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THE MIND AND SOCIETY

# The Mind and Society 

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THE GENERAL FORM OF SOCIETY

## The Mind and Society

[Trattato di Sociologia generale ]

BY VILFREDO PARETO

EDITED BY ARTHUR LIVINGSTON

TRANSLATED BY ANDREW BONGIORNO AND ARTHUR LIVINGSTON WITH THE ADVICE AND ACTIVE COOPERATION OF James harvey rogers

VOLUME FOUR
The General Form of Society

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## THE MIND AND SOCIETY

Volume IV: The General Form of Society

## The Gencral Form of Society

2060. The elements. The form of a society is determined by all the elements acting upon it and it, in turn, reacts upon them. We may therefore say that a reciprocal determination arises. Among such elements the following groups may be distinguished: i. soil, climate, flora, fauna, geological, mineralogical, and other like conditions; 2. elements external to a given society at a given time, such as the influences of other societies upon it-external, therefore, in space; and the effects of the previous situation within it-external, therefore, in time; then $3:$ internal elements, chief among which, race, residues (or better, the sentiments manifested by them), proclivities, interests, aptitudes for thought and observation, state of knowledge, and so on. Derivations also are to be counted among these latter.
2061. These elements are not independent: for the most part, they are interdependent. Among them, morever, are to be classed such forces as tend to prevent dissolution, ruin, in societies that endure. When, therefore, a society is organized under a certain form that is determined by the other elements, it acts in its turn upon them, and they, in that sense, are to be considered as in a state of interdependence with it. Something of the sort is observable in animal organisms. The form of the organs determines the kind of life the animal leads, but that manner of living in its turn has its influence upon the organs ( $\$ 2088$ f.).
2062. In order thoroughly to grasp the form of a society in its every detail it would be necessary first to know what all the very numerous elements are, and then to know how they functionand that in quantitative terms. It would, that is, be necessary to assign indices to the various elements and their effects and to know just how they are correlated-to establish, in a word, all the conditions that determine the form of the society; and they, being quantitively considered, would be stated in the form of mathematical equations. The number of equations would have to be equal to the
number of unknowns and would determine them exhaustively. ${ }^{1}$ 2063. An exhaustive study of social forms would have to consider at least the chief elements that determine them, disregarding those elements only which seem to be of secondary or incidental influence. But such a study is not at present possible, any more than an exhaustive study of plant or animal forms is possible, and we are therefore obliged to confine ourselves to a study covering a part only of the subject. Fortunately for our project, not a few of the elements have an influence upon human proclivities and sentiments, so that by taking account of residues we indirectly take account of them as well.
2063. The influence of the first group of elements (soil, climate, and so on, § 2060) is undoubtedly very important. A comparison of the civilizations of peoples of the tropics and peoples of temperate zones would be enough to show that; and many books have been written on the subject, but so far with no great results. We shall make no direct examination of such influences here, but account for them indirectly by taking as data of fact the residues, proclivities, and interests of human beings who are subject to them.
2064. To go farther still in our avoidance of difficulties, we shall confine our investigations to the peoples of Europe and of the Asian and African sections of the Mediterranean basin. That will free us of the many serious-and unsolved-questions that are connected with race. We must necessarily take account of the influences upon

[^0]a given people of other peoples, for the various peoples of the regions indicated have at no time in history been entirely isolated. But military, political, intellectual, economic, and other kinds of power through which those influences have been exerted depend upon elements such as sentiments, state of knowledge, and interests; and the influences, therefore, may be inferred, in part at least, from those elements.
2066. But however many, however few, the elements that we choose to consider, we assume at any rate that they constitute a system, which we may call the "social system"; and the nature and properties of that system we propose to investigate. The system changes both in form and in character in course of time. When, therefore, we speak of "the social system" we mean that system taken both at a specified moment and in the successive transformations which it undergoes within a specified period of time. So when one speaks of the solar system, one means that system taken both at a specified moment and in the successive moments which go to make up a greater or lesser period of time.
2067. The state of equilibrium. ${ }^{1}$ If we intend to reason at all strictly, our first obligation is to fix upon the state in which we are choosing to consider the social system, which is constantly changing in form. The real state, be it static or dynamic, of the system is determined by its conditions. Let us imagine that some modification in its form is induced artificially (virtual movements, § I30). At once a reaction will take place, tending to restore the changing form to its original state as modified by normal change. If that were not the case, the form, with its normal changes, would not be determined but would be a mere matter of chance.
2068. We can take advantage of that peculiarity in the social sys-
$2067^{1}$ Since pure economics began considering a "state of equilibrium," many writers have talked of that state without having any precise notions as to what it is. Not accustomed to defining strictly the terms they use, they of course feel no particular need of a rigid definition when they come to this one. Even worse is the attitude of people who imagine that they can grasp the nature of the "equilibrium" in question sentimentally, so putting the word in that class of metaphysical terms where "the good," "the beautiful," "the true," and company stand in awful array. So the strangest conceptions are for ever coming forward, things bordering on the ridiculous. Needless to add, we are here using the word "equilibrium" as a mere label, convenient for indicating certain things that we shall in due course be careful to define exactly.
tem to define the state that we choose to consider and which for the moment we will indicate by the letter $X$. We can then say that the state $X$ is such a state that if it is artificially subjected to some modification different from the modification it undergoes normally, a reaction at once takes place tending to restore it to its real, its normal , state. That gives us an exact definition of the state $X .{ }^{1}$
2069. The state $X$ is ever in process of change, and we are not able, nor do we care, to consider it that way in all its minute detail. If we desire to figure on the fertility of a piece of land, we do not set out to watch how the grain grows in the sown field every minute, every hour, every day, or even every month. We take the annual crop and let it go at that. If we want to figure on the element of patriotism, we cannot follow each soldier in every move he makes from the day when he is called to arms to the day when he falls on a battle-field. For our purposes it is enough to note the gross fact that so many men have died for their country. Or again, the hand of a watch moves and stops, stops and moves, yet in measuring time we disregard that circumstance and figure as though the movement of the hand were continuous. Let us therefore consider successive states $X_{1}, X_{2}, X_{3} \ldots$ reached at certain intervals of time that we fix on for the purpose of getting at the states which we choose to consider and which are such that each one of the elements that we elect to consider has completed its action. To see the situation more clearly, we might look at a few examples. Pure economics affords a

[^1]very simple one. Let us take a person who in a given unit of timeevery day, we will say-barters bread for wine. He begins with no wine, and stops bartering when he has a certain quantity of wine. ${ }^{1}$ In Figure 32 , the axis of time is $O t$, and $a b, b c, c d, d e \ldots$ are spaces representing equal units of time. The axis of the quantities of wine is $O q$. At the beginning of the first unit of time, the individual has no wine-his position is at $a$; at the end he has the quantity $b X_{1}$ of wine-his position is at $X_{1}$. Exactly the same transaction is repeated every day, and at the end of every day, or of every unit of time, the individual's position is at $X_{1}, X_{2}, X_{3} \ldots$ All those points fall within a line, $M P$, parallel to $O t$, and the distance between the two lines is equal to the quantity of wine that the individual acquires through ex-


Figure 32 change each day. The line $M P$ is called the line of equilibrium and, in general, is the line determined by the equations of pure economics. ${ }^{2}$ It does not have to be a line parallel to the axis $O t$, for there is no reason why exactly the same transaction should be repeated every day. It may, for example, be the line $M P$ in Figure 33: $a b, b c, c d \ldots$ are still equal units of time, but at the beginnings of the various periods the individual's position is at $a, s, r, d$, $u$. . . and at the ends at $X_{1}, X_{2}, X_{3}, X_{4}, X_{5}$. . . The line $M X_{1}$, $X_{2}, X_{3}, X_{4}, X_{5} \ldots$ is still called the line of equilibrium. When it is said that pure economics gives the theory of the economic equilibrium, it means that pure economics shows how the final positions,
$2069{ }^{1}$ This is a case of exchange between two individuals, one of whom has no wine and a given quantity of bread, and the other no bread and a given quantity of wine. This elementary problem gave rise to the theories of pure economics. We consider it here merely for convenience of exposition; but what we say may easily be extended to the much more complex problems examined by pure economics.
$2069^{2}$ A number of the economists who founded the science of pure economics thought of determining only the line $a X_{1}$, without even specifying that it was to be considered strictly within a unit of time. They cannot be censured for that. It is the general rule in the development of every science that pioneers consider the main elements in a phenomenon and leave it to their successors to complete their calculations and make them more exact.
$X_{1}, X_{2}, X_{3} \ldots$ are reached from the points $a, s, r, d, u \ldots$ and nothing more. ${ }^{3}$ Now let us consider the more general case. In Figure $33, a b, b c, c d \ldots$ are no longer equal to one another, but represent different periods of time, which we choose in order to examine a phenomenon at the end of each of them, the length of the period being determined by the time required for an element to complete the particular action that we have chosen to consider. The points $a, s, r, d, u \ldots$ represent the state of the individual at the beginning of the action; $X_{1}, X_{2}, X_{3} \ldots$ the state of the individual when it is completed. The line $M X_{1}, X_{2}$


Figure 33 . . . $P$ is the line of the state $X$ (§ 2076 ).
2070. That definition is identical, barring the mere difference in form, with the one given in § 2068. In fact, if we start in the first place with the definition just given of the state $X_{1}$, we see that the action of each element having been completed, society cannot of itself assume any form other than the form $X_{1}$, and that if it were made artificially to vary from that form, it should tend to resume it; for otherwise, its form would not be entirely determined, as was assumed, by the elements considered. In other words, if society has reached a point, $X_{1}$ (Figure 34), following such a path, $a X_{1}$, that at $X_{1}$ the action of the elements which we choose to consider is complete; and if society is artificially made to vary from $X_{1}$, the variation can be brought about only: (1) by forcing society to points such as $l, n \ldots$ which are located outside the line $a X_{1}$; or (2), by forcing it to a point $m$ on the line $a X_{1}$. In the first case, society should tend to return to $X_{1}$; otherwise its state would not be completely determined, as was assumed, by the elements considered. In the second case, the hypothesis would be in
$2069{ }^{3}$ In the example chosen, the individual successively traverses the distances $a X_{1}, b X_{2} \ldots$, but there could be other examples in which he would traverse the distances $G X_{1}, X_{1} X_{2}, X_{2} X_{3} \ldots$ on the line MP. In that case, MP would no longer be the line uniting the extreme points, $X_{1}, X_{2}, X_{3} \ldots$ at which the individual arrives at the end of cvery unit of time, but the line actually traversed by the individual. However, in cconomic and social matters phenomena generally occur somewhat after the manner shown in the examples mentioned.
contradiction with our assumption that the action of the elements is complete; for it is complete only at $X_{1}$, and is incomplete at $m$; at the latter point the elements considered are still in action and they carry society from $m$ to $X_{1}$.

Using the definition we gave in $\S 2068$ as the point of departure, we see, conversely, that if after society has been artificially made to vary from the point $X_{1}$, it tends to return to $X_{1}$, the phenomenon indicates one of two things: either, as in the first case above, that society has been brought to the points $l, n \ldots$ which are different from the points determined by the elements considered, or that society has been brought to a point $m$, at which the action of the elements considered is incomplete. If instead of reaching the points $X_{1}, X_{2}, X_{3}$ . . . successively the system were to traverse the line $X_{1}, X_{2}, X_{3}$ in a continuous movement, there would be nothing to change in the defini-


Figure 34 tions just given. One would need merely to say that if the system were made artificially to deviate from the line $X_{1}, X_{2} \ldots$ it would tend at once to return to it; and that if the effect of the elements is to impel the system along that line, their action would not be complete unless the system were located on that line, and on no other.
2071. So we get the precise and rigorous definition that we said (§ I23) we were intending to give of the state we are about to consider. To become more familiar with it let us now look at some analogies, much as one looks at a sphere to get some conception of the shape of the Earth.

For a concrete example, the state $X$ is analogous to the state of a river, and the states $X_{1}$, and $X_{2} \ldots$ to the states of the same river taken day by day. The river is not motionless; it is flowing, and the slightest modification we try to effect in its form and in the manner of its flow is the cause of a reaction that tends to reproduce the original state.
2072. For an abstract case, to which we alluded in § 121, the state $X$ that we are considering is analogous to the state of dynamic equi-
librium in a physical system, the states $X_{1}, X_{2} \ldots$ to successive positions of equilibrium in that system. ${ }^{1}$ The state $X$, one might also add, is analogous to the state of equilibrium in a living organism. ${ }^{2}$
2073. We might look for analogies in a field closer to our own. The states $X_{1}, X_{2}, X_{3} \ldots$ are like the states that pure economics considers in an economic system; and the analogy is so close that the states of the economic system may be regarded as particular cases of the general states of the sociological system. ${ }^{1}$
2074. There is another analogy that we cannot disregard if we would go somewhat deeply into this matter. The state $X$ is analogous to the state called a statistic equilibrium in the kinetic theory of gases. To make that clearer, suppose we consider a particular case, the consumption, for instance, of cigars of a given quality within a given territory. The states $X_{1}, X_{2}, X_{3} \ldots$ represent, hypothetically, the annual consumptions of such cigars. Let us begin by assuming that they are all more or less equal. Then we would say that the consumption of cigars is constant. By that we do not mean that every individual smokes the same number of cigars each year. We know very well that such numbers vary widely. But the variations more or less offset one another, so that the resultant is zero or, to
$2072{ }^{1}$ That fact was not noticed by a certain good soul, who for reasons best known to himself imagined that the economic equilibrium was a state of immobility and therefore to be condemned by every loyal worshipper of the god Progress. Many people talk just as wildly when they set themselves up as judges on the theories of pure economics without taking the trouble to study the subject, on which they are eager to talk, imagining that they can grasp it by a hasty and cursory reading of books that they understand upside down because their minds are packed with preconceptions, and because they are interested not in calm and thoughtful scientific research, but in rendering a service to their particular social faith. In that way they miss many golden opportunities to be silent. Quite a number of the books, pamphlets, prefaces, and articles on pure economics that have been published in a recent past are not even worth reading.
$2072^{2}$ Such an equilibrium is evidently a dynamic one. If biology were as backward as the social sciences, some very knowing individual might write a treatise on positive biology and evince surprise and pain that anybody could think of life as in a state of equilibrium, in other words of immobility, since life is movement!
$2073{ }^{1}$ This matter is not casy to grasp. A reader desirous of gaining a clear conception of the sociological states, $X_{1}, X_{2} \ldots$, and of the possible ways of determining them, should first study the similar situations that are considered in the theories of pure economics. It is better always to proceed from the easier to the more difficult, from the better known to the less well known.
be more exact, approximately zero. To be sure, it may happen that so many of these variations will be in the same direction that the resultant will no longer be approximately zero, but such a probability is so slight that we need not consider it; and that is what we mean when we say that the consumption is constant. If, instead, the probability is not so slight, fluctuations around the constant total of consumption will be observable, such fluctuations following the law of probabilities. But suppose $X_{1}, X_{2}, X_{3} \ldots$ represent increasing consumptions. We can then repeat, with the proper modifications, everything we have just said. We are in no sense assuming that the individual consumptions are on the increase. We know they are extremely variable. We are speaking of a statistic equilibrium, where variations offset one another in such a way that the resultant is an increasing total consumption. And such increasing total consumption may have a probability so great as to eliminate fluctuations depending on probabilities; or a probability not so great, and then fluctuations will occur. So, in preparing ourselves by studying particular cases of that sort we find it easy to grasp the general significance of $X_{1}, X_{2}, X_{3} \ldots$ for consumptions varying in any manner whatsoever.
2075. Extend to an entire social system what we have seen to hold for a system of consumers of one brand of cigars, and the result will be a clear conception of the analogy we have in view for the states $X_{1}, X_{2}, X_{3} . \ldots$
2076. We could continue to designate the social states that we elect to consider (§ 119) with the letters $X$, and $X_{1}, X_{2} \ldots$, but that manner of designating things soon begins to weary and one would prefer to have them given names. We could choose a name at random, but it is perhaps better to borrow it from something more or less like the thing we intend to designate by it. So, stopping at the mechanical analogy, we will call the states $X$ and $X_{1}, X_{2} \ldots$ states of equilibrium. But the meaning of the term as we use it has to be sought strictly within the definitions that we gave in $\$ \$$ 2068-69, due attention being paid to the argument in $\$ 2074$.
2077. We have now simplified our problem by deciding to consider certain successive states instead of the numberless imperceptible mutations that lead up to them. We now have to go on along that path and try to reduce the problem of mutual correlations and
the number of elements that we are to consider to greater simplicity. 2078. In our study we stop at certain elements, just as the chemist stops at chemical elements; but that in no sense means that the elements at which we stop are not reducible to a smaller number, or even, at a hazard, to one; just as the chemist does not claim that the number of chemical elements is not still further reducible or indeed that some day they may not be recognized as different manifestations of one single element. ${ }^{1}$
2079. Organization of the social system. The economic system is made up of certain molecules set in motion by tastes and subject to ties (checks) in the form of obstacles to the acquisition of economic values. The social system is much more complicated, and even if we try to simplify it as far as we possibly can without falling into serious errors, we at least have to think of it as made up of certain molecules harbouring residues, derivations, interests, and proclivities, and which perform, subject to numerous ties, logical and non-logical actions. In the economic system the non-logical element is relegated entirely to tastes and disregarded, since tastes are taken as data of fact. One might wonder whether the same thing might not be done for the social system, whether we might not relegate the non-logical element to the residues, then take the residues as data of fact and proceed to examine the logical conduct that originates in the resi-
$2078^{1}$ There are those who regard economics as a branch of psychology, and again those who would bar "individual" psychology from economics, deeming it a sort of metaphysics, and confine attention strictly to the "collective" facts of production and exchange. Such a question is generally more of words than of facts. All human conduct is psychological and, from that standpoint, not only the study of economics but the study of every other branch of human activity is a psychological study and the facts of all such branches are psychological facts. The distinction that some would like to draw in economic exchange between the "individual" and the "collective" fact is childish. Every human being consumes bread on his own account, and it is ridiculous to imagine that a hundred human beings eat bread "collectively" and are fed, while no one of them eats bread "individually" and is fed. On the other hand all studies of human activity, whether labelled psychological or otherwise, are studies of facts, since facts arc the only thing known to us; and the psychology of a human being remains an unknown so long as it is not made manifest in facts. The principles of an economic psychology or of any other psychology can be deduced only from facts, as are the principles of physics and chemistry, the principles of gravitation, and so on. Once the principles are obtained in that fashion, or even mercly by way of hypothesis, their consequences are drawn, and if such consequences are verified by the facts the principles are established (\$§2397 f.). A very general view of common well-known facts gave English
dues. That, indeed, would yield a science similar to pure, or even to applied, economics. But unfortunately the similarity ceases when we come to the question of correspondences with reality. The hypothesis that in satisfying their tastes human beings perform economic actions which may on the whole be considered logical is not too far removed from realities, and the inferences from those hypotheses yield a general form of the economic phenomenon in which divergences from reality are few and not very great, save in certain cases (most important among them the matter of savings). Far removed from realities, instead, is the hypothesis that human beings draw logical inferences from residues and then proceed to act accordingly. In activity based on residues human beings use derivations more frequently than strictly logical reasonings, and therefore to try to predict their conduct by considering their manners of reasoning would be to lose all contacts with the real. Residues are not, like tastes, merely sources of conduct; they function throughout the whole course of the conduct developing from the source, a fact that becomes apparent in the substitution of derivations for logical reasonings. A science, therefore, based on the hypothesis that logical inferences are drawn from certain given residues would yield a general form of the social phenomenon having little or no contact with reality-it would be a sociology more or less like a non-Euclidean
writers the concept of a "final degree of utility," and Walras the concept of "rarity" [Éléments d'économie politique pure, pp. 21, 22, 466]. The inferences drawn from those principles were found to accord approximately with the facts, and the principles were therefore considered acceptable within certain experimental limits. From the concept of a final degree of utility Edgeworth derived his lines of indifference to picture simple economic facts. I inverted the problem, and from lines of indifference derived the concepts that correspond to the final degree of utility, or "rarity," or "ophelimity"; nor did I fail to remark that instead of lines of indifference I might just as well have considered other economic factors, such as the laws of supply and demand, and derived from them the concept of ophelimity, of which for that matter they may just as well be taken as consequences. But in all this inferring back and forth, a great many precautions have to be taken that I have explained, and which seem to be entirely unknown to many writers treating on such matters with a very scant acquaintance with them. The residues and derivations that we have just beén considering in sociology ought, in part at least, to be considered as concepts analogous to the concept of "ophelimity" in economics. From an examination of the facts we were led, by induction, to formulate those notions; then, following an opposite course, we drew inferences from them, and because the inferences were found to be in approximate accord with the facts, the concepts from which they had been drawn were held to be established.
geometry or the geometry of a four-dimensional space. If we would keep within realities, we have to ask experience to acquaint us not only with certain fundamental residues, but with the various ways in which they function in determining the conduct of human beings. ${ }^{1}$
2080. Let us consider the molecules of the social system, in other words, individuals, who are possessed of certain sentiments manifested by residues-which, for the sake of brevity, we shall designate simply as residues. We may say that present in individuals are mixtures of groups of residues that are analogous to the mixtures of chemical compounds found in nature, the groups of residues themselves being analogous to the chemical compounds. We have just examined (Chapter XI) the character of such mixtures and groups, and we found that while some of them appear to be virtually independent, others also are correlated in such a manner that an accentuation in the one is offset by an attenuation in others, and vice versa. ${ }^{1}$ Such mixtures and groups, whether dependent or independent, are now to be considered among the elements determining the social equilibrium.
2081. Residues manifest themselves through derivations. These are indications of the forces operating upon the social molecules. We have divided them into two categories (§ 1826): derivations proper and the manifestations in which they eventuate. Here, for the sake of a comprehensive view, we shall take them both together.
2082. Common opinion attaches great importance to derivations and among them to derivations proper, ${ }^{1}$ to theories, as determining social forms. Contrarily to that view, we have seen as the result of long and far-reaching researches that their direct influence on such forms is slight-a fact that is not perceived because there is a tendency to ascribe to derivations effects which really are referable to

[^2]the residues that they manifest. Before derivations can acquire any considerable efficacy they have to be themselves transformed into sentiments (§1746), and that does not happen so readily. ${ }^{2}$
2083. In this matter of derivations, the capital fact is that they do not correspond exactly to the residues in which they originate ( $\$ \S 1767 \mathrm{f} ., \mathrm{r} 780 \mathrm{f}$.). In that lie the chief obstacles to the constitution of a social science; for derivations only are known to us, and we are sometimes at a loss as to how to find our way back from the derivations to the residues that underlie them. That would not be the case if derivations were of the same nature as logico-experimental theories (\$§ 1768, 2007). Derivations, furthermore, contain many principles that are not explicitly stated, which are taken for granted, and as a result they are gravely lacking in definiteness ( $\$ 2002$ ). The uncertainty is greater in the case of derivations proper than in the case of manifestations, but it is not wanting in the latter also. To remedy that difficulty, we have to collect large numbers of derivations associated with one same subject-matter, and then find in them a constant element that can be distinguished from variable elements.
2084. Even when there is some rough correspondence between derivation and residue, the derivation usually oversteps the terms of the residue and oversteps reality ( $\$ 1772$ ). It indicates an extreme limit of which the residue falls short, and very very often contains an imaginary element that states a goal far beyond the goal which would be set if it expressed the residue exactly (§ 1869). If, furthermore, the imaginary element expands and evolves, the results are myths, religions, ethical systems, theologies, systems of metaphysics, ideals. That happens more especially when the sentiments corresponding to derivations are intense, and the more readily, the greater the intensity.
2085. So, using the sign of the thing for the thing itself, one may say that human beings are spurred to a vigorous manner of action by derivations. But such a proposition, taken literally, would be far from the truth, and has to give way to the less foggy statement that human beings are spurred to a vigorous manner of action by the sentiments that find expression in derivations (§ 1869). In many

[^3]cases the use of either of the two forms of statement is a matter of indifference-the cases, chiefly, where there is a certain correspondence between derivations and conduct. A correspondence subsisting between the conduct and the sentiment betrayed by the derivation, there is also correspondence between the conduct and the derivation, and vice versa. But in other cases, to use the first proposition instead of the second is to go woefully astray, and those are cases, chiefly, where in their eagerness to influence conduct people imagine that they can attain that end by changing derivations. Modification of the sign does not in the least modify the thing to which the conduct corresponds, and therefore not the conduct either ( $\$ \$ 844 \mathrm{f}$.).
2086. In trying to get back from derivations to residues, it must not be overlooked that a given residue, $B$, may have any number of derivations, $T, T^{\prime}, T^{\prime \prime} \ldots(\$ \$ 2004$ f.), that are readily interchangeable. So: I . If $T$ appears in one society and $T^{\prime}$ in another, one cannot conclude that the two societies have different corresponding residues: they may have the same residue, $B$ ( $\$ \$ 2004 \mathrm{f}$.). 2. To replace $T^{\prime}$ with $T$ is of little or no avail as regards modifying social forms, since the substitution has no effect on the residue $B$, which plays a much more important part than the derivations in determining those forms ( $\$ \$ 1844$ f.). 3. But the fact that the subject of the conduct considers or does not consider the substitution a matter of indifference may have its effect, not through that opinion as such, but through the sentiments that it manifests ( $\$ 1847$ ). 4. The derivations $T, T^{\prime \prime}, T^{\prime \prime} \ldots$ may show reciprocal contradictions. If two logico-experimental propositions were contradictory they would destroy each other. Two contradictory derivations not only may subsist simultaneously but may even reinforce each other. Sometimes other derivations are brought in to eliminate the contradiction and establish harmony, but that is of quite secondary importance. People experience little difficulty in devising and accepting sophistical derivations of that type. They feel a certain need for logic, but readily satisfy it with pseudo-logical propositions. For that reason the intrinsic logico-experimental validity of derivations, $T, T^{\prime \prime}, T^{\prime \prime \prime} . .$. , usually has little to do with their influence on the social equilibrium.
2087. Composition of residues and derivations. We have so far been considering separate groups of residues. Now let us see how they work when they are taken together. The situation in one of its
aspects bears some analogy to the compounding of chemical elements, and under another aspect, to the composition of forces in mechanics. Speaking in general terms, suppose a society is being influenced by certain sentiments corresponding to the residue groups $A, B, C \ldots$ manifested through the derivations $a, b, c \ldots$ Now let us give each of those groups of residues a quantitative index corresponding to the intensity of its action as a group. So we get the indices $\alpha, \beta, \gamma \ldots$ Let us further designate as $S, T, U \ldots$ the derivations, myths, theories, and so forth, that correspond to the residue groups, $A, B, C$. . . The social system will then be in equilibrium under the action of the forces $\alpha, \beta, \gamma \ldots$ which are exerted approximately in the direction indicated by the derivations $S, T, U$ . . . due account being taken of counter-forces. In that we are merely restating what we have just said in a new form.
2088. Keeping to this new form we get the following propositions: y . One cannot, as is usually done, estimate the effects of each group of residues, or variations in the intensity of the group, taking the group all by itself. If the intensity varies in one group, variations, generally, must occur in other groups if the equilibrium is to be maintained. That is a different sort of dependence from the one mentioned in $\S 2080$. Different things have to be designated by different names. Suppose, then, we use the term dependence, first type for the direct dependence between various groups of residues, and the term dependence, second type for the indirect dependence arising from the proviso that the equilibrium has to be maintained, or from some other requirement of the kind. 2. The real movement takes place according to the resultant of the forces $\alpha, \beta, \gamma \ldots$ and in no way corresponds to the imaginary resultant-if there be such a thing-of the derivations $S, T, U \ldots 3$. The derivations show only the direction in which certain movements are tending to evolve ( $\$ 2087$ ); but that direction is not, generally speaking, the direction that would be indicated by the derivation taken in its strict literalness, as would be the case with a logico-experimental proposition. We have frequently seen that two contradictory derivations can hold side by side, a thing that would be impossible in the case of two logical propositions. The two propositions $A=B$ and $B<>A$ are logically contradictory and so cannot both be true. But as derivations they can get along together perfectly well and mean one and
the same thing, namely, that the $A$ 's are trying to rule the $B ' s$, using the first proposition to weaken the resistance of people who, though not partisans of the $B$ 's, would not like to see them reduced to subjection; and using the second proposition to inspire those who are already partisans of the $A$ 's to action. 4. Ordinarily, if the social system does not move in the direction indicated by the residues, $A$, to which the force $\alpha$ corresponds, the reason is not that there has been direct resistance to $A$, and much less that the derivation $S$ corresponding to $A$ has been refuted; but that the movement in accord with $A$ has been deflected under the influence of the residues $B, C$. . . . It is important to distinguish, among these latter, the residues belonging to various classes ( $\$ 2153^{-4}$ ) ; for owing to the tendency of the class as a whole to remain virtually constant, one should be on watch for the action rather of the various classes than of each single residue. ${ }^{1}$
2089. Better to picture the difference between interdependences of the first and the second types, one might consider a given society. Its existence is in itself a fact, and then we have the various facts that are taking place within it. If we look at the first fact and these latter facts simultaneously, we will say that they are all interdependent ( $\$ 2204$ ). If we separate them, we will say that the latter facts are all mutually dependent (dependence, first type) and are furthermore interdependent through the first fact (dependence, second type). We can also say that the fact of the existence of society results from the facts observable within it, that, in other words, these latter facts determine the social equilibrium; and, further again, that if the fact of the existence of a society is given, the facts arising within it are no longer altogether arbitrary but must satisfy a certain condition, namely, that the equilibrium being given, the facts which determine it cannot be altogether arbitrary.
Let us look at a few illustrations of the difference between interdependences of the first and second types. The inclination of the Romans towards formalism in practical life tended to produce, maintain, and intensify formalism in religion, law, and politics; and vice versa. That would be an interdependence of the first type. But we get an interdependence of the second type in the fact that the inclination of the Romans to independence managed to survive
$2088^{1}$ We shall go on with these points farther along ( $\$ \S 2 \mathrm{r}^{8} \mathrm{f}$.).
owing to the fact that political formalism averted the dangers of anarchy. That was what actually happened down to the last years of the Republic. The inclination of the Romans to political formalism weakening about that time (chiefly because the old Romans had given way to people of other stocks), their inclination to independence was also weakened, and they were obliged to accept imperial despotism as a lesser evil. Had it not given ground in that way, Roman society would have broken down either through internal revolutions or through foreign conquest, exactly as happened, and for identical reasons, with Poland. In this case there is no direct interdependence between Class II residues (inclination to formalism) and Class V residues (inclination to independence)-which would be a dependence of the first type. There is an indirect interdependence, arising from the fact that for the Roman community at that time and under those circumstances, the position in which the index of the inclination to independence (residues of personal integrity) remained constant while the index of political formalism (residues of group-persistence) fell off, was not a position of equilibrium (interdependence, second type).
2090. From the manner of operation of interdependences of the second type it is evident that their effects oftentimes become much less promptly manifest than the effects of interdependences of the first type-for a change in the equilibrium must first have occurred and then have had its repercussions on other residues. For the same reasons, interdependences of the second type will play a more important rôle than those of the first type in the rhythmical character of social movements ( $\$ 1718$ ).
2091. We have already discussed ( $\$ 1732$ ) various ways of taking account of interdependences. To follow the better, the $2 b$ method, one would have to be able to assign an index to each of the interdependent elements correlated and then proceed by mathematical logic to determine the indices through a system of equations. That has been possible in pure economics, but, for the present at least, it cannot be done in sociology; and we are consequently thrown back on less perfect methods ( $\$ 2203$ f.).
2092. Since we are here using ordinary instead of mathematical language, it will not perhaps come amiss to give a very simple example of the method $2 a$ (consideration of cause-and-effect relations as
modified by actions and reactions) that illustrates its relation to the method $2 b$ (direct consideration of interdependences). Let $x$ and $y$ be two quantities in a state of interdependence. Using mathematical language, we would say, according to the method $2 b$, that there is an equation between the two variables $x$ and $y$, and that would be the end of it. But using ordinary language we have to follow the method $2 a$, and say, therefore, that $x$ is indeed determined by $y$, but that it also reacts upon $y$, so that $y$ in its turn is dependent upon $x$. We could, notice, invert the terms and say that $y$ is indeed determined by $x$, but then also reacts upon $x$, so that $x$ is dependent upon $y$. When applied to equations, this method sometimes yields the same results as the method $2 b$, but sometimes it does not. It is better therefore, in general, to be very cautious in using the method $2 a$ in place of the method $2 b$, and in any event carefully to scrutinize the consequences of substitutions. ${ }^{1}$
$2092{ }^{1}$ Let us assume that the selling-price, $p$, of a certain commodity, when the quantity sold is $x$, is given by the equation:
\[

$$
\begin{equation*}
p=15-0.4 x \tag{I}
\end{equation*}
$$

\]

and that the production-cost, $q$, of the same commodity, when produced in the quantity $x$, is given by the equation:
(2)

$$
q=9+0.2 x
$$

The producer will stop at the point where selling-price is equal to production-cost, that is to say, at the point where we get the equation:
(3)

$$
p=q
$$

The practical man acts in such a way as to solve these equations by trial and errorunwittingly, in other words, he uses a method equivalent to the method $2 b$ of §1732. In that way it will be found that for $x=10$ one gets $p=11$ and also $q=1 \mathrm{r}$-in other words, selling-price is equal to production-cost.

Suppose, now, that following the method $2 a$, we try to substitute a study of a sequence of actions and reactions for a direct solution of the equations 1,2 , and 3 , for the method $2 b$, that is. In doing that, we may follow two courses:
I. We may begin with sales, considering the price as the cause of the sale of the quantity, and then consider that quantity as the cause of production cost. If the cost proves not to be equal to the assumed selling-price, we consider it as a new sellingprice that will be the cause of the sale of a new quantity, which in its turn will be the cause of a new production-cost, and so on. Algebraically that is equivalent to taking the equations I and 2 in the following order and form:

> (4)

$$
x_{1}=37.5-2.5 p_{1} \quad q_{1}=9+0.2 x_{1}
$$

Taking $p_{1}=9$, we get $x_{1}=15$; then, from the second equation, we get $q_{1}=12$. Taking $q_{1}$ for $p_{1}$ in the first equation and giving the index 2 to $x$, we get $x_{2}=7.5$. Substituting that value in the second equation and giving the index 2 to $q$ as well,
2093. Let us assume, by way of hypothesis, that it has been possible to assign certain indices, $x_{1}, x_{2} \ldots$, to sentiments; certain others, $y_{1}, y_{2} \ldots$, to economic conditions; certain others, $z_{1}, z_{2} \ldots$, to customs, laws, religions; and still others, $u_{1}, u_{2} \ldots$, to intellectual conditions, scientific knowledge, technical capacity, and so on. Using mathematical language we can say that the state $X$, defined in § 2068, is determined by a number of equations equal to the number of the unknowns, $x_{1}, x_{2} \ldots, y_{1}, y_{2} \ldots, z_{1}, z_{2} \ldots, u_{1}, u_{2} \ldots$, and so on. And we can say that the states $X_{1}, X_{2}, X_{3} \ldots$ defined in § 2069 are determined in the same way.
2094. Moreover, considering the dynamics of the system, we can say that likewise determined is that movement which, if there were $n o$ variation in the circumstances indicated by the parameters of the equations, would carry the system successively to the positions $X_{1}, X_{2}, X_{3} . \ldots$ If such circumstances


Figure 35 were to vary, the movement would change also, and the successive positions would be $X_{1}, X^{\prime}, X_{3}^{\prime} \ldots$ as in Figure 35.
we get $q_{2}=10.5$. Putting that value for $p_{1}$ in the first equation, and giving the index 3 to $x$, we get $x_{3}=11.25$. This latter value substituted for $x_{1}$ in the second equation will yield $q_{3}=11.25$. We may go on in that way indefinitely and so get the following successive values for $p$ and $x$ :

| $p=9$ | 12 | 10.5 | 11.25 | 10.875 |
| :--- | :--- | :--- | :---: | :---: |
| $x=15$ | 7.5 | 11.25 | 9.375 | 10.3175 |

Those values will constantly approach the values obtained by solving the equations 1 and 2 directly-by the method $2 b$, that is. Those values were:
(5)

$$
p=1 \mathrm{I}
$$

$$
x=10
$$

II. Instead of beginning with sales, we may begin with production. The price, $q$, will be taken as the cause of the production, $x$; then, going over to sales, the quantity $x$ is taken as the cause of the selling-price. That is equivalent to taking the equations 1 and 2 in the following order and form:
(6)

$$
x_{1}=5 q_{1}-45 \quad p_{1}=15-0.4 x_{1}
$$

Starting with one of the values we found above, with $x_{1}=7.5$, and making the calculation by the same method, we get the following successive values for $p$ and $x$ :

| $p=12$ | 9 | 15 | 3 |
| :--- | ---: | ---: | ---: |
| $x=7.5$ | 15 | 0 | 30 |

Instead of approaching the values (5) obtained from the solution of the equations I and 2, they get farther and farther away. It follows that in adopting that course the method $2 a$ cannot be used instead of the method $2 b$.

Let no literary economist try to see the reason for that fact in the circumstance
2095. We may assume a certain number of unknowns as given, provided we suppress an equal number of equations. We might, for example, assume as given certain sentiments corresponding to the indices $X_{1}, X_{2} \ldots$ Then the movement that leads to the positions $X_{1}, X_{2}, X_{3} \ldots$ would be the movement that would take place if those sentiments remained constant; whereas the movement $X_{1}, X^{\prime}{ }_{2}$, $X^{\prime}{ }_{3} \ldots$ would be the movement occurring if the sentiments varied.
that in procedure I the point of departure was sales, whereas in procedure II it was production; and then say that since production has to precede sales, it is no wonder that the first procedure leads towards the solution, the second away from it. The reason is quite different. Take, in general terms, two equations:

$$
x=f(y) \quad y=\phi(x)
$$

The two procedures have this in common, that an arbitrary value is given to one of the variables in one equation; the value of the other variable is derived in terms of it, and then substituted in the other equation, and so on. They differ according to the variable that one gets as the function of the other. From the equations (7) it is possible to derive:

$$
\begin{equation*}
y=\bar{f}(x) \quad x=\bar{\phi}(y) \tag{8}
\end{equation*}
$$

Following procedure I, we will solve equations (7); and following II, equations (8). Take $x_{0}, y_{0}$, as the values that satisfy equations $(7)$. Substituting for $y$ in the first an arbitrary value $y_{1}=y_{0}+b_{1}$, we get for $x$ a value $x_{1}=x_{0}+a_{1}$. If $b_{1}$ is suffciently small, it will be possible to assume, approximately:

$$
x_{0}+a_{1}=f\left(y_{0}\right)+b_{1} f^{\prime}\left(y_{0}\right)
$$

Substituting in the second equation, we get the values:

$$
\begin{aligned}
& y_{2}=y_{0}+b_{2}, \text { and approximately: } \\
& b_{2}=b_{1} f^{\prime}\left(y_{0}\right) \phi^{\prime}\left(x_{0}\right)
\end{aligned}
$$

If the successive values of $y$, and therefore also of $x$, are to approach values that solve the equations ( 7 ), then in absolute value $b_{2}$ has to be less than $b_{1}$; that is to say, we have to have:

$$
\begin{equation*}
\left|f^{\prime}\left(y_{0}\right) \phi^{\prime}\left(x_{0}\right)\right|<I \tag{9}
\end{equation*}
$$

Similarly, if one were to follow procedure II, indicated by equations (8), we should have to have:

$$
\begin{equation*}
\left|\bar{f}^{\prime}\left(x_{0}\right) \bar{\phi}^{\prime}\left(y_{0}\right)\right|<1 \tag{ıо}
\end{equation*}
$$

But it is known that:

$$
\overline{f^{\prime}}\left(x_{0}\right)=\frac{\mathrm{I}}{f^{\prime}\left(y_{0}\right)} \text { and that } \phi^{\prime}\left(y_{0}\right)=\frac{\mathrm{I}}{\phi^{\prime}\left(x_{0}\right)}
$$

Hence the value of the first member of equation io is equal to unity over the value of the first member of 9 . That is why, if this last is less than unity in absolute value, the sccond is greater; that is to say, if the first procedure approaches the values $x_{0}$, $y_{0}$, the second moves away from them, and vice versa. If $f\left(y_{0}\right)$ is virtually constant, it varies but slightly as $y$ varies very considerably, in the first equation; and $y$ varies
2096. If we suppress one or more equations of the system determining the equilibrium and the movement, an equal number of unknowns will remain indeterminate (§130), and we shall be in a position to consider virtual movements; in other words, we can produce variations in certain indices and determine the others. The interdependence of the elements will come out as that is done. ${ }^{1}$
but slightly as $x$ varies very considerably in the second, while the relations in which the opposite takes place must be avoided. One may also hope to reach a solution of the problem by following the method $2 a$ if one of the relations, for example the second equation in ( 7 ), is of very very slight importance as compared with the first, if, that is, $\phi^{\prime}\left(x_{0}\right)$ is very small. We have simplified the problem as far as possible, but in general, among the interdependent quantities we get equations of the form:

$$
\begin{gathered}
f_{1}(x, y, z \ldots) \underset{f_{3}(x, y, z \ldots)}{=} \underset{0}{f_{2}(x, y, z \ldots)=0}=0
\end{gathered}
$$

and it is much more difficult to know which procedure to follow in order to use the method $2 a$ in place of the method $2 b$.
$2096{ }^{1}$ Every proposal to modify the existing social order in any way whatever is, at bottom, a proposal to modify this or that one of the conditions determining that order; and inquiries into the possibility of such modifications of the social order are inquiries into the possibility of modifying the conditions that determine it. People who preach aim at modifying residues, but they never, or almost never, attain that end. They do, however, and with no great difficulty, attain another, which is modification in the manifestations of existing residues. Take a community that is keenly dissatisfied with its government, the dissatisfaction being vague and general and venting itself in various ways that are frequently at loggerheads. A preacher arises and gives distinct and exact form to the residue, concentrating its manifestations upon one point. Ties and conditions are changed, and the social order adapts its form to the new ties and conditions. Those who pass laws and get them enforced sometimes aim at modifying residues, but they often find that they have worked to no purpose. If they have force at their disposal, they may modify certain ties and create others, but only within certain limits. Even the despot encounters such ties; he has to find ways to get approval of his policies from those who are upholding him by force: otherwise he is either not obeyed or else is overthrown. Then, too, a despotic government is no more able than a free government to enforce measures that are in too violent a conflict with the residues functioning in its subjects. It is not enough to proclaim a law-the law has to be enforced; and observation shows that many laws fail of enforcement because the people who are charged with their application are weak in resolve, while resistance on the part of those who are to obey is energetic. From that standpoint a despot often has far less power than a free government, since the measures dictated by the latter usually express the will of a party and consequently find many supporters to look after enforcement; whereas there may be few, very very few, supporters for the measures of a despot. He may enforce his will by energy and exertion in certain particular cases, but not in very many, for that would be a task far beyond the powers of a single individual. The people about him nod their heads but do not obcy, and his prescriptions are left a dead letter. That is the case too, on a much smaller scale, in the relations between
2097. Using ordinary language, we may say that all the elements considered determine the state of equilibrium ( $\$ 2070$ ); that there are certain ties ( $\$ 126$ ); and that if, by way of hypothesis, some of the ties are suppressed, we will be in a position to consider hypothetical changes in society (virtual movements). ${ }^{1}$ And the better to understand the interdependence that becomes apparent at once in mathematical language, we may add that sentiments depend on economic conditions, just as economic conditions depend on sentiments; and that there are similar correlations among the other elements.
2098. Examination of the facts allows us to go farther than these general considerations. Using mathematical language, we may say a government minister and his subordinates. Here is an instance that may serve as a type. Persano, Diario, Pt. III, pp. 88-90. We are in October of the year 1860. Persano is received in audience by Cavour and the following dialogue ensues: "[Cavour] 'I wish you were to be in the Chamber today. There may be questions from the floor, and your presence there would be desirable. Unfortunately, on your promotion you ceased to be a member. That is a nuisance-it annoys mel' [Persano] 'Promotion, Excellency? What promotion?' 'Why, your promotion to viceadmiral.' 'I have never received notification of any such promotion.' 'Never?' 'Never, Excellency.' 'In point of fact, we have been at a loss to explain your silence on the matter, and your continuing to sign yourself "Rear-admiral." But what has been going on? We sent you a notification of your promotion while you were still at Naples!' 'Oh, Excellency, one of the usual intrigues of underlings.' [But Cavour instantly found a way to take advantage of the slight, as the alert and skilful statesman will always do.] [Cavour] 'I have written to Lanza [the president of the Chamber] not to announce your promotion, since you have not received it. So you will attend the session. There may be some explanations to make, and it would be a good idea if you were there.' " The man who had been disobeyed was no less than Cavour and at a time when the Kingdom of Italy was being founded through his efforts!

In place of all these ties, so numerous, so varying, so complicated, worshippers of the goddess Reason see only one, the state of knowledge and the logical consequences of knowledge, thence going on to imagine that the modes and forms of society are determined by reasoning. That notion is highly pleasing to "intellectuals," for they are manufacturers of reasonings, and every manufacturer sings the praises of his own wares. But in that they fall into a truly childish error. Never mind the fact that their "reasonings" are usually derivations, and that the slight cfficacy they do have rests entirely on the residues which underlie them. Even if they were sound logico-experimental reasonings, in fact for the very reason that they were such, they could do little or nothing as regards modifying the forms of society that stand in correlation with quite different facts of far greater importance.
$2097^{1}$ That is what reformers do, without saying so, in building their imaginary Utopias. The man who can do what he pleases with the sentiments of human beings can also, within certain limits determined by other conditions, give society any form he pleases.
that the variables do not figure in the same way in all the equations, or, to put the situation more exactly, may approximately be assumed as not figuring equally in them all.
2099. In the first place, groups differ in degree of variability. One group is so stable that it may, approximately and over a not very extensive period of time, be taken as constant (geographical conditions, climate, soil, and so on), and the quantities that figure in such a group may be counted, approximately, in the group of constants. Another group varies to some slight extent (classes of residues, for instance). It may be taken as constant over a short period of time, but without overlooking the fact that it does vary in course of time. Another is quite considerably variable (education level, for instance). Another shows a maximum variability (derivations).
2100. Approximately, again, the equations that determine the equilibrium can be divided into groups in such a way that interdependences with other groups can be disregarded. There are good examples of that situation in pure economics where there may be equations of only two variables. In that case one of them may be said to be determined by the other.
2101. Using ordinary language, we may say that in determining the equilibrium certain elements may be considered as constant over fairly long periods of time, others as constant over periods not so long, but still not short, others as variable, and so on. We can add that, roughly at least, as a first approximation, the interdependence may be considered within certain groups of elements only, the various groups being taken as independent. If one such group is reducible to two elements and one of the two elements may be called constant, or practically so, that element may be taken as the cause, the other as the effect.
2102. If, by way of hypothesis, the geographical situation of Athens and its commercial prosperity in the age of Pericles are taken apart from other elements, the geographical situation may be said to be the cause, the prosperity the effect. But that group has been arbitrarily constituted by ourselves. Had two elements been indissolubly united, there should never have been any change in the second, since there has been no change in the first. But since the second has undergone a change, it could not have depended exclusively on the first. It was not, in other words, the effect of that cause.
2103. Another example-the case of ancient Rome. If we form a group made up of morals on the one hand, and political and economic prosperity on the other; and if we assume, by way of hypothesis, that morals were better at the time of the Punic Wars than they were at the end of the Republic; and if we assume, for still another hypothesis, that the morals are the constant element as compared with the element represented by the prosperity, we can say in company with many writers that good morals were the cause of Rome's prosperity. But along come those same writers, or others, and tell us that the prosperity of Rome was the cause of the corruption of morals. In the ordinary sense of the word "cause," this latter proposition contradicts the other. They can stand side by side if the relationship of cause and effect is dropped, and interdependence only is envisaged. In this form the relationship between the morals and the prosperity of a nation could be stated as follows: Good morals increase prosperity, prosperity reacts upon morals and corrupts them. ${ }^{1}$
2104. It is readily apparent that instead of considering a group of two elements, we may consider a group of a larger number of elements and then numbers of groups, each made up of a number of elements. That is a method-and it is at present the only one at our disposal-for obtaining approximate solutions that will be made more exact as the number of the elements and groups considered is expanded ( $\$ 82203 \mathrm{f}$.).
2105. Properties of the social system. A system of material atoms and molecules has certain thermic, electrical, and other properties. So a system made up of social molecules also has certain properties that it is important to consider. One among them has been perceived, be it in a rough and crude fashion, in every period of his-tory-the one to which with little or no exactness the term "utility," or "prosperity," or some other such term, has been applied. We must now dig down into the facts to see whether something definite can be found underlying these vague expressions, and its character determined. ${ }^{1}$

[^4]2106. Take the things called economic, moral, and intellectual prosperity, military and political power, and so on. If we would deal with them scientifically, we must be able to define them rigorously; and if we would introduce them into a determination of the social equilibrium, we must find some way, be it by mere indices, to make them correspond to quantities.
2107. That has been possible in pure economics and that is why that science has made such progress. But it cannot be done as readily for sociology. Again as usual, we must get around the difficulty by substituting rough approximations for the precise numerical data that we cannot have. So if a person had no table of vital statistics at his disposal he would have to rest content with the rough approximation of knowing that mortality is high in the years of infancy, then diminishes, and rises again in old age (§ I44). That is little, very little indeed, but it is better than nothing; and the way to increase the little is not to throw it away, but to keep it and make successive additions to it.
2108. If we ask, "Is Germany today, in the year 1913, more powerful in prestige and in a military sense than she was in 1860 ?", everyone will answer yes. But if we go on to ask just how much more powerful she is, no one will be able to answer. We can do the same with other questions of the kind; and it is taken for granted that the things called military power, political prestige, general intelligence, and so on are susceptible of increase or decrease without our being able to represent them in their various stages by exact figures.
2109. Even less definite are the entities called the prosperity and the power of a country, which are the sum of the various capacities just mentioned. Yet anybody can see that the prosperity and power of France are greater than the prosperity and power of Ethiopia, and that French prosperity and power are greater now, in the year 1913, than they were immediately after the war of 1870. Everyone understands, without any requirement of numerical definiteness, that there was a difference between the Athens of the age of Pericles and the Athens of the period following the battle of Chaeroneia, between the Rome of Augustus and the Rome of Augustulus. Even differences far less marked are perceptible and roughly evaluable; and for all of our lack of numerical precision, we still have an im-
pression of the situation that does not go very far wide of the facts. Then we can go on into the details and consider the various elements in the complex.
2110. To get a more exact picture, one has to state just what norms-they have to be to some extent arbitrary-one intends to follow in determining the entities that one is trying to define. Pure economics has succeeded in doing that. It has taken a single norm, the individual's satisfaction, and it has further set down that of that satisfaction he is the only judge. So economic "utility" or "ophelimity" came to be defined. But if we set ourselves the problem, after all so simple, of ascertaining quite apart from the individual's judgment just what is most advantageous to him, it soon appears that we require a norm, and that it has to be arbitrary. Shall we say, for instance, that it will be to his advantage to suffer physically for the sake of a moral satisfaction, or shall we say the opposite? Shall we say that it is better for him to seek wealth exclusively, or to apply himself to something else? In pure economics we left the decision to him. If now we are going to deprive him of that function, we must find someone else to whom it can be assigned. ${ }^{1}$
$2 I I^{1}$ In setting out on his inquiry into the nature of the "best republic," Aristotle clearly saw that such problems had to be solved. Politica, VII, 2, I (Rackham, p. 539) : "It remains for us to see whether the same happiness should not be attributed to the individual as to a city. But that doubt is dispelled, for every man confesses that it is the same. For whosoever says that the individual is happy where he has wealth says also that that city is happy on Earth that has wealth. And whosoever praises the tyrannical-life as blessed also holds that city most blessed which rules most peoples. And if there be he who says that the individual is happy if he has virtue, so he calls the city happy if it is virtuous."

Now we would stop at that point. That is to say, we have noted these and other similar opinions as to the state towards which the city should be guided, and we would then look for the characteristics common to all such states. Aristotle goes further than that. He determines what state one ought to prefer, VII, I, I (Rackham, p. 533): "If one would soundly ascertain what the best state is he must first determine what the best life is." With that, we leave the field of the experimental relative to go wandering compassless in the field of the metaphysical absolute. In reality Aristotle does not determine his absolute-a thing that would be impossible. He merely finds the solution to the problem that best accords with his own sentiments and with the sentiments of people who agree with him, with the usual adjunct, more or less implicit, of the derivation that evcryone agrees, or at least ought to agree, with him, and the tautology that every respectable man thinks as he thinks, since those who do not are not respectable. But in Aristotle, along with the metaphysicist, there was also the scientist with an eyc to experience. So, in IV, 1, 2-4 (Rackham, pp. 277-81), he returns from the field of the absolute to the field of the
2111. Utility. Whoever the judge we choose, whatever the norms we decide to follow, the entities so determined have certain common properties, and we shall now look at them. Once we have fixed upon the norms we elect to follow in determining a certain state as the limit that an individual or a community is assumed to approach, and once we have given numerical indices to the different states that more or less approximate the limit state, so that the state closest to it has an index larger than the index of the state farthest removed, we can say that those indices are indices of a state $X$. Then, as usual, for the purpose of avoiding the inconvenience of using mere letters of the alphabet as terms, we will substitute some name or other for the letter $X$, taking the name, again as usual, in order to avoid a jargon too baroque, from something of kindred nature. When we know, or think we know, just what thing is advantageous to an individual or a community, we say that it is "beneficial" for both individuals and communities to exert themselves to obtain it, and judge the utility they enjoy the greater, the nearer they come to obtaining it. By simple analogy, therefore, and for no other reason, we shall apply the term "utility" to the entity $X$ just described. ${ }^{1}$
2112. We must not forget that, for the very reason that the name is derived from a mere analogy, the "utility" so defined may on occasion roughly accord with the "utility" of ordinary parlance, but
relative and remarks that the majority of peoples cannot organize along the lines of the "best commonwealth," and that a form of government suited to peoples actually existing has to be found. He then very soundly adds: "For one should not only speculate as to the best government [republic] but also as to the government that is possible and which likewise can be common to all [cities]." He is also aware that it is not enough to just imagine the best form of state, but that ways have to be found to get the form one proposes accepted. However, he soon goes astray again, and for the usual reason of giving the major rôle to logical conduct and imagining that a lawgiver can shape a state according to his own pleasure. All the same, the knowledge he has of practical politics later constrains him to add that "to reform a state is no less serious a task than founding a new one."
2 III ${ }^{1}$ If it could be known what the metaphysicists ever mean when they speak of the "purpose" or "end" a human being is made for, that "end" might be taken as one of the states $X$; and the letter $X$ could then (still by analogy) be replaced by the word "end," and one could say that the state $X$ was the "end" towards which individuals and communities tend or "ought" to tend. That "end" might be absolute, as it usually is with metaphysicists, but it could also be relative if it were left to the judgment of certain individuals to determine it. A state more closely approaching that "end" would have a higher index than a state that did not come so close to it.
then again be in disaccord, and to such an extent as to mean the flat opposite. For example, if we take a state of material prosperity as our limit state for a people, our utility will not be greatly different from the entity that practical men designate by that name, but it will differ widely from the ideal envisaged by the ascetic. Conversely if we take the state of perfect asceticism as the limit state, our "utility" will coincide with the entity to which the ascetic aspires, but will differ altogether from the ideal of the practical man. After all, since human beings are in the habit of designating opposite things by the same name, we are left a choice between two modes of expression only: (I) We can resolutely eschew ordinary language and give different names to the different things-since these are very numerous, we will get, in consequence, many many coined words. Or (2) we can keep the same names for the things, with the warning that the names designate those things only in general, like the name of a class of objects, like the term "element" in chemistry, the term "mammal" in zoology, and so on; and that the species within the class will be fixed subject to the criterion we have chosen in defining the term "utility."
2113. It is undoubtedly most unfortunate that a single term should designate different things; and it would therefore be better to avoid using the term "utility" in the sense defined in §2111, which coincides with one of the senses of the term in ordinary language, and to substitute a new term for it, as has been done in economics, where "ophelimity" has been distinguished from "utility." I believe that the time will come when it will be necessary to do that. If I refrain from doing it here, it is from sheer terror of overabusing coined words. ${ }^{1}$
2114. The mere coining of a term will not extricate us, of course, from all our difficulties. Even when we consider some particular
$2113^{1}$ I say that, but I am sure I am wrong. There may be no way of reconciling the literary approach to sociology with the scientific approach. Once one sets out to study sociology on the models of chemistry, physics, and other sciences, it is perhaps the wiser part courageously to accept the sort of terminology that has shown itself unavoidably requisite in those sciences. Anyone desiring to apply himself to them has to familiarize himself with a certain number of baroque technical terms-know, for example, their systems of measurement and the meanings of such units as "dyne," "barye," "erg," "joule," "gauss," "poncelet," and so on. That is much more complicated than remembering the meanings in which I use the terms "residues"
utility with reference to its end, the utility of material prosperity, let us say, we find there are other utilities of different kinds from the standpoints of individuals or communities, the ways in which they are attained, the notions people have of them, and other circumstances of the sort.
2115. The important thing, first of all, is to distinguish cases according as we are thinking of the individual, the family, a community, a nation, the human race. And not only are the utilities of those various entities to be considered; a further distinction has to be drawn between their direct utilities and the utilities that they derive indirectly through their mutual relationships. So, disregarding other distinctions that it might be of advantage to make, and keeping to such as are absolutely indispensable, we find ourselves obliged to deal with the following varieties:

## a. Utility to the Individual:

$a$-I. Direct
a-2. Indirect, resulting from the fact that the individual is part of a community
$a-3$. Utility to an individual, as related to the utilities to others
b. Utility to a Given Community (For this variety the same distinctions, $a-\mathrm{I}, a-2, a-3$, serve.)
and "derivations." Even in ordinary literary essays it is wise not to imitate the writers alluded to by Boileau (Épittre X), who condemned

> ". . . la métaphore et la métonomye, grands mots que Pradon croit des termes de chymie."

The "energy" of mechanics must not be confused with the "energy" of ordinary parlance, nor is it excusable to imagine that a mechanical "live force" is a force that is alive. If one would know the meaning of "entropy" one had better glance at a treatise on thermodynamics. Chemistry, for its part, uses new terms by the hundreds, and chemists are sometimes obliged to give them synonyms for ordinary use. So in pharmacy the euphonious "hexamethylentetramine" has been replaced by "utropin," which at least has the merit of being a few letters shorter. To study chemistry one has to turn to a treatise on chemistry-plain good sense and etymology are of no help. That is unfortunate, but that is the way it is. No breed of literary chemists exists. To study sociology one has to turn to a treatise on that science and resign oneself to not trusting etymology and plain good sense. That, too, is unfortunate, in that it prevents the very numerous race of literary economists and sociologists from understanding the subject. For that matter, their breed is destined still to thrive for some time to come, since its existence corresponds to a certain social "utility" (§ $2400^{1}$ ).
$b$-r. Direct utility to communities, considered apart from other communities
b-2. Indirect utility, arising by reaction from other communities
$b-3$. Utility to one community as related to the utilities to other communities

Far from coinciding, these various utilities oftentimes stand in overt opposition. ${ }^{1}$ Sometimes explicitly, more often implicitly, all of them are usually brought down to one-by theologians and metaphysicists, out of a love for the absolute, which is one; by moralists, in order to induce individuals to concern themselves with the good of others; by statesmen, to induce the individual to blend his own advantage with the public advantage; and by other sorts of people for reasons of like character.
2116. Without departing from the logico-experimental domain, further distinctions may be drawn and the different utilities considered in two ways: as one of the members of the community pictures them to himself, and as an outsider views them, or a member of the community trying as far as he can to render an objective judgment. An individual who has a vivid sense of the direct utility, $a-\mathrm{I}$, and little or no sense of the indirect, $a-2$, will simply look to his own convenience and not concern himself with his fellow-citizens; whereas a person judging that individual's conduct objectively will see that he is sacrificing the community to his own advantage.
2117. Nor have we yet done with our distinctions. Each of the varieties indicated ( $\$ 2115$ ) may be considered with reference to time-in reference to the present, that is, and to one point or another in the future; nor will the conflicts between those various utilities be found any less sharp than between the others, nor can there be less difference as regards the person who judges them under sway of sentiment and the person who views them objectively.
2118. Suppose, to give the discussion a more concrete form, we consider one of the utilities in particular, material prosperity, let us say. In so far as human conduct is logical, one may hold, strictly, that the man who goes to war and does not know whether he will fall in battle or return home is acting out of considerations of individual utility, direct or indirect, for he can compare the probable

[^5]utility accruing to him if he returns safe and sound with the probable damage he will suffer if he loses his life or is maimed. But that argument ceases to hold for the man who marches to certain death in defence of his country. He is deliberately sacrificing individual utility to national utility (the case of the subjective utility mentioned in §2117).
2119. In the majority of cases a man makes such a sacrifice in virtue of a non-logical impulse, and subjective considerations of utility have nothing to do with it-the only consideration applying being the objective consideration of the on-looker. That is the case with animals, many of which instinctively sacrifice themselves for the good of other animals of their kind. The hen dying in defence of her chicks, the cock in defending the hen, the bitch in defending her pups, and so on, sacrifice their lives for the utility of their species and as a matter of instinct. Very prolific species of animals endure only through sacrificing the individual. Rats are killed by the thousands, yet there are still rats. The Phylloxeron has defeated man and taken possession of his vineyards. The utility of today is frequently in conflict with the utility of days to come, and the conflict gives rise to phenomena that are well known under the names of providence and improvidence in individuals, families, and nations. ${ }^{1}$
2120. Net utility. Taking account of the three types of utility noted (§2115) in the case of a single individual, we get as a result the net utility that the individual enjoys. He may, on the one hand, suffer a direct damage and on the other hand, as a member of a community, secure an indirect advantage; and the latter may be so great as more than to offset the direct damage, so that in the end there is a certain gain for a remainder. So for a group. If we could get indices for these various utilities, and take their sum, we would have the total or net utility of the individual or group. ${ }^{1}$

[^6]2121. Maximum utility of an individual or group. Since the utility just mentioned has an index, it may, possibly, in a certain state have a larger index than in a state more or less close to it-that is to say, it may have a maximum. People sense problems of that type in practical life, be it intuitively and in a vague way. We encountered one along our own path when we were inquiring as to the utility the individual might derive from observance of certain rules prevailing in his society ( $\$ \$ 1897 \mathrm{f}$.), or, more generally, the utility that he might derive from aiming at certain ideal ends (\$§ 1876 f.). At that time we considered only the qualitative solution of the problem, and not even with that could we go very far, since we lacked a rigorous definition of utility. We must therefore return to that subject here.
2122. When we consider a definite species of utility with reference to an individual, we get indices of partial utilities and also an index of the total net utility; and that is what makes it possible to estimate the utility which the individual enjoys under given circumstances. Furthermore if, as circumstances vary, the index of his net utility, which began by increasing, ends by decreasing, there will be a certain point at which it reaches a maximum. All the problems that we stated previously in qualitative terms ( $\$ \S 1876$ f., 1897 f.) then become quantitative and involve problems of maxima. Instead of asking whether an individual achieves his own happiness through observing certain norms, we ask whether and to what extent his ophelimity increases, and once on that road, we end by asking how and when such ophelimity attains its maximum.
2123. The particular problems stated in § 1897 are comprised in the more general problems stated in $\$ 1876$, and these in turn are part of a still more general category. If the state of an individual depends upon a certain circumstance to which variable indices may be assigned, and if for each of those indices we can know the index of net utility for an individual (or for a group considered as an individual), we shall be able to determine in what position of the individual (or community) that utility reaches a maximum.
2124. Finally, if we repeat that operation for all the circumstances

[^7]upon which the social equilibrium depends, all ties being known, we shall have that many indices from which we can select one index that will be greater than all the indices which stand anywhere near it, and it will correspond to the maximum of utility, due account being taken of all the circumstances mentioned.
2125. Difficult as these problems may be practically, they are theoretically easier than others on which we must now touch.
2126. So far we have considered the maxima of utility of an individual and of a community taken apart from other individuals and communities. Still left is the problem of those same maxima when individuals or communities are taken relatively to one another. For the sake of brevity we shall speak only of individuals in what follows, but the reasoning will apply just as well to comparisons of distinct communities. If the utilities of single individuals were homogeneous quantities and could therefore be compared and reduced to a sum, our study would not, theoretically at least, be difficult. We would simply take the sum of the utilities of the various individuals and so get the utility of the community they constitute -and that would be taking us back to problems already examined.
2127. But the business is not so simple. The utilities of various individuals are heterogeneous quantities, and a sum of such quantities is a thing that has no meaning; there is no such sum, and none such can be considered. If we would have a sum that stands in some relation to the utilities of the various individuals, we must first find a way to reduce those utilities to homogeneous quantities that can be summed.
2128. Maximum of ophelimity for a community in political economy. A problem of just that character arose in economics and had to be solved by that science. It will be well to consider it briefly, that we may be the better prepared to solve the more difficult sociological problem. In economics the equilibrium can be determined provided we stipulate that every individual achieves the maximum of ophelimity. The ties can be posited in such a way that the equilibrium will be perfectly determined. If, now, certain ties are suppressed, the perfect determination will come to an end, and the equilibrium will be possible at an infinite number of points at which maxima of individual ophelimities are attained. In the first case, only movements leading to the determined point of equilibrium
were possible; in the second, other movements also are possible. These are of two quite distinct types. Movements of a first type, $P$, are such that, beneficial to certain individuals, they are necessarily harmful to others. Movements of a second type, $Q$, are such that they are to the advantage, or to the detriment, of all individuals without exception. The points $P$ are determined by equating with zero a certain sum of homogeneous quantities dependent on heterogenous ophelimities. ${ }^{1}$
2129. Consideration of the two types of points, $P$ and $Q$, is of great importance in political economy. When the community stands at a point, $Q$, that it can leave with resulting benefits to all individuals, procuring greater enjoyments for all of them, it is obvious
$2 \mathrm{r} 28^{1}$ Pareto, "Il massimo di utilità per una collettività in sociologia," Giornale degli economisti, April, 1913, pp. 337-38 [This article was overlooked by RoccaSpinedi, Bibliografia di Vilfredo Pareto.-A. L.]: "Let us begin by recalling the economic problem. If we have the individuals $1,2,3 \ldots$ for whom the elementary ophelimities of the commodity $A$ are $\phi_{1 a}, \phi_{2 a} \ldots$ and if the variations of the total ophelimities that each one enjoys are $\delta \phi_{1}, \delta \phi_{2} \ldots$ one considers the expression:
\[

$$
\begin{equation*}
\delta U=\frac{1}{\phi_{1 a}} \delta \phi_{1}+\frac{\mathrm{I}}{\phi_{2^{a}}} \delta \phi_{2}+\cdots \tag{I}
\end{equation*}
$$

\]

Variations arising along the route that leads to the point of equilibrium are indicated by $d$. If the equilibrium is determined on the condition that each individual achieve the maximum of ophelimity, we get, for the route that leads to the point of equilibrium:

$$
\begin{gather*}
d \phi_{1}=0 \quad d \phi_{2}=0 \ldots  \tag{2}\\
d U=0=\frac{1}{\phi_{1 a}} d \phi_{1}+\frac{1}{\phi_{2} a} d \phi_{2}+\ldots \tag{3}
\end{gather*}
$$

The points determined by the equations (2), supplemented by the equations of the ties, are points of equilibrium in the system, and for them we get: $d U=0$. If some of these ties are removed, it will be possible to consider other variations, $\delta$, and for them $\delta U$ may or may not be zero. Let us call points at which $\delta U$ is zero points of the type $P$, and points at which $\delta U$ is not zero points of the type $Q$. Points of the type $P$ have one important peculiarity. Since the elementary ophelimities, $\phi_{1} a, \phi_{2} a$ . . . , are essentially positive, if the equation

$$
\begin{equation*}
\delta U=0=\frac{\mathrm{I}}{\phi_{1 a}} \delta \phi_{1}+\frac{\mathrm{I}}{\phi_{2 a}} \delta \phi_{2}+\ldots \tag{4}
\end{equation*}
$$

is to be satisfied, some of the total ophelimities $\delta \phi_{1}, \delta \phi_{2} \ldots$ must necessarily be positive and some negative: they cannot all be positive nor all negative. That peculiarity may be again expressed in the following manner: The points of the type $P$ are such that we cannot deviate from them to the benefit or detriment of all the members of the community-we can deviate from them only to the bencfit of some individuals and the detriment of others.
that from the economic standpoint it is advisable not to stop at that point, but to move on from it as far as the movement away from it is advantageous to all. When, then, the point $P$, where that is no longer possible, is reached, it is necessary, as regards the advisability of stopping there or going on, to resort to other considerations foreign to economics-to decide on grounds of ethics, social utility, or something else, which individuals it is advisable to benefit, which to sacrifice. From the strictly economic standpoint, as soon as the community has reached a point $P$ it has to stop. That point therefore plays in the situation a rôle analogous to the rôle of the point where the maximum of individual ophelimity is attained and at which, accordingly, the individual stops. Because of that analogy it has been called point of maximum ophelimity for the community. But, as usual, nothing is to be inferred from the etymologies of those terms (§2076); and to escape the ever present danger of falling into errors of that kind we shall continue to call that point the point $P$. ${ }^{1}$

[^8]2130. If a community could be taken as a single individual, it would have a maximum of ophelimity just as a single individual has; there would, that is, be points at which the ophelimity of the community would attain a maximum. Those points would not be the same as the points $Q$ indicated in $\S 2$ 228. Since, in fact, advances from those points can be made with resulting benefit to all the individuals in a community, it is obvious that the ophelimity of the community might be increased in that fashion. But it cannot be said that such points would coincide with the points $P$. Let us take a community made up of just two persons, $A$ and $B$. We can move from a point $P$, adding 5 to $A$ 's ophelimity and taking 2 from the ophelimity of $B$, and so reaching a point $s$; or adding 2 to $A$ 's ophelimity and taking I from $B ' \mathrm{~s}$, so that a point $t$ is reached. We cannot know at which of the two points, $s, t$, the ophelimity of the community will be greater or less until we know just how the exchange, shall be equal to the price $p_{a}$. Let us assume that that condition is met. ... If it is certain that that equation is forced upon us, and if it is taken as our hypothesis, there is no need whatever of covering four pages with calculations just to discover that 'two commodities being given on a market, the maximum satisfaction of needs, or the maximum of actual utility, is attained for each bidder when the relation of the intensities of the last needs satisfied, or the relation of rarities, is equal to the price. . . ?' To be sure there is no mistake in the argument, nothing that vitiates the theory, since the solution that is reached is none other than the hypothesis with which we started. But it is asonishing that Walras should have succumbed to such an illusion. One would willingly believe that it was an oversight on his part. But that is not the case. The tautology was called to his attention several times and by the most appreciative critics, but Walras simply would not see it that way. And in that we come upon a most interesting thing-the violence of the sentiments that were driving the illustrious economist to preach a practical doctrine. He wanted the public interest to be demonstrated mathematically, at all costs. He was resolutely bent on showing that free competition was good and monopoly bad."
Those strictures in no way detract from Walras's great merit in having been the first to state the equations of the economic equilibrium in a particular case, just as criticisms that might be made of Newton's theory of light or, what is worse, of his comments on the Apocalypse, do not detract from the admiration due to the immortal founder of the science of celestial mechanics. People who are ever confusing the prophet with the scientist are not aware of that. It may well be that the dogmas of a religion, being reputed absolute, do not change as the years go by. But scientific doctrines are in a perpetual state of flux and, now by an author himself but at any rate always by others, they are forever being modified, amplified, given new forms, and even new content. Believers in the Apocalypse may be eager to count Newton as one of them. Believers in the humanitarian or Socialist religion may strive to make capital out of the name of Walras. But such wretched pettifogging does no harm either to Newton or to Walras.
ophelimities of $A$ and of $B$ are to be compared; and precisely because they cannot be compared, since they are heterogeneous quantities, no maximum ophelimity of the community exists; whereas a maximum ophelimity for the community can exist, since it is determined independently of any comparison between the ophelimities of different individuals.
2131. The maximum of utility FOR a community, in sociology. ${ }^{1}$ Now let us take all that over into sociology. In so far as he acts logically, every individual tries to secure a maximum of individual utility, as explained in §2122. If we assume that some of the ties imposed by public authority are suppressed without being replaced by others, an infinite number of positions of equilibrium with the provisos of individual maxima as indicated become possible. Public authority interposes to require some and prohibit others. Let us assume that it acts logically and with the sole purpose of achieving
$2131{ }^{1}$ (Continuing the quotation from my article, "Il massimo di utilità per una collettività," in $\$ 2128^{1}$ above): "The quantities $\delta \phi_{1}, \delta \phi_{2} \ldots$ are heterogeneous and therefore cannot be summed, for such a sum would be without meaning. But let us assume for a moment that they are not heterogeneous and that the equation
\[

$$
\begin{equation*}
\delta H=\delta \phi_{1}+\delta \phi_{2}+\ldots \tag{5}
\end{equation*}
$$

\]

does mean something. In that case it would represent the variation of ophelimity of the community considered as a single person; the proviso $\delta H=0$ would correspond to the proviso of a maximum of ophelimity for that imaginary person, and the points $P$ would therefore be the points of maximum ophelimity for such a person. The purpose in considering the quantities

$$
\begin{equation*}
\frac{\mathrm{I}}{\phi_{1 a}} \delta \phi_{1}, \quad \frac{\mathrm{I}}{\phi_{2} a} \delta \phi_{2} \ldots \tag{6}
\end{equation*}
$$

is to avoid the difficulty arising from the heterogeneous character of the ophelimities $\delta \phi_{1}, \delta \phi_{2} \ldots$ and to make it possible, by the fact of their being homogeneous, to take their sum. The quantities (6) are that because, in virtue of the equations of the equilibrium, they all represent quantities of a single commodity $A$. It is evident that if there were some other way of rendering the heterogencous quantities $\delta \phi_{1}$, $\delta \phi_{2} \ldots$ homogeneous by multiplying them, let us say, by certain positive quantities $a_{1}, a_{2} \ldots$ consideration of the sum
(7)

$$
\delta V=0=a_{1} \delta \phi_{1}+a_{2} \delta \phi_{2}+\ldots
$$

would yield somewhat the same results as consideration of (4) [§2128 ${ }^{1}$ ] and determine certain points of the type $P$ from which departure cannot be made to the advantage, or detriment, of all the members of the community. Economics does not require this other manner of assimilating the variations in ophelimity, and therefore does not look for one. But sociology does, and it therefore seeks and finds. An individual (equation i) sets out to act in such a way that all his fellow-citizens shall achieve the greatest possible good, without anyone's being sacrificed. The expres-
a certain utility. (That rarely is the case; but that fact we need not consider here, since we are envisaging not a real, concrete situation, but a theoretical, hypothetical one.) In such a case the government must necessarily compare-we need not now ask with reference to what criteria-the various utilities. When it shuts a thief up in prison, it compares the pain that it inflicts upon him with the utility resulting from it to honest people, and it roughly guesses that the latter at least offsets the former; otherwise it would let the thief go. ${ }^{2}$ For the sake of brevity we have here compared two utilities only. A government of course-as best it can, and that is often badly enough-compares all the utilities it is aware of. Substantially, it sion (7) exists subjectively for him; that is to say, he experiences the variation $\delta \phi_{1}$ directly and imagines the variations $\delta \phi_{2}, \delta \phi_{3}$. . . The coefficients $a_{2}, a_{3} \ldots$ serve to effect the transition from the quantities $\delta \phi_{2}, \delta \phi_{3} \ldots$, which are objective and heterogeneous, to the quantities $a_{2} \delta \phi_{2}, a_{3} \delta \phi_{3} \ldots$ which are subjective and homogeneous. Humanitarians $\mathrm{I}, 2,3$, who dislike to see the criminals $4,5,6$ in jail, giving not a thought to the victims $7,8 \ldots$ will assign high coefficients to the quantities $\delta \phi_{4}, \delta \phi_{5}, \delta \phi_{6}$, and coefficients of approximately zero to the quantities $\delta \phi_{7}, \delta \phi_{8}$. . . In that way, however, there are as many equations (7) as there are individuals, namely:

$$
\begin{align*}
& 0=a^{\prime}{ }_{1} \delta \phi_{1}+a^{\prime}{ }_{2} \delta \phi_{2}+a^{\prime}{ }_{3} \delta \phi_{3}+\ldots .  \tag{8}\\
& 0=a^{\prime \prime}{ }_{1} \delta \phi_{1}+a^{\prime \prime}{ }_{2} \delta \phi_{2}+a^{\prime \prime}{ }_{3} \delta \phi_{3}+\ldots \\
& 0=a^{\prime \prime \prime}{ }_{1} \delta \phi_{1}+a^{\prime \prime \prime}{ }_{2} \delta \phi_{2}+a^{\prime \prime \prime}{ }_{3} \delta \phi_{3}+\ldots
\end{align*}
$$

And the heterogeneity, eliminated from the quantities in the single equation, turns up again in the quantities of the different equations. To render these homogeneous, they have to be multiplied again by certain coefficients $\beta^{\prime}{ }_{1}, \beta^{\prime \prime}{ }_{1}, \beta^{\prime \prime \prime}{ }_{1} \ldots$ determined with an objective purpose in view-the prosperity of the community, let us say. Suppose a government believes that the prosperity of the community demands the extermination of criminals. It will then resign itself to inflicting pain on kindhearted humanitarians; it will, in other words, assign very low coefficients $\beta^{\prime}{ }_{1}, \beta^{\prime \prime}{ }_{1}$, $\beta^{\prime \prime \prime}{ }_{2} \ldots$ to their pains, and fairly high coefficients, $\beta^{\mathrm{VII}_{1}}, \beta^{\mathrm{vIII}}{ }_{1} \ldots$ to the pain of the victims of the criminals. Now that, thanks to the coefficients, the quantities corresponding to the equations (8) have become comparable, their sum can be taken after they have been multiplied by $\beta^{\prime}{ }_{1}, \beta^{\prime \prime}{ }_{1} \ldots$ and we get:

> (9)

$$
0=M_{1} \delta \phi_{1}+M_{2} \delta \phi_{2}+M_{3} \delta \phi_{3}+\ldots
$$

The equation (9) will determine points of the type $P$ analogous to the points $P$ determined by the equation (4) [ $\left.\$ 2128^{1}\right]$. A government that has fixed on the equation (9) will have to carry the movement of the community on till one of the points $P$ is reached; and there it will stop, for if it went any farther it would become involved in a self-contradiction, sacrificing people who it believes should not be sacrificed."
$2131^{2}$ The comparison is usually made with derivations, comparing ideal purposes rather than actual positions. To tip the scales in favour of honest people, it will be said that "the criminal deserves no mercy," which means, at bottom, that it is better
does at a guess what pure economics does with scientific exactness: it makes certain heterogencous quantities homogencous by giving them certain coefficients, thence proceeding to add the resulting quantities and so determine points of the type $P$.
2132. All that is sensed more or less vividly, more or less vaguely, in practical life; and it is said that a government ought to stop at the point beyond which no "advantage" would accrue to the community as a whole, that it ought not to inflict "useless" sufferings on the public as a whole or in part, that it ought to benefit the community as far as possible without sacrificing the "ideals" it has in view "for the public good," that it ought to make efforts "proportionate" to purposes and not demand burdensome sacrifices for slight gains. The foregoing definition is designed to substitute exact cơnceptions for such expressions of common parlance, which are deficient in all exactness and, in view of that vagueness, misleading.
2133. In pure economics a community cannot be regarded as a person. In sociology it can be considered, if not as a person, at least as a unit. There is no such thing as the ophelimity of a community; but a community utility can roughly be assumed. So in pure economics there is no danger of mistaking the maximum of ophelimity for a community for a non-existent maximum of ophelimity of a community. In sociology, instead, we must stand watchfully on guard against confusing the maximum of utility for a community with the maximum of utility of a community, since they both are there.
2134. Take, for instance, the matter of population increase. If we think of the utility of the community as regards prestige and military power, we will find it advisable to increase population to the fairly high limit beyond which the nation would be impoverished and its stock decay. But if we think of the maximum of utility for the community, we find a limit that is much lower. Then we have to see in what proportions the various social classes profit by the in-

[^9]crease in prestige and military power, and in what different proportion they pay for it with their particular sacrifices. When proletarians say that they refuse to have children because children merely increase the power and profits of the ruling classes, they are dealing with a problem of maximum utility for the community-the derivations they chance to use, such as derivations of one religion or another, or of Socialism or pacifism, are of little importance-the thing to look for is what lies underneath. The rejoinders of ruling classes oftentimes show a confusion of a problem of maximum utility of the community and a problem of maximum utility for the community. They also try to bring decisions down to a question of a maximum of individual utility, trying to make the "subject" classes believe that there is an indirect utility which, when properly taken into account, turns the sacrifice required of them into a gain. That may actually be the case sometimes, but not always; there are many cases where, even taking very liberal account of indirect utilities, the result shows not an advantage, but a sacrifice, for the subject classes. In reality, in cases such as these, non-logical impulses only can serve to induce the subject classes to forget the maximum of individual utility, and work for the maximum of utility of the community, or merely of the ruling classes-and that fact has not infrequently been sensed, intuitively, by the latter.
2135. Let us imagine a community so situated that a strict choice has to be made between a very wealthy community with large inequalities in income among its members and a poor community with approximately equal incomes. A policy of maximum utility of the community may lead to the first state, a policy of maximum utility for the community to the second. We say may, because results will depend upon the coefficients that are used in making the heterogeneous utilities of the various social classes homogeneous. The admirer of the "superman" will assign a coefficient of approximately zero to the utility of the lower classes, and get a point of equilibrium very close to a state where large inequalities prevail. The lover of equality will assign a high coefficient to the utility of the lower classes and get a point of equilibrium very close to the equalitarian condition. There is no criterion save sentiment for choosing between the one and the other.
2136. There is a theory-we are not now concerned with the extent of its correspondence with the facts-according to which slavery was a necessary condition of social progress; because, so the argument runs, it enabled a certain number of individuals to live lives of leisure and consequently devote themselves to intellectual pursuits. Granting that contention, for a moment, if one person desires to solve a problem of maximum utility of the species and considers that utility and nothing else, he will decide that slavery has been a benefit; on the other hand, if another person desires to solve a problem of the same sort, and envisages nothing but the utility of the human beings who are reduced to slavery, he will decide that slavery has been an evil, meantime overlooking a number of indirect effects. We cannot ask who is right, who wrong. Such language has no meaning until a criterion has been selected for guiding a comparison between the two decisions (§ 17).
2137. We are to conclude from that not that problems simultaneously considering a number of heterogeneous utilities cannot be solved, but that in order to discuss them some hypothesis which will render them commensurate has to be assumed. And when, as is most often the case, that is not done, discussion of such problems is idle and inconclusive, being merely a play of derivations cloaking certain sentiments-and those sentiments we should alone consider, without worrying very much about the garb they wear.
2138. Even in cases where the utility of the individual does not stand in conflict with the utility of the community, the points of maximum of the one do not ordinarily coincide with the points of maximum of the other. Let us go back for a moment to the particular case examined in §§ 1897 f. Taking a given individual, let $A$ be the extreme point representing strictest observance of every precept obtain-


Figure 36 ing in his society; $B$, another extreme point representing violation of precepts that are not recognized as absolutely indispensable; $m n p$ the curve of utility of the individual, who begins suffering a damage at $A$, then attains a benefit, which becomes greatest at $n$, the benefit thereafter diminishing and becoming a loss at $B$.

Similarly, let srv be the curve of the utility deriving to society from the fact of the individual's more or less faithful observance of the precepts. The social utility is greatest at $r$. At the point $q$, intermediate between $A$ and $B$, we get for the individual the maximum of utility $q n$. At the point $t$, also intermediate between $A$ and $B$, we get $t r$ as the maximum of utility deriving to the community through the individual's conduct. ${ }^{1}$
2139. Instead of considering a single individual, one may take a number of individuals having approximately the same curve of utility, mnp. Then the curve of utility srv of the group to which the individuals belong will be the curve resulting from the conduct of those individuals. Instead of mere violations of the norms obtaining in a society, we may consider transformations and reforms of them that take place in that society. In many cases $t$ will be much closer than $q$ to $B$; in other words, as regards certain individuals it will be advantageous to society that the reform be greater than the reform which would bring them the maximum utility. People who are already rich and powerful oftentimes have little to gain from innovations, whereas society may benefit greatly by them. Or again, for individuals inclined to quiet, unruffled living $t$ will be much nearer than $q$ is to $B$; in other words, any innovation, however beneficial to society, will be distasteful and troublesome to them. For "speculators," on the other hand, $t$ stands much farther removed than $q$ does from $B$-and "speculators" tend much more readily to change than is necessary for the good of society. If we go on considering the various categories of individuals in that way, we may find, needless to say, a certain amount of compensation in their conduct, so that, everybody pulling for himself, a position will result somewhere in the neighbourhood of the point $t$, where the society's maximum utility is located.
2140. Residues and derivations in relation to utility. Above, in §2123, we considered in the abstract certain things that might influence the social equilibrium. Now let us be specific and consider residues and derivations chiefly. ${ }^{1}$

[^10]2141. As a preparation for our inquiry, let us forget human society for a moment and assume that we have two extreme types of abstract societies: I. A society where sentiments hold absolute sway, without reasonings of any kind. Animal societies seem to approximate that type quite closely. 2. A society in which logico-experimental reasonings hold absolute sway. Going back to Figure 29 (§ 1869), we may say that in the first case individuals move from $h$ to $m$ instinctively, without reasoning, without holding an ideal, $T$, in view, there being therefore no tangent, $h T$. In the second case they move from $h$ to $m$ by reasoning solely, and there is again no tangent, since any such line would be an arc of the curve hm .
2142. In a case of the first type, the form of the society is determined if the sentiments are given, and the external circumstances (environment) in which the society is situated; or if the circumstances only are given, but the sentiments are regarded as determined by the circumstances. Darwinism, carried to the extreme, gave the complete solution of that problem with its theory of the survival of the individuals best adapted to environment ( $\$ \$ 828,1770$ ). Yet not even in that very simple case was the fog that drapes these questions entirely dispelled. In the first place, one could ask: How comes it that so many varieties of animals are to be found on one same soil? One of the species should have been better adapted to it than the others and therefore have destroyed them. Furthermore, behind the phrase "better adapted" lurk the same difficulties that we encountered when we came to the term "utility." The animal that is "better adapted" as far as its own individual prosperity is concerned may not be "better adapted" as regards the prosperity of the species. If rats survive, that fortune is due solely to their extraordinary fertility. Suppose certain rats were better adapted than others to escape the traps set by human beings but at the same time were less prolific. Escaping the traps, they might in time replace other rats, but in view of their reduced fertility the species might become extinct. ${ }^{1}$
sidering the problem qualitatively and could not go very far with it, since we were not equipped with any definition of utility ( $\$ \$ 211$ f.). Virtual movements were considered in their relation to an objective in general, and only secondarily in their relation to utility. Here we are thinking of this last in particular.
$2142^{1}$ There have been numbers of books, favourable or unfavourable, on the subject of social Darwinism, which now and again, even without being directly mentioned, has inspired important works such as those of G. de Molinari. The criticisms
2143. In a case of the second type where logical thinking prevails, the form of the society is by no means determined when the external environment is given. It is necessary further to indicate the end to which logico-experimental reasoning is to be the means. Be it said in all deference to our estimable humanitarians and positivists, a society determined exclusively by "reason" does not and cannot exist, and that not because "prejudices" in human beings prevent them from following the dictates of "reason," but because the data of the problem that presumably is to be solved by logico-experimental reasoning are entirely unknown (\$\$ 1878, 1880-82). Just there the vagueness of the notion of utility again puts in an appearance, the same vagueness that fell in our way as we were trying to define utility (§2III). The concepts various individuals have of what is good for them and good for others are essentially heterogeneous, and there is no way of reducing them to unity.
2144. That fact is denied by people who think they know the
that we are here making of social Darwinism in no wise tend to depreciate its importance, a caution that might well be repeated for many other doctrines on which we touch in these volumes ( $\$ 4 \mathrm{I}$ ). This treatise on general sociology is neither an exposition nor a history of sociological, philosophical, scientific, and other doctrines. We are concerned with them only incidentally, according as they provide examples which enable us to distinguish this or that derivation from experimental reality or to clarify some point in one of our scientific investigations. We would not be called upon to give this warning had the science of sociology reached the level of other logico-experimental sciences. A reader of Poincaré's Les méthodes nouvelles de la mécanique céleste does not expect to find in that book an exposition or a history of astronomical theories from Hipparchus to our day; and a reader of Paul Tannery's Recherches sur l'histoire de l'astronomie ancienne does not expect to find in it a treatise on celestial mechanics. In my Systèmes socialistes, my intention was to make a study of the derivations that are known under the names of such systems. One critic observed that I had stopped at forms, without getting to the bottom of things, and he went on from there to deliver a sharp condemnation of the book. The observation was sound, the condemnation deserved-at least as deserved as a criticism that might be made of Tannery for not dealing with celestial mechanics in the book just alluded to. The deficiency in my Systèmes socialistes is of quite another nature, arising from the fact that when I wrote that book I did not as yet have at my disposal the theory of derivations that I develop in this treatise: I was forced to apply it in advance before I had attained a thorough-going conception of it, and the result was a certain wavering. That study ought now to be recast in the light of the more exact theories which I have been expounding here. It would also be useful to have similar studies of political, philosophical, and other theories, in short, of all the various manifestations of the intellectual activity of human beings, which, the doctrines of socialist systems among them, go to make up the vast mass of social
absolute. They reduce all human opinions to their own opinion, eliminating the others by those processes of derivation of which we have given many examples; but the elimination is valid only for themselves and their followers, other people remaining of the differing opinions.
2145. Social reformers as a rule also fail to notice, or at least they disregard, the fact that individuals entertain different opinions with regard to utility, and that they do so because they get the data they require from their own sentiments. They say, and believe, that they are solving an objective problem: "What is the best form for a society?" Actually they are solving a subjective problem: "What form of society best fits my sentiments?" The reformer, of course, is certain that his sentiments have to be shared by all honest men and that they are not merely excellent in themselves but are also in the highest degree beneficial to society. Unfortunately that belief in no way alters the realities. ${ }^{1}$
doctrines. I have not dealt with them, and quite deliberately so, in these volumes.
No one must infer from that that I am so absurdly presumptuous as to imagine that I owe nothing to such doctrines as they have been expounded in the past (§41). One might as well say that a man of the Stone Age was in as good a position to discuss a scientific subject as a trained scholar living in a society as intellectually advanced as ours. The influence of one doctrine on another makes itself felt not only in the points where they stand in agreement one with the other, but in their points of divergence as well. Aristotle owes something to Plato even when he criticizes him. If there had been no Euclidean geometry, we should perhaps never have had non-Euclidean geometries. Newton's theory of universal gravitation would probably never have existed had there not been the earlier theories that it contradicts. Just what was their influence on Newton's mind and what the influence of direct experience? We do not know, and Newton himself knew no better than we, and perhaps not so well. Very keen must the person be who can successfully specify the shares belonging to each of the very numerous and varied influences that bear upon an author. Such researches may be important for psychology or for anecdotic history. They have very little significance in the logico-experimental study of the laws of social phenomena. [All the same, in a work of a million words with not a few asides, and containing not a few strictures on great writers of past and present, a few hundred words more might not have come amiss to describe what Pareto in particular owed, for his general method to Auguste Comte, for his theory of derivations to Bentham (some of whose categories Pareto adopts verbatim), for his theory of class-circulation to Gaetano Mosca, for his theory of residues to Frazer and others, and for a number of phrases and items of detail even to Hegel, William James, and many others.-A. L.]
$2145{ }^{1}$ From the strictly objective standpoint the term "best" as used in their theorem needs defining ( $\$ 2110^{1}$ ) -it is essential, that is, to state exactly what the term is supposed to stand for. That is like determining exactly which one of the
2146. Human society falls somewhere between the two extreme types just noted (\$2141). Its form is determined-aside from external environment-by sentiments, interests, logico-experimental reasonings used for satisfying sentiments and interests, and, in a secondary way, by derivations, which express and sometimes intensify sentiments and interests and serve in certain cases as instruments of propaganda. Logico-experimental reasonings play an important rôle when the objective is known and the quest is for the means best suited to reaching it. They are therefore used with conspicuous success in the arts and crafts, in agriculture, industry, and commerce; and so, in addition to the many technical sciences, it has been possible to constitute a general science of interests, the science of economics, which assumes that logico-experimental reasonings exclusively are used in certain branches of human activity. They are effective also in war, where they have produced strategy and allied sciences. They might conceivably be effective in the science of government, but so far in history they have been used in that connexion rather as an individual art by this or that statesman than as a means of building up an abstract science, since the objective is not known or, being known, is better kept secret. For those reasons and others still logico-experimental thinking has played a very minor part in the organization of society. There are, as yet, no scientific theories bearing on that subject, and in everything pertaining to it human beings are moved much more by sentiment than by thought. A certain number of individuals are clever enough to take advantage of that circumstance to satisfy their own interests, in doing which, at this or that moment, case by case and as occasion requires, they use empirical and to some extent logico-experimental reasonings.
2147. Almost all the reasonings that are used in social matters are derivations. Not seldom the most important element in them is left unexpressed, implicit (§1876), or is at best remotely suggested. If one goes looking for it, if, that is, one tries to discover on just what principles the conclusions may be logically based, one may in many

[^11]cases succeed in discovering the sentiments and interests that explain the acceptance of the conclusions to which the derivations pointed the way. The better to understand the character of such derivations, suppose we consider two examples. We shall be able to examine only a few of the principles that one might legitimately assume to be implicit in them; for if one set out to deal with them all, one would be obliged to consider all the infinitude of motives that determine the opinions of men.
Example I. Let us take the celebrated parable of Bastiat on the use of a carpenter's plane, ${ }^{1}$ and see how Bastiat applies it in his controversy with Proudhon. It is a story of two imaginary carpenters, James and William by name. James makes a plane; William borrows it, and in return for such "service" agrees to give James one of the boards he makes with it. ${ }^{\text {" }}$
The derivation puts in an appearance in the very statement of the issues in debate, the question as to whether interest on capital is or is not "legitimate." ${ }^{3}$ It occurs neither to Bastiat nor to Proudhon to try to define the term "legitimate." For Bastiat it seems to mean "in accord with my sentiments," which, through a very common derivation ( $\$ \$ 59 \mathrm{If}$.), become the sentiments of all men. Proudhon too entertains the same notion, but he supplements it with many others in order to harmonize his theories with the sentiments of the

[^12]public he is addressing (derivation, Class III-accord with sentiments). ${ }^{4}$ He finds no great difficulty in doing that, since the accord has to be established between things that are left indefinite and can therefore be stretched as far as one wishes in whatever direction. The two both agree that the loan is a "service." ${ }^{5}$ Neither of them, however, defines at all exactly what he understands by the term, and the result, of course, is that they both draw different conclusions from the accepted premise. Pre-eminent in Bastiat's mind is the notion that a person who renders a "service" has a "right" to a remuneration. With Proudhon, the dominant feeling is that the individuals in a society render mutual "services" and their "rights" therefore offset one another. Those propositions may be true or false according to the meanings of the terms that are used. They are of a piece with propositions based on "natural law." Proudhon goes on to hint at a practical manner of effecting such offset in remunerations. That does not interest us here in itself; but one might note the implicit assumption that first one has to decide in what form of social organization "justice" and "right" reside, and then, secondarily, how that organization is to be established. ${ }^{6}$ Had that
$2147{ }^{4}$ The controversy took place in 1849 at a moment when republican enthusiasms were rising high. Proudhon to Bastiat, Ibid., Vol. V, pp. 120-21: "The February revolution aims, in the domains of politics and economics, to establish the absolute freedom of the man and the citizen. The watchword of the Revolution is, in the political sphere, the organization of universal suffrage-in other words, the absorption of power by society, and in the economic sphere, the organization of circulation and credit, in other words the absorption of the capitalist's status by the worker's status. That formula does not of course, all by itself, give a complete picture of the system. It is only its point of departure, its aphorism. But it suffices to explain the Revolution in its immediateness, its actuality. It justifies us, consequently [The "consequence" is worth a gold mine in Peru.], in saying that the Revolution is and can be nothing but that."
$2147{ }^{5}$ Proudhon to Bastiat, Ibid., Vol. V, p.. I25: "On the one hand it is true, as you yourself categorically assert, that the loan is a service. And since every service is a value [What does that mean?], since, consequently, it is in the nature [Our greetings to this old friend of ours!] of every service to be recompensed, it follows that the loan must have its price, or, to use the technical expression, must bear interest."
$2147{ }^{6}$ That is clearly evident in all the writings of Bastiat and Proudhon. As regards the former, the following will suffice: Ibid., Vol. VI, p. 201: Harmonies économiques: Richesse: "It must be recognized, in the first place, that the impulse which drives us towards wealth comes from nature [Most illuminating! Does not the impulse that impels one to commit a crime also come from nature?], is of providential creation [What on earth is that?], and therefore moral. It lies in that
principle been stated explicitly, the many problems connected with multiple utilities would have come to the fore at once, and the many relationships between such utilities and the norms of con-duct-be they what one will-to which the terms "justice" and "right" are applied. Both Bastiat and Proudhon vaguely sense the existence of such problems and exert themselves to demonstratewith scant success, to tell the truth-that "justice" and "right" are identical with some vaguely defined "utility." ${ }^{7}$ Bastiat uses the very common derivation of offering a hypothetical example as proof (§ I409). An example may have its place in a logico-experimental argument provided it is adduced merely to clarify a writer's thoughts. It can never serve as proof. The complete syllogism would be: "Assuming that a situation $A$ exists, the consequence will be $B$. The situation in reality is, in the pertinent respects, equivalent or
primitive and general destitution which would be the lot of us all did it not inspire us with a resolve to be free of it. And it must be admitted in the second place that the efforts men make to lift themselves from that primitive impoverishment are, provided they are kept within the bounds of justice [But the location of those bounds is the very point in dispute between those who assert and those who deny that in taking a part of the worker's product the capitalist oversteps the bounds of justice.], altogether estimable and respectable, since they are universally esteemed and respected. [Class II derivation-authority.] There is no one who does not agree that labour has quite by itself a moral status. . . . Thirdly, one must admit that the desire for wealth becomes immoral when it is carried to the point of inducing us to overstep the bounds of justice. [But who sets those bounds? They are evidently not the same for people who claim that "property" is "theft" and for those who claim that "property" is "legitimate."] . . . That is the judgment passed not by a handful of philosophers but by the universality of men. [People who do not agree with Bastiat are not "men."] On that I rest." How many words just to describe how he feels. He might have done that in the first place without such a long detour.
$2147{ }^{7}$ Bastiat's work as a whole is devoted to that very thing, and that is his purpose especially in his Economic Harmonies. Many other writers have also argued the identity of the conclusions of economic science and "morality"-Proudhon, the identity of his economic ideas and "justice." In almost all writers the identity is not between economics and morality as they actually exist in human societies, but between some future economics and some future morality, between economics and morality as they will be when the writer's ideas are adopted or as they will be at the end-a little known quantity, to tell the truth-of an historical evolution. Usually the identity obtained in that manner seems self-evident, for it is assumed implicitly that economics and morality have to be, or are going to be, logical inferences of certain given premises; and it is undeniable that the various logical consequences of the same premises cannot be discordant. The theories of final causes, of the providential organization of society, of social Darwinism, and other theories of the sort, all lead to the same conclusions.
similar to $A$. The consequence therefore will be $B$." But in offering the hypothetical example, "the consequence of $A$ will be $B$," the proposition that most requires demonstration-that "the real situation is equivalent or similar to $A^{\prime \prime}$--is suppressed, and the conclusion is left unstated to avoid calling attention to the suppression ( $\$$ I406). The example offered by Bastiat is the parable of the plane. He, however, cannot be charged with suppressing the proposition that the example is a faithful copy of reality. He states as much in unequivocal terms. ${ }^{8}$. What one can say is that he is mistaken, that reality is not as he pictures it. Bastiat reduces the parties involved to two: a man who has a saw and a plane, and another who wants to make boards. That is too violent a simplification to bear any resemblance to the real situation. One would come closer to the truth by considering three men, one of whom uses the boards while the other two produce them, the one having only his hands to work with, the other owning the saw and the plane. That slight modification in the hypothesis is enough to change Bastiat's conclusions entirely, even if we accept his method of drawing them. They stand only as regards a consumer in his relations to the two producers as a group. They cease to be valid when the producers come to dividing the fruits of their labour. As a matter of fact the workman has no use for his boards. It is idle therefore to remind him that if he had no plane and no saw he could produce hardly one board in a year's time, whereas as it is he is producing a hundred. The problem to be solved is a different one. The working-man and the capitalist are producing, and what we want to know is in just what proportions the product ought to be divided. That problem is unsolvable unless the term "ought" is strictly defined, and Bastiat's apologue gives not the slightest help in that connexion. Those who think the product ought to go to "capital" will regard as unfair anything that goes to the working-man beyond what is absolutely necessary to keep him in condition to work: and the logic of that is slavery. Those who think the produce ought to go to "labour" will regard as unfair anything taken by capital-they will call it "surplus

[^13]value," and the work corresponding to it "surplus labour." Those who think the product ought to go not to the individuals who produce it, but to society, which provides them with the environment without which they could never produce, will maintain that the product belongs to society to distribute as society thinks best. Those who think that the product "ought" to be distributed according to certain norms-norms of free competition, for instance-will hold that the working-man and the capitalist should be left to fight out the problem of division between themselves. And so on and on, there being as many solutions as there are meanings attachable to the term "ought." Still others we get if we assume that the term "ought" envisages realization of certain purposes of social utility. One might try to decide what norms of apportionment correspond to a maximum of political and military power for a country, what to a maximum of comforts for a given group of people, and so on and on. None of those solutions can be called intrinsically "true" or intrinsically "false." Only after the exact meaning of that blessed term "ought" has been declared can one ask whether the proposed solution is, or is not, a consequence of the definition.
Still to be solved, after that, are no end of problems as to the manners of determining who is the consumer, who the workingman, who the capitalist, and the consequences of those various manners. There may be inflexibly closed castes of individuals of the statuses in question, or, again, it may be possible to move from one caste to another, and then it still remains to be seen to what extent what is legally possible actually occurs ( $\$ 2046$ ). There is the very important problem of inheritance. Is James's plane to go to his son or not; or is it to go to someone else of James's chosing? ${ }^{?}$ It would
$2147^{9}$ It is sometimes thought that the problem is solved from the standpoint of utility on the ground that "the institution of inheritance is beneficial because it encourages individuals to be saving and not squander their fortunes." But even if we accept such an assertion hypothetically, the problem is solved qualitatively and not quantitatively. All other utilities still have to be considered and their resultant found. In practice, moreover, constantly increasing inheritance-taxes run counter to the principle stated. In that connexion some economists try to draw a further distinction, disregarding inheritance-taxes completely and refusing to allow them to enter the discussion. So long as inheritance subsists in name, inheritance-taxes may in the fact take almost everything away and those economists reverently will bow their heads and say nothing. But that brings the whole question down to a mere matter of words. So many are opposed to protective duties on wheat, but make no ob-
be difficult indeed to assert that all these manners are immaterial so far as economic effects are concerned; yet, after all, if someone insists on taking that point of view, he may, provided only the fact be stated explicitly. And unless the idea is to cut off any solution of the problems that arise from facing the economic consequences of the various manners in which circulation takes place among the social classes, those problems have to be frankly faced, and one's attitude regarding them made clear. The difficulties that arise in those connexions are commonly avoided in the manner just de-scribed-by separating, that is, the economic problem entirely from other social problems, without going on to explain too clearly what the reciprocal effects of the various solutions would be.

To balance the explicit declarations of Bastiat that we noted above, there are plenty of propositions that are left unstated in his argument. When he has James and William make a contract for the use of the plane, he implicitly assumes that they are free to make the contract, whereas the very question in dispute is whether they should or should not have that freedom. To dissemble the suppression he falls back on "morality"; but on what system of morality? To the system current in societies where freedom of contract in part prevails! And so he gets out of it only what was already there, going round in a circle. But since our society admits freedom of contract only in part, its "morality" also contains premises counter to such freedom, and from them Bastiat's adversaries could, with equal soundness, draw opposite conclusions to the ones he draws.
Speaking in general terms, let $A$ and $B$ stand for two societies where the norms for apportioning product between capital and labour differ. If one considers the problem strictly from the economic standpoint, one implicitly assumes that the difference in apportionment has no effect on the social order and so has no reaction from

[^14]the social order back upon the economic order (\$§2203f.). That may be true, but if so, it has to be demonstrated, for it also might not be true; and should it in fact prove not to be true, hosts of problems would have to be solved of which Bastiat's argument takes no account whatever and which therefore it implicitly regards as negligible. Bastiat's derivations are, as is usually the case, essentially qualitative, and disregard composition of residues and derivations ( $\$ \$ 2087$ f.). But with that matter we shall be better able to deal in connexion with the example following.
Example II. Towards the end of the year 1913 at Zabern, in Alsace, a conflict arose between military and civil authorities, and the military acted independently of the latter to maintain order. Just here we are not interested in the substance of the incident, which is a particular case of the general problem of the use of force that we shall come to in due time ( $\$ \$ 2174 \mathrm{f}$.) ; nor are we concerned with the question as to the legality or illegality of the conduct on either side. We are interested exclusively in the derivations to which the incident gave rise. ${ }^{10}$ On the whole they had their points of similarity with the derivations provoked by the Dreyfus affair in France (§ I779), but their effects were very different, because the solid fibre of conservative forces in Germany ( $\$ 2218$ ) prevented any such upheaval in society as the dispersion of those forces permitted in France. ${ }^{11}$ In both cases, substantially, people who

[^15]wanted political chicanery and revolutionary agitation to prevail over the military power of the government came to a clash with those who did not want that to happen. ${ }^{12}$
Suppose we designate those two conditions, those two states, by $A$ and $B$ respectively. If a person chooses one of them merely out of faith in certain abstract principles, he deserts the logico-experimental field thereby, and we are excused from concerning ourselves further with him here. To be sure we shall have to attend to him if he comes prancing back to that field with the assertion, for instance, that his solution guarantees some of the various utilities of the individual and society. That is a proposition over which logico-


#### Abstract

their hostility to the military authorities in the Zabern incident. That shows that along with such pro-Semite sentiments as some of them may have had regarding Dreyfus, there were other sentiments that they all had and which first impelled them to side with Dreyfus and then afterwards to side against the German military authorities at Zabern. That is all that the Dreyfus affair and the Zabern incident had in common. Now let us turn to the differences, which chiefly arose from differences in the social and political institutions of France and Germany. They are well stated in the following article in the Gazette de Lausanne, Jan. 26, 1914: "When the Zabern incident occurred, liberal papers all over Europe began to predict that Germany was


$2147{ }^{12}$ That is flatly denied oftentimes in the derivations to which the Dreyfus affair continues to give rise: The "Dreyfusards" say that their opponents were inspired solely by a desire to have an innocent man sent to prison. The "antiDreyfusards," in their turn, say that the one concern of their opponents was to have a traitor acquitted. Both those positions implicitly assume as solved the very question that is in debate. Some of the anti-Dreyfusards certainly considered Dreyfus a traitor. They might therefore have been accused of holding a mistaken opinion, but not of trying to have an innocent man sent to prison. Conversely, some Dreyfusards certainly thought that Dreyfus was innocent. They might be called mistaken, but they could not be charged with favouring a traitor. But another fact, meantime, is overlooked, and it is much more important from the scientific standpoint: people do not know, or pretend not to know, that among both the Dreyfusards and the anti-Dreyfusards there were individuals who ignored the question as to whether Dreyfus was innocent or guilty. Their reasoning was somewhat as follows: "The Dreyfus case has by this time become a flag leading towards a goal which, if attained, will prove disastrous according to the anti-Dreyfusards, beneficial according to the Dreyfusards, to the country, or even just to our party." To meet such thinking with questions of legality, respect for court decisions, or of some other such principle, is to assume that the many difficult problems stated in $\$ \$ 1876 \mathrm{f}$. have been solved. To consider them solved by mere declamations against the conviction of an "innocent" man is childish, unless one desires to go to an extreme of asceticism and abstain from any defence of one's country on the grounds that war sends thousands upon thousands of "innocent" men to their graves.
experimental science has exclusive jurisdiction, and in order to discuss it one has to solve problems such as those stated in $\$ \$ 1897 \mathrm{f}$. Now those problems are either ignored or solved implicitly ${ }^{12 \mathrm{a}}$ in the derivations. If a person asserts that the acts of the military authorities are to be condemned simply because they are contrary to legality, the "rights" of individuals, Democracy, Progress, he implicitly asserts either that those entities are the only things to be considered, the various utilities being disregarded, or else that conduct in conformity with those entities would coincide with the conduct that would be required by the utilities he is asked to consider. And similarly for those who approve of the acts of the German military going to have her Dreyfus affair. Those papers did not know their Germany. A Dreyfus affair has long been impossible in Germany, though militarism has been far more powerful and far more aggressive in that country than it was in France in the last years of the past century. The French Chamber of Deputies primed the charge for the Dreyfus explosion in France. Now even if the Reichstag were disposed to do so, it would not have the power to arouse any such agitation for the review of the Strasbourg verdicts as proved so completely successful in France. For that matter, the majority in the Reichstag already seems to be tiring of its attitude of opposition. The National Liberals and the Centrists are asking for nothing better than a chance to step over to the majority side. Tomorrow it will be all over. On the disorderly rout of the bourgeois parties, Vorwärts very soundly observed last Saturday that 'Force and struggle are two words that are not to be found in the dictionary of the German middle classes.' Those classes are the most docile of all classes. Respectful, timid, they like nothing better than to be led blindfold by those wielders of force whom William II has called 'the backbone of the nation.' Like the wife of Sganarelle, the bourgeoisie across the Rhine sees nothing but caresses in the acts of violence that are inflicted upon it by the powers above. One has to have the disastrous capacity for self-deception of a Jaurès, or the appetite for dreams of the editor of Humanité, an internationalist who is blind on all international questions, to believe that the Reichstag has any mission in Germany or any influence on German destinies. To hail the incident that has just taken place in Germany as a guarantee of peace between that country and France is to coddle a dangerous error. A number of French Socialists who are still imbued with the revolutionary spirit of ' 48 are nourishing that illusion. It may prove fatal not only to France but to all Europe." On the other hand a good (Swiss) Dreyfusard wrote from Paris to his paper: "Naturally people here are following political events in Germany with the keenest interest. There is general delight that an immense majority in Germany is rising against a brutal militarism. Some perhaps may be exaggerating the happy consequences as regards FrancoGerman relations that may result from this conflict between what the Temps calls 'the two Germanies.'" They were more than an exaggeration of the influence of the "immense majority of German opinion"! That influence amounted to plus or minus zero!
$2147^{12 a}$ [Pareto said "explicitly," a slip for "implicitly."-A. I.]
authorities at Zabern simply because those acts happen to accord with certain principles of theirs. ${ }^{13}$ To all that the derivations make not the slightest reference, the solutions of the problems being either entirely disregarded or else implicitly assumed. To give a form somewhat more concrete to these reflections, suppose we consider just one of the utilities involved, the military strength of a country, and consider the two conditions that at the present time might be called Germanic and Latin respectively, though if we were talking of the times of the battle of Jena, terms would have to be inverted ( $\$ 2474$ ). In the Latin condition, it is agreed that the military authority must be humble servant to the civil authority; in the Germanic condition, that the military authority is the superior. In France the prefect has precedence over the general; in Prussia not only the general, but any army officer, has precedence over all civil authorities. ${ }^{14}$ In the Latin condition, the feeling is that if revolutionary or merely mob force comes in conflict with the military power of the government, the mob has all the rights and the military all the duties, and the duty in particular of submitting to everything before resorting to arms. Obscenities, fisticuffs, stones, everything is excusable if it comes from the mob; but retaliation is absolutely forbidden to the armed forces of government. There is always an excuse for "the People." The mere presence of soldiers
$2147{ }^{13}$ Bismarck well derides the use of such entities as "rights," "democracy," "Progress," in statesmanship. Busch, Tagebuchblätter, Vol. III, p. 231 (English, Vol. II, p. 417), Apr. 7, 1888: "'In 1877 when the Russo-Turkish war was in the offing, England kept urging us to use our influence at St. Petersburg to prevent it, "in the interests of humanity," as the Times demonstrated. Queen Victoria urged us to do so in a letter to the Emperor, which was delivered to him through Augusta, who added her own intercession, and in two others to myself [Bismarck]. "Humanity," "Peace," "Liberty"! Those are always their pretexts when they cannot by way of a change use Christianity and the extension of the blessings of civilization to savage and semi-barbarous peoples. [French version erroncous.-A. L.] [By believing in those big words, Napoleon III, Ollivier, Favre, Simon, among others, ruined their country. By taking no stock in them Bismarck made his country great and strong.] In reality, however, the Times and the Queen wrote in the interests of England, which had nothing in common with our interests. It is in the intercst of England that the German Empirc should be on bad terms with Russia.'"
$2147{ }^{14}$ Busch, Ibid., Vol. I, p. 127 (English, Vol. I, p. 96), Aug. 30, 1870: "[Bismarck] cautioned me later on that when officers saluted us as we drove past, I [Busch] should be careful not to return their salute. 'They salute me,' he said, 'not as Chancellor or minister, but as a general officcr. Soldiers might be offended if a civilian scemed to think their salute was also intended for him.'"
gets on its nerves, and that justifies it in surrendering to any impulse. The police, however, must be possessed of inexhaustible patience. Smitten on one cheek they turn the other. Soldiers are expected to be so many saints, so many ascetics-indeed no one can understand why they were ever given riffes and bayonets instead of rosaries and prayer-books of the religion of Progress. ${ }^{15}$ The Germanic condition is just the reverse. The military power demands absolute respect from everybody. People whose nerves are affected by the mere glimpse of a soldier had better stay indoors-otherwise they will learn to their sorrow that, as Bebel used to say to his followers, "bullets hit and swords cut." Retaliation for insult and assault is not only permitted the public forces, it is required of them. An army officer is disgraced if he allows his cheek to be grazed by the slightest blow without striking back. The patience has to be exercised by those who are insulting the public power; when the latter is striking back, its one concern is to enforce respect on the part of its enemies. The rosaries and prayer-books of the religion of Progress are absolutely unknown to the Prussian, and even to the German, army. Officers and soldiers know that if they carry arms it is to use them whenever necessary and in order to command respect. Absolutely inconceivable in Germany would be anything similar to what occurred in France when the Minister of Marine, M. Pelletan, visited an arsenal, riding in a carriage with an admiral, while arsenal employees shouted after them at the top of their voices: ". . . And our bullets are to be for the admirals!" The Germans may be wrong, but they do not admit it.
Now are national defence and military power equally well guaranteed by both of the conditions mentioned? And if not, which of

[^16]the two conditions is the more favourable to them? Those problems are not among the outstanding ones in the derivations used to defend the Latin condition. They hold first place, instead, but are solved a priori in the derivations used to justify the Germanic condition. ${ }^{16}$ The difference probably is to be explained by the fact that one readily gets the impression that the Germanic condition is favourable to the military power of a country, while it is not so easy to get
${ }^{2147}{ }^{16}$ Following on the Zabern incident and the debates relative to it in the Reichstag, a society was founded in Berlin for the defence of the Prussian system. Journal de Genève, Jan. 21, 1914: "Berlin, Jan. 19: The new Prussian League (Preussenbund) held its first convention yesterday in Berlin. The purpose of the association is to maintain and strengthen the hegemony of Prussia in the Empire, and especially the preponderance in Germany of Prussian aspirations, Prussian methods, Prussian manners of thinking. Its tendencies are essentially conservative, its policy, reaction against the gradual democratization of the Empire. The Zabern affair had, among other indirect consequences, the effect of aligning Prussia against the Empire. The Prussian League is the outcome of the conflict. Its membership is recruited from among high officials, army officers, conservative Deputies, and the League of Landowners. During these last weeks many symptoms have indicated that the organization of the Prussian League is viewed with satisfaction in higher circles. 'The speeches delivered at the convention yesterday deserve,' says the Temps, 'most attentive inspection. They are altogether characteristic of a certain state of mind that prevails at this moment in the higher reaches of power.' Herr Rocke, president of the Chamber of Commerce at Hanover, delivered the opening address. 'Prussia,' said he, 'is the bulwark of the Empire. The Empire must not develop at the expense of Prussia.' The second speaker was Herr von Heydebrandt, who said in part: 'Many people are wondering whether the moment has not come to defend Prussia, the Prussian spirit, the Prussian form of living, in Germany. What are the characteristic traits of the Prussian? They are a sense of orderliness, a sense of duty, love for the army, fidelity to the dynasty. It would be a catastrophe with no morrow if that Prussian spirit were to lose control of the country.' General von Wrochen delivered a eulogy of Colonel Reuter. 'The Colonel's conduct was cheering to all of us. He deported himself like a Prussian of the old stock. We shall have such men as long as the army continues to be monarchical. The verdict of January io was a well-deserved box on the ears for those who had talked too loudly.' General von Rogge followed him on the platform. He deplored democratic tendencies within the Empire. 'The mission of Prussia,' he said, 'has not ended. German blood still requires a strong injection of Prussian iron.' An inspector of churches, Herr von Rodenbeck, declared that the mission of Prussia as guardian of Germany had been willed by Providence. He then launched a rebuke against the peoples of the Rhineland whose 'wine-drinking had gone too much to their heads.' Before adjourning, the convention unanimously adopted the following resolution: 'It is the sense of the first convention of the Prussian League that certain tendencies of our time in the direction of an increasing democratization of our institutions are weakening the foundations of the monarchy. Prussia can fulfil her mission in Germany only if she is strong and free from all encumbrances that might result from too close a union with the Empire. All assaults of democracy on Prussia and on the inde-
that impression of the Latin condition. In spite of the different impressions one could not, strictly speaking, assert a priori that the Latin condition is not as favourable to the military power of a country as the Germanic condition, or even more so. But before such an assertion could be accepted, at least some suggestion of a proof would be required, and no trace of any such proof is to be found in the derivations justifying the Latin condition. ${ }^{17}$ And that
pendence of the confederate states must be energetically repelled. It is imperatively necessary therefore that all those who are resolved to defend Prussia from the attacks of democracy should unite and labour with one accord.' "
$2147{ }^{17}$ On Dec. 4, 1913, after a debate on the Zabern incident the Reichstag passed by a vote of 293 to 5 a resolution censuring the Chancellor of the Empire. The Chancellor did not see things that way. He remained at his post, and army organization did not experience the remotest effects from the incident. On December 2, the French Chamber defeated by a vote of 290 to 265 the Delpierre Bill, a government measure designed to provide tax immunity for government securities about to be issued, and the ministry fell. The real cause of its defeat was its insistence on strengthening the army and its having forced the passage of the Three Years' Service Bill. That is why it occurred to Deputy Vaillant, a prominent anti-militarist, to shout when the result of the vote on the Delpierre Bill was announced: "A bas les trois ans!" The Gazette de Lausanne, Dec. 3, 19r3, summarizes French editorial opinion on the incident as follows: "The Petite République writes: 'In saluting the fall of the ministry with the cry "Down with the Three Years!" Deputy Vaillant emphasized the real significance of the yote in a way that will prove very humiliating to not a few individuals.' The Eclair suspects that part of the Deputies saw fit to get their revenge for the Three Years' Law by refusing to appropriate money absolutely required if the effort to build up the army again is to be a success. The Matin says that the adversaries of M. Barthou will be fair enough to him to recognize that on the question of French prestige he fell with honour. The paper foresees that the new cabinet will be a ministry of union and cooperation among Republicans. The Gaulois interprets M. Caillaux's victory as the Bloc's revenge for the Congress of Versailles. Next in order, perhaps, will be his revenge on the man elected at that Congress. The République française rebukes the cry of 'Down with the Three Years!' 'But,' it goes on to say, 'it is altogether logical that the men who did not quaver about exposing France to ruin should go on and disarm her in the face of invasion.' Action wonders how long the coalition will last between revolutionary demagoguery and that Radical plutocracy which has just overthrown M. Barthou with cries of 'Down with the Three Years.' The Echo de Paris says that the Radicals 'have committed an unpardonable sin not only against the public credit by marching hand in hand with the Unified Socialists, but also against the power of the nation. If it is true that a new majority is to be organized, it will be organized against France.' The Journal notes that the adversaries of the Three Years' Law chanced to find themselves united against the elec-tion-reform bill and tax-exemption for the new securities. The Libre parole believes that dividing the spoils is the only concern of yesterday's majority. The leaders will be offered posts in the government. Some will get a sop in the election-reform bill, others in the Three Years' Law. The Homme libre writes: 'Every mistake is
fact clearly shows how readily derivations can dispense with logic: the same Frenchmen who pitied the peoples of Alsace and Lorraine because of their conquest by Germany do all they can to destroy the military power of their country, which amounts to preparing the way for further German conquests. They bewail an evil and do their best to make it greater. The logical fallacy in the derivations would be corrected if they asserted implicitly or otherwise that they envisage not a present but some future advantage and, further, that a conquest may be a temporary evil and a future blessing. Examples are available in the history of Roman conquests-such a thing is therefore not impossible. What is required is proof that a conquest by Germany is going to be a blessing this time. Other utilities might also be envisaged, the utilities of certain groups, for instance. It is clear enough that the Latin condition is favourable to groups that are disposed to resist the law or the authority of the government: all they seem to need in order to enforce their will is the courage to get out into the streets and fight. The Germanic condition is favourable to orderliness and respect for law, and also to arbitrary conduct and even crimes on the part of individuals in power. There too derivations figure. On the side of those who would overthrow the present social régime, conduct in that sense is regarded as inevitably "good," and that belief is justified by the myths of St. Democracy, just as, if rôles were inverted and the revolutionaries were aristocrats or monarchists, they would justify their beliefs with the myths of Sts. Aristocracy and Monarchy. On the side of those who wish to maintain the present system and are reaping benefits from it, fewer derivations are used, because people who are in the saddle do not need derivations to spur their retainers to action, and resort to them only when it seems advisable to justify their conduct, or in order to weaken opposition on the part of people who bite at such bait. In this case, as usual, their derivations aim at showing that the maintenance of law and order, which is aptly identified with the arbitrary will of the rulers, is a "highest good" for which everything else must

[^17]be sacrificed. Or else the resort is to the principle that the end justifics the means-and for a person in the saddle what better end can there be than staying there and enjoying the fruits of such eminence? ${ }^{18}$ If then, as in cases such as the Zabern incident, a conflict arises between different nationalities, no citizen of the dominant nation would dare doubt that the maintenance of its dominion is the supreme good. In that respect the nationalist faith is very like the Moslem, the Christian, the Democratic, and all the other faiths there are. And myths in enormous numbers are manufactured, all of which make it as clear as the noonday Sun that the dominant nation is deserving of its dominion, while the subject nation deserves nothing but oppression. From the time when ancient Rome proclaimed the legitimacy of her dominion over
$2147{ }^{18}$ Another type of derivation is very very widely used. The purpose of each of the contending parties is to look to its own convenience, its own interest, even in the face of accepted norms that there is a pretence of respecting. The comedy is played as follows: From the standpoint of the "outs": Act I. While the conflict between themselves and public authority is raging. Government forces must not use their weapons. Give "the People" (the strikers, the revolutionaries) a free hand. If-just to imagine the case-a crime is committed, there are courts to punish it. The job of the government is to bring citizens before the courts. Farther than that it must not go. Such crimes, or most of them at any rate, are certainly not capital offences; yet the penalty of death would actually be inflicted on anyone struck down by the fire of the police. It is not fair to use guns on people who are merely throwing paving-stones. (In Italy carabinieri, on being forbidden to use their arms, have been known to pick up the stones that were thrown at them and throw them back.) The police power, in a word, can offer only a patient and passive resistance. Such derivations soothe the feelings of the people who would not be satisfied if strikers or other insurgents who rob, maim, and sometimes kill were to go entirely unpunished. Act II. After the battle. Bygones are bygones. What is needed is an amnesty (release on bail or probation is not enough) to erase all memory of civil discord and stifle animosities in the name of love of country. The public memory is not long. It has soon forgotten the crimes of yesterday. The dead are dead, and the living-have to live: they want quiet, and still more, money, without worrying very much about the past or the future. They are therefore satisfied with such derivations, which suit their requirements perfectly. Act III. The consequences. The crimes mentioned have not been prevented or punished by force, for the punishment was to be attended to by the courts. The courts cannot attend to it because of the amnesty. As a result delinquencies in the past are left unpunished, and the prospect is that they will not be punished in the future. And that was the very thing that the derivations in question were designed to accomplish all along.

From the standpoint of the ruling class: Act I. While efforts are being made to impose something by force. This is not the moment to decide whether such a measure is legal or illegal, just or unjust. Let the citizen obey, and then if he
conquered peoples down to our cwn day, when so-called civilized nations "demonstrate" that it is legitimate, just, proper, necessaryand Christians add, ordained of God-that they should rule, exploit, oppress, and destroy the nations they call uncivilized, derivations of the sort mentioned have been evolved in fabulous numbers, all of them repeating virtually the same things in different words.
Both the defenders of the Latin condition and the defenders of the Germanic condition entirely disregard the quantitative problem ( $\$ \$ 2174$ f.). The forces and ties that determine the state $A$ are possible, just as the forces and ties that determine the state $B$ are possible, since both states are observable in reality. But are the forces and ties that would determine an intermediate state, $C$, also possible? If they are not, to find out where the maximum of utility lies, it is sufficient to compare $A$ and $B .{ }^{19}$ If they are, then to determine that maximum $A, C, B$ have to be compared. That leads, in the special case we are here examining, to asking to just what extent, in order to realize specified purposes, it is advisable to give consideration and power to the army as against the civil authority. And if that inquiry thinks he has been wronged he can appeal to the courts. This derivation and others like it quiet the alarm of people who would assent with reluctance to arbitrary acts and injustices at the expense of private citizens. There can be nothing arbitrary or unjust, for after all the courts are there to pass judgment on anything that happens. Act II. After the fact. If some simple-minded soul follows the advice that has been given him and turns to the courts, he is told that they have no jurisdiction and that he should go to the governmental authorities, who are sole judges of the conduct of their agents. If his simple-mindedness goes so far as to allow him to do that, he learns, at his own expense, that wolf does not eat wolf and that that is that. Such conduct is justified because the public peace, the majesty of the State, the reign of law, have to be safe-guarded. The public interest has to prevail by hook or by crook over private interests. These derivations are accepted on sentiment by people who believe that public authority must not be embarrassed by the whims of individual citizens and who realize how essential it is to the public welfare that order be maintained. Act III. The consequences. The governing class has acted arbitrarily and illegally and come off scot-free, and it will be able to do so again whenever it chooses. And that was the thing the derivations were designed to accomplish.

It should be remembered, however, that neither in this case nor in the other are the derivations the main cause of what happens. They are for the most part mere veilings that mask the forces which actually produce the phenomena.
$2147{ }^{19} \mathrm{~A}$ person holding that view might reason as follows: "If the Chancellor had fallen from power as a result of the Reichstag's vote of censure, Germany would have taken the course that inevitably (or just very probably) leads to having a minister such as Lloyd George in England, and, what is worse, to handing the
is prosecuted, results will begin appearing which at first sight will seem paradoxical-that the Latin condition, which is defended by lovers of democracy, might in the last analysis be disastrous to democracy either by inviting foreign conquest or by leading democracy towards anarchy, which has been the tomb of so many democratic systems in the past; and likewise that the Germanic condition, which is defended by the monarchists, might in the last analysis be disastrous to monarchy. An intermediate state, $C$, might perhaps better than $A$ or $B$ assure the attainment of the purposes aimed at by defenders of the two extremes. If one would treat the question scientifically, one would have to consider some at least of these and other similar problems; and the more of them one considers, the better, from the logico-experimental standpoint, one's reasoning will be. On the other hand, if one's aim is to persuade people and spur them to action, one must refrain from inquiries of that sort, not only because they cannot be grasped by the public at large, but also because, as we have said so many times, they incline one in the direction of scientific scepticism that is incompatible with the vigorous and resolute action of the believer; and the fewer the scientific problems one considers and the greater the skill with which one evades and conceals them, the better one's talk will be as regards the effectiveness of its derivations.
2148. Composition of utilities, residues, and derivations. To determine the complex utilities that result from the composition of residues and derivations, we shall follow out the argument we began in §2087, where we considered the influence of residues and

[^18]derivations taken as a whole. The subject is not an easy one, and no help is to be refused, even if it be lent by imperfect analogies. Let us therefore, as we have so often done before, appeal to a visual graph ( $\S 1869$ ), not to prove anything, of course, for that would be a grave mistake, but just to make an argument that is quite abstract more intelligible. To have the advantage of a graph in three dimensions, let us assume that the state of an individual is such that it can be represented by a point $h$ on a surface of which the ordinate on a


Figure 37 horizontal plane represents the index of the ophelimity that the individual enjoys. In horizontal projection the state of the individual is represented, therefore, by the point $h$. If we draw a vertical section passing through the point $h$, we get the straight line, $g l$, which is the section of the horizontal plane of projection; then the curve, $\tau \sigma$, which is the arc of the surface, and the ordinate $p h$, which is the index of the utility enjoyed by the individual ( $\$ 1869$ ). The point $h$ is impinged by forces (i.e., residues) moving in the directions $A, B \ldots$ with intensities $\alpha, \beta \ldots$ as explained in § 2087, and must always hold a position on the surface that we have premised and which is determined by ties.
2149. Now let us forget the ophelimity of the individual, and think of the utility of a community, and assume that Figure 37 is valid for the community too. Suppose the point $h$ is located in the position of the maximum utility of the community. It may be that somewhere on the straight line $h A$ there is a point, $h^{\prime}$, at which the utility of the community would be greater than it is at $h$; and so the idea naturally enough arises that it would be a good thing to intensify $\alpha$ in order to get the community to the point $h^{\prime}$. That is the ordinary manner of reasoning in social matters.
2150. But if equilibrium were possible at $h^{\prime}$, the hypothesis that $h$ is a point of maximum utility of the community would no longer stand. According to that hypothesis no equilibrium is possible at any point in the vicinity of $h$ where the utility of the community would be greater. It is therefore not possible at $h^{\prime}$. To augment the pres-
sure $\alpha$ therefore would not transfer the point of equilibrium to $h^{\prime}$, but to some point such as $h^{\prime \prime}$, where the collective utility is not so great. That is the case because the intensification of $\alpha$ occasions modifications in $\beta, \gamma \ldots$ And in that we have a case of interdependence of residues, second type ( $\$ 2088$ ).
2151. The argument we have just outlined in no way depends on the hypotheses we posited in order to picture the position of the point $h$ in a three-dimensional space, nor indeed upon any other graphic representation of the kind. It may therefore be restated in abstract terms, and the conclusion will be valid for the general case of utility dependent on residues.
2152. Let us now consider derivations as well and continue in general the argument we developed for a particular case in § 1896. We again use Figure 37 ( $\$ 2148$ ), but adding to it the derivations $S, T, U, V \ldots$ or, if you will, the myths, the ideals, that prompt human beings to conduct in the directions $A, B, C \ldots$ under pressure of the forces $\alpha, \beta, \gamma \ldots$ The vertical section is now cut along $h B T$. The pressure $\beta$ moving along $h B$ arises in the aspiration of people towards the imaginary ideal, $T$, and if


Figure 38 it were acting all by itself, it would carry the individual to the point $m$. But if equilibrium is attained at the point $h$, the effect of the force $\beta$ is offset or nullified by the effects of other forces. That is the case whether $h$ is a point of maximum utility or any point at all, provided it be a point of equilibrium.
2153. We may now repeat what we said above in $\S 2088$, adding the consideration of utility. I. If there is reason to believe that $B$ operating by itself would increase utility, it in no sense follows that operating in opposition to other residues and subject to ties, its effect
would still be an enhanced utility. ${ }^{1}$. The variation in utility depends on the effects of the resultant of forces manifested by the residues, not upon the imaginary resultant-if such there be-of the derivations. The real resultant is quite different: it indicates the direction in which individuals in the society where the derivations prevail are moving, and a course in that direction may lead much closer to reality than the derivation taken by itself would lead one to suppose ( $\$ 1772$ ); and so for the utility. That is in fact the case in societies in which the activities of individuals are aimed more especially at real than at fantastic goals, and prosperity is on the increase. 3. Quite insignificant is the fact that the derivation oversteps the bounds of reality, and points to a goal that is fantastic and may therefore be considered dangerous. The derivation merely indicates the direction in which the movement is tending to develop, and not at all the limit to which the individual will be carried. On reaching that limit, indeed, the movement may prove to have increased utility, whereas the utility might lessen and


Figure 39 become a frank detriment if the individual went any farther in the direction in which the derivation is headed. 4. Let $A, B \ldots$ represent certain residues of a given class-Class I, let us say; $P, Q, R \ldots$ other residues of another class, say Class II; $X$, the resultant of the residues $A, B, C \ldots$ of Class I ; $Y$, the resultant of the residues $P, Q, R \ldots$ of Class II, and so on; and finally $\Omega$ the total resultant of all the forces $X, Y \ldots$ which determines the real movement and consequently the utility. If we do not get the utility-or the detriment-that would result from considering the residues $A$ alone, that is not because $A$ is not doing its work, much less because a derivation corresponding to $A$ has been effectively refuted, but because of the counter-actions of $B, C$

[^19]$P, Q$. . . Furthermore, in virtue of the fact that the whole of a class $A, B \ldots$ has the peculiarity of remaining virtually constant, $A$ may diminish very considerably, or even disappear, without any great variation in $X$, and consequently, without any great variation in the resultant $\Omega$ and in the utility which that resultant entails. Variations in $\Omega$ and the corresponding utility are much more readily appraised by watching variations in $X, Y \ldots$ than variations in any one of the residues $A, B \ldots P, Q \ldots$
2154. Likewise applicable to the matter of utility is what we said in $\S 2086$ of the varying derivations $T, T^{\prime}, T^{\prime \prime}$. . corresponding to one same residue, $B$. r. Since it is the residues, chiefly, that affect the equilibrium, the presence of one of the various derivations $T$, $T^{\prime}, T^{\prime \prime}$. . . throws little or no light on the question of utility. 2. To replace $T$ with $T^{\prime}$ can amount to little or nothing as regards modifying the utility. 3. But the fact that the person who is performing the conduct considers the derivation, $T$, which he accepts, as very beneficial and other derivations very harmful (or, in more exact terms, the sentiments he manifests in that way) may be of the greatest utility. Indeed, apart from a few ascetics, human beings are most reluctant to distinguish utility from what they consider "good"; so if they really regard the derivation $T$ as "good," they will also consider it "beneficial," and if that should not happen to be the case, it would be a sign that they have no great faith in the derivation. Anything fantastic, impractical, or harmful in the belief will then be corrected by other beliefs that are also prevalent in the society that happens to be involved (\$§ 1772,2153 ). ${ }^{1}$ 4. If, intrin-

[^20]sically, from the logico-experimental standpoint, one derivation seems better calculated than others to augment utility, one cannot infer on that account that it would actually do so in practice. It might even prove that the derivation which seems more beneficial intrinsically corresponds to sentiments that are less beneficial than those expressed by derivations that seem less beneficial intrinsically. All the propositions just stated are at variance with common opinion, but observation of reality shows that they accord with the facts.
2155. From what we have been showing it also follows that the problem of utility is quantitative and not qualitative, as is commonly believed. One must determine in what proportions the consequences of a given derivation, $S$ (Figure 38), or of the principle that it propounds, may when combined with the consequences of other derivations, $T, U, V \ldots$ prove beneficial to society; and not, as is commonly done, try to decide whether $S$ is in itself beneficial or detrimental to society, a problem that can have no meaning. Derivations fail as a rule to take any account of these quantitative considerations, for the reason, as we have so many times said, that they are inclined to envisage absolutes (§ 1772) ; and when a derivation proclaims some principle or other, almost always implicit in it is the assumption that the principle is to be striven for in an absolute manner, without reservations as to degree or anything else.

It will probably help if we supplement these abstract considerations with illustrations of a more concrete nature, and clarify the general propositions with examples of particular cases. Suppose we begin with an interesting case in which contemplations of ideal ends, $T$, and real ends, $m$, are thrown together without such ends being at all clearly distinguished; and then go on to look at a number of cases of compound utilities.
it. The reason is that in those parts of our country there are large numbers of people who approve of 'natural' therapeutic methods, take no stock in official medical science, and are in fact afraid of its encroachments. They are worried lest the proposed amendment open the door to compulsory measures to which they are unalterably opposed, obligatory vaccination, for instance." Opponents of vaccination against smallpox are probably wrong; but when champions of vaccination in Italy go so far as to haul into court a scientist who has voiced an honest scientific opinion on the subject, one is forced to conclude that in resisting the "establishment" of an official science through the penal code, anti-vaccinationists are performing a useful social function.
2156. History. We have seen (§1580) that the compositions which go under the name of "history" are as a rule compounds of factual observations of one kind or another supplemented by derivations and ethical considerations, without any distinctions being drawn between ideals and myths, $T$, and real facts, $m$ (Figure 29). In general one may say that history has so far been a history of derivations rather than of residues, a history of concepts, $T$, rather than of the forces of which those concepts are but manifestations.
2157. That is all well enough, when "history" is more or less a composition designed to influence the sentiments of human beings (§1580), when preaching is more or less interwoven with experimental observation; but it is not only not beneficial, it is positively harmful, when the purpose of history is to describe real facts and the relations between them.
2158. If ideas, ideals, myths, are the only things considered and they are taken intrinsically and for their own sakes, we get systems of ethics, metaphysics, and theology. If real facts are alone considered, and ideas, ideals, myths, are taken extrinsically only, as objective facts, we get researches in experimental science or, to give them a name, scientific history (\$§ 1580,2576 ).
2159. The compositions that best serve for purposes of persuasion, for arousing sentiments and urging people along a given line of conduct, are combinations of the categories above; because the human mind requires the ideal and the real in varying dosage. The proportions vary at given times and in given localities according to individuals; and taking the average of individuals in different times and localities, they vary according to a certain rhythm, as is the case with virtually all social phenomena.
2160. In our Western countries in our times, theological histories have fallen into desuetude, but metaphysical and ethical histories continue to enjoy a wide-spread vogue that gives no indication of subsiding. ${ }^{1}$ Sometimes the ethical or metaphysical outlook is ex-

[^21]pressly declared by writers; but that is a rare occurrence in our day. More often they fail to distinguish the various elements that go to make up their "history" ( $\$ 1582$ ), relying on the ambiguity of the term "historical truth" ( $\$ 1578$ ) to spread a veil over the mixture. They rarely state categorically their conviction that derivations determine the forms of society, allowing that fact to be tacitly inferred from the proposition, which they deem axiomatic, that the conduct of human beings is a consequence of their beliefs.
2161. How do such writings compare with logico-experimental science? If a writer ascribes a supernatural origin to religion he is at least respecting formal logic in regarding religion as the prime cause of social phenomena. But if he ascribes an earthly origin to religion, he must, even to keep to the field of merely formal logic, explain how and why religica is a cause and not an effect. When adversaries of religion lay the responsibility for the fall of the Roman Empire upon Christianity, they still have to explain why the spread of Christianity was the cause and not the effect of that dissolution and also why the two phenomena cannot be taken as merely simultaneous. If a person asserts that moral concepts are engraved on the human mind by the hand of God, he may take them outright as the prime cause of social phenomena, and he is,

[^22]furthermore, under no obligation to inquire whether, when, and to what extent it is better for human beings to conform to them. They are obeying ordinances of God and that is the whole story: they need consider nothing else. But if a person ventures from that fortress, which is impregnable to formal logic, he must-as in the preceding case, if he would take morality as the cause of social phe-nomena-first explain why morality is a cause and not an effect or something merely simultaneous, and then go on to state just what solution he intends to give to the question raised in § 1897-state, that is, just what relationship, in his opinion, obtains between observance of certain moral or other norms and social utility. No such declaration is required of a person who is examining cases of conscience, or of persons examining social phenomena strictly, without making them in any way dependent on cases of conscience. But if the two things are mixed in together, the relationship between them has to be declared, the bridge specified that is to be built in order to get from one to the other.
2162. Historians commonly abstain from giving any such explanation because they are in no hurry to undertake the difficult, not to say impossible, task of justifying the solution that they accept. They rest content with the implicit assumption that observance of the norms of morality always leads to social benefit (affirmative solutions, §§ 1903-98); and they win general assent because that proposition is true, on the whole, as regards the conduct of private individuals and because, owing to group-persistences, it can be plausibly extended to public affairs. So to distinguish the various elements in the social complex and tacitly to assume solutions for the elements not considered has the great advantage of making it easier for a writer to study the element with which he is dealing, since he may take it all by itself. Furthermore, it makes his conclusions more readily acceptable to the public, in that they take for granted certain solutions that are very generally accepted. For that reason that method is followed not only by historians but by economists ( $\$ 2147$ ) and other investigators of social phenomena as well. From the logico-experimental standpoint the first part of the procedure, the separation of the various elements in the social complex, is permissible, is indeed indispensable, for without such a simplification no inquiry would be possible. Science, as we have so many times
repeated, is essentially analytical. But the second part-the assumption for elements not considered of implicit solutions that nearly always accord with public sentiments-belongs to the field of derivations, and takes one completely outside the logico-experimental field, where unstated propositions dictated by sentiment have no place and where only facts and inferences from facts can properly stand. Logico-experimental science, accordingly, altogether rejects those implicit solutions based on sentiment of which derivations make, and have to make, lavish use, and replaces them with explicit solutions obtained by considering facts and nothing else.
It is also a common practice of historians to expatiate on ethical and legal judgments of the conduct of public individuals, usually without declaring just what ethical norms and laws underlie their verdicts. In that too premises are left implicit and are likewise accepted because, in virtue of group-persistence, they overreach the domain where the norms and laws that regulate the relationships between individuals apply. To do that is, on a very much smaller scale, something like extending juridical norms that are established for human beings to animals. It has been long debated whether Caesar had or did not have the "right" to cross the Rubicon. For the study of history and social phenomena, to solve such a problem today is about as significant as solving the celebrated query that used to be posed in the Middle Ages: Utrum chimaera bombinans in vacuo possit comedere secundas intentiones-though it might be a useful exercise in the abstract study of Roman public law.
2163. With many historians it is an article of faith that Napoleon III committed a "crime" in making the coup d'état that brought him into power. That may, or may not, be so, according to the meaning one attaches to the term "crime." In relations between individuals, that term is defined by a penal code, by law; but what code, what law, is to be used in passing judgments on political events? The answer has to be stated. It is not enough to say, as many do, that it is a crime to overthrow any "legitimate" government; for then one would have to define just what a "legitimate" government would be. As a matter of fact, from Louis XVI down to Napoleon III, and then on down to the Third Republic, there was a continuous succession of governments each of which arose by overthrowing another that called itself legitimate and then pro-
ceeded to assert that it was as legitimate as its predecessor, and even more so. No decision is possible until we are told what norms are to be used in settling such disputes; and even if we were told and had rendered our judgment with reference to them, it is still not clear just how such a judgment could add in the slightest to our knowledge of social phenomena and their interrelationships. We were discreet enough to stop, notice, with Louis XVI. We could just as well have gone farther back and questioned the "legitimacy" of the royal authority that rose on the ruins of feudalism, the "legitimacy" of the authority of Pepin, of the Frankish kings, of the Roman conquerors of Gaul, and so on back to Adam. One can remedy the absurdity of such inquiries by conceding the existence of the norm, but the limit of its validity still has to be fixed. Shall we make it thirty years, as France does for private property, or a longer or shorter period? Then from just what authority does it emanate? What means does said authority possess for making headstrong recalcitrants obey? Considered in the light of the norms of private law and morals, the morals of Catherine II of Russia were reprehensible and the things she did to win her throne, criminal. But such a judgment has, after all, very little bearing on social phenomena and their relationships; and it would be of little help in trying, for example, to determine whether it would have been to the advantage of Russia that her husband, rather than she herself, should have ruled. ${ }^{1}$ Elizabeth of England was concerned to seem chaste, and seems not to have been. What bearing can that have had on the social development of the England of her time? Facts of that sort have a bearing on history not through the ethical value which

[^23]they possess intrinsically, but as circumstances concomitant with certain happenings or determining certain others. Among such circumstances one may count extrinsic ethical values, as for instance the judgment passed on certain acts by the persons participating in events. But even in doing that one has to proceed cautiously and warily, for very often it is not so much the judgment that influences events as the events that influence the judgment, which, for that matter, may be lenient or severe according to the sentiments this or that person entertains towards those under judgment. The Affaire du collier did a great deal of harm to Marie Antoinette, though she seems really to have had no part in it; yet down to that time, scandals far more serious and far better authenticated had done no harm whatever to scions of royalty in France. In politics, particularly, scandal harms the weak and causes little worry to the strong. Examples to that effect can be counted every day of the week.
2164. In discussing Taine's third volume, of which he quotes the celebrated preface, M. Aulard brings two criticisms against the author of the Origines, accusing him of insufficient accuracy and of disregarding a number of documents. As regards social history, neither criticism stands. The inaccuracies mentioned are in no way substantial. They may at times be important for passing ethical judgments on individuals. They have slight bearing, if any at all, on the history of social phenomena. ${ }^{1}$ The documents quoted by
$2164^{1}$ Cochin, La crise de l'histoire révolutionnaire: Taine et M. Aulard, pp. 16-17: "Suppose we draw the sum of [M. Aulard's] inventory [of Taine's mistakes]. Among the 550 references quoted on the 140 pages of the 'Spontaneous Anarchy,' M. Aulard notes 28 substantial errors, which are really 15, 6 mistakes of copying, 4 mistakes in page numbers, 2 in dates and 3 misprints-a very creditable average, after all, and one that M. Aulard himself, at least as regards his book on Taine, is far from equalling, since he errs in his rectifications at least one time in two. . . . Taine was the first to open those files in the archives. He found a virgin forest before him and gathered up facts and documents by the armful. He did not have time to be pedantic or exhaustive. Did he, to be accurate? His friends never dared to be too sure. His enemies said no, very loud and often. M. Seignobos [Who was incapable of distinguishing the fancies of his democratic theology from scientific history.] finds Taine 'probably the most inaccurate historian of our time.' M. Aulard's book refutes that estimate by M. Seignobos. Taine's work has had the rare good fortune of receiving its baptism of fire from an adversary as partisan as he is learned. [M. Cochin is being exceedingly courteous.] It wins thereby the one patent of soundness that it still lacked: the thirty years of scholarship of M. Aulard. Every statement of Taine will henceforth have two counter-proofs: the learning of Taine himself, and the fact that a critic's spleen has not dared to dispute it."

Taine are, to tell the truth, even too numerous. No such body of proof is necessary to show that, in the French as in many another Revolution, politicians stole right and left and rid themselves of their enemies by putting them to death. One has only to glance at the conduct of politicians in times of peace to see quite readily that their conduct in times of revolution betrays the existence of forces which differ only in intensity from those which manifest themselves under peaceful conditions. Taine, instead, seems to believe that the differences are in the main qualitative, and would ascribe to the statesmen of the French Revolution sins of which politicians of all times and countries cannot plead innocence; and furthermore -a more serious mistake-he tries to attribute the crimes to the mistaken theories of those statesmen.
2165. M. Aulard disregards such criticisms, and others of the kind, that can be brought against Taine's results, and probably because, at bottom, he follows the same road as Taine, the only difference being that Taine passes an unfavourable ethical judgment on the Jacobins, whereas M. Aulard is kindly disposed toward them. But history is not concerned with such ethical judgments, whether in one sense or in another. ${ }^{1}$ Read in succession Machiavelli's Prince, The Ancient City of Fustel de Coulanges, then Cicero's Philippics, and Taine's third volume, especially the preface; and it will be apparent that the first two and the last two stand in altogether different classes that can be in no way confused. The two former examine relationships between social facts, the latter aim chiefly at ethical judgments.
2166. The admirers and the critics of the French Revolution are substantially in agreement as to the facts; but the antis hold that the revolutionists were inspired to do the things they did by de-
$2165^{1}$ Cochin, Op. cit., pp. 99-100: "Shall we see the end of this crisis [in the writing of histories of the French Revolution]? I think we shall, but on two conditions: first, that we stand on better guard against that curse of all curiosity indignation . . . and, second, that criticism should at last rid us of that revolutionary fetish, the People, send it back to politics the way Providence has been sent back to theology, and restore apologetic history to a place in the museum of religious myths that it should never have been allowed to desert. If our historians have not attended to that hitherto, it must be because the anthropomorphism of the People is more recent and more specious than that of Providence. It could still fool people in days when the workings of the social machine and the laws of practical democracy were still but vaguely discerned on the reverse side of 'principles.' Taine and M. Aulard are historians of that era. They are historians of an-Old Régime!"
pravity of character; the pros that they were provoked by the resistance and wickedness of their adversaries. ${ }^{1}$ As regards the history of social phenomena, to solve that problem is about as important as knowing whether Caesar, Augustus, Cromwell, and other such men were honest, moral individuals, or dishonest, immoral. Taine thought he was writing of the French Revolution like a zoologist describing animals. He was mistaken. His history may be something like Buffon's history of the animal kingdom, a work of literature, but never like the Traité de zoölogie concrète of Delage and Hérouard, a scientific treatise. Quite like the latter instead is Machiavelli's description of Valentino's campaigns.
2167. Ethical disputes about the French Revolution possess not even the merit of novelty. They are in all respects replicas of the disputes that have raged, and will forever rage, about every political, social, or religious revolution. Those favouring a revolution will say that it is "justified" by the evil machinations of its enemies; those hostile to it will condemn it because of the evil machinations of the revolutionists. There is no way of deciding who is right and who wrong until we are told what norms are to apply in condemning or absolving; and then, on the assumption that we are told, such judgment may give us a certain ethical satisfaction, but it will show
$2166^{1}$ Every now and then, in cases of conflict between public authorities and strikers where there are casualties, one notes facts and judgments that are altogether similar, though on a much smaller scale. Defenders of the police say that the "guilt" lies with the strikers, in that they were trying to do things that the police were in duty bound to prevent. Defenders of the strikers say that the "guilt" rests with the police, who were not sufficiently patient and tried to interfere with the strikers. Before we can determine who is right and who wrong, we have to know what meaning is to be attached to the term "guilt." If it be granted that orders from the police must always be respected and that people venturing to disobey them do so at their own risk and peril, the defenders of the police are right. If it be granted that people on strike are to be at all times respected by the police and that anyone venturing to do them violence is committing a crime, the defenders of the strikers are right. But in either of those cases we have solved an ethical problem, not a problem of relationships among social phenomena, and we still have to learn what sentiments and interests underlie the conduct of the two contending parties and what the consequences of the various solutions that might be given to the conflict would be, as regards the social order and the various other utilities. The police power is used in all countries to enforce measures that may be classificd under two headings: $(A)$ measures favourable, or at least irrelevant, to the welfare of the community; and ( $B$ ) measures detrimental to the community's welfare. If one holds that resistance to the police force is always detrimental to the
absolutely nothing as to the relationships of one political or social fact to another, or about the uniformities that may be inferred from them (§2166 ${ }^{1}$ ).
2168. Among the many reasons why historians of the French Rev-olution-in that not differing from historians in general-have followed the ethical method we must here touch on two in chief, the one subjective, the other objective. The subjective reason we have just explained in part. In view of it historians give a miscellany of ethical dissertations, sermons, exhortations, along with observations of fact and of relationships between facts. In the very best case, these latter represent only one of the purposes with which the historian is concerned, and frequently enough they are not even a purpose, but a means for realizing other purposes. The subjective reason is a general one, and figures in almost all historical writing.
2169. The objective reason is also general, but it comes out with special prominence in the histories of the French Revolution. It arises in the fact that each of the contending parties in the Revolution in order to fight and win used the phraseology of the other party, so that identical derivations disguise differing residues; with the result that if one stops at derivations one can know nothing of
community, he thereby holds either: (I) That $A$ cannot be separated from $B$, and that the utility of $A$ is greater than the harm done by $B$; or else (2) that $A$ can always be separated from $B$ in some other way than by offering resistance to the police power. This latter proposition is contradicted by history. Many transformations that have proved beneficial, indeed exceedingly so, to society have been effected only by meeting the police power with opposing force.

Conversely, if one expresses oneself as in all cases favourable to resistance to the police power, one holds either: (1) That $A$ can in no way be separated from $B$ and that the harm done by $B$ overrides the utility of $A$; or else (2) that $A$ can never be separated from $B$ in any other way than by resistance to the police power. This latter proposition is in its turn contradicted by history, which shows that many transformations that have proved beneficial, and sometimes in the highest degree, to society have been effected otherwise than by resistance to the police power.

It follows, therefore, that such problems cannot be solved a priori in one sense or the other, but that each particular case has to be examined quantitatively to determine in which direction the utility or the detriment lies. It is the peculiar characteristic of ethical derivations that in such cases they substitute a priori a single and qualitative solution for the multiple and quantitative solutions that experience furnishes a posteriori. That is why ethical solutions are more acceptable to the public than experimental solutions. They are simpler, and they are easier to understand without long and fatiguing compilations of multitudinous facts (§ $2147^{18}$ ).
the forces which were really at work in the Revolution. In some cases such inconsistencies between the derivation and the conduct are so evident that they have not escaped historians; so, if they find that Augustus founded the Empire on pretence of restoring the Republic, and that Robespierre, opposing capital punishment, made extensive use of it, they get out of the difficulty by passing ethical judgments on those men in view of their inconsistencies. It may well be that Augustus was lying when he pretended to be restoring the Republic and that Robespierre was lying when he posed as a humanitarian. But if we are interested in getting at the facts we cannot stop at that. Two problems at once emerge, the one of slight, the other of very great, importance. The first lies in determining whether Augustus and Robespierre were sincere or insincere, since it might easily be, as has been seen to happen in many other cases, that both of them sincerely believed in the derivations they used in order to mislead others. ${ }^{1}$ The second problem, which is the only one of the two that has any significance for history, lies in determining how and why the sentiments and interests cloaked by the derivations in question had the success they had. Does anyone really think that the Romans were duped by Augustus, and the French by Robespierre, much as a customer is tricked by a jeweller who sells him a piece of glass on the assurance that it is a diamond? Such a thesis is untenable. Indeed the personalities of Augustus and Robespierre themselves disappear, in part at least, in reality, and we are obliged to say that the sentiments and interests that were represented by those individuals prevailed over the sentiments and interests represented by other individuals. What took place was the resultant of all the social factors, among which the derivations did, to be sure, have their place, but not a very important place ( $\$ 2199$ ).
2170. The use of force in society. Societies in general subsist because alive and vigorous in the majority of their constituent members are sentiments corresponding to residues of sociality (Class IV). But there are also individuals in human societies in whom some at least of those sentiments are weak or indeed actually missing. That

[^24]fact has two interesting consequences which stand in apparent contradiction, one of them threatening the dissolution of a society, the other making for its progress in civilization. What at bottom is there is continuous movement, but it is a movement that may progress in almost any direction.
2171. It is evident that if the requirement of uniformity (residues IV- $\beta$ ) were so strongly active in all individuals in a given society as to prevent even one of them from breaking away in any particular from the uniformities prevalent in it, such a society would have no internal causes for dissolution; but neither would it have any causes for change, whether in the direction of an increase, or of a decrease, in the utility of the individuals or of the society. On the other hand if the requirement of uniformity were to fail, society would not hold together, and each individual would go his own way, as lions and tigers, birds of prey, and other animals do. Societies that endure and change are therefore situated in some intermediate condition between those two extremes.
2172. A homogeneous society might be imagined in which the requirement of uniformity would be the same in all individuals, and would correspond to the intermediate state just mentioned. But observation shows that that is not the case with human societies. Human societies are essentially heterogeneous, and the intermediate state is attained because the requirement of uniformity is very strong in some individuals, moderately strong in others, very feeble in still others, and almost entirely absent in a few. The average is found not in each individual, but in the group comprising them all. One may add as a datum of fact that the number of individuals in whom the requirement of uniformity is stronger than the average requisite of the intermediate state in which the society is situated is much greater than the number of individuals in whom the requirement is weaker than that average, and very very much greater than the number in whom it is entirely missing.
2173. For the reader who has followed us thus far it is needless to add that, in view of the effects of this greater or lesser potency of the sentiments of uniformity, one may foresee out of hand that two theologies will put in an appearance ( $\$ 2147$, Example II), one of which will glorify the immobility of one or another uniformity, real or imaginary, the other of which will glorify movement, prog-
ress, in one direction or another. That is what has actually happened in history. There have been popular Olympuses where the gods fixed and determined once and for all how human society was to be; and then, too, Olympuses of utopian reformers, who derived from their exalted minds conceptions of forms from which human society was never never more to deviate. On the other hand, from the days of ancient Athens down to our own, the lord gods of Movement in a Certain Direction have listened to the prayers of their faithful and now sit triumphant in our latter-day Olympus, where Progress Optimus Maximus reigns in sovereign majesty. So that intermediate situation of society has usually been attained as the resultant of many forces, prominent among them the two categories mentioned, which envisage different imaginary goals and correspond to different classes of residues ( $\$ \$ 2152$ f.).
2174. To ask whether or not force ought to be used in a society, whether the use of force is or is not beneficial, is to ask a question that has no meaning; for force is used by those who wish to preserve certain uniformities and by those who wish to overstep them; and the violence of the ones stands in contrast and in conflict with the violence of the others. In truth, if a partisan of a governing class disavows the use of force, he means that he disavows the use of force by insurgents trying to escape from the norms of the given uniformity. On the other hand, if he says he approves of the use of force, what he really means is that he approves of the use of force by the public authority to constrain insurgents to conformity. Conversely, if a partisan of the subject class says he detests the use of force in society, what he really detests is the use of force by constituted authorities in forcing dissidents to conform; and if, instead, he lauds the use of force, he is thinking of the use of force by those who would break away from certain social uniformities. ${ }^{1}$
2175. Nor is there any particular meaning in the question as to whether the use of violence to enforce existing uniformities is beneficial to society, or whether it is beneficial to use force in order to

[^25]overstep them; for the various uniformities have to be distinguished to see which of them are beneficial and which deleterious to society. Nor, indced, is that enough; for it is further necessary to determine whether the utility of the uniformity is great enough to offset the harm that will be done by using violence to enforce it, or whether detriment from the uniformity is great enough to overbalance the damage that will be caused by the use of force in subverting it ( $\$ 2195$ ) ; in which detriment and damage we must not forget to reckon the very serious drawback involved in the anarchy that results from any frequent use of violence to abolish existing uniformities, just as among the benefits and utilities of maintaining frankly injurious uniformities must be counted the strength and stability they lend to the social order. So, to solve the problem as to the use of force, it is not enough to solve the other problem as to the utility, in general, of certain types of social organization; it is essential also and chiefly to compute all the advantages and all the drawbacks, direct and indirect (\$2147, Example II). Such a course leads to the solution of a scientific problem; but it may not be and oftentimes is not the course that leads to an increase in social utility. It is better, therefore, if it be followed only by people who are called upon to solve a scientific problem or, to some limited extent, by certain individuals belonging to the ruling class; whereas social utility is oftentimes best served if the members of the subject class, whose function it is not to lead but to act, accept one of the two theologies according to the case-either the theology that enjoins preservation of existing uniformities, or the theology that rounsels change.
2176. What we have just said serves to explain, along with the theoretical difficulties, how it comes about that the solutions that are usually found for the general problem have so little and sometimes no bearing on realities. Solutions of particular problems come closer to the mark because, situate as they are in specific places and times, they present fewer theoretical difficulties; and because practical empiricism implicitly takes account of many circumstances that theory, until it has been carried to a state of high perfection, cannot explicitly appraise.

Considering violations of material conformities among modern civilized peoples, we see that, in general, the use of violence in repressing them is the more readily condoned in proportion as the
violation can be regarded as an individual anomaly designed to attain some individual advantage, and the less readily condoned in proportion as the violation appears as a collective act aiming at some collective advantage, and especially if its apparent design be to replace general norms prevailing with certain other general norms. ${ }^{1}$
2177. That states all that there is in common, between the large numbers of facts in which a distinction is drawn between so-called private and so-called' political crimes. A distinction, and often a very sharp distinction, is drawn between the individual who kills or steals for his own benefit and the individual who commits murder or theft with the intent of benefiting a party. In general, civilized countries grant extradition for the former, but refuse it for the latter. In the same way one notes a continually increasing leniency towards crimes committed during labour strikes or in the course of other economic, social, or political struggles. There is a more and more conspicuous tendency to meet such aggressions with merely passive resistance, the police power being required not to use arms, or else permitted to do so only in cases of extreme necessity. Such cases never arise in practice. So long as the policeman is alive, the necessity is held not to be extreme, and it is bootless, after all, to recognize the extremity after he is in his grave and no longer in a position to profit by the considerate permission to use his revolver. Punishment by judicial process is also becoming less and less vigorous. Criminals are either not convicted or, being convicted, are released in virtue of some probation law, failing of which, they can still rely on commutations, individual pardons, or general amnesties, so that, sum total, they have little or nothing to fear from the courts $\left(\$ 2147^{18}\right)$. In a word, in a vague, cloudy, confused sort of way, the notion is

[^26]coming to the fore that an existing government may make some slight use of force against its enemies, but no great amount of force, and that it is under all circumstances to be condemned if it carries the use of force so far as to cause the death of considerable numbers, of a small number, a single one, of its enemies; nor can it rid itself of them, either, by putting them in prison or otherwise. ${ }^{1}$
2178. What now are the correlations that subsist between this method of applying force and other social facts? We note, as usual, a sequence of actions and reactions, in which the use of force appears now as cause, now as effect. As regards the governing class, one gets, in the main, five groups of facts to consider: I. A mere handful of citizens, so long as they are willing to use violence, can force their will upon public officials who are not inclined to meet violence with equal violence. If the reluctance of the officials to resort to force is primarily motivated by humanitarian sentiments, that result ensues very readily; but if they refrain from violence because they deem it wiser to use some other means, the effect is often the following: 2. To prevent or resist violence, the governing class resorts to "diplomacy," fraud, corruption-governmental authority passes, in a word, from the lions to the foxes. The governing class bows its head under the threat of violence, but it surrenders only in appearances, trying to turn the flank of the obstacle it cannot demolish in frontal attack. In the long run that sort of procedure comes to exercise a far-reaching influence on the selection of the governing class, which is now recruited only from the foxes, while the lions are blackballed (§2227). The individual who best knows the arts of sapping the strength of the foes of "graft" and of winning back by fraud and deceit what seemed to have been surrendered under pressure of force, is now leader of leaders. The man who has bursts of rebellion, and does not know how to crook his spine at the proper times and places, is the worst of leaders, and his presence is tolerated among them only if other distinguished endowments offset that defect. 3. So it comes about that the residues of the combination-instinct (Class I) are intensified in the governing

[^27]class, and the residues of group-persistence (Class II) debilitated; for the combination-residues supply, precisely, the artistry and resourcefulness required for evolving ingenious expedients as substitutes for open resistance, while the residues of group-persistence stimulate open resistance, since a strong sentiment of group-persistence cures the spine of all tendencies to curvature. 4. Policies of the governing class are not planned too far ahead in time. Predominance of the combination instincts and enfeeblement of the sentiments of group-persistence result in making the governing class more satisfied with the present and less thoughtful of the future. The individual comes to prevail, and by far, over family, community, nation. Material interests and interests of the present or a near future come to prevail over the ideal interests of community or nation and interests of the distant future. The impulse is to enjoy the present without too much thought for the morrow. 5. Some of these phenomena become observable in international relations as well. Wars become essentially cconomic. Efforts are made to avoid conflicts with the powerful and the sword is rattled only before the weak. Wars are regarded more than anything else as speculations ( $\$ 2328$ ). A country is often unwittingly edged towards war by nursings of economic conflicts which, it is expected, will never get out of control and turn into armed conflicts. Not seldom, however, a war will be forced upon a country by peoples who are not so far advanced in the evolution that leads to the predominance of Class I residues.
2179. As regards the subject class, we get the following relations, which correspond in part to the preceding: I. When the subject class contains a number of individuals disposed to use force and with capable leaders to guide them, the governing class is, in many cases, overthrown and another takes its place. That is casily the case where governing classes are inspired by humanitarian sentiments primarily, and very very easily if they do not find ways to assimilate the exceptional individuals who come to the front in the subject classes. A humanitarian aristocracy that is closed or stiffly exclusive represents the maximum of insecurity. 2. It is far more difficult to overthrow a governing class that is adept in the shrewd use of chicancry, fraud, corruption; and in the highest degree difficult to overthrow such a class when it successfully assimilates most of the in-
dividuals in the subject class who show those same talents, are adept in those same arts, and might therefore become the leaders of such plebeians as are disposed to use violence. Thus left without leadership, without talent, disorganized, the subject class is almost always powerless to set up any lasting régime. 3. So the combination-residues (Class I) become to some extent enfeebled in the subject class. But that phenomenon is in no way comparable to the corresponding reinforcement of those same residues in the governing class; for the governing class, being composed, as it is, of a much smaller number of individuals, changes considerably in character from the addition to it or withdrawal from it of relatively small numbers of individuals; whereas shifts of identical numbers produce but slight effects in the enormously greater total of the subject class. For that matter the subject class is still left with many individuals possessed of combination-instincts that are applied not to politics or activities connected with politics but to arts and trades independent of politics. That circumstance lends stability to societies, for the governing class is required to absorb only a small number of new individuals in order to keep the subject class deprived of leadership. However, in the long run the differences in temperament between the governing class and the subject class become gradually accentuated, the combination-instincts tending to predominate in the ruling class, and instincts of group-persistence in the subject class. When that difference becomes sufficiently great, revolution occurs. 4. Revolution often transfers power to a new governing class, which exhibits a reinforcement in its instincts of group-persistence and so adds to its designs of present enjoyment aspirations towards ideal enjoyments presumably attainable at some future time-scepticism in part gives way to faith. 5. These considerations must to some extent be applied to international relations. If the combination-instincts are reinforced in a given country beyond a certain limit, as compared with the instincts of group-persistence, that country may be easily vanquished in war by another country in which that change in relative proportions has not occurred. The potency of an ideal as a pilot to victory is observable in both civil and international strife. People who lose the habit of applying force, who acquire the habit of considering policy from a commercial standpoint and of judging it only
in terms of profit and loss, can readily be induced to purchase peace; and it may well be that such a transaction taken by itself is a good one, for war might have cost more money than the price of peace. Yet experience shows that in the long run, and taken in connexion with the things that inevitably go with it, such practice leads a country to ruin. The combination-instincts rarely come to prevail in the whole of a population. More commonly that situation arises in the upper strata of society, there being few if any traces of it in the lower and more populous classes. So when a war breaks out one gazes in amazement on the energies that are suddenly manifested by the masses at large, something that could in no way have been foreseen by studying the upper classes only. Sometimes, as happened in the case of Carthage, the burst of energy may not be sufficient to save a country, because a war may have been inadequately prepared for and be incompetently led by the ruling classes, and soundly prepared for and wisely led by the ruling classes of the enemy country. Then again, as happened in the wars of the French Revolution, the energy in the masses may be great enough to save a country because, though the war may have been badly prepared for by its ruling classes, preparations and leadership have been even worse in the ruling classes of the enemy countries, a circumstance that gives the constituent members of the lower strata of society time to drive their ruling class from power and replace it with another of greater energy and possessing the instincts of group-persistence in greater abundance. Still again, as happened in Germany after the disaster at Jena, the energy of the masses may spread to the higher classes and spur them to an activity that proves most effective as combining able leadership with enthusiastic faith.
2180. These, then, are the main, the outstanding phenomena, but other phenomena of secondary or incidental importance also figure. Notable among such is the fact that if a ruling class is unable or unwilling or incompetent to use force to eradicate violations of uniformities in private life, anarchic action on the part of the subject class tends to make up for the deficiency. It is well known to history that the private vendetta languishes or recurs in proportion as public authority continues or ceases to replace it. It has been seen to recur in the form of lynchings in the United States, and even in

Europe. ${ }^{2}$ Whenever the influence of public authority declines, little states grow up within the state, little societies within society. So, whenever judicial process fails, private or group justice replaces it, and vice versa. ${ }^{1}$ In international relations, the tinselling of humani-
$2180{ }^{\text {a }}$ [This casual allusion to the phenomena of lynch-law does not reflect the full light that Pareto's theories throw upon them; nor does it altogether square with the facts. Lynchings occur in fairly law-abiding communities in the United States (California). They fail to occur in fairly lawless communities (New York, Chicago). They are not correlated therefore with the greater or lesser efficiency of law enforcement as such. I would state the Paretan uniformity as follows (strictly, the problem belongs to what Pareto calls "special sociology, and thercfore does not fall within the purview of this work). A lynching develops in three stages. 1. A revolting crime causes a violent shock to Class V residues connected with the social equilibrium. 2. Activity residues (Class III), at once come into play, and meeting no great check in combination-residues (Class I) as consolidated and made permanent by persisting abstractions (residues II- $\delta$ ), vent themselves to the full. 3 . The activity residues having spent their force the social equilibrium is at once restored and life resumes its normal course. The protests, editorials, sermons, that follow a lynching have little effect, because they themselves are in large part manifestations of the activity residues aroused in stages 1 and 2. In the Paretan theory the vigor of conduct is correlated with the numbers of sentiments involved in an act and their intensities, as "composed" in a resultant by the number and intensity of conflicting or opposite sentiments. Activity residues are checked in the North by the strength of persisting combinations, and the absence of lynchings is therefore interdependent with the strength of industry, commerce, popular education, prosperity and so on. Lynchings occur in the South from the relative and proportionate weakness of the combination-residues (very significant the falling off in the numbers of lynchings during the "boom" years, 1923-29). Another thing: lynchings preferably occur when the combination of Class V and Class III residues is reenforced by Class VI residues (sex) and by IV- $\beta$ residues (sense of uniformitycolour). There is an interesting proof of the comment on the reactions of protest, above. Some very brutal lynchings (one the burning of a negro woman) occurred during Mr. Hoover's administration. The President at that time said nothing. He was moved to a wholly sentimental and unobjective outburst by the very orderly lynching of the San Josć kidnappers in 1933. That shows that he too had been profoundly stirred by the Lindbergh case and by the ensuing wave of kidnapping crimes and, owing to the boutade of the late Governor Rolfe, had at last found a way to vent his activity residues. Of these latter the famous manifesto of Governor Rolfe was a pure and unadulterated expression. This analysis throws the whole matter of lynchings into the sphere of non-logical conduct, and shows that just as lynchings have not disappeared after a century of preaching, they will not disappear as long as the present structure of American society endures. They can only be prevented in the given case by an application of force; but there again, as history also shows, the application of force is prevented by the very forces that cause the lynch-ings.-A. L.]
$2180^{1}$ Examples from the past are too numerous and too familiar to require mention here. Suppose I note just one very recent example. In the year i913, at
tarian and ethical declamation is just a dressing for an underlying force. The Chinese considered themselves the superiors in civilization of the Japanese ( $\$ 2550^{\circ}$ ), and perhaps they were, but they lacked a military aptitude that the Japanese, in virtue of a surviving

Orgosolo, in Sardinia, a number of individuals replaced the defective action of the police and the courts with their own group action. The incident is worth recounting as typical of the past and illustrative, with duc allowances as to procedures and forms, of what can at any time be the future.

Two families, the Cossus and the Corraines, became involved in a feud for private reasons. The Cossus succeeded in winning the support of government officials and therefore of the police and the courts. The Corraines, considering themselves unfairly treated in view of that, flew to arms. Giornale d'Italia, Oct. 5, 1913: "Orgosolo, Oct. 3. The band of brigands that has been infesting the territory about Orgosolo has committed another atrocious crime. In the La Mela district the bodies of two property-owners and their hired man were found this morning, all three of them slain by the brigands in question. The dead: Giuseppe Succu, Giovanni Succu, their hired man, Michele Picconi. The three bodies were riddled with bullets and knife-cuts and horribly mutilated. One of Picconi's ears was cut off. Giovanni Corraine is keeping his promise: the more vigorously the army and the police try to run him down, the more emphatic the evidence he will give of his power and his resolve on vengeance. Today's crime had been foreseen about town. Your correspondent has interviewed Egidio Piredda, one of the chicf victims of the persecution. Signor Piredda confessed that every person in the Cossu clan rose from bed this morning in terror of not seeing sundown. And he added in the presence of officials that despite the protection accorded his party by the police, despite the escorts of carabinieri that are being provided every time a Cossu clansman goes out of doors, the Cossus were all resigned to their fate. The man's features were overspread with anguish, the anguish of a man living under a relentless menace, and aware of the uselessness of struggling against a diabolical power that is utterly his superior. Piredda was right. On the night when the carabinieri fell upon the Corraine house and arrested the mother and her young and beautiful daughter, Giovanni Corraine stood only a short distance away under cover of the darkness and, clutching his rifle, he took oath to avenge them. The incident is well known. It was recounted to me by Giovanni Corraine's brother on the day when, with the pale drawn face of a sickly child, he told me in an unfaltering voice that justice would be done on those who had sent two innocent women to prison with the connivance of 'friends in high places.' That conviction is deeply rooted in the bandits, and also in all the townsfolk of Orgosolo, who would sacrifice their blood and their liberty to aid the Corraines. They firmly believe that the Cossus, sworn enemies of the Corraines [and allies of the Succus] are able to bully and mistreat the Corraines through political influence and that, as the Corraines also think, they are obstructing the orderly procedure of justice. That was their conclusion the day when a jury at Oristano acquitted the murderer of one of the Corraine brothers. That, again, was their conclusion on the night when the police, hoping to cut the bandits off from their bases of supply by wholesale arrests among the Corraine faction, dragged its outstanding figures to prison at Nuoro. And the curse uttered by Medda Corraine, the prettiest girl in Orgosolo, as she was passing the Cossu house in handcuffs and under police escort, voiced the fierce and tragic warning
remnant of feudal "barbarism," possessed in abundance. So the poor Chinese were attacked by hordes of Europeans-whose exploits in China, as Sorel well says, remind one of the feats of the Spanish conquistadores in the Americas. They suffered murder, rapine, and
that has had its bloody epilogue today: 'God will curse you for the wrong you are doing to our family. God will not suffer you to benefit by such a life of infamy. . . . And so saying she lifted her fettered wrists in an unearthly gesture of imprecation. Today her brother hearkens to her curse and commits murder. Today's dead are the two brothers, Giuseppe and Giovanni Succu, members both of a wretched family that is dotting the small, lonely cemetery of Orgosolo with dozens of crosses. One by one they are falling, all of them, under the bullets of the bandits that never miss. The town looks on at the slaughter in silence and continues sending bread, ammunition, money, to 'the able-bodied' as they call them, to the men who are living like wild beasts in the woods, breathing the air of vengeance." Four days later, Oct. 9, 1913, the same newspaper published an interview with one of the "personages in high place." The official explained the situation very lucidly: "'The bitter hatred that divides the now notorious families of Orgosolo and has already resulted in a long list of crimes is due to a number of causes. For the sake of clearness suppose we begin by explaining that the "menaced" families are the Cossus, the Succus, the Pineddas, the Poddas, and the Pisanos. The families to which the bandits belong, or by which they are supported, are the Corraines, the Moros, and the De Vaddises. [Names, as Pareto remarked in a note, are badly confused in the news articles which he quotes. I uniformize them to make the narrative coherent.-A. L.] Now what are the causes that really and immediately determined these crimes? The first and remotest cause is to be sought in some obscure disagreement over an inheritance, which is now too involved for anyone to make head or tail of. But there is a cause more serious and less remote: an offer of marriage made in behalf of a girl in the Cossu family, which was rejected by the Corraines. Soon afterwards the affront was returned. A youth belonging to the second "group" of families sued for the hand of a girl belonging to the first "group." He was rejected in his turn. Hatred between the two clans flared up. And soon there was worse. A man of the Corraine family was found drowned in a well. The police and judicial authorities were in full agreement, after a formal inquest, that Corraine had committed suicide. But the Corraines and their adherents held, and still hold, that their kinsman was murdered by their enemies and that the authorities, as a favor to the Cossus, their henchmen, invented the little story of suicide. Sad inspiration of clannish passions!
" 'But there came another such inspiration, I will not say sadder, but stranger. In a skirmish between the carabinieri and some fugitives from justice who were evading arrest, one of the De Vaddis boys was killed, whereupon the De Vaddises and their adherents held, and continue to hold, that their kinsman was slain by the Cossu "group" and that the authorities, again to protect the Cossus, invented this time the story of a fight with the carabinicri.' 'But why should the authoritiesgranted that it is a mistaken impression on the part of the Corraines or the othersbe favouring the Cossus?' 'That suspicion is based on the mere fact that the Cossus were the wealthiest and most influential family in Orgosolo. I say "were," because the family is now all but destroyed. Its men and its possessions have been wiped out, and Antonio Cossu, the old man, has had to take refuge in Nuoro, where
pillage at European hands, and then paid an indemnity into the bargain; whereas the Japanese came off victorious over the Russians and now exact respect from everybody. A few centuries back, the subtle diplomacy of the Christian lords of Constantinople did not
carabinieri stand constantly on guard about his house trying to protect him. But let us go on with the story. The Corraine "group" now had two new grievances to avenge in addition to the old ones: two murders, in other words, for nothing will ever convince the Corraines that their two kinsmen were not murdered by their enemies.
" 'So the terrible work of vengeance began. Barns were burned, timber lands were set on fire, live stock was stolen or hamstrung, children were kidnapped, men were killed.' 'It was then that the Corraines took to the woods?' 'Exactly, and for that reason. A month or so ago the police authorities, who had been doggedly pursuing the fugitives, made a wholesale raid on their accomplices and arrested thirty in all, what with women and men. The Corraine 'group' boiled with indignation, and saw in that another abuse on the part of the authorities, because all the individuals arrested were members of their group. Nor was it of any use to remind them that the accomplices in their own crimes were certainly not to be sought in the families of their victims, who were by this time so terror-stricken that not one of them any longer dared to go out of doors.' 'And were the arrests upheld?' 'Yes. After a long and detailed "instruction" the judicial authorities decided to remand them for trial as members of a criminal association. That was the last straw. It unleashed the whole fury of the Corraines. The two months during which the inquiry had been in progress were months of truce: no word was said of individuals evading arrest. There were no personal assaults, no thefts on the farms. Evidently the "group" backing the individuals in custody hoped that the warrants would be quashed and did not care to prejudice the judges against the defendants. But when it transpired that they were to be remanded, the storm broke. For a fortnight past crime has followed on crime. . . . And the police are powerless to avert them or punish them.' 'And what might be the cause of that helplessness?' 'Many causes, but the chief one this, that everybody in the Orgosolo district, every man, woman, and child, is on the side of the fugitives.' 'And why that?' 'Because they are all convinced that in the beginning these men, or rather, the families of these men, did not get fair treatment; that they are therefore not criminals, but victims of oppression taking justice into their own hands. Moreover, in Sardinia, and especially in the vicinity of Nuoro, "procuring justice for oneself" by whatever means and at whatever cost is never considered dishonourable in anyone. So it comes about that the carabinieri receive no aid and are unable to get a scrap of information concerning the movements of the bandits from living soul in the country, which contains, unquestionably, a large number of reputable people; whereas the fugitives are kept perfectly and promptly informed of every movement on the part of the police and are constantly being supplied with food and ammunition. And you who know, if only from a casual visit, the country about Nuoro, cannot but understand that the police are facing difficulties that are truly insuperable.'"

And now let us listen to what is said not by the poor and ignorant peasants of a remote rural district, but by the magistrates themselves, who are entrusted with the execution of justice. Giornale d'Italia, Scpt. 20, 1913, reporting a convention of Italian judicial magistrates in session at Naples: "His Honour Justice Giulio Cag-
save them from ruin under the impact of the fanaticism and might of the Turks; and now, in this year 1913, on the very same spot, the victors show that they have deteriorated in their fanaticism and in their power and, in their turn reposing illusory hopes in the diplo-
giano, continuing his report on the break-down of service in the courts, in the following tenor: 'History teaches that any enfeeblement or break-down in the organs of justice spells a reversion, be it a slow reversion, to primitive conditions of barbarism, that the Teppa, the Camorra, the Maffia, brigandage, are forms of collective crime that originate in distrust of official justice. The best-framed laws become mere hoaxes, like the famous "cries," or proclamations, of Don Rodrigo's time [Allusion to the villain in Manzoni's novel, The Betrothed.], unless there are organs to enforce respect for them and obedience to them. Nor must we overlook a side light on the question, which has a more direct bearing on the prestige of our order. If a portion of the public is capable of understanding that it is not because of the incapacity or laziness of our judges that the break-down in justice is becoming more and more alarming, the majority of the public does not hesitate to attribute it bluntly to indolence, incompetence, or lack of interest on the part of persons.' " The public also believes, and rightly, that not seldom interference by politicians and government ministries in behalf of one friend or another deprives court decisions of all status as law and justice. In serious cases, the virile, unspoiled inhabitants of Sardinia and Sicily resort to their rifles, while the milder populations on the Continent bow their heads resignedly. Even in highly civilized regions private justice on occasion replaces public administration. Liberté, Nov. 3, I913: "Fatal Gesture: It was to be foreseen. Sooner or later an act of violence had to be the answer to one or another of those incomprehensible whims for which the jury system has been distinguishing itself for some years past. The fatal gesture has been made in open court at the Criminal Assizes of the Cher. An individual is accused by his two sons of murdering their mother. Her body has been found in a well with a rope about the neck. The jury declares the defendant not guilty and the court dismisses him from the bar. The youngest of the two sons rushes at his father and fires a revolver at him point-blank, inflicting a slight wound. 'You can acquit that rascal,' he cries. 'I won't, ever!' In the tumult the spectators throw themselves upon the self-appointed executioner with cries of 'Lynch him!' Court attendants manage to rescue him and lead him away to prison while the acquitted defendant signs the dismissal docket and strides from the court-room. . . . So there we are! In open court an individual takes it upon himself to reverse a verdict of fumbling justice, while a crowd of court-room spectators take it upon themselves to replace justice in punishing an assault. . . . The incident is of too serious an import not to merit the attention of all law-abiding citizens who may fancy they are living in an organized society. Let us state the bald truth: If such things are possible, the responsibility undeniably lies with the countless acquittals juries have been making in cases where punishment has obviously been required. Not a few such cases have been downright scandals and have served to lend piquant force to the remark of a lawyer who summarized a long experience in the courts with the reflection that 'if he were guilty, he would certainly demand a jury trial.'" The analysis is sound only in part. The "fault" in such cases-perhaps we had better say the cause of such things-does not lie only in the jury system. Judges are oftentimes worse than juries. Nor does it lie altogether in the judicial system, for
matic arts, are defeated and overthrown by the vigour of their sometime subjects. Grievous the hallucination under which those statesmen labour who imagine that they can replace the use of force with unarmed law. Among the many examples that one might point to are Sulla's constitution in ancient Rome and the conservative constitution of the Third Republic in France. Sulla's constitution fell because the armed force that might have compelled respect for it was not maintained. The constitution of Augustus endured because his successors were in a position to rely on the might of the legions. ${ }^{2}$ When the Commune had been defeated and overthrown, Thiers decided that his government ought to find its support rather in the law than in armed force. As a result his laws were scattered like leaves before the hurricane of democratic plutocracy. ${ }^{3}$ We need say nothing of Louis XVI of France, who thought he could halt the Revolution with his royal veto, for his was the illusion of a spineless weakling who was soon to lose what little head he had (§2201). ${ }^{4}$ after all the judicial system is no better or worse than it is made by the individuals who administer it. It lies chiefly in the fact that through a combination of many circumstances the public authority is failing in its function of guaranteeing justice.
$2180^{2}$ There is an anecdote about Sulla in Appian, De bellis civilibus, I, 104. Having abdicated the dictatorship, and still being respected by everyone because of the fear that he continued to inspire, Sulla was finally insulted by a young man, and he commented on the incident to the effect that "the act of that young fellow would keep any other man who held such power as he had had [the dictatorship] from ever resigning it. And shortly after, that very thing happened to the Romans, for Caius Caesar refused to lay down his command." The anecdote was probably invented to explain Caesar's conduct, but those who invented it and those who felt its force clearly perceived the weak spot in Sulla's achievement. In fact, as soon as he died, the Romans returned to their customary quarrelling, and the two consuls assailed each other furiously. That is what usually happens, and it shows that where the force of government fails, the force of individuals and factions takes its place.
$2180{ }^{3}$ Humanitarians are fond of repeating the aphorism: "On peut tout faire avec des baīonnettes excepté s'asseoir dessus." ("One can do anything with bayonets except sit on them"); but it would be interesting if they would tell us whether, in their opinion, the power of Augustus and his successors did or did not rest to an extent at least on the power of the practorians and the legionaries. To be sure, the praetorians used swords and not bayonets, but if that is not pap, it is pudding.
$2180^{4}$ Aulard, Histoire politique de la révolution française, pp. 177-79: "On November 29, 1791, the Legislative Assembly passed, among other measures, a bill requiring ecclesiasts who had refused to accept the civil constitution within a week's time to take the civic oath, or oath of allegiance to country, law, and king. . . . The King refused to sign the bill. So he had opposed his royal veto to a bill of November 9 carrying threat of death to fugitives abroad who did not return home at once and continued plotting against the country. . . . A devious policy of watch-
2181. All such facts as a rule present themselves in the guise of derivations. In one direction we get theories that condemn the use of violence by the subject class in whatever case, in the other direction theories that censure its use by public authority ( $\$ 2147^{18}$, 2174).
2182. Ruling-class theories, when the requirement of logic is not too keenly felt, appeal simply to sentiments of veneration for holders of power, or for abstractions such as "the state," and to sentiments of disapprobation for individuals who try to disturb or subvert existing orders (\$2192). Then when it is deemed advisable to satisfy the need of logic, the effort is to create a confusion between the violation of an established uniformity for the individual's exclusive profit and a violation designed to further some collective interest or some new uniformity. The aim in such a derivation is to carry over to
fulness and intrigue both at home and abroad was masked by a ministry that was at odds with itself, had no program, and was made up of intriguers and downright counter-revolutionists. . . . The King consented to disband the Swiss Guard, but he refused to sign the law on priests and on the army." Sulla's policy was different. He cared little for the temples, stripping them of their valuables in order to pay his soldiers, and refusing to obey an order of the Senate demanding the demobilization of his legions. When he marched upon Rome, as Duruy, Histoire des Romains, Vol. II, p. 576 (Mahaffy, Vol. II, p. 588), aptly notes: "Once he had decided to draw the sword on people who had only a plebiscite to defend them, success was certain." Later on, Julius Caesar also trusted to his sword and won in the face of decrees by the Senate. M. Aulard certainly cannot be suspected of monarchical bias. He confesses, Ibid., p. 187, that after the riots of June 20, 1792, "there was a recrudescence of royalism in the bourgeoisie and in certain districts in France. Twenty thousand petitioners and departmental administrations in large numbers protested against the insult that had been done to the royal majesty and which was represented as an attempt on the King's life." Petitions? Petitions were not enough! The call was for arms! Are humanitarians so obtuse that they can learn nothing from history? M. Aulard goes on to tell the story of the famous baiser de Lamourette (July 7, 1792) and concludes, p. 188: "So, all the defenders of the bourgeois régime stood grouped in one accord to defend the throne, prevent a repetition of the scenes of June 20 , and punish those responsible for them." A fine defence! Words, intrigues! What those good souls lacked was faith in force, the energy to fight, the courage to fall face to the foe and weapon in hand-nothing more! P. 189: "As we have seen, the legislative assembly had disbanded the royal guard and the King had signed that bill. After depriving the King of his means of defence against a popular insurrection it had itself tried to organize a military force to checkmate the plans of the King or his entourage." Then what always has happened, happened: those who possessed the force defeated those who could not bring themselves to use it; and that was fortunate for France at that time, as it had been for other peoples in the past, for the rule of the strong is generally better than the rule of weaklings.
the social or political act the reprobation that is generally visited upon common crime. Frequent in our day are reasonings in some way connected with the theology of Progress. Not a few of our modern governments have revolutionary origins. How condemn the revolutions that might be tried against them without repudiating the forefathers? That is attended to by invoking a new divine right: Insurrection was legitimate enough against governments of the past, where authority was based on force; it is not legitimate against modern governments, where the authority is based on "reason." Or else: Insurrection was legitimate against kings and oligarchies; it is never legitimate against "the People." Or again: Rebellion is justifiable where there is no universal suffrage, but not where that panacea is the law of the land. Or again: Revolt is useless and therefore reprehensible in all countries where "the People" are able to express their "will." Then finally-just to give some little satisfaction to their Graces, the Metaphysicists: Insurrection cannot be tolerated where a "state of law" exists. I hope I shall be excused if I do not define that very sweet entity here. For all of most painstaking researches on my part, it remains an entity altogether unknown to me, and I should much rather be asked to give the zoological pedigree of the Chimaera.
2183. Again as usual, no one of these derivations has any exact meaning. All governments use force, and all assert that they are founded on reason. In the fact, whether universal suffrage prevails or not, it is always an oligarchy that governs, finding ways to give to the "will of the people" that expression which the few desire, from the "royal law" that bestowed the imperium on the Roman Emperors down to the votes of a legislative majority elected in one way or another, from the plebiscite that gave the empire to Napoleon III down to the universal suffrage that is shrewdly bought, steered, and manipulated by our "speculators." Who is this new god called Universal Suffrage? He is no more exactly definable, no less shrouded in mystery, no less beyond the pale of reality, than the hosts of other divinities; nor are there fewer and less patent contradictions in his theology than in theirs. Worshippers of Universal Suffrage are not led by their god. It is they who lead him-and by the nose, determining the forms in which he must manifest himself. Oftentimes, proclaiming the sanctity of "majority rule," they
resist "majority rule" by obstructionist tactics, even though they form but small minorities, and burning incense to the goddess Reason, they in no wise disdain, in certain cases, alliances with Chicanery, Fraud, and Corruption.
2184. Substantially such derivations express the sentiments felt by people who have climbed into the saddle and are willing to stay there-along with the far more general sentiment that social stability is a good thing. If, the moment a group, large or small, ceased to be satisfied with certain norms established in the community of which it is a part, it flew to arms to abolish them, organized society would fall to pieces. Social stability is so beneficial a thing that to maintain it it is well worth while to enlist the aid of fantastic ideals ( $\$ \$ 1879,1875$ ) and this or that theology-among the others, the theology of universal suffrage-and be resigned to putting up with certain actual disadvantages. Before it becomes advisable to disturb the public peace, such disadvantages must have grown very very serious; and since human beings are effectively guided not by the sceptical reasonings of science but by "living faiths" expressed in ideals, theories such as the divine right of kings, the legitimacy of oligarchies, of "the people," of "majorities," of legislative assemblies, and other such things, may be useful within certain limits, and have in fact proved to be, however absurd they may be from the scientific standpoint.
2185. Theories designed to justify the use of force by the governed are almost always combined with theories condemning the use of force by the public authority. A few dreamers reject the use of force in general, on whatever side; but their theories either have no influence at all or else serve merely to weaken resistance on the part of people in power, so clearing the field for violence on the part of the governed. In view of that we may confine ourselves to considering such theories, in general, in the combined form.
2186. No great number of theories are required to rouse to resistance and to the use of force people who are, or think they are, oppressed. The derivations therefore are chiefly designed to incline people who would otherwise be neutral in the struggle to condemn resistance on the part of the governing powers, and so to make their resistance less vigorous; or at a venture, to persuade the rulers themselves in that sense, a thing, for that matter, that is not likely
to have any great success in our day save with those whose spinal columns have utterly rotted from the bane of humanitarianism. A few centuries ago some results might have been achieved in our Western countries by working with religious derivations upon sincere Christians; and, in other countries, by working upon firm believers with derivations of the religion prevailing in the given case. Since humanitarianism is a religion, like the Christian, the Moslem, or any other, we may say, in general, that one may sometimes secure the aid of neutrals and weaken resistance on the part of people in power by using derivations of the religion, whatever it may be, in which they sincerely believe. But since derivations readily lend themselves to proving the pro and the contra, that device is often of scant effect even when it is not a mere mask for interests.
2187. In our times conflicts are chiefly economic. If a government therefore sets out to protect employers or strike-breakers from violence by strikers, it is accused of "interfering" in an economic matter that does not properly concern it. If the police do not allow their heads to be broken without using their weapons, they are said to have "shown poor judgment," to have acted "impulsively," "nervously." Like strike-breakers, they must be denied the right to use arms whenever they are attacked by strikers, for otherwise some striker might be killed, and the crime of assault, assuming but not conceding that there has been such a crime, does not deserve the penalty of death $\left(\$ 2147{ }^{18}\right)$. Court decisions are impugned as "class decisions"; at any rate, they are always too severe. Amnesties, finally, must wipe out all remembrance of such unpleasantness. One might suppose that since the interests of employers and strike-breakers are directly contrary to the interests of the strikers, they would use the opposite derivations. But that is not the case, or if they do, they do it in a very mild, apologetic way. The reason is, as regards the "strike-breaker," the "scab," that he has, as a class, very little spirit. He is not inspired by any lofty ideal, he is almost ashamed of what he is doing, and does it with as little talk as possible. As regards employers of labour, the reason is that many of them are "speculators" who hope to make up for their losses in a strike through government aid and at the expense of consumer or taxpayer. Their quarrels with strikers are quarrels between accomplices over the division of the loot. The strikers belong to the masses, where there
is a wealth of Class II residues. They have not only interests but ideals. Their "speculator" employers belong to a class that has grown rich in its aptitude for combinations. They are well supplied, oversupplied, with residues from Class I and so have interests chiefly, and few or no ideals. They spend their time in activities that are far more lucrative than the manufacture of theories. Among them are not a few plutocratic demagogues who are artists at the trick of turning to their advantage strikes that are in all appearances directed against them. ${ }^{1}$ There are general considerations, furthermore, that apply to both domestic and international conflicts. They come down, in brief, to an appeal to sentiments of pity for the sufferings that are caused by the use of force, disregarding entirely the reasons for which the force is used and the utility or the harm that results from using or not using it. They are often filled out with expressions of reverence, or at least of compassion, for the proletariat, which can never do wrong or at the very least is excusable for whatever it does. In a day gone by, similar derivations, corresponding to the very same sentiments, were used in favour now of royal, now of theocratic, now of aristocratic, rule.
2188. It is interesting, as in keeping with the essentially sentimental character of derivations, that theories that would be the soundest from the logico-experimental standpoint are as a rule neglected. In the Middle Ages an excellent argument might have been put forward in favour of the ecclesiastical power at a time when it was at war with imperial, royal, or baronial powers-the fact that it was virtually the only counterbalance to those other powers, and almost the only refuge of intelligence, science, and cultivation against ignorant brutal force. But that argument was seldom, if ever, used. People preferred to rely on derivations based on the doctrine of revelation and quotations from Scripture ( $\$$ I617). Now employers who

[^28]themselves enjoy economic protection manifest great indignation at strikers for trying to rid themselves of the competition of non-union workers. The rejoinder is never made that they are trying to keep others from doing what they are doing themselves, and that they fail to show how and why free competition is good for the workingman and bad for the employer of labour. An individual tries to slip across the Italian frontier with a few bags of saccharin. Customs officers come running and violently prevent such competition with Italian manufacturers of beet-sugar, going, on occasion, so far as to use their guns and sometimes to kill the smuggler whom nobody mourns. All the same it is owing to just such violence and such murders that not a few Italian "sugar men" have managed to amass considerable fortunes and win public esteem, national honours, and even seats among the law-makers. One still has to be shown why violence cannot be used in the same way to increase wages.
2189. It may be objected that the violence that safe-guards the interests of the employer is legal and the violence used by the strikers on "scabs" illegal. That transfers the question from the utility of the violence to the utility of the manner in which violence is ap-plied-a matter of considerable importance, no one will deny. Legal violence is the consequence of the norms established in a society, and in general resort to it is more beneficial or at least less harmful than resort to private violence, which is designed as a rule to overthrow prevailing norms. The strikers might answer, and in fact sometimes do, that they are using illegal violence because they are cut off from using the legal variety. If the law were to constrain people by use of legal violence to give them what they demand, they would not need to resort to illegal violence. That same argument would serve in many other cases. People who use illegal violence would ask for nothing better than to be able to transmute it into legal violence.
2190. But the matter is not yet exhausted, and we now come to the salient point in the question. Let us set the particular case aside and look at the problem in its general form. The dispute is really as to the relative merits of shrewdness and force, and to decide it in the sense that never never, not even in the exceptional case, is it useful to meet wits with violence, it would be necessary first to show that the use of cunning is always, without exception, more advisable
than the use of force (\$2319). Suppose a certain country has a governing class, $A$, that assimilates the best elements, as regards intelligence, in the whole population. In that case the subject class, $B$, is largely stripped of such elements and can have little or no hope of ever overcoming the class $A$ so long as it is a battle of wits. If intelligence were to be combined with force, the dominion of the $A$ 's would be perpetual, for as Dante says, Inferno, XXXI, vv. 55-57 (Fletcher translation):

> "For if the machination of the mind To evil-will be added and to might, Of no defence is competent mankind."

But such a happy combination occurs only for a few individuals. In the majority of cases people who rely on their wits are or become less fitted to use violence, and vice versa. So concentration in the class $A$ of the individuals most adept at chicanery leads to a concentration in class $B$ of the individuals most adept at violence; and if that process is long continued, the equilibrium tends to become unstable, because the $A$ 's are long in cunning but short in the courage to use force and in the force itself; whereas the $B$ 's have the force and the courage to use it, but are short in the skill required for exploiting those advantages. But if they chance to find leaders who have the skill-and history shows that such leadership is usually supplied by dissatisfied $A$ 's-they have all they need for driving the $A$ 's from power. Of just that development history affords countless examples from remotest times all the way down to the present. ${ }^{1}$

[^29]2191. In general terms, a revolution of that type is beneficial to a community-more so when a governing class is tending more and more towards humanitarianism, less so when it is made up of individuals who are tending more and more to use combinations instead of force, especially if the combinations result, even indirectly, in the material prosperity of the community.

Let us imagine a country where the governing class, $A$, is inclining more and more in the direction of humanitarianism, is fostering, in other words, only the more harmful group-persistences, rejecting the others as outworn prejudices, and, while awaiting the advent of the "reign of reason," is becoming less and less capable of using force and is so shirking the main duty of a ruling class. Such a country is on its way to utter ruin. But lo, the subject class, $B$, revolts against the class $A$. In fighting $A$ it uses the humanitarian derivations so dear to the $A$ 's, but underlying them are quite different sentiments, and they soon find expression in deeds. The $B$ 's apply force on a far-reaching scale, and not only overthrow the $A$ 's but kill large numbers of them-and, in so doing, to tell the truth, they are performing a useful public service, something like ridding the country of a baneful animal pest. They bring with them to the seats of power a great abundance of group-persistences; ${ }^{1}$ and little it matters, if it matters at all, that these group-persistences be different in outward forms from the old. ${ }^{2}$ The important thing is that now they are functioning in the governing class and that owing to them the social fabric is acquiring stability and strength. The country is saved from ruin and is reborn to a new life.

If one judges superficially, one may be tempted to dwell more especially on the slaughter and pillaging that attend a revolution, without thinking to ask whether such things may not be manifesta-tions-as regrettable as one may wish-of sentiments, of social forces, that are very salutary. If one should say that, far from being reprehensible, the slaughter and robbery are signs that those who were called upon to commit them deserved power for the good of

[^30]society, he would be stating a paradox, for there is no relationship of cause and effect, nor any close and indispensable correlation, between such outrages and social utility; but the paradox would still contain its modicum of truth, in that the slaughter and rapine are external symptoms indicating the advent of strong and courageous people to places formerly held by weaklings and cowards. ${ }^{3}$ In all that we have been describing in the abstract many revolutions that have actually occurred in the concrete, from the revolution which gave imperial rule to Augustus down to the French Revolution of ' 89 ( $\$ \$ 2199$ f.). If the class governing in France had had the faith that counsels use of force and the will to use force, it would never have been overthrown and, procuring its own advantage, would have procured the advantage of France. Since it failed in that function, it was salutary that its rule should give way to rule by others; and since, again, it was the resort to force that was wanting, it was in keeping with very general uniformities that there should be a swing to another extreme where force was used even more than was required. Had Louis XVI not been a man of little sense and less courage, letting himself be floored without fighting, and preferring to lose his head on the guillotine to dying weapon in hand like a man of sinew, he might have been the one to do the destroying. If the victims of the September massacres, their kinsmen and friends, had not for the most part been spineless humanitarians without a particle of courage or energy, they would have annihilated their enemies instead of waiting to be annihilated themselves. It was a good thing that power should pass into the hands of people who showed that they had the faith and the resolve requisite for the use of force.
The advantage of the use of force to a society is less apparent when the governing class is made up of persons in whom the combination instincts are prevalent, and within certain limits there may be no advantage. But when a governing class divests itself too com-

[^31]pletely of the sentiments of group-persistence, it easily reaches a point where it is unfit to defend, let alone its own power, what is far worse, the independence of its country. In such a case, if the independence is to be deemed an advantage, it must also be deemed an advantage to be rid of a class that has become incompetent to perform the functions of defence. As a rule it is from the subject class that individuals come with the faith and the resolve to use force and save a country.
2192. The governing class, $A$, tries to defend its power and avert the danger of an uprising of the $B$ 's in various ways ( $\$ \S 1827,1838$, 2377 f.). It may try to take advantage of the strength of the $B$ 's, and and that is the most-effective policy. Or it may try to prevent its disaffected members from becoming leaders of the $B$ 's, or rather, of that element among the $B$ 's which is disposed to use force; but that is a very difficult thing to achieve. And the $A$ 's use derivations to keep the $B$ 's quiet ( $\$ 2182$ ), telling them that "all power comes from God," that it is a "crime" to resort to violence, that there is no reason for using force to obtain what, if it is "just," may be obtained by "reason." The main purpose of such derivations is to keep the B's from giving battle on their own terrain, the terrain of force, and to lead them to other ground-the field of cunning-where their defeat is certain, pitted as they will be against the $A$ 's, who are immensely their superiors in wits. But as a rule the effectiveness of such derivations depends largely upon the pre-existing sentiments that they express, and only to a slight extent upon sentiments that they create.
2193. Those derivations have to be met with other derivations of equal effectiveness, and it will be better if some of them play upon sentiments that are acceptable to people who imagine that they are neutral, though in reality they may not be, who would prefer not to take sides with either the $A$ 's or the $B$ 's but to think solely of what is "just" and "honest." Such sentiments are chiefly available in the group manifested by residues of sociality (Class IV) and more especially the sentiments of pity (IV- $\boldsymbol{\gamma}^{\mathrm{I}}$, IV- $\boldsymbol{\gamma}^{2}$ ). For that reason, most of the derivations favouring the use of violence by the subject class defend it not so much directly as indirectly-condemning resistance on the part of the governing class in the name of sociality, pity,
and repugnance to sufferings in others. ${ }^{1}$ These latter sentiments are almost the only ones that are exploited by many pacifists who can think of no other way to defend their thesis than by describing the "horrors of war." Derivations relating to the social struggle often have recourse, further, to sentiments of asceticism, which sometimes influence individuals among the $A$ 's and so prove to be of no mean advantage to the $B$ 's. ${ }^{2}$
2194. At bottom all such derivations express, in chief, the sentiments of individuals who are eager for change in the social order, and they are therefore beneficial or harmful according as the change is beneficial or harmful. If one is going to assert that change is
$2193{ }^{1}$ Sorel, Réflexions sur la violence, pp. 33-35, 176, 27 (91-94, 271, 83; Soule, pp. $74-76,220,68$ ), has well shown the fatuity of such derivations: "One finds it difficult to understand proletarian violence when one tries to reason with the ideas that bourgeois philosophy has spread abroad in the world. According to that philosophy, violence would be a remnant of barbarism that is destined to disappear as enlightenment progresses. . . . The parliamentary Socialists cannot grasp the purposes of the 'new school.' As they conceive it, the whole of Socialism comes down to a search for the means of getting into power. [They are just individuals who are in process of assimilation into the governing class. The name "Transformists" which they sometimes affect fits the substance of the thing.] A shrewdly manipulated agitation is extremely profitable to parliamentary Socialists, who boast before the government and the wealthy bourgeoisie that they know the trick of exorcizing the revolution. That enables them to engineer the business enterprises in which they are interested, and get incidental favours for large numbers of influential vote-getters. [And, in Italy, procure governmental subsidics for Socialist cooperatives.] . . . The ferocity of the old days is tending to give way to cunning, and many sociologists think that that is a real progress. Some philosophers who are not in the habit of following the opinions of the flock do not see very clearly how that can represent any great progress from the standpoint of morals. . . . Quite a number of workingmen understand perfectly well that all the claptrap of parliamentary literature [Derivations.] serves merely to dissemble the real considerations that determine the policies of governments. The protectionists get along by subsidizing a few big party leaders [And here and there a little one, and not only with money, but by flattering their vanities, nudging a newspaper to praise them, getting them decorations and posts of influence.] and supporting newspapers which in turn support the policies of those party leaders. The workers have no money, but they have at their disposal a far more effective means of action: they can frighten."
$2193^{2}$ It was the surpassing merit of Georges Sorel that in his Réflexions sur la violence he threw all such fatuities overboard to ascend to the altitudes of science. He was not adequately understood by people who went looking for derivations and were given logico-experimental reasonings instead. As for certain university professors who habitually mistake pedantry for science ( $\$ 1749{ }^{6}$ ), and, given a theory, focus their microscope on insignificant errors and other trifles, they are completely destitute of the intellectual capacities required for understanding the work of a scientist of Sorel's stature.
always for the worse, that stability is the supreme good, one ought to be ready to show either that it would have been to the advantage of human societies always to have remained in a state of barbarism, or that the transition from barbarism to civilization has been achieved, or might have been achieved ( $\$ \mathrm{I} 33$ f.), without wars and revolutions. This latter assertion is so grossly at variance with the facts as we learn them from history that it is absurd even to discuss it. So only the first is left, and it might be defended by giving a special meaning to the term "utility" and adopting the theories that have sung the joys of a "state of nature." If one is unwilling to go as far as that, one cannot hold to the first proposition either; and so one is forced by the facts and by logic to admit that wars and revolutions have sometimes been beneficial (which does not mean that they have always been so). And once that is admitted for the past, no basis whatever remains for showing that things will be otherwise in the future.
2195. So there we are again, and as usual, driven from the qualitative field, where derivations predominate, into the quantitative field of logico-experimental science. One cannot assert in general that stability is always beneficial or that change is always beneficial. Every case has to be examined on its particular merits and the utility and the detriment appraised to see whether the first overbalances the second, or vice versa.
2196. We have already found ( $\$ 2176$ ) that in many cases stability is beneficial. We should find cases no fewer in number where violations of existing norms have also proved beneficial, provided we consider norms of an intellectual order along with norms of a material order. But keeping them separate, it will be apparent thatespecially as regards violations by small numbers of individualsmany are the cases where violations of intellectual norms by individuals or by a few individuals prove advantageous, few the cases where violations of norms of a material order prove beneficial. For that reason, the implications of the formula stated in $\S 2176$, whereby violations of norms of a material order should be the more vigorously suppressed, the more exclusively they are the work of individuals, the less so, the more they are the work of groups, do not in many cases take us too far astray from the maximum of social utility, as they would do if the formula were applied to violations of norms
of an intellectual order. That, substantially, is the chief argument that can be advanced in favour of what is called "freedom of thought" (§ 2348).
2197. Derivations do not run that way. Dissenters defend their opinions because they are "better" than the opinions held by the majority; and it is a good thing that they have that faith, for it alone can supply them with the energy they need to resist the persecutions that they almost always incur. So long as they are few in numbers, they ask just for a little place in the Sun for their sect. In reality they are panting for the moment when they can turn from persecuted to persecutor, a thing that infallibly happens as soon as they have become numerous enough to enforce their will. At that moment the advantage of their past dissent is at an end, and the detriment resulting from their new orthodoxy begins to assert itself.
2198. In considering the use of force there is a stronger temptation than in other social connexions to think only of relationships of cause and effect; nor in many cases do we go very far wide of the mark in that. After all, in the sequence of actions and reactions that confronts one, the action of this or that force as producing this or that effect occupies a very considerable place. However, it is better not to stop at that, but go on to see whether phenomena that are more general should not be taken into account.
2199. Just above, for instance, in $\$ 2169$, we compared the revolution in Rome at the time of Augustus with the revolution in France at the time of Louis XVI; and we saw that to understand those two events we had to look beyond the derivations to the sentiments and interests that the derivations represented. Advancing one step further, one notes that both in the fall of the Roman Republic and in the fall of the French monarchy, the respective governing classes were either unwilling or unable to use force, and were overthrown by other classes that were both willing and able to do that (\$2191). Both in ancient Rome and in France the victorious element rose from the people and was made up in Rome of the legions of Sulla, Caesar, and Octavius, in France of the revolutionary mobs that routed a very feeble royal power, and then of an army that vanquished the very inefficient troops of the European potentates. The leaders of the victors spoke Latin, of course, in Rome, and French in France, and no less naturally used derivations that were suitable
to the Romans and the French respectively. The Roman people was fed on derivations conforwing with a feeling that substance might be changed so long as forms were kept ( $\$ \$ 174 \mathrm{f}$.), the French masses, on derivations inspired by the religion of "Progress," a faith surpassingly dear to the French of that day. Not otherwise, in the day of the Puritan Revolution, did Cromwell and other foes of the Stuarts use biblical derivations.
2200. The French derivations are more familiar than the Roman not only because more documents have come down to us, but also, as seems very probable, because they were supplied in greater abundance. Had Octavius long continued in his rôle as defender of the Senate, he might have made very lavish use of them; but when, before Bologna, he came to an understanding with Antony and Lepidus, his fortunes came to rest altogether on the might of his legions; so he laid his derivations away in his arsenals as weapons no longer needed, not taking them out again till after his victory, when it was a question of smoothing the fur of old-timers in Rome, which might have been ruffled by the change in régime. ${ }^{1}$ Something of the same sort took place in France as regards Napoleon I; but before his time the Jacobins, who opened the road for him, found it impossible to play only the lion and had to resort to the tricks of the fox. With his own prestige as commander, Octavius had made sure of the support of an armed force, and at first with his own money, later on with the money that he was in a position to extort by force from others. The French revolutionary leaders were unable to do anything like that, in the beginning. They had to recruit their
$2200{ }^{1}$ The three triumvirs were enemies, but each had a number of legions at his disposal, while the Senate had none. They were therefore readily convinced that it was to their advantage to come to an agreement with each other and make the partisans of the Senate pay the various "considerations." Says Duruy to this point, Histoire des Romains, Vol. III, p. 458 (Mahaffy, Vol. III, pp. 446-47): "In line with that inexorable fatality of expiation in history to which we have so often called attention in the course of this narrative, the Senatorial party was about to come under the law that it had made for its adversaries. [Duruy prudently says nothing about the proscriptions of Marius.] The proscriptions and confiscations of Sulla were about to begin again, but this time the nobles were to pay with their heads and fortunes for the crime of the Ides of March and for the rivers of blood with which the oligarchy had flooded Rome and Italy forty years before." If Duruy were a worshipper of Jupitcr Optimus Maximus, one might easily guess the agent he trusts with the task of executing his "incxorable fatality"; but since he never resorts to theological considerations of that type, one is forced to the conclusion that his "in-
revolutionary army with derivations, whinh, expressing as they did the sentiments of many of the government's enemies, brought them in a flock to their standards, and, expressing also the sentiments of almost all members of the ruling classes, further served as an opiate to their already listless vigilance, and broke down their already feeble resistance. Later on, as soon as the revolution got possession of power, its leaders imitated the Roman triumvirs and many other masterful men of the same type, distributing among their followers the money and property of their adversaries.
2201. If the effects of derivations are much less considerable than the effects of residues, they are not, as we have many times seen, altogether without influence, serving primarily to give greater strength and effectiveness to the residues that they express. It would not therefore be exact to say that the historians who have made the derivations of the French Revolution their exclusive or at least their main concern have dealt with an entirely irrelevant aspect of that episode. They may be said to have erred in regarding as primary an aspect that was merely secondary. It has been a more serious error on their part not to consider the rôle played by force and the reasons why force was used by some parties, and not by others. The few who have considered the rôle of force at all have gone astray in assuming that this or that man in power refrained from using force in deference to derivations, whereas both derivations and the aversion to use of force had a common origin in the sentiments of those men. And yet-if one examines closely-the whole thing seems clear, exorable fatality" is just a metaphysical entity, which, to tell the truth, seems not a little mysterious both in itself and in its workings. All the same, if anyone desires to get some inkling of its nature, one need only turn to the ancient writers who give the facts to which Duruy alludes. Appian, De bellis civilibus, IV, 3, says that after the triumvirs struck their bargain, they decided to "promise the soldiers, as the prize of victory, in addition to gifts, eighteen Italian cities to be occupied as colonies, all first-class towns as regards opulence, soil, and buildings-said cities, with the territories surrounding, and all real estate, to be divided among the soldiers as though they had been conquered from a foreign enemy." And cf. Dio Cassius, Historia Romana, XLVI, 56; Tacitus, Annales, I, 10; Velleius Paterculus, Historia Romana, II, 63; Florus, Epitoma de Tito Livio, II, 16, 6 (IV, 6, 6; Forster, pp. 305-07). Might it not be, therefore, that Duruy's very pretty "fatality" comes down to a matter of buying and bribing individuals who represent physical force, and then using them in one's own interest? This Dame Fatality of Duruy's must have had a whole litter of children, for no other ancestors can be imagined for the deity who protects our latter-day politicians in keeping their hold on power by buying votes.
with the proof and the cqunter-proof. Louis XVI fell because he was unwilling, unable, incompetent, to use force; the revolutionists triumphed because they were willing and able and competent. Not by any cogency in their theories but by the sheer might of their followings did now this and now that revolutionary faction climb to power. Even the Directory, which had saved itself by resorting to force in conflicts with weaker factions, succumbed to force in its struggle with Bonaparte, made the man of the hour by his victorious troops. And Napoleon lasts until he is worn down under the superior force of the Allies. And then-over again: a succession of régimes in France, each falling because unwilling, unable, incompetent, to use force, and others rising on the use of force. ${ }^{1}$ That was observable on the fall of Charles X , on the fall of Louis Philippe, on the advent of Napoleon III; and one may go on and say that if the government of Versailles in 1871 managed to keep its feet in the face of the Commune, it was because it had a strong army at its disposal and knew enough to use it.
2202. But at this point a question arises of its own accord: Why have certain governments used force and others not? And it is evident that on the step that we have taken above in explaining things other steps must now follow. And it is further evident that we are not strictly exact when we say, as we have just said, that this or that government fell "because" it did not use force; for if there should prove to be facts on which the failure to use force depended, those facts more properly would be the "cause" of the outcome, the failure to use force being merely the apparent cause. It might also be that those facts in their turn depended, in part at least, upon the failure to use force, and so our relationships of cause and effect would have to be amended into broader relationships of interdependence. Nor is

[^32]that all. If it is true that governments which are incompetent or unable to use force fall, it is also true that no government endures by depending entirely upon force ( $\$ 225$ I). From all of which it is apparent that we have examined only one side of the situation and must therefore broaden the scope of our researches and look at it in a much more general way. Suppose we do that.
2203. Cycles of interdependence. Let us go back and think once more of the elements upon which the social equilibrium depends; and since, unfortunately, we cannot consider them all and take their interdependences into account in all strictness, suppose we follow the course suggested above in $\$ \$ 2104$ and 2092, and consider a restricted group of elements, to be selected, naturally, from among the more important, gradually enlarging the groups thereafter so as to have them include as many elements as possible. As for the interdependences, we will use method $2 a$ instead of method $2 b$, as indicated in § 1732, keeping always in mind the pitfalls sign-boarded in § $2092{ }^{1}$.
2204. An element of a given group acts upon elements in other groups, either apart from the other elements in its own group or in conjunction with them. Suppose we call the effect it has when considered apart from the other elements in its group the direct effect; the effect it has in virtue of its combination with other elements in its group, the indirect effect. In so doing we shall be continuing the analysis we began in $\S 2089$. There we divided facts into two categories: I . The fact of the existence of a society. 2. The facts observable in that society, in other words, the elements from which the fact of its existence results. Let us now first divide this second category into groups, and then go on to select one element from each group and try to determine the effect that it has, as a distinct unit, upon the elements in other groups (direct effect) as well as the effect it has upon them when it is considered as operating in conjunction with the other elements in its own group (indirect effect).
2205. And now let us turn to the matter of interdependence among the groups. To be as brief as possible, suppose we indicate the following elements by letters of the alphabet: Residues, $a$; interests, $b$; derivations, $c$; social heterogeneity and circulation, $d$. If one could use mathematical logic, the interdependence of the elements could
be expressed in equations ( $\$ 209 \mathrm{I}$ ) ; but since that cannot be done in the present state of knowledge and we are compelled to use ordinary language ( $\$ 2092$ ), we have nothing left but to consider the interdependence in another form-in the form of actions and reactions among the elements-and to follow the course indicated in § 2104.
2206. We may say, accordingly: (I) That $a$ acts upon $b, c, d$; (II) that $b$ acts upon $a, c, d$; (III) that $c$ acts upon $a, b, d$; (IV) that $d$ acts upon $a, b, c$.

From what we have been saying in the previous chapter, it is evident that Combination I yields a very considerable portion of the social phenomenon; and those writers who have regarded ethics as the foundation of society may have had a remote and inadequate perception of that fact. In it also lies the modicum of truth that is to be found in metaphysical doctrines which make facts dependent upon "concepts," since "concepts" reflect, though very confusedly, residues and sentiments corresponding to residues. It is Combination I also that assures continuity in the history of human societies, since the category $a$ varies slightly or slowly. ${ }^{1}$

Combination II also yields a very considerable portion of the social phenomenon, and it too varies but slightly and slowly and contributes to the continuity of human societies. The importance of Combination II was noticed by the followers of "economic determinism"; but they fell into the error of substituting the part for the whole and disregarding the other combinations. Combination III is the least important of all. Failure to perceive that fact has rendered the lucubrations of humanitarians, "intellectuals," and worshippers of the goddess Reason, erroneous, inconclusive, fatuous. However, to a greater degree than any of the others it is known to us through literature, and a far greater importance is commonly attached to it than it really has in society. Combination IV is of no mean importance, a fact remarked of old by Plato and A.ristotle, to say nothing of other ancient writers. In our day the studies of Lapouge, Hamon, and others, incomplete and marred by errors as they may be, have had the great merit of throwing that very important relation into relief, while failure to take account of it fundamentally vitiates so-called democratic theories.
$2206{ }^{1}$ Of that we shall speak more fully further along.
2207. It must not be forgotten that actions and reactions follow one on another indefinitely and, as it were, in a circle ( $\$ 2552^{1}$ ): that is to say, beginning with Combination I one goes on to Combination IV and from IV back again to I. In Combination I the element $a$ was acting upon $d$; in IV the element $d$ is acting upon $a$; then one goes back again to Combination I, so that $a$ is again acting upon $d$, and so on. In virtue, therefore, of Combination I a variation in $a$ causes variations in the other elements, $b, c, d$; and just to make the situation more manageable in language, we will give the variations in $a, b, c, d$ that are effected in virtue of Combination I the name of immediate effects. But in virtue of the other combinations, variations in $b, c, d$ also effect variations in $a$; and because of the circular movement this variation reacts upon Combination I and gives rise to new variations in $a, b, c, d$. To these variations we will, again for mere purposes of convenience, give the name of mediate effects. Sometimes it is necessary to consider two or more combinations simultaneously. Farther along (\$§2343f.) we shall see an example of great significance in which effects are so intertwined that we are obliged to study Combinations II and IV together. The state of concrete equilibrium observable in a given society is a resultant of all these effects, of all these actions and reactions. It is therefore different from a state of theoretical equilibrium obtained by considering one or more of the elements $a, b, c, d$ instead of considering all. Poljical economy, for instance, deals with category $b$, and one of its branches is pure economics. Pure economics yields a theoretical equilibrium that is different, still within category $b$, from another theoretical equilibrium yielded by applied economics; and different from other theoretical equilibria that could be obtained by combining $b$ with some of the elements $a, c, d$; and different, again, from the theoretical equilibrium that most nearly approximates the concrete and is obtained by combining all the elements $a, b, c, d$ (§2552). ${ }^{1}$

[^33]2208. This will all be clearer if we give a less abstract form to what we have just been saying, and at the same time proceed from particular cases to more general ones, following the inductive method. Suppose we locate the protection of industries by import duties in the group $b$. We first get its economic effects, direct and indirect; and these are the concern primarily of economics, which is the science of the group $b$. We shall not go into them here, but merely note certain effects that we find it necessary to consider for our purposes. Among these we shall have to consider economic effects that have so far been more or less neglected by the science of economics. As a rule, champions of free trade have considered low prices, implicitly at least, as an advantage to a population at large, whereas champions of protection have regarded low prices as an evil. The first view is readily acceptable to anyone thinking chiefly of consumption, the latter to anyone thinking chiefly of production. From the scientific standpoint they are both of little or no value, since they are based on an incomplete analysis of the situation. ${ }^{1}$ A
$b$, and make free trade a concrete reality. In general when economists come upon some sentiment, $a$, that they are obliged to consider, they usually assume that it exists of itself, without any relation to $b$. The "just" and the "unjust," for instance, are absolutes, and have no bearing whatever on $b$. Marx noted the existence of the relation between $a$ and $b$, and so came quite close to a logico-experimental result; but he erred in mistaking it for a relation between a cause, $b$, acting upon an effect, $a$, whereas if $b$ acts upon $a, a$ reacts in its turn upon $b$. Among the many reasons why Combination IV is very frequently ignored is the habit of regarding sentiments, interests, and derivations absolutely, independently of individuals. That yields abstractions, and not properties of given individuals; and it is therefore assumed that the manner of variation of classes of individuals does not have to be considered.
$2208{ }^{1}$ The following derivations were also widely used. Taking their stand in the field of ethics, free-traders said: "Protection is an evil because it robs the unprotected in favour of the protected"; and protectionists replied: "That evil can be corrected by according equal protection to everyone equally." To which the freetraders rejoined that equal protection to everyone was equivalent to protection for nobody-which is an admission that two identical positions of equilibrium are possible with different prices $\left(\$ 2207^{1}\right)$. Both free-traders and protectionists, deliberately or unwittingly, substituted derivations for considerations of realities. In order to keep within the logico-experimental field, free-traders should have said: "Thanks to a destruction of wealth, protection transfers a certain amount of wealth from certain individuals to certain other individuals, and that transfer is precisely what you protectionists are trying to effect. You are therefore contradicting yourselves when you talk of equal protection for everybody; for if equal protection were possible, there would be no reason left for your being protectionists. When you speak of equal protection for everybody you mean, though you do not say so, equal protection not for all citizens, among whom mere owners of savings would have to be
forward step along the scientific path was taken when the theories of mathematical economics supplied a proof that, in general, the direct effect of protection is a destruction of wealth. ${ }^{2}$ If one were free to go on and add an axiom, which is implicitly taken for granted by many economists, that any destruction of wealth is an "evil," one could logically conclude that protection is an "evil." " But before such a proposition can be granted the indirect economic effects and the social effects of protection have to be known. Keeping to the former for the moment, we find that protection transfers a certain amount of wealth from a part, $A$, of the population to a part $B$, through the destruction of a certain amount of wealth, $q$, the amount
counted, but equal protection for the whole of a given class of citizens, which will be found to comprise a more or less extensive number of manufacturers, farmers, and land owners. That is the thing which we regard as detrimental to the country." To which protectionists should have replied: "The facts are as you describe them. Our aim is indeed to transfer wealth from one part of the population to another. We know that such a transfer entails a certain destruction in wealth. All the same, we regard it as a good thing for the country." After that, experience alone could have shown which of the two parties came the closer to realities. But before consulting experience, it would have been essential to know more exactly what the terms "detrimental" and "a good thing" were supposed to designate.
$2208^{2}$ That proof and another more general one were given for the first time in my Courrs, $\S \$ 862$ f., 730 . And $c f$. the Appendix to my Manuel [but more especially, pp. 506-19.-A. L.]
$2208{ }^{3} \mathrm{My}$ Cours contains errors of that sort, at least by implication. I tried to avoid them in my Manuale. In the preface to the latter, pp. vii-viii, I say: "Here and there in my Cours erroneous manners of statement are to be noted. Such errors arise from two sources, chiefly: first, an incomplete synthesis, in one's hurry to get back from scientific analysis to concrete doctrine. [It was, in fact, my recognition of the necessity of a synthesis less incomplete that led me to undertake the long research the results of which appear in these present volumes.] I was aware of the necessity of a complete synthesis, but then, unconsciously, I came partially to disregard it, if not explicitly, at least by implication. Typical of all such cases would be the matter of free trade and protection. It can be shown scientifically that as a rule protection occasions a destruction of wealth. Examination of facts past and present shows that protection is for the most part established through the influence of persons who profit by it to appropriate other people's goods. But is that enough to condemn protection in the concrete? It is not. Other social consequences of the institution have to be taken into account. [But to do that one had to have a theory of the sort we are here developing, and judgment had to be postponed until that research had been completed.] I believe that I would have given that same answer at the time of my Cours, so that the error is not explicit in so many words. All the same, I often expressed myself as though, in the concrete, free trade were in every case a good thing and protection in every case a bad thing, and such statements presuppose assumptions that are marred by the error mentioned."
representing the costs of the operation. If, as a result of this new distribution of wealth, the production of wealth does not increase by a quantity greater than $q$, the operation is economically detrimental to a population as a whole; if it increases by a quantity greater than $q$, the operation is economically beneficial. The latter case is not to be barred a priori; for the element $A$ contains the indolent, the lazy, and people, in general, who make little use of economic combinations; whereas the element $B$ comprises the people who are economically wide-awake and are always ready for energetic enterprise-people who know how to make effective use of economic combinations. Going on, then, to consider in general not only economic but social effects, one has to distinguish between dynamic effects, which ensue for a brief period of time after protection has been established, and static effects, which ensue after protection has been established for a certain length of time. A distinction must further be drawn between the effects on productions that are readily susceptible of increase, such as manufactures in general, and the effects on productions not so susceptible of increase, such as the agricultural. The dynamic effect is more considerable in the case of the manufacturer than in the case of the farmer. When protection is established those manufacturers who already own factories for protected goods, and persons who are shrewd enough to anticipate protection or to go out and get it, enjoy temporary monopolies, and these come to an end only when new manufacturers enter the field to compete with established firms-that takes time, and often not a short time. Farmers, on the other hand, have little to fear from new enterprise, and for them, therefore, the dynamic effect is not so very different from the static. Furthermore, protection may encourage new industries and so increase, if not the profits, at least the numbers, of manufacturers. That may also happen in agriculture, though on a very much smaller scale, and the ordinary effect of agricultural protection is merely to replace one kind of acreage with another. The static effect, on the other hand, is less considerable on the profits of manufacturers than on the profit of the farmer. It increases the earnings of the farmer, while competition cuts down the earnings of the manufacturer from his temporary monopoly. For that very reason industrial protection usually destroys more wealth than agricultural protection, for with
the latter the new earnings, which represent a mere transfer of wealth, are saved from destruction.
2209. Let us look at the immediate effects on the other groups.

Combination II. The most perceptible effects are on $d$, that is to say, on social heterogencousness. The dynamic effects of industrial protection enrich not only individuals who are endowed with technical talents, but especially individuals who have talents for financial combinations or gifts for manipulating the politicians who confer the benefits of protection. Some individuals possess such endowments in conspicuous degree. They grow rich and influentiai, and come to "run the country." The same is true of politicians who are clever at selling the benefits of protection. All such persons possess Class I residues in high intensities, and Class II residues in fairly low intensities. On the other hand, people in whom endowments of character are more notable than technical or financial talents, or who lack the gift for clever political manoeuvring, are pushed down the ladder. Deriving no benefit from protection, they are the ones who pay its costs. The static effects are not identical-they are analogous in that, though they enrich far fewer persons, they nevertheless open new fields for the activities of individuals who have endowments of talent and cunning, and they increase the industrial population, often at the expense of the agricultural. In short, to put the situation briefly, when account is taken, in making up the governing class, of the imaginary examinations that we used for illustration in § 2027, the higher grades have to be given to individuals in whom Class I residues are numerous and intense and who know how to use them in garnering the fruits of protection; and the lower grades, to individuals in whom Class I residues are few and feeble, or, if they are numerous and strong, are not skilfully exploited. So it results that industrial protection tends to strengthen Class I residues in the governing class. Class-circulation, furthermore, is accelerated. In a country where there is little industry an individual born with a good assortment of combination-instincts finds far fewer opportunities for using them than an individual born in a country where there are many industries and where new enterprises are starting every day. The very art of manipulating protectionist favours offers a wide field of activity for people whose talents lie in that direction, even though they do not use them
directly in industry. Carrying on the analogy suggested, one may say that the examinations for purposes of discovering the candidate best equipped with Class I residues are held more frequently and attract larger numbers of aspirants.
2210. No very appreciable effects are apparent on residues, $a$, if only for the reason that residues change but slowly (\$2321). On the other hand, effects upon derivations, $c$, are very considerable, and one notes a rank florescence of economic theories in defence of protection, many of which are comparable to the dedications and sonnet sequences that were addressed to wealthy feudal lords in a day gone by as bids for pensions ( $\$ 2553$ ).
2211. Combination III. Derivations act feebly, or not at all, upon residues, $a$, feebly upon interests, $b$, a little more potently upon social heterogeneity, $d$, for in any society persons who have the knack for praising people in power find ready admission to the governing class. Schmoller might never have been named to the Prussian House of Lords had he been a free-trader; on the other hand English free-traders win favours from a so-called "Liberal" government. That gives us an indirect effect outside our categories: the interests, $b$, acting upon derivations, $c$, and they in turn upon social heterogeneity, $d$.
2212. Combination IV. Here again we get effects of great importance, not so much in the influence of heterogeneity upon resi-dues-in view, as usual, of their relative stability-as in the influence of interests.
2213. Indeed, considering Combination IV in general, the indirect, or "mediate," influence of interests on residues is far from negligible and if continued over long periods of years, may even be very considerable. In a country that concentrates almost exclusively on economic interests, combination-sentiments are stimulated, extularated, and sentiments corresponding to group-persistences are attenuated. In those two classes of residues, certain genera, and especially the forms in which residues are expressed, are modified, and therefore also derivations. Perfection is located in the future instead of in the past. The god Progress is enthroned on Olympus. Humanitarianism triumphs because interests are now better safe-guarded by chicanery than by force. It becomes a habit and a principle to circumenent obstacles instead of pushing them aside by brute force. In the long
run such practices sap strength of character, and cunning in all its forms comes to reign supreme.
2214. Such things have been perceived in all periods of history, but the writers whom they have chanced to interest have as a rule soon deviated from the study of facts to turn to ethical considerations, to praise or to blame; and to discovering some way of realizing this or that ideal. ${ }^{1}$
2215. Gcing back now to the particular case of protection: After interests have, thanks to protection, brought into the governing class individuals richly endowed with Class I residues, those individuals in their turn influence interests and stimulate the whole country in the direction of economic pursuits and industrialism. The thing is so noticeable that it has not escaped even casual observers, or people who wear the blinders of mistaken theories, and it has often been described as an "increase in capitalism" in modern societies. Then going on, arguing as usual post hoc, propter hoc, the "increase in capitalism" has been taken as the cause of a decline in moral sentiments (group-persistence).
2216. That, really, is a case of an indirect, a mediate, effect: interests, in other words, have influenced heterogeneity; the latter, in its turn, now reacts upon interests; and through a sequence of actions and reactions, an equilbrium is established in which economic production and class-circulation become more intense, and the composition of the governing class is profoundly modified.
2217. The increase in economic production may be great enough to exceed the destruction of wealth caused by protection; so that, sum total, protection may yield a profit and not a loss in wealth; it
$2214{ }^{1}$ Speaking strictly from the standpoint of the correspondence of theories with facts, one may say that many economists have been handicapped in that inquiry by failure to understand that in a state of free competition the entrepreneur on the average shows neither profit nor loss, if due account is taken of interest on capital and his wage as an individual. But when the entrepreneur has a monopoly, his transactions may on the average show a profit over and above such interest and wage. Many Socialists also have been handicapped by confusing the interest on capital with the entrepreneur's profit. Such a profit materializes, on the average, only under conditions of temporary or permanent monopoly. So a number of observations by Socialists that are true as applied to profit cease to be when they are extended to interest on capital. Socialists have been further handicapped by failing to keep two kinds of persons distinct (§§223I f.), thinking of them all together as "capitalists."
may therefore prove (though not necessarily so) that the economic prosperity of a country has been enhanced by industrial protection.
2218. That, notice, is a mediate effect, coming about through the influence of industrial protection upon social heterogeneity and class-circulation, which go on in turn to react upon the economic situation. It is possible for that reason to suppress the first link in the chain; and so long as the second is kept, the effect will follow just the same. For that reason, again, if protection were to act in a different wise upon social heterogeneity and class-circulation, the effect also would be different; and that is what actually happens, as a rule, with agricultural protection. Halting, therefore, at the point in the cycle where we now stand, we may say that it will be possible to get the indirect, the mediate, effect of an increase in economic prosperity either through industrial protection or through a free trade that removes a burdensome agricultural protection. This latter is, roughly, what took place in England at the time of Cobden's League. Abolition of agricultural protection had strong effect; an effect much less strong was the abolition of industrial protection, for at that time English industry led the world, and the effects were especially due to the first measure. In England, furthermore, classcirculation was already intense and became more so through a number of political measures. On the other hand, when Germany turned to protectionism class-circulation was sluggish and largely came about for other than economic considerations. Agricultural protectionism could have had little if any effect upon a circulation already slow in itself; whereas industrial protectionism stimulated it marvellously. The effects therefore were effects largely of industrial protectionism. Observable in England also were effects depending upon the abolition of agricultural protection, and the country moved rapidly forward towards a state of demagogic industrialism, which cannot prevail in Germany so long as the Junker element remains strong and vigorous under the shelter of agricultural duties. In Italy, after the establishment of the new kingdom protectionism in finance and public works had already exerted upon social heterogeneity the influence that we have elsewhere seen attaching to industrial protection; so that when the latter was established, along with a strong dosage of agricultural protection, it had indirect, mediate, effects of slight importance-with some exceptions per-
haps in Northern Italy, whereas in the South agricultural protection was virtually the only kind that had any effect. As a consequence, the mediate effects were on the whole almost unnoticeable, the economic effects of the destruction of wealth alone striking the eye, until, as time went on, they were obscured by a coating of beneficial effects resulting from a period of prosperity general throughout the civilized world. ${ }^{1}$
2219. Knowledge of the causes of these various effects, which are none the less economic, could not have been supplied by political economy alone. That science had to be combined with another more general science that would show how to throw off the spell of the derivations on which mistaken theories were commonly erected, and emphasize the multiplicity and great variety of the forces that were really determining phenomena which, though strictly economic to all appearances, actually depended upon other social phenomena.
2220. It must not be forgotten that so far we have been very roughly sketching a first picture of the situation. A great deal still remains to be done in filling in the secondary details. This is not just the place to do that ( $\$ \$ 223$ I f., 23IOf.) ; but we are obliged to eliminate one other imperfection in it that is due to our stopping at a certain point in the cycle, whereas actually we have to go on and look at further mediate effects that are quite different.
2221. If no counter-forces stood in the way, and the cycle of actions and reactions were to go on indefinitely, economic protection and its effects ought to go on becoming progressively greater; and that is what is actually observable in many countries during the nineteenth century. But as a matter of fact counter-forces do develop, and increasingly so. Speaking now not of the particular case of protection, but in general, such forces may be noted in the modi-

[^34]fications that the élite undergoes, and in variations in the circumstances that make the cyclical movement possible ( $\$ 2225$ ). History shows that when the proportions between Class I and Class II residues in the elite begin to vary, the movement does not continue indefinitely in one direction, but is sooner or later replaced by a movement in a counter-direction. Such counter-movements often result from wars, as was the case in the conquest of Greece by Rome, Greece at the time possessing Class I residues in very great abundance, while in Rome the advantage lay with the residues of group-persistence (Class II). Then again, the counter-movement to a movement that has been in progress for a fairly long time has resulted from internal revolutions, a striking case being the change from the Republic to the Empire in Rome, which was primarily a social revolution and profoundly altered proportions of residues in the ruling class. Considering the two processes together we may say, in general and roughly, that when the counter-movement does not come from wars, it comes from revolutions, much as when the fruit is ripe on the tree either it is plucked by a human hand or it falls naturally to the ground, but in either event is removed from the tree. The cause just mentioned-modifications in the élite-is among the major ones determining the undulating form that the movement assumes, and of that we shall see notable examples as we proceed (\$\$2311, 2343 f .).
2222. In many countries we find industrial protection combined with agricultural protection; in fact, at the present time in Europe, they nowhere appear singly; and since they have effects that are, to an extent at least, opposite, it is apparent that pressure of facts will lead empirically minded statesmen as it were by instinct to follow a middle course. In general, protections of the industrial and the agricultural types, when combined in varying degree, yield varying corresponding proportions of Class I and Class II residues in the governing class, along with the various effects resulting from that fact ( $\$ 2227$ ).
2223. All that we have been saying may readily be extended to any other type of protection, economic or otherwise. The protection of the military classes that arises when individuals acquire wealth, eminence, and power chiefly through war acts no less than economic protection upon social heterogeneity, but in a different direction,
tending rather to strengthen Class II residues in a ruling class. Like economic protection, military protection intensifies circulation, and permits individuals with bellicose instincts to rise from the lower strata of society to the ruling class. In such cases one notes very appreciable effects on residues-so far as such effects are possible, considering their relative stability. Wars tend to enhance intensities in Class II residues. As usual, effects on derivations are also considerable, though to no such extent as in economic protections; for war has little or no need of theories-the better to see that in an extreme form, one need only compare Sparta and Athens. For that reason too, derivations have but little influence on social heterogeneity, though a little more on residues. Finally, thinking especially of Combination IV, one finds that protection of interests connected with war encourages a nation towards military pursuits-and that again would be an effect that is mediate.
2224. Military protections also develop forces that tend to produce a movement in a direction counter to that of the cycle. We saw, as regards ancient times, that wars cut wide swaths in warrior aristocracies. So on the one hand frequent wars draw men of bellicose instincts into the governing classes, but on the other hand they destroy them. All things considered, the two movements in contrary directions may, according to the case, either enrich or impoverish a ruling class as regards fighting elements, and so either increase or diminish its fund of Class II residues. As regards modern times, wars require not only men but also huge expenditures in money, which can be met only by intensive economic production, so that if wars in themselves increase the warrior element in governing classes, preparations for war reduce it, drawing industrial and-commercial elements into the seats of power. This second effect is the preponderant one at the present time in France, England, and Italy. It is much less marked in Germany.
2225. As for the circumstances that make the cycles in question possible (§222I), the war-cycle requires a supply of rich peoples that may be exploited by conquest, whereas the industrial cycle finds it helpful, though not indispensable, that there be economically backward peoples who can be exploited by industrial production. Here we come upon a point that has so far been inadequately stressed. Industrialism, in order to expand, needs a populous class of savers,
whereas industrialism generally tends to diminish the saving instinct and encourages individuals to spend all they earn (\$2228).

In general and for all periods of history, the movement of the warcycle encounters greater obstacles within itself than the movement of the industrial cycle. In fact, up to a certain point, the industrial cycle is self-sufficient and produces the wealth it consumes. As the poorer peoples that are exploited increase in prosperity, they consume more and more goods, and the wealthy industrial peoples make greater profits in consequence. The trouble cannot begin till later on, when the poorer peoples come closer to standing on an equal footing with the richer. As regards savings, we know that residues change very slowly; so that the effects of the industrial cycle upon the sentiments underlying saving do not materialize all at once, and savings may continue to increase for a long time, so removing the danger of any immediate failure of the exploitable material that is indispensable to the continuance of industrialism. But to profit by the arts of war a nation has to be in position to practise them on peoples of considerable wealth, and if the supply of such peoples gives out, the essentially warlike nation dies of inanition. Exceptional was the case of ancient Rome, where the mediate effects of wars of conquest endured over long periods of years. But that was due, in the first place, to the fact that it was a long long time before the supply of conquerable countries gave out; and in the second place, to the fact that conquests were not alone responsible for the material prosperity of Rome, commerce and industry contributing not a little. So it came about that Rome attained her maximum prosperity towards the end of the Republic and the beginnings of the Empire. Then came failure both in the supply of wealthy peoples to be conquered and exploited and in commercial and industrial prosperity. Conquests of barbarous territories could net profits in no wise comparable to those yielded by conquests of wealthy lands such as Greece, Africa, and Asia; while stagnation in class-circulation and the ever increasing destruction of wealth dried up the fountain-heads of economic production.
2226. Carthage and Venice owed their prosperity in part to the exploitation of economically backward peoples, as is to some extent the case with the industrial and commercial states of our day. Some of these countries do not produce grain in sufficient quantities tō
feed their populations, and in order to get along, they are obliged to have relations with agricultural countries that have a surplus in grain production. What would become of England if all the countries on the globe had just enough grain for their own consumption? Certainly the conditions at present observable in England would have to undergo a profound change. The prosperity of Carthage broke to pieces on the military power of Rome, just as the prosperity of Venice was seriously impaired by the conquests of the Turks. The prosperity of modern industrial nations does not seem to be menaced, at least for the present, by dangers of that kind. In general, if a country moving through one of the two cycles mentioned (war, industrialism) happens to encounter a country that is traversing the other cycle, the one or the other may succumb, according to the stage that has been reached in the respective evolution. Modern countries conspicuous for their industrial development conquer, subjugate, or destroy barbarous or semi-barbarous countries that are still backward in the war cycle. On the other hand, the countries of the Mediterranean basin that were farthest advanced economically were conquered by Rome, and the Roman Empire was overthrown in its turn by Barbarians. Among the civilized countries of our time there are but slight differences in cyclical stage, and so the influence arising from disparities in evolution is, though still considerable, not decisive.
2227. Among the effects resulting from changes in the proportions of Class I and Class II residues in the ruling class ( $\$ 222 \mathrm{I}$ ), deserving of special attention are those which tend to break down the resistance of that class as against the subject class. ${ }^{1}$ To get a first
$2227^{1} \mathrm{~A}$ governing class often brings on its own ruin. It readily accepts individuals who are well supplied with Class I residues and devote themselves to economic and financial pursuits, because such people as a rule are great producers of wealth and so contribute to the well-bcing of the governing class. In the days of absolute monarchy they supplied the sinews for the extravagances of the kings; nowadays they provide the wealth for the extravagances of democracy; and often they may benefit a whole country. The first effects of their coming to power are therefore favourably felt by many people and they strengthen the hold of the governing class; but gradually, as time goes on, they prove to be borers from within, by divesting the class of individuals who are rich in Class II residues and have an aptitude for using force. So the "speculators" (\$2235) in France encompassed first the triumph of absolute monarchy and then its ruin ( $\$ 2384^{1}$ ). In our day in a number of countries they have contributed to the triumph of the régime that is called democratic (and might better be called pluto-demagogic) and are now preparing its ruin.
rough conception of these very important phenomena, one might observe that, very loosely speaking, the ruling and subject classes stand towards each other very much as two nations respectively alien. A predominance of interests that are primarily industrial and commercial enriches the ruling class in individuals who are shrewd, astute, and well provided with combination instincts; and divests it of individuals of the sturdy impulsive type richly endowed with instincts of group-persistence ( $\S 2178$ ). That may also happen through other causes, and speaking of them in general (considering Combination IV, that is (§2206)), one might guess that if cunning, chicanery, combinations, were all there was to government, the dominion of the class in which Class I residues by far predominate would last over a very very long period and come to an end only with the senile degeneration of the stock itself. But governing is also a matter of force ( $\$ 2174$ ), and as Class I residues grow stronger and Class II residues weaker, the individuals in power become less and less capable of using force, so that an unstable equilibrium results and revolutions occur, such as the Protestant revolt against the ruling classes of the Renaissance, or the uprising of the French masses against their governors in 1789; and such revolutions succeed for very much the same reasons that a rude and crude Rome was able to conquer a civilized and sophisticated Greece. An exception that proves the rule would be Venice, who long endured in her one political system because her aristocracy managed to preserve those sentiments of group-persistence which are required for the use of force. The masses, which are strong in Class II residues, carry them upwards into the governing class either by gradual infiltrations (class-circulation) or in sudden spurts through revolutions (§§ 2343 f).
2228. In our modern countries that are economically advanced industry, commerce, and even agriculture require large amounts of capital. Furthermore the governments of such countries are very expensive, since they must make up with chicanery, and with the money that that costs, for the force in which they are deficient. They conquer by gold, not by steel. For that reason those countries where the industrial cycle is developing at an ever accelerating speed require savings in vast amounts ( $\$ 2317$ ). But the virtues of thrift are more compatible with Class II than with Class I residues.

Adventurous individuals, people who are for ever on the look-out for new combinations, are not savers. So a governing class that is preeminently industrial and commercial must have a substratum of people of a different type who save. If it does not find them in its own country, it has to look for them abroad. That is the case with the governing class in the United States, which draws extensively on European savings. The class governing in France finds the savings it needs at home and in great abundance, owing, chiefly, to the French women, in whom Class II residues still predominate. But let the French women become like American women, there being no compensation somewhere else to offset the change, and the quantity of savings that France provides for its own ruling class, and for other countries, may very materially diminish ( $\$ 2312$ f.).
2229. With the social sciences constituted as they are at present, not having as yet attained the level of the logico-experimental sciences, the predominance of Class I residues actually means the predominance not only of interests, but also of derivations and intellectual religions, and not of scientific reasonings; and oftentimes those derivations are much farther removed from realities than the non-logical conduct of the mere empiricist. Before there was any science of chemistry the dyer's art was more safely entrusted to the dyer who knew his trade by rule of thumb than to alchemists who played with the theoretical lucubrations of magic and other such nonsense. The "intellectuals" of Europe, like the mandarins of China, are the worst of rulers, and the fact that our "intellectuals" have played a less extensive rôle than the mandarins in the conduct of public affairs is one of the many reasons why the lots of European peoples and the Chinese have been different, just as it explains in part why the Japanese, led by their feudal chieftains, are so much stronger than the Chinese. "Intellectuals," to be sure, may be held aloof from public affairs even when Class I residues predominate in a ruling class, and that was the singular good fortune of Venice; but, in general, the predominance of Class I residues in the ruling class inclines that class to avail itself extensively of the services of "intellectuals," who are, on the other hand, rebuffed by people in whom "prejudices"-to use the jargon of our Continental humanitarians-in other words, Class II residues, predominate.
2230. In $\$ \$ 2026$ f. we suggested a general classification of social
strata and in $\$ 2052$ we alluded to the relations of that classification to the classification of aristocracies. That is not all there is to the matter. It may properly be the subject of many other considerations, one among which is of the first importance.
2231. It is of an economic character. Writers have confused and persist in confusing under the term "capitalists" (I) owners of savings and persons who live on interest from property and (2) promoters of enterpris-"entrepreneurs." ${ }^{1}$ That confusion is a great hindrance to an understanding of the economic phenomenon and an even greater hindrance to an understanding of human society. In reality those two sorts of "capitalists" often have interests that are different. Sometimes indeed they are diametrically opposed and stand in even greater conflict than the interests of the classes known as "capitalist" and "proletarian." From the economic standpoint it is to the advantage of the man of enterprise, the entrepreneur, that the interest on savings and other capital that he borrows should be the lowest possible. It is to the interest of the savers that it be as high as possible. The promoter of enterprise profits when the goods he produces go up in price, while rises in the prices of other commodities are of slight importance to him if he finds a compensation in the profits netted by his own goods. But all such increases in prices are to the loss of the mere saver. Tax imposts on the goods that he produces do little harm to the entrepreneur-in fact they are sometimes an advantage, in that they scare off competition; but they are always injurious to the consumer whose income derives from the lending of savings at interest. In general, the owner of an enterprise can always pass on to the consumer the increase in costs that results from heavy taxes. The mere saver almost never can. So rises in wages as a rule cause only temporary inconvenience to the manu-facturer-to the extent, that is, of standing contracts, since he can offset them by raising prices in future contracts. The mere owner of savings loses by wage-increases, usually without being able to recoup. In such cases, therefore, owners of enterprises and their employees have a common interest, which is in conflict with the in-

[^35]terests of mere owners of savings. ${ }^{2}$ The same may be said of employers and employees in protected industries. Agricultural protection frequently has contrary effects and is therefore opposed by industrial workers, who are inclined to act on impulse; whereas it is shrewdly favoured by manufacturers, since they see in it a way of maintaining industrial protection.
2232. No less pronounced are the conflicts from the social point of view. Entrepreneurs as a class are recruited from individuals in whom the combination-instincts indispensable to success in enterprise are highly developed. Individuals in whom the Class II residues predominate remain among the mere owners of savings. Entrepreneurs are in general, therefore, adventurous souls, hungry for novelty in the economic as well as in the social field, and not at all alarmed at change, expecting as they do to take advantage of it. The mere savers, instead, are often quiet, timorous souls sitting at all times with their ears cocked in apprehension, like rabbits, and hoping little and fearing much from any change, for well they know of bitter experience that they will be called upon to foot the bill for it ( $\$ 2316$ ). The inclination to an adventurous and extravagant life, like the inclination to a quiet and thrifty life, is in great part a matter of instinct and only to a very slight extent a matter of reasoned design. ${ }^{1}$ They are like other inclinations in human beings,

[^36]like courage, cowardice, the passion for gambling, concupiscence, fondness for this or that bodily exercise, this or that intellectual pursuit. All such inclinations may be modified to some extent by incidental circumstances; but beyond a doubt they are in the main individual traits on which reasoning exercises little or no influence. To try by reasoning to convert a coward into a brave man or a spendthrift into a saver, to persuade a gambler to give up his gambling or a rake his women, is, as everybody knows, nearly always-and one might say always-a waste of breath; and that is not to be gainsaid by marshalling statistics, as people have tried to do in order to show that saving is an essentially logical act and that the amount of savings is determined primarily by the interest that is to be had on them. In such cases, to use statistics of very complex phenomena in place of the direct observation of simple phenomena
relate to a very complex situation in which many forces besides individual tendencies to saving are at work. What influence could possible interests from savings ever have had on the saving instinct in the days when people tucked gold and silver coins away and secreted them in their houses? Or in the days when people in France were always talking of the "woollen stockings" of the frugal peasantry? And even now-go to the good French housewife who lays money away a penny at a time and then takes her little hoard to the savings-bank, and ask her if she would save any more if the interest-rate at the bank were raised! You would be lucky if she understood what you meant, and if by some chance she did, she would laugh at you as a simpleton. And it is ridiculous to describe as "auto-observation" observations that are made in such fashion on others. If, now, statistics when skilfully manipulated say the opposite, it simply means either that they are wrong or that they have been unsoundly handled, like statistics which might show that people walked on their hands and not on their feet. Avarice is thrift carried to extremes. Fiom ancient down to modern times the type of the miser has been over and again described by men of letters. But what writer ever dreamed of putting the miser's saving in relation with the interest he could make on his money? Nothing of the kind, certainly, is to be seen either in Theophrastus or in Molière. The miser saves all he can, and he extorts all he can as interest on the money he lends, and the two maxima are in no way correlated. In the day of Theophrastus there were no statistics, and they cannot, therefore, prove of a certainty whether the Athenians ate, drank, and wore clothes; but it secms probable that they did, just as it is probable that there were provident and improvident individuals among them; and the descriptions of a keen observer such as Theophrastus are worth infinitely more than the nebulous disquisitions of certain of our statisticians. In describing the man given to sordid hoarding ("The Penurious Man," Characters, 10 (i1), Jebb, pp. 146-49) Theophrastus does not so much as intimate that there was any relation between his savings and the interest he might have made on them. It is evident that saving is an instinctive act manifesting a passion for accumulating money. And so is the saving that figures in the counsels of Cato the Censor, who knew a thing or two about
that one is trying to understand can only lead astray. ${ }^{2}$ All human conduct based on instinct may be more or less modified by reasoning, and it would be going too far to assert that that does not apply also to conduct based on the instinct for saving. But that does not prevent that instinct from being the primary element in saving, which remains none the less a non-logical act. ${ }^{3}$
2233. The facts just mentioned put us in the way of making a more general classification in which the preceding classification would be included and to which we shall have frequent occasion to refer in explaining social phenomena hereafter ( $\$ 2313$ f). ${ }^{1}$ Suppose we put in one category, which we may call $S$, individuals whose incomes are essentially variable and depend upon the person's wideawakeness in discovering sources of gain. In that group, generally
thrift and miserliness on his own account. I noted in my Courts, § 30 , that savings do not have-and in that differing from other economic goods-an elementary ophelimity that diminishes as quantity increases. There too direct observation shows that many persons who have no savings at all feel no need of thrift, while the need develops and grows stronger in them when they have made savings to some amount. It is a well-known fact that a gift of a bank-book to a working-man who has no savings is frequently a way to induce him to save. But it is useless to go on mentoning facts so well known, and which anyone who chooses may verify. Those who refuse to recognize them may stick to their opinions like Don Ferrante in Manzoni's "Betrothed," who showed with learned theory that the plague raging in Milan could not exist save as a malign influence from the celestial bodies, and then caught it and died of it, shaking his fists at the stars. Cf. Pareto, Cours, §419, and Manuale, Chapter VIII, § 1 r.
$2232{ }^{2}$ Two scientists of great and deserved reputation, Bodio in Italy and De Foville in France, have very soundly shown how much prudence, discretion, and caution are required in using statistics. Such warnings should be kept constantly in mind.
$2232{ }^{3}$ Among the better-authenticated cases where logic interposes to determine saving is the case where a person "retires" from a profession when he has saved as much as he needs to live comfortably for the rest of his life; and it is interesting that in that case the logical conduct is the reverse of what one would expect if quantity of savings increased with potential interest. Even in that very simple case the situation is complex. The amount of savings required for "retiring" depends not only on interest on savings, but also on costs of living and one's standard of living at the moment of retirement. Then come other circumstances having to do with family situation, the usages and customs of the times, and so on. All such things are adjuncts to the non-logical conduct, not substitutes for it. The spendthrift does not need to worry about interest-rates--he has no savings. The miser, too, ignores them-he is busy accumulating with might and main. Individuals in the intermediate stages are influenced partly by instinct and partly by reasoning.
$2233{ }^{1}$ The classification in question was first suggested in my "Rentiers et spéctlateurs," in Indépendance, May I, rigi I.
speaking and disregarding exceptions, will be found those promoters of enterprise-those entrepreneurs-whom we were considering some pages back; and with them will be stockholders in industrial and commercial corporations (but not bondholders, who will more fittingly be placed in our group next following). Then will come owners of real estate in cities where building speculation is rife; and also landowners-on a similar condition that there be speculation in the lands about them; and then stock-exchange speculators and bankers who make money on governmental, industrial, and commercial loans. We might further add all persons depending upon such people-lawyers, engineers, politicians, work-ing-people, clerks-and deriving advantage from their operations. In a word, we are putting together all persons who directly or indirectly speculate and in one way or another manage to increase their incomes by ingeniously taking advantage of circumstances.
2234. And let us put into another category, which we may call $R$, persons who have fixed or virtually fixed incomes not depending to any great extent on ingenious combinations that may be conceived by an active mind. In this category, roughly, will be found persons who have savings and have deposited them in savings-banks or invested them in life-annuities; then people living on incomes from government bonds, certificates of the funded debt, corporation bonds, or other securities with fixed interest-rates; then owners of real estate and lands in places where there is no speculation; then farmers, working-people, clerks, depending upon such persons and in no way depending upon speculators. In a word, we so group together here all persons who neither directly nor indirectly depend on speculation and who have incomes that are fixed, or virtually fixed, or at least are but slightly variable. ${ }^{1}$

[^37]2235. Just to be rid of the inconvenience of using mere letters of the alphabet, suppose we use the term "speculators" for members of category $S$ and the French term rentiers for members of category $R .{ }^{1}$ Now we can repeat of the two groups of persons more or less what we said above (§2231) of mere owners of savings and entrepreneurs, and we shall find analogous conflicts, economic and social, between them. In the speculator group Class I residues predominate, in the rentier group, Class II residues. That that should be the case is readily understandable. A person of pronounced capacity for economic combinations is not satisfied with a fixed income, often a very small one. He wants to earn more, and if he finds a favourable opportunity, he moves into the $S$ category. The two groups perform functions of differing utility in society. The $S$ group is primarily responsible for change, for economic and social progress. The $R$ group, instead, is a powerful element in stability, and in many cases counteracts the dangers attending the adventurous capers of the $S$ 's. A society in which $R$ 's almost exclusively predominate remains stationary and, as it were, crystallized. A society in which S's predominate lacks stability, lives in a state of shaky equilibrium that may be upset by a slight accident from within or from without.

Members of the $R$ group must not be mistaken for "conservatives," nor members of the $S$ group for "progressives," innovators, revolufortune to be elected. $X$ 's expense-account shows a total of 64,200 francs, divided as follows: household expenses, 33,800; office expenses, 22,550; expenses for his election district (avowable expenses), 7,850 . There ought, therefore, to be a deficit of 45,700 francs; but the deficit is not only covered but changes into a surplus in view of the following revenues: contributions to newspapers and other publications, 12,500 francs; honorarium as general agent of the A.B.C. Company, 21,000 francs; commissions on sales, 7,500 . In this connexion, Prezzolini notes that $X$, reporting on the war budget, enters 100,000 francs for supplies delivered to himself, as general agent of the A.B.C. Company: that gives $X$ his "sales commissions." Finally, because of the influence that he enjoys, our member, $X$, reccives a stipend of 18,000 francs from a newspaper. In all, these revenues, which clearly belong in the category $S$, yield a total of 50,000 francs. Prezzolini adds that the member in question is not the only one, nor the least, of his species. He is just a better-known and an honester type.
$2235{ }^{1}$ It might be well to repeat that our use of such terms is not based on their ordinary senses, nor upon their etymologies. We are to use them strictly in the sense defined in $\$ \$ 2233-34$, and the reader must refer to those definitions whenever he encounters them in the remainder of this volume. [I keep the term "speculator." English ordinarily analyzes the matter embraced under Pareto's term, especially in slang. Pareto's "speculator" is our "hustler," "man of pep," "wide-awake individual," "live-wire," and so on.-A. L.]
tionaries ( $\$ 226,228-44$ ). They may have points in common with such, but there is no identity. There are evolutions, revolutions, innovations, that the $R$ 's support, especially movements tending to restore to the ruling classes certain residues of group-persistence that had been banished by the $S$ 's. A revolution may be made against the $S$ 's -a revolution of that type founded the Roman Empire, and such, to some extent, was the revolution known as the Protestant Reformation. Then too, for the very reason that sentiments of group-persistence are dominant in them, the $R$ 's may be so blinded by sentiment as to act against their own interests. They readily allow themselves to be duped by anyone who takes them on the side of sentiment, and time and time again they have been the artisans of their own ruin (§ 1873 ). If the old feudal lords, who were endowed with $R$ traits in a very conspicuous degree, had not allowed themselves to be swept off their feet by a sum of sentiments in which religious enthusiasm was only one element, they would have seen at once that the Crusades were to be their ruin. In the eighteenth century, had the French nobility living on income, and that part of the French bourgeoisie which was in the same situation, not succumbed to the lure of humanitarian sentiments, they would not have prepared the ground for the Revolution that was to be their undoing. Not a few among the victims of the guillotine had for long years been continually, patiently, artfully grinding the blade that was to cut off their heads. In our day those among the $R$ 's who are known as "intellectuals" are following in the footprints of the French nobles of the eighteenth century and are working with all their might to encompass the ruin of their own class ( $\$ 2254$ ).

Nor are the categories $R$ and $S$ to be confused with groupings that might be made according to economic occupation (\$§1726-27). There again we find points of contact, but not full coincidence. A retail merchant often belongs to the $R$ group, and a wholesale merchant too, but the wholesaler will more likely belong to the $S$ group. Sometimes one same enterprise may change in character. An individual of the $S$ type founds an industry as a result of fortunate speculations. When it yields or seems to be yielding a good return, he changes it into a corporation, retires from business, and passes over into the $R$ group. A large number of stockholders in the new concern are also $R$ 's-the ones who bought stock when they thought
they were buying a sure thing. If they are not mistaken, the business changes in character, moving over from the $S$ type to the $R$ type. But in many cases the best speculation the founder ever made was in changing his business to a corporation. It is soon in jeopardy, with the $R$ 's standing in line to pay for the broken crockery. There is no better business in this world than the business of fleecing the lambs-of exploiting the inexperience, the ingenuousness, the passions, of the $R$ 's. In our societies the fortunes of many many wealthy individuals have no other foundations. ${ }^{2}$
2236. The differing relative proportions in which $S$ types and $R$ types are combined in the governing class correspond to differing
$2235{ }^{2}$ Many people conclude that such facts are enough to condemn our social organization, and hold it responsible for most of the pains from which we suffer. Others think that they can defend our present order only by denying the facts or minimizing their significance. Both are right from the ethical standpoint (\$§2162, 2262 ), wrong from the standpoint of social utility experimentally considered (§2115). Obviously, if it be posited as an axiom that men ought, whatever happens, to observe certain rules, those who do not observe them necessarily stand condemned. Trying to put such a reasoning into logical form, one gets as its premise some proposition of the type mentioned in $\S \$ 1886,1896-97$. If one goes on to say that the organization so condemned is in the main injurious to society, one must logically fall back on some premise that confuses morality and utility (\$§ 1495, 1903-98). On the other hand, if premises of those types are granted and one would, notwithstanding, still defend or approve the organization of our societies, there is nothing left but to deny the facts or say they are not significant. The experimental approach is altogether different. Anyone accepting it grants no axioms independent of experience, and therefore finds it necessary to discuss the premises of the reasonings mentioned. On so doing one soon perceives that it is a question of two phenomena that do indeed have points in common, but are in no sense identical ( $\$ 2001$ ), and that in every particular case experience has to be called in to decide whether one is dealing with a point of contact or a point of divergence. An instant's reflection is enough to see that if one accepts certain conclusions one adopts by that fact the premises to which they are indissolubly bound. But the power of sentiment and the influence of habitual manners of reasoning are such that people disregard the force of logic entirely and establish conclusions without reference to the premises or, at the very best, accept the premises as axioms not subject to discussion. Another effect of such power and such influence will be that in spite of the warnings we have given and over and over again repeated, there will always be someone to carry the import of the remarks that he is here reading on the R's and S's beyond the limits we have so strictly specified, interpreting all that we have been saying against one of those groups as implying that the influence of the group is, on the whole, harmful to society and the group itself "condemnable"; and all that we have been saying in its favour as a proof that the influence of the group is, in general, beneficial to society and the group itself worthy of praise. We have neither the means nor the least desire to prevent the fabrication of such interpretations. We are satisfied with recognizing them as one variety of our derivations (§1419, I- $\beta$ ).
types of civilization; and such proportions are among the principal traits that have to be considered in social heterogeneity. ${ }^{1}$ Going back, for instance, to the protectionist cycle examined above ( $\$ \$ 2209 \mathrm{f}$.), we may say that in modern democratic countries industrial protection increases the proportion of $S^{\prime} s$ in the governing class. That increase in turn serves to intensify protection, and the process would go on indefinitely if counter-forces did not come into play to check it (§222I).
Before we can go any farther along this line, we must have a better understanding of a number of other phenomena.
2237. Government and its forms. Among the complex phenomena that are observable in a society, of very great importance is the system of government. That is closely bound up with the character of the governing class, and both stand in a relationship of interdependence with all other social phenomena.
2238. Oftentimes, as usual, too much importance has been attached to forms at the expense, somewhat, of substance; and the

[^38]thing chiefly considered has been the form that the political régime assumed. However, in France, especially during the reign of Napoleon III, and more particularly among economists, a tendency developed to ascribe little or no importance to forms of government, and not only that, to substance as well. That was going to another extreme, and exclusively "political" theories of society were met with exclusively "economic" theories, among them the theory of economic determinism-the usual mistake of disregarding mutual correlations in social phenomena ( $\$ \$ 206 \mathrm{f}$.).
2239. Those who attach supreme significance to forms of government find it very important to answer the question, "What is the best form of government?" But that question has little or no meaning unless the society to which the government is to be applied is specified and unless some explanation is given of the term "best," which alludes in a very indefinite way to the various individual and social utilities ( $\$ 2115$ ). Although that has now and then been sensed, consideration of governmental forms has given rise to countless derivations leading up to this or that political myth, both derivations and myths being worth exactly zero from the logico-experimental standpoint, but both of them-or, rather the sentiments that they manifest-having, it may be, effects of great consequence in the way of influencing human conduct. It cannot be doubted that the sentiments manifested by the monarchical, republican, oligarchic, democratic, and still other faiths, have played and continue to play no mean part in social phenomena, as is the case with the sentiments underlying other religions. The "divine rights" of the prince, of the aristocracy, of the people, the proletariat, the majority-or any other divine right that might be imagined-have not the slightest experimental validity. We must therefore consider them extrinsically only, as facts, as manifestations of sentiments, operating, like other traits in the human beings that go to make up a given society, to determine its mode of being, its form. To say that no one of these "rights" has any experimental foundation does not, of course, in any way impugn the utility to society with which it may be credited. Such an inference would be justified if the statement were a derivation, since in such reasonings it is generally taken for granted that anything that is not rational is harmful. But the question of utility is left un-
touched when the statement is rigorously logico-experimental, since then it contains no such implicit premise ( $\$ 2147$ ). ${ }^{1}$
2240. Here, as in dealing with other subjects of the kind, we stumble at the very first step on difficulties of terminology. That is natural enough: the objective investigations that we are trying to make require an objective terminology, whereas the subjective discussions that are commonly conducted can get along with the subjective terminology of ordinary parlance. Everyone recognizes that in our day "democracy" is tending to become the political system of all civilized peoples. But what is the exact meaning of the term "democracy"? It is even more vague than that vaguest of terms, "religion." We must therefore leave it to one side and turn to the facts that it covers. ${ }^{1}$
2241. One observes at the outset a pronounced tendency on the part of modern civilized peoples to use a form of government where legislative power rests largely with an assembly elected by a part at least of the citizens. One further notes a tendency to augment that power and increase the number of citizens electing the assembly.
2242. In Switzerland, by way of exception, the legislative powers of the elective assembly are limited by the popular referendum, and in the United States they are to some extent checked by the federal courts. An attempt to limit them by plebiscite was made in France at the instance of Napoleon III. It met with no success, though one could not definitely assert that that was due to any inherent defect in the scheme itself, since the government that was created by it was destroyed by the armed forces of a foreign enemy. The tendency to increase numbers of voters is general, and along that road, for the time being, there is no going back. The franchise is continually being extended. After giving it to adult men, the idea is now to grant

[^39]it to women. It is not beyond the range of possibility that it may be extended as regards age.
2243. Underlying such forms, which are more or less the same with all civilized peoples, there are great differences in substance, like names being given to unlike things. The power of the legislative assembly varies all the way from a maximum to a minimum. In France both the Chamber of Deputies and the Senate are elective. For the purposes of our investigation, therefore, they may be regarded as a single assembly, which is, one may say, absolutely sovereign and has no limits to its power. In Italy, the power of the Chamber has a theoretical check in the Senate, an actual check in the monarchy. In England, once upon a time, the power of the House of Commons found in the House of Lords an actual check that is now very much attenuated, and in the monarchy another that has likewise become largely nominal. In the United States the President is elected independently of the Congress and effectively limits its power. In Germany the States' Council and, to a still greater extent, the Emperor, supported by the military caste, constituted very considerable checks on the power of the Reichstag. So gradually we come to Russia, where the Duma has very little power, and to Japan, where the elective assembly has almost none at all. We may overlook Turkey and the republics of Central America, where the legislative assemblies are more or less fanciful entities.
2244. We need not linger on the fiction of "popular representa-tion"-poppycock grinds no flour. Let us go on and see what substance underlies the various forms of power in the governing classes. Ignoring exceptions, which are few in number and of short duration, one finds everywhere a governing class of relatively few individuals that keeps itself in power partly by force and partly by the consent of the subject class, which is much more populous. The differences lie principally, as regards substance, in the relative proportions of force and consent; and as regards forms, in the manners in which the force is used and the consent obtained.
2245. As we have elsewhere observed (\$§2170 f.), if the consent were unanimous there would be no need to use force; but that extreme is unknown to fact. Another extreme has a few concrete illustrations-the case where a despot keeps himself in power by armed force against a hostile population (such cases all belong to
the past); and then the case where a foreign power holds a reluctant people in subjection-of that there are still quite a few examples in the present. The reason why the equilibrium is much more unstable in the first case than in the other has to be sought in the prevalence of differing residues. The residues working in the satellites of the despot are not essentially different from those working in the despot's subjects, so that there is no faith available to inspire, and at the same time to restrain, the use of force; and as was the case with the praetorians, the janissaries, and the Mamelukes, satellites are readily tempted to make capricious use of their power; or else to abandon defence of the despot against the people. The 'ruling nation, on the other hand, generally differs in usages .and customs, and sometimes in language and religion, from the subject nation. There is a difference in residues, therefore; and so plenty of faith to, inspire use of force. But there may be plenty of faith in the subject nation to inspire resistance to oppression; and that is how, in the long run, the equilibrium may chance to be upset. 2246. It is in fear of that very outcome that conquering peoples triy to assimilate their subject peoples, and when that can be done, it is by all odds the best way for them to assure their dominion. They often fail because they try to change residues by violence instead of taking advantage of existing residues. Rome had the faculty for this latter in pre-eminent degree, and so was able to assimilate the many peoples, about her in Latium, Italy, and the Mediterranean basin.

2242 We have had incidental oeceastm already to rematk that he policies of governments are the more effective, the more adept hey are at utilizing existing residues (§ 8843 ), the less effective, the ess skilful, and in general total failures when they set out to change esidues by forcel and to tell the truth, almost all explanations as ts the success or failure of certain policies of this or that government come down in the end to that principle. ${ }^{1}$

[^40]2248. Many people are prevented by derivations from recognizing the principle. If $A$, for instance, is the derivation that-fxpresses certain sentiments of the subject class, another derivation, $B$, is readily found, which at bottom expresses the sentiments of the dominant class but which the latter regards as a valid and convincing refutation of $A$. In that confidence it concludes that it will be an easy matter to force $B$ upon the subject class, since that will be a mere question of opening their eyes to a truth so obvious. So the conflict between sentiments becomes a conflict between derivations or, in qther terms, a mere battle of words. Others see the realities a little more clearly but use sophistries. They dwell at length on the advantages of a people's having unity of faith in certain matters, but neglect entirely to consider whether that can be accomplished without incurring very serious disadvantages that would offset or more than offset the advantages. Still others implicitly assume that for a person to take advantage of the sentiments of others without sharing them, he must necessarily have a purpose that is dishonest and detrimental to society, and so they condemn such conduct outright as worthy only of a wicked hypocrite. ${ }^{1}$
2249. To utilize the sentiments prevalent in a society for attaining a given purpose is in itself neither beneficial nor detrimental to society. The utility, or the detriment, depends upon the result achieved. If the result is beneficial, one gets a utility; if harmful, a detriment. Nor can it be said that when a governing class works for a result that will be advantageous to itself regardless of whether it will be beneficial, or the reverse, to its subject class, the latter is necessarily harmed. Countless the cases where a governing class working for its own exclusive advantage has further promoted the welfare of a subject class. In a word, utilization of the residues prevailing in a society is just a means, and its value the value of the results achieved.
2250. Along with residues, considered-as-instruments of governtaxes, which, after the satisfaction of local needs, would go to Germany. In that way France would lose a province from which she gets her best soldiers and would never be a menace again.' " Compare that far-sighted outlook with the oppressive measures resorted to by present-day governments with a view to changing the sentiments of subject peoples, often in altogether insignificant respects.
$2248^{1}$ However, that mode of reasoning is peculiar to a small number of moralists. One rarely notes it in practical men.
ing, come interests, and at times these are the only available agents for modifying residues. It is important, however, not to forget that naked interests alone, taken apart from sentiments, may indeed be a powerful instrument for influencing individuals showing a predominance of Class I residues and so for influencing numerous elements in a governing class; but that taken in that way by themselves, apart from sentiments, they have very little influence upon individuals showing a predominance of Class II residues, and consequently upon the subject class as a whole. One may say, in general and speaking very roughly, that the governing class has a clearer view of its own interests because its vision is less obscured by sentiments, whereas the subject class is less aware of its interests because. its vision is more clouded by sentiments; and that, as a result, the governing class is in a position to mislead the subject class into serving the interests of the governing class; but that those interests are not necessarily opposite to the interests of the subject class, often in fact coincide with them, so that in the end the deception may prove beneficial to the subject class.
2251. Consent and force appear in all the course of history as instruments of governing. They come forward in the legendary days of the Iliad and Odyssey to make the power of the Greek kings secure. They are discernible in the legends of the Roman kings. Later on, in historical times, in Rome they are busy under both Republic and Empire; and it is by no means to be taken for granted that the government of Augustus enjoyed any less support in the subject class than the various governments the last years of the Republic managed to secure. And so coming on through the Barbarian kings and the mediaeval republics down to the divine-right potentates of two or three centuries ago, and finally to our modern democratic régimes, we find all along the same mixture of force and consent.
2252. Just as derivations are much more variable than the residues that underlie them, so the forms in which force and consent express themselves are much more variable than the sentiments and interests in which they originate; and the differences in the relative proportions of force and consent are in large part due to varying relative proportions of sentiments and interests. The parallel between derivations and forms of government goes farther still. They both
have less influence upon the social equilibrium than do the sentiments and interests that underlie them. That fact has also been perceived by many scholars, but they have tended to go a little too far in asserting that forms of government are altogether matters of indifference.
2253. A governing class is present everywhere, even where there is a despot, but the forms under which it appears are widely variable. In absolute governments a sovereign occupies the stage alone. In so called democratic governments it is the parliament. But behind the scenes in both cases there are always people who play a very important rôle in actual government. To be sure they must now and again bend the knee to the whims of ignorant and domineering sovereigns or parliaments, but they are soon back at their tenacious, patient, never-ending work, which is of much the greater consequence. In the Roman Digesta one may read truly splendid constitutions bearing the names of very wretched Emperors, just as in our day we have very fair legal codes that have been enacted by fairly brainless parliaments. The cause in both cases is the same: The sovereign leaves everything to his legal advisers, in some cases not even divining what they are having him do--and parliaments today even less than many a shrewd leader or king. And least of all King Demos! And such blindness on his part has at times helped to effect betterments in conditions of living in the face of his prejudices, not to mention much-needed steps in behalf of national defence. King Demos, good soul, thinks he is following his own devices. In reality he is following the lead of his rulers. But that very very often turns out to the advantage of his rulers only, for they, from the days of Aristotle down to our own, have made lavish use of the arts of bamboozling King Demos. ${ }^{1}$ Our plutocrats, like those

[^41]of the late Roman Republic, are at all times busy making money, either on their own account or to sate the hungry maws of their partisans and accomplices; and for anything else they care little or nothing. Among the derivations which they use to show that their rule is to the advantage of a country, interesting is the assertion that the public is better qualified to pass on general questions than on special ones. The fact, in reality, is the precise opposite. One has to talk only for a very brief time with an uneducated person-to see. that he grasps special questions, which are usually concrete, much more clearly than general questions, which as a rule are abstract. But abstract questions have the advantage for people in power that whatever the answers that are given them by the public, they will be able to draw any interence they choose from them. The people sends to parliament men who are pledged to abolish interest on capital and "surplus value" in industry, and check the "greed" of the "speculators" (general questions); and those representatives now directly,
nents of them. [But since, after all, they are intelligent men and not a little shrewd, we are obliged to conclude that there must be some powerful force that is driving them into the course they follow. That force can be located nowhere else than in a social organization that has put the government into the hands of "speculators."] Read the confessions of Waldeck-Rousseau. He will tell you that after he had prosecuted before a high tribunal a plot that he was not sure had ever existed, he forced through the old-age pension bill from which he expected nothing and the incometax bill from which he feared everything. 'We were condemned,' he writes, 'to adopt as a rule overriding everything else the necessity of not falling from power. We were obliged to make concessions on points of principle, while doing our best to prevent our principles from being carried out.' " But why all that? Because he wanted to rehabilitate Dreyfus! And why did he want to rehabilitate Dreyfus? Because an intense excitement, fanned in part by a press liberally subsidized by men who expected to get their money back, had laid hold on the country, and the speculators wanted to turn it into profits, just as they turn discoveries of mines or new inventions into profits. That was the start of the current that had gripped Waldeck-Rousseau-already the long-standing champion and friend of the speculators-and his friends, and which lifted on its silt-laden waves a ship packed with modern Argonauts who sailed away to conquer a golden fleece and came home with power, honours, and many a side of bacon. Jouvenel continues, p. 60: "A Premier who did not believe in the separation of Church and State made that separation inevitable. Another Premier signed the bill that made it law, and he had never favoured it. Most of our Radical Senators today have at one time or another fought for the abolition of the Senate. Many of our colonial Deputies were opponents in their youth of colonial representation. The Scnate was almost unanimous against the repurchase of the 'Western' [railway] and against the income-tax. It has now voted the repurchase of the 'Western' and will vote the income-tax." And that because it was the ransom paid to public sentiments for lucrative operations conducted by shrewd
now indirectly by helping others, increase the public debt beyond all bounds and consequently the interest paid to capital, maintain and in fact increase the "surplus value" enjoyed by manufacturers (many of whom fatten on political demagoguery), and put the government of the nation into the hands of speculators such as Volpi, who concluded the Peace of Lausanne, or of cabinet ministers such as Caillaux and Lloyd George.
2254. The governing class is not a homogeneous body. It too has a government-a smaller, choicer class (or else a leader, or a committee) that effectively and practically exercises control. Sometimés that fact is visible to the eye, as in the case of the Ephors of Sparta, the Council of Ten in Venice, the favourite ministers of absolute sovereigns, or the "bosses" in parliaments. At other times it is more or less hidden from view, as in the "caucus" in England, the political convention in the United States, the cliques of "speculator" chieftains who function in France and Italy, and so on. ${ }^{1}$ The tendency
financiers, promoters, and other speculators. In Italy a Chamber that opposed extension of suffrage, and rejected the very moderate extension proposed by Luzzatti, approved the much more radical measure proposed by Giolitti, and that because it could not stand out against a man who was so expert in protecting trusts and in manipulating electoral patronage. As for Giolitti himself, he favoured an extension of the franchise to pay for the support of Transformist Socialists and other democrats, and that, in order to lessen the opposition they might offer to his own enterprises, among which we must reckon the Tripolitan War, which, in turn, he had not favoured at first, but which was forced upon him by sentiments prevailing in a large part of the public.
$2254^{1}$ The situation is excellently described in a speech made by M. Briand at St.-Étienne, Dec. 20, 1913: "There are feverish impatiences in our democracy, there are demagogic plutocrats who are rushing towards Progress at such a frenzied pace that we lose our breath in trying to keep up with them. They want everything or nothing, those men. At the very time when they are amassing fortunes with scandalous ease, they are grasping at wealth with a demeanour so menacing, so exaggerated, so unrestrained, that we have a right to wonder whether it is really to get it and not rather to protect it." All the same the financiers M. Briand has in mind let others do the talking while they go on making money. Of their breed Carducci wrote "On the Fifth Anniversary of the Battle of Mentana" (Poesie, p. 483):
> ". . . Se il tempo brontola,
> finiam d'empire il sacco!
> Poi venga anche il diluvio-
> sarà quel che sarà. . . ."

("If the storm begins rumbling, let us hurry and fill our pockets; then let a deluge come, and what will be will be.") The thing is of all times and places whenever and wherever speculators hold the upper hand. Liberté, Apr. 14, 1913: "Banker
to personify abstractions or merely to think of them as objective realities inclines many people to picture the governing class as a person, or at least as a concrete unit, and imagine that it knows what it wants and executes by logical procedures designs which it had conceived in advance. In just such terms do anti-Semites think of the Jews, and many Socialists of the "bourgeoisie" (though others, coming closer to realities, think of the middle class as a "system" functioning to some extent quite aside from any design on the part of its members). Ruling classes, like other social groups, perform both logical and non-logical actions, and the chief element in what happens is in fact the order, or system, not the conscious will of individuals, who indeed may in certain cases be carried by the system to points where they would never have gone of deliberate choice. In speaking of "speculators," we must not think of them as actors in a melodrama who administer and rule the world, executing wicked designs by stratagem dark. Such a conception of them would be no more real than a fairy-story. Speculators are just people who keep their minds on their business, and being well supplied with Class I residues, take advantage of them to make money, following lines of least-resistance, as after all everybody else does. They hold no meetings where they congregate to plot common designs, nor have they any other devices for reaching a common accord. That accord comes about automatically; for if in a given set of circumstances there is one line of procedure where the advantage is greatest and the resistance least, the majority of those who are looking for it will find it, and though each of them will be following it on his own account, it will seem, without being so, that they are all acting in common accord. But at other times they will be carried along by the sheer force of the system to which they belong, involuntarily,

[^42]and indeed against their wills, following the course that is required of the system. Fifty years ago "speculators" had no conception whatever of the state of affairs that prevails today and to which their activities have brought them. The road they have followed has been the resultant of an infinitude of minor acts, each determined by the present advantage. As is the case with all social phenomena, it has been the resultant of certain forces operating in conjunction with certain ties and in the face of certain obstacles. When we say that at the present time our speculators are laying the foundations for $a$ war by continually increasing public expenditures, we in no sense mean that they are doing that deliberately-quite to the contrary! They are continually increasing public expenditures and fanning economic conflicts not in order to bring on a war, but in order to make a direct profit in each little case. But that cause, though an important one, is not the main cause. There is another of greater importance-their appeal to sentiments of patriotism in the masses at large, as a device for governing. Furthermore, the speculators in the various countries are in competition with each other and are using armaments to exact concessions from rivals. Other similar causes are operating, and they all are leading to increases in armaments without that's being in any sense the consequence of preconceived design. Not only that. Those men who are rich in Class I residues sense inttitively, without needing to reason or theorize that if a great and terrible war should occur, one of its possible consequences might be that they would have to give way to men who are rich in Class II residues. To such a war they are opposed in virtue of the same instinct that prompts the stag to run from the lion, though they are glad to take on little colonial wars, which they cap superintend without any danger to themselves. It is on such interests and sentiments, not on any deliberate, premeditated resolve, that their activities depend, and these accordingly may eventually carry them to some objective that they may be aiming at, but also quite as readily to points where they would never have dreamed of going. Some day the war they have made way for but not wanted may break out; and then it will be a consequence of the past activities of the speculators, but not of any intent they have had either at that time or ever. So the speculators of ancient Rome brought on the fall of the Republic and the dictatorships of Caesar and Augustus,
but without knowing that they were headed in those directions and without the slightest desire to reach those goals.
In dealing with speculators, as with other elements in the social order, the ethical aspect and the aspect of social utility have to be kept sharply distinguished. The speculators are not to be condemned from the standpoint of social utility because they do things that are censured by one or another of the current ethical systems; nor are they to be absolved from any given ethical standpoint because they have proved socially beneficial. The utility depends upon the circumstances in which the activities of the speculators are carried on, and specifically upon the relative proportions of speculators to persons strong in Class II residues, either in the population at large or in the governing classes. To determine and appraise such utility is a quantitative, not a qualitative, problem. In our day, for instance, the enormous development of economic production, the spread of civilization to new countries, the remarkable rise in standards of living among all civilized peoples, are in large part the work of speculators. But they have been able to do that work because they came from populations in which Class II residues were numerous and strong: and it is doubtful, indeed it is hardly probable, that benefits such as these could be realized if there were any great decline in the Class II residues in our masses at large or even merely in our governing classes ( $\$ \$ 2227^{1}, 2384^{1}$ ).
2255. To have a concrete instance of the applications of the instruments of governing just described, one might consider the case of Italy during the Depretis régime. How could that politician ever have been master of the Italian Chamber and the country for so many years? He was not the leader of a victorious army. He had none of the eloquence that stirs the emotions of men. He had none of the prestige born of high achievement. He was not forced upon the country by a king. What, then, the source of his strength? Only one answer is possible: He was a past master at utilizing the sentiments and interests then prevailing in the country, and more especially the interests, and so becoming really the leader of the syndicate of speculators that was then ruling the country and to a - -argeextent holding the substance of the power of which he enjoyed only the semblance He made many speculators rich menyby protective tariffs, railway deals, government contracts in which the state was
robbed right and left, banking irregularities that were later exposed. Never was bandit chieftain more lavish towards his confederates in pillage and plunder. Crispi was an interlude. His was an administration that set out to modify residues and cared little for the interests of speculators. He aspired to creating sentiments of nationalism in a people that had na sense of country, and his work, like the work of all men who have tried what he tried, came to nothing; Instead of using the Socialists, he fought them and so had their more intelligent and active leaders against him. And hostile or indifferent were the speculators, to whom he tossed few if any bones to pick. In a word, the conditions of the economic period in which he ruled were all in his disfavour (\$2302). He fell incidentally as the result of a defeat in Abyssinia, but he could not have lasted long in power in any event. Remarkable the contrast between him and his successor, Giolitti, who was truly a master in the art of using interests and sentiments. He, no less than Depretis, made himself the leader of the speculator class and the protector of "big business"; and since money was required for helping the latter, and the banks had their money tied up in government loans, he provided the government with funds by founding the insurance monopoly, so making the money in the banks available for "big business." ${ }^{1}$ Sentiments he had

[^43]a gift for using in a truly marvellous way, never overlooking a single one. Crispi had striven to create nationalist sentiments in the country, and he had striven in vain. Giolitti found them ready-made, and exploited them lavishly and ever with success. He never dreamed of fighting Socialism. He billed and cooed with its leaders till he got them-as he himself said-to "pack Marx away in the attic." Others he tamed to such an extent that they came to deserve their nickname as "the King's Socialists" He lavished money on the Socialist cooperatives, and that he was in a position to do, because economic conditions were in his favour ( $\$$ 2302), just as they had been unfavourable to Crispi; and those same conditions allowed him to carry the Libyan adventure to a successful conclusion and defer to the Greek calends the liquidation of the huge public debt that was incurred in connexion with his policies. Friendly with the Socialists, at least with such among them as were not too savage and staunch, he was not unfriendly to the Clericals, and if he did not tame them, he at least made them more tractable, and could depend on them extensively at election time. Taking advantage of an enthusiastic public consensus in sentiments of nationalism, he broke up the closeknit body of Republicans and reduced that party to a small nucleus of zealots blindly keeping faith with their principles. He extended the franchise to strike terror into the hearts of the bourgeoisie and make himself its protector, meanwhile doing his utmost to look like the patron of the popular parties. In a word, there was not a sentiment nor an interest in Italy of which he failed to make clever use for his purposes, so piling success on success and going through with the Libyan enterprise, which was something far more costly and dangerous than the Abyssinian venture that had proved so fatal to Crispi ( $\$ 2302$ ). It is said that he did not want the war with Turkey and fought it only as a sop to certain sentiments, using it as an in-

[^44]strument of governing. Like all men preponderantly endowed with Class I residues, he could use sentiments, but he did not understand them. He could never see how they could still be strong in the masses at large when they showed themselves so pliant in the popular leaders whom he flattered and cajoled. He therefore had no accurate perception of their social significance. That was no great hindrance to him in his deft manoeuvres from moment to moment; but it prevented him from having any broad view of the future that he was meantime preparing. But that, after all, did not worry him greatly-his eye was wholly on the present. In fighting the Libyan War, he was striking a grievous blow at the Ottoman Empire and so bringing on the Balkan War, and as a result profoundly altering the balance in Europe. Yet he made no efforts to strengthen the military and naval forces of his country with a view to oncoming wars. He refused to increase army and navy appropriations in the degree required because he did not care to exasperate the taxpayers, and especially because he needed the votes of the Socialists. On the other hand, he made loud boast of the fact that in spite of his war he had maintained or increased expenditures on public works and in subventions of various kinds to voters. He concealed the amounts the war had cost by disguising them in his budget reports, postponing payment of them to the future. He increased the public debt clandestinely by issuing long-term treasury bonds, so filling the coffers of commercial and savings-banks but with grave risks of danger to come. By such devices he made ready to have his war and yet conceal its costs. The policy was momentarily convenient, for by those devices he was able to satisfy both the elements who wanted the war and the elements who were unwilling to shoulder its inevitable consequences. But it postponed and aggravated the difficulties that it failed to solve.
In this particular case one sees, as under a magnifying lens, the kind of thing that speculators generally tend to do. The great predominance of Class I and the virtual absence of Class II residues in Giolitti and his followers first was a great help and then ended by being a great handicap to their power, which was all but shattered by fifty or more Socialist Deputies who were sent to the parliament by the elections of 1913 and who were strong in Class II residues. Before that campaign the Socialist party had had to choose between
"transformism" and "intransigence" (non-compromise), in other words, between following a course more particularly featured by Class I residues and a course prevailingly featured by Class II residues. As usually happens with both nations and parties, the Socialist leaders were inclined to follow the first course; but a great tidal wave came surging up from the masses and bore new leaders to the fore, and then swept them, with a few survivors from among the old, along the second course, where sentiments predominated. That was fortunate for the Socialist party, for it was in that way placed in a favourable position for giving battle to a government that had no convictions and no faith. And in that we have a particular instance of a development that is general and with which we shall have to deal at some length. In other words, we discover that the greatest strength of a party lies not in the exclusive predominance of Class I residues or of Class II residues, but in a combination of residues from the two classes in certain relative proportions.
2256. The interlude provided by the administration of Luzzatti confirms these inferences. Luzzatti had been of great help to elements that profited by protective tariffs, but they had no further need of him when he became Prime Minister-at that time protection was in no danger, and once water has gone over the dam it comes no more to the mill. Furthermore, Luzzatti was far from being as good a representative of the speculators as Giolitti had been, nor did he have Giolitti's faculty for using sentiments without sharing them. For that reason Giolitti remained the actual "boss" during Luzzatti's turn in power and took power away from him with the greatest ease when he judged the moment opportune. Likewise Sonnino, who is far superior to many another statesman in Italy so far as education and political thinking are concerned, has never been able to last long in power, because he lacks either the ability or the inclination to act as a faithful agent of the band of speculators. In France, Rouvier was frequently "boss" of the parliament simply because of his merits as leader of a similar band, and his last ministry came to an end not because of difficulties at home but because of difficulties abroad. Caillaux's strength lies altogether in the speculators who are gathered about him. But it would be wiser for us not to stop at these names or any other list of the kind and imagine that we are dealing with situations peculiar to certain individuals, cer-
tain political systems, certain countries. They are closely bound up with a social system in which speculators make up the governing élite. ${ }^{1}$ In England the election campaigns against the House of Lords were backed financially by speculators led by so-called Liberal ministers. ${ }^{2}$ In Germany the great manufacturing and financial interests
$2256^{1}$ Descriptions given by technicians who follow the ways of empiricism without any cluttering of theory are very useful for getting facts in a clear light. Such men are immune to the ever present danger of reshaping fact to conform with theory, even unwittingly. I will quote in point such a description from the Financial Times, Mar. 27, 1914. It relates to the things that we have just been discussing. I will merely note that the description applies not only to France, but to other countries where speculators are in the saddle. As regards the United States, a good deal would have to be added to the description, but nothing taken away. "Paris, March 24. We have heard a good deal of late about 'plutocratic democrats' and 'democratic plutocrats,' by which is meant either a wealthy financier who becomes a demagogue for the sake of political influence rather than from any real conviction or, as is more widely the case in France, a demagogue who has no objection to becoming a wealthy financier if circumstances permit. M. Barthou, M. Briand, and their friends have freely used the expression in connexion with M. Caillaux, to whom they are politically opposed, and it is a fact that certain prominent Republican politicians belonging to all sections of the Republican party have of late years turned their political influence to considerable personal advantage." A long account follows of things various statesmen had done in collusion with financiers. We omit it because we prefer not to cite proper names, their presence easily diverting attention from general uniformities to considerations of ethics, party, or particular sympathies or antipathies. The conclusion of the article takes us back to facts of general bearing, which are of greater importance in a scientific study. "Need of a political protector: As a matter of fact, it has long been the fashion with French financial and other companies to provide themselves with a 'paratonnerre' or 'lightning-rod,' in the shape of a person of political influence who can act more or less as a mediator in high places, and who, on occasion, can help to shield financiers who may be liable to get into trouble, or protect interests that may be in danger from threatened legislation. As a rule politicians are very chary of being openly connected with any but concerns of very high reputation; but there are others. Thus, there are many barristers who are both clever pleaders and brilliant politicians. Many are the concerns that willingly pay huge annual fees to a political barrister in order to secure his services as 'legal adviser.' The legal adviser is paid quite as much for his political influence as for his legal advice, and he runs no risk, not being openly connected with the concern. It is natural, perhaps, in a country where kissing goes by favour-and show me the country in which it does not!-that people interested in important business schemes should endeavour to obtain a hearing with the powers that be by securing as influential a political intermediary as they can get, but the practice undoubtedly has its drawbacks." And see $\S 2254^{1}$.
$2256{ }^{2}$ Guglielmo Emanuel, Corriere della sera, Feb. 9, 1914: "Characteristic of the [Engiish] system is an incident of which I heard the story one evening as told in a political address by a Liberal who, being both a Member of Parliament and the recipient of a knighthood, certainly knew whereof he spoke. Before the elections of
reach the very foot of the throne, though that choice spot is still to some extent disputed by the military caste. In the United States Wilson and Bryan went into power as professed and probably sincere opponents of trusts and financiers, but actually they worked in their favour in maintaining anarchy in Mexico with a view to securing a President there who would be subservient to American finance. And those pacifists carried their self-composure to the extent of inviting Mexico to attend the Peace Congress at The Hague at the very moment when the American navy was attacking Vera Cruz, killing men, women and children! The recent past is very much like the present. In Erance Louis Napoleon Bonaparte was able to become Napoleon III only because he had become the leader of the speculators, while in Italy administrations of the past have fallen
1906, which gave the majority and the government to the Liberals, he was discussing with a friend who later became a minister what a scandalous thing it was that the Unionist ministry which was at the time in power should be 'selling' titles. Being still an innocent young man and ignorant of the ways of politics, he exclaimed emphatically: 'When we get into power we must put an end to such a disgraceful thing!' 'Really?' answered the future minister calmly. 'I believe that when we get into power we shall have to sell as many titles as we can in order to replenish the party's treasury.' If one is to believe what the Opposition newspapers are now saying, it would seem that the idea of the prospective minister has been carried out to the letter. Wagging tongues assert that a price-list has actually been agreed upon. A knighthood cannot be bought for less than $£ 5,000$ stérling; a baronetcy requires a contribution of at least $£ 25,000$; and a peerage, not less than $£^{6} 60,000$. . . The money derived from such 'sales' goes into the 'war budget,' where it is administered by the 'chief whip.'"

And there we have the "ethical state" or "the State of Law" so greatly admired by simpletons! The same situation is to be noted in other countries. Austria-Hungary does a rushing business in decorations and titles. In cvery civilized country government ministries have considerable subsidies at their disposal for election purposes. Liberté, May 10, 1914: "Ingenuous people imagine that the government has at its disposal for 'making' the elections only the slender item of a million and a quarter accounted for in the budget under the 'secret fund.' The 'black box' is infinitely better lined than that. A man who has been minister of agriculture in the Bloc is quoted to the effect that he had thirty millions a year to distribute, as he saw fit and without making any accounting, for the requirements of ministerial politics. The pretext in that case was subsidies to farmers. Then there is the income from gambling (card-playing clubs and horse-racing). Now the government has absolute control, outside the budget, of that real gold-mine. In 1912 income from casinos and race-track betting yielded twenty-four millions (francs) for application to purposes of public charity. The total was larger for 1913. This public charity has a bearing on elections, primarily, a fact that allowed the Hon. M. X—— to say to the voters in his district: 'Why, in eight years' time I have secured a good million in relief for you!'" And sce § $2557^{1}$.
through unawareness of the importance of speculators or through disregarding or neglecting them. It would perhaps be going too far, though not very much too far, to say that if the governments of the King of Naples and his other neighbours had made a concession of the "Railways of the South" to private interests, and promoted other similar enterprises, they would not have been overthrown. For years and years French and Italian liberals have tired our ear-drums with their praises of the English parliamentary system, which they have held up as a model before the whole world. Some of them may possibly have been ignorant of the extraordinary corruption which features that system and has been so excellently described by Ostrogorski. But others must certainly have known of it, and if they have held their peace, it has been in deference to the principle that wolf does not eat wolf.
2257. For purposes of maintaing its power the governing classuses individuals from the subject class, who may be grouped in two divisions corresponding to the two principal instruments for holding power secure ( $\$ 225 \mathrm{I}$ ). The one group uses toffe, and is made $\Psi$ p of soldiers, police of one sort or another, and the bravi of a day gone by; the other uses skill, and ranges in character and in time all the way from the clientage of the -ld Roman politicians to the clientèles of our contemporary politicians. Those two groups are always with us, but never in the same actual proportions, nor, much less, in the same visible proportions. One extreme is marked by the Rome of the praetorians, where the chief de facto instrument of governing, and even more so the visible instrument, was armed force. The other extreme is represented by the United States of America, where the chief actual instrument of governing, and to a somewhat lesser extent the apparent instrument, is the political "machine." These cliques work in various ways. ${ }^{1}$ The principal way is the least conspicuous. The administration in power "looks after"

[^45]the interests of the speculators, and often without any explicit understanding with them. A protectionist government, for instance, gets the confidence and the support of the manufacturers it protects without having to come to explicit terms with all of them, though it may have some agreement with outstanding individuals. The situation is the same with public works, though agreement with the big contractors is becoming the rule. Other ways are better knownthey are less important from the social standpoint, but are commonly regarded as more important from the ethical standpoint. Among them is the bribery of voters, elected officials, government ministers, newspaper-owners, and other such persons, which has its counterpart under systems of absolutism in the bribery of courtiers, favourites, male and female, officials, generals, and so on-an old form of corruption that has not altogether disappeared.' Such means
$2257^{2}$ Direct purchase of votes was a practice widely followed in days gone by ( $\$ 2557^{1}$ ), and it still is, though perhaps not to the same extent as formerly. People who are beaten by such practice condemn it bitterly and often perhaps sincerely. Those who profit by it sometimes pretend to condemn it, but sometimes also openly vouch for the benefits it brings to the public. Here is an example: Rivista popolare, June 15, 1913. Discussing the election for which preparations were in progress at Cuneo [Giolitti's home town], the review prints a passage from a government newspaper, quoted in Salvemini's Unità, May 16, 1913: "Quite apart from any notion of vote buying, a thing of which we are unable even to conceive (sic) [interpolation of Salvemini] it is a fact that general elections put a great deal of money into circulation. [That sounds much better than the word "bribery."] And when money circulates, it circulates for everybody. It is therefore desirable that this rain of manna should continue for a certain length of time. We understand, of course, that it means sacrifices, and very burdensome sacrifices, because they are of a financial character. But a noble ambition to serve one's country properly implies some sacrifice. Furthermore there is no law obliging our politicians to run the chances involved in an election. If they have no money and cannot procure any, if they have money but do not care to spend it, let them stay indoors at home. No one, we repeat, compels them to make a bid for the spot-light. The Honourable Giolitti, in accord with the Head of the State, will call for the new elections at what he judges to be the proper time; and whatever he does will be well done. For our part-and we are confident that we speak for the vast majority in the country-we hope that the campaign will be a long, a very long, one. There will be a lot of talk, but there will also be a lot of money put into circulation, and it will circulate down to the humblest levels in society; and so-to come to the point-candidates old and new need not worry as to the precise date of the elections. Let them rather take to heart the admonition of the Divine Master: Estote paratil Let them be prepared, for they shall know ncither the day nor the hour when the famous decree cometh. Let them be ready-that is to say, let them come supplied with everyhing and especially with the viaticum."
That newspaper might have added that the statesmen who control it get their
have been employed in all periods of history, from the days of ancient Athens and republican Rome down to our own; but they are really the consequences of government by a class that forces its way into power by cunning and rules by cunning. And that is why the numberless attempts which have been made to "purify" politics have been failures and still remain such. Witch-grass may be cut as often as one chooses, but it sprouts only the more rankly if the roots are left untouched. Our democracies in France, Italy, England, and the United States are tending more and more to become demagogic plutocracies and may be following that road on the way to one of those radical transformations that have been witnessed in the past.
2258. Barring some few exceptions, chief among them the conferring of honours and decorations by governments ( $\$ \$ 2256^{2}$, $2257^{\circ}$ ), money has to be spent to secure the support both of armed
viaticum from the taxpayers, whereas the Opposition have to produce their viaticum from their own pockets. An honest man, and of such there are still a few, pays his money and that is the end of it; but the man who is not so honest-and of such the numbers are legion-considers his campaign contribution as an investment that is to bear dividends when he is elected, and to that end he sometimes comes to terms with the man who was his enemy a few days earlier.
Money is not used in all cases of corruption. The most economical form of corruption is to confer honorific tittes or other such favours; and sometimes they can be sold for money and the money then used for direct corruption. A case that may serve as typical came to public notice in Austria in 1913. It is excellently reported by Achille Plista, a correspondent of Liberté, Dec. 26, 1913: "M. Stapinski, leader of the Popular party in Poland, received from M. Dlugosz, a member of the cabinet as minister from Galicia, large sums of money to be used for party campaign publicity and other election expenses. The charge was made by M. Dlugosz himself. But it turns out that M. Stapinski is much less blameworthy than was at first believed. M. Dlugosz is also a Pole and a sympathizer of the Popular party. He is a man of some wealth. In applying to M. Dlugosz for help for the party, M. Stapinski was acting quite properly. The money he received came, he supposed, from a man of the same political faith, a wealthy Polish patriot, generous and devoted to 'the cause.' That, however, was not the case. M. Dlugosz took advantage of his membership in the cabinet to procure the money from the Premier. It was provided out of secret funds. M. Stapinski did not know that. He did not know, either, that M. Dlugosz paid him less than he had received from the secret fund. The situation of the Premier, though beyond criticism on the side of personal integrity, is hardly less embarrassing as regards the propriety of his conduct in office. He has used the secret fund for purposes of legislative corruption. To tell the truth, it is perfectly well known that the government has its resources for influencing Deputies and parliamentary groups. But that is known and yet not known. So much the worse, then, for the minister who lets himself be caught red-handed in an operation of that type. Only one course is open to him: disappearance. The incident has been the occasion of a long debate in the course of which the Chamber heard some
force and of political "machines." It is not enough, therefore, to be willing to use such instruments-one has to be able to. That capacity is correlated with the production of wealth, and the production of wealth, in its turn, is not independent of the manner in which armed force and the political following are utilized. The problem therefore is a complex one and has to be considered synthetically
blunt truths. M. Daszynski testifies, for instance, that during the past seven years elections in Galicia have cost the secret fund of the Ministry of the Interior four millions. Now the Interior has a credit of only 200,000 crowns a year under that rubric. In seven years, therefore, $\mathbf{r}, 400,000$ crowns! Where did the other $2,600,000$ come from? A voice from the floor answered the question: 'How about philanthropies?' The remark has the following background. At moments of crisis in ancient Rome a dictator was created. Here they create a baron. Barons are made out of financiers and manufacturers, if they are rich enough. The decree mentions as justifying the nomination: 'Services rendered to the national economy, national industry, national commerce'; or else, 'philanthropies.' Deeply rooted here is the belief that the services which receive most signal recompense are not mentioned in the decree. That explains the enormous discrepancy between the liberalities of the secret funds of the Interior or of Foreign Affairs and the very moderate normal budgets allowed those two departments for their inexpensive operations. Has it not been shown that a single newspaper, the $R-$, has cost the Interior a hundred thousand a year more than the total allowance for the secret fund? I keep to the Interior alone. For if one were to go into the activities of the other department, we would be carried too far afield, perhaps even abroad! Deputy Tusar remarked quite appositely that for some time past every day had been wash-day for dirty linen. That is true. After the Prohazka scandal came the gambling scandal in Hungary, with a whole flock of others, notably the 'Canadian-Pacific' scandal, which was one of the most astonishing that ever came to light here. In that one the Austrian public servant appears in an attractive, honourable, even touching rôle. The Austrian Ministry of Commerce sees the port of Trieste boycotted and Austrian shipping strangled by a powerful combination of German companies that are working for Bremen and Hamburg and with the brutal matter-of-factness of a Lieutenant Forstner and his colonel ["heroes" of the Zabern affair]. So, to break that monopoly, an agreement is reached with an English concern that is strong enough to stand the strain of battle-the Canadian-Pacific, which is to favour Trieste by steering emigrants to that port. 'I take it'-protested a section chief of the ministry at the investigation-'I take it that an Austrian official has a right to serve Austrian interests!' But the powerful German syndicate sets a newspaper, the Reichspost, to work, and also emissaries who win the support of the military authorities. By an army order all the representatives of the Canadian-Pacific are arrested, its offices closed, its sailings cancelled. As a result foreign interests came to triumph over Austrian interests, and the Austrian Army, doubtless unwittingly, was made the tool of a German syndicate against the Austrian Government! The Chamber had to interfere with a parliamentary investigation, before the Army, which had been fooled by the Reichspost and other agents of the great German group, could be brought back to the right road. What was the rôle of stupidity, what of venality, in all that? Those who know may tell, but not cverything can be ascribed to in-
(§2268). Analytically, one may say that armed force in many cases costs less than the "machine," but in certain other cases the "machine" may prove to be more favourable to the production of wealth; and that has to be taken into account in striking the balance ( $\$ 2268$ ).
2259. Evolution towards "democracy" seems to stand in strict correlation with the increased use of that instrument of governing which involves resort to artifice and to the "machine," as against the
experience and simple-mindedness. The case of the innocent Deputy Stapinski, who was bribed without knowing it, must be fairly rare in this hard-boiled age of ours." In England the election campaign conducted by the Asquith ministry to strip the House of Lords of its power cost enormous sums, and the money was supplied in large part by manufacturers and business men. In Italy and to an even greater extent in France, the distribution of decorations is an instrument of governing that has the advantage of costing nothing. The mérite agricole, which is frequently conferred on individuals who could not tell wheat from barley, the palmes académiques, which are oftentimes conferred on individuals who have fought heroically in a war with French syntax, and other honours of the kind, have saved the country millions and millions of francs. In Italy an administration can also take advantage of its power to grant or withhold licences for bearing arms, granting them to members of its party, refusing it to its adversaries. And-chiefly at election-times in districts where the battle is hottest-it grants licences to professional criminals who help the government candidate in ways not always legitimate, and withholds them from the honest citizens who show themselves favourable to an opposition candidate. Between the days when Aristophanes was exhibiting the corruption of Athenian politicians on the stage and the days when the Panama investigation and other scandals were shedding a flood of light on the ways of contemporary politicians, centuries and centuries have elapsed, countless treatises on morality have been written, sermons without end have been preached, to induce men to behave themselves in an honest and upright manner; and since all that has been in vain, it is obvious that ethical theories and the sermons that go with them have been absolutely powerless to eliminate or even to reduce political corruption, and it is very very probable that they will be just as ineffectual in the future. The things that really influence the situation are of a quite different character. It is interesting, however, that our knowledge, now authentic and voluminous, of countless instances of political corruption does not serve to shake the faith of certain "intellectuals" in the "ethical state," nor the faith of the masses at large in governments that have to thank their existence and their power, in part at least, to such corruption. So in the Middle Ages the simony and the immorality of many Popes in no way shook the Catholic faith-Boccaccio, as we have seen, in his story of the converted Jew ( $\S 1937^{1}$ ), shows by a pretty derivation that such things very properly strengthened it. At every step we take we stumble on facts of the same kind, and they all go to show that in people at large there are two currents, a current of logical or pseudological reasoning, and another current of non-logical conceptions, beliefs, faiths, of the inconsistencies of which people are not aware; or which, if they do perceive them, they immediately brush aside as nuisances, and forget. The two currents flow in parallel channels, never mixing their waters, ever remaining, to an extent at least, independent.
instrument of force. In ancient times that was clearly observable towards the end of the Republic in Rome, where there was a conflict between precisely those two instrumentalities, force winning the final victory in the Empire. It is even more apparent in our own day, when the régimes in many "democratic" countries might be defined as a sort of feudalism that is primarily economic (\$ 1714) and in which the principal instrument of governing is the manipulation of political followings, whereas the military feudalism of the Middle Ages used force primarily as embodied in vassalage. A political system in which "the people" expresses its "will"-given but not granted that it has one-without cliques, intrigues, "combines," "gangs," exists only as a pious wish of theorists. It is not to be observed in reality, either in the past or in the present, either in our Western countries or in any others. ${ }^{1}$
$2259{ }^{1}$ A library of thick volumes would not be big enough to hold even an insignificant fraction of the available documents. From a host of examples I will quote just one from Italy: the construction of the Palace of Justice in Rome. For the particulars, see Eugenio Chiesa, La corruzione politica, discorsi alla Camera dei Deputati, with the preface by Napoleone Colajanni. Among the findings of the commission that conducted the inquiry, Number 4 is as follows: "Interference on the part of public authorities with work on the building was very active and very harmful even during the period when the work was on a money-saving basis, 937,328 lire being spent at that time, nominally to pay for work of preservation, but actually to give employment to four hundred labourers who were so faithful and so inactive on their jobs that they came to be called 'hod-carriers of state.' " It is amusing to note that those lines were written under an administration whose chief device for governing lay in holding the support of the Socialists by subsidizing a number of cooperatives, which, if those workmen deserved the nickname of "hod-carriers of state," could only have been called "revolutionists of state" (\$2261 ${ }^{1}$ ). The widow of his late Excellency, Ascanio Branca, who came in for censure at the hands of the Commission, very justly wrote to the Giornale d'Italia, Apr. 30, 1913: ". . . Allow me . . . to protest vigorously against the strictures brought by said Commission against my late husband, Ascanio Branca. I well remember that at the time when he was Minister of Public Works he was forced to append his signature to the contracts in question under pressure from the then Minister of the Interior, the Marquis di Rudinì, who, with a sense of his responsibility for the maintenance of the public peace and [When force cannot be used, one has to use one's wits.] in order to avoid a very serious strike, thought it his duty to regulate his political conduct in that manner." In similar terms the son of the late Minister Ferraris soundly defended his father, alleging and proving that all sorts of pressure had been brought to bear upon Signor Ferraris, at the time Keeper of the Seals, in connexion with the Courts' Building. Interesting one of the letters written by the Keeper of the Seals to the Prime Minister on July i1, Giornale d'Italia, May 3, 1913: "Before yielding, as your Excellency says and truly, may I be allowed to speak my mind
2260. Such phenomena, long the subject of remark, are usually described as aberrations, or "degenerations," of "democracy"; but when and where one may be introduced to the perfect, or even the merely decent, state from which said aberration or "degeneration" has occurred, no one ever manages to tell. The best that can be said is that when democracy was an opposition party it did not show as many blemishes as it does at present; but that is a trait common to almost all opposition parties, which lack not so much the will as the chance to go wrong.
2261. It is further to be noted that the defects in various systems of government may differ from each other, but, taking things as a whole, it cannot be held that one type of régime is very different in that respect from any other. The criticisms that are levelled at modern democracy are not greatly different from those that were lev-
on the housing and construction question in Rome. From as far back as 1879 the national and municipal authorities have been deceived, or at least have chosen to be deceived-certainly they have deceived the parliament and the country. [Really, it was not deception, but just the consequence of a certain method of governing.] Instead of resolutely taking upon itself both the expense and the management of the works required for modernizing the capital . . . the state placed or pretended to place the responsibility on the shoulders of the city government. The city assumed the responsibility, not realizing altogether just what it was doing; all the more so because meantime it was accepting assistance from the state, leaving the question of balancing accounts open. At any rate, the city accepted the assistance, and the state, either in connivance or out of impotence, gave it more rope. . . . The city proceeded to mismanage everything and it will always be unable to do otherwise; because it has no traditions; because politics figures in everything [And what of the national government? Politics not only figures in everything-it is everything!], because the real interests of the city are not considered at election-time, in a word because it is forced to go wrong either through connivance, or through weakness, or through incompetence. [Exactly what the investigation showed had been the case with the national government.] The last straw was the enactment of July 20 , 1890. Now I see that the same mistakes are being made over again, with this one in addition. The government is eager to keep, and is trying to keep, the goodwill of the city authorities; it is eager, and is trying, to avert a municipal panic: it has neither the program nor the courage to make an issue of the labour question and answer it once and for all. [Artifice still substituting for force.] The result is that they are all like persons sinking in the mire [Mire is the element in which eels and politicians live and grow fat.]: the more they struggle, the deeper they sink; and meantime the city authorities, the contractors, the labour agitators, are feathering their nests. . . . Having said that much, I, who am of opinion contrary to the view I see prevailing in the cabinet, yield. I yield for many reasons, in fact for every reason; but to ask me to name a Roman office-holder as my personal representative is going too far. In view of the pressure that had been brought to bear upon me [A Minister of State is speaking, remember, the titular head of a national magis-
elled at ancient democracies, the Athenian, for instance; and if there are cases of corruption in democracies old and new, it would not be difficult to find cases just as bad in absolute and constitutional monarchies, in oligarchical governments, and in any other sort of régime ( $\$ 2446$ f., 2454). ${ }^{1}$
tracy! The pressure is bearing upon such a man! Imagine the pressure that must bear on a mere judge when some political service is required of him!], I had already issued instructions to Councilman Gargiulo. I shall excuse him. But I will appoint no one in his place. It is for your Excellency to indicate whom I shall name, and I will name him, in full conscience at any rate that I shall be in no way responsible for what he docs or fails to do as my appointee."

The file copy of this letter is in Ferraris's personal hand. It is a pity that we do not have all the letters that Ministers of State in France and England have written to one another in connexion with "business." There would certainly be some like the above. There are honest people in abundance in every country, but they are powerless to resist the manoeuvres of the politicians-they are ground to bits in a powerful machine: the political system. Among the countless documents that might be quoted, see Atti della Commissione d'inchiesta parlamentare sulle banche, Roma, i894: Interrogatorii (testimony of Pietro Antonelli, pp. 8-1 I; and of Carlo Cantoni, pp. 38-39). But in general, for that matter, politicians and newspaper men may be seen buzzing about the banks like flies about honey.

226I ${ }^{1}$ So for political parties: The difference between them lies in the opportunity, not in the will. Examples are legion. Iniziativa, Apr. 19, 1913: "Everybody remembers the chorus of protests that arose from the Socialist camp-the Avanti leading the music-when a few voices made themselves heard anent the degeneration manifest in the Socialist cooperative labour movement. Everything was denied, even things that spoke for themselves, namely, that in accepting contracts for public works the Socialist cooperatives were making the Socialist Deputies tools of the administration. And, in fact, so strong today are the ties between parliamentary Socialism and Giolittian government, and so close the relations between the Socialist cooperatives and the Ministry of Public Works-which naturally misses no opportunity for favouring the Socialist cooperatives, in contempt of every norm of fair playthat breaking them will be absolutely out of the question. It will also be a vain hope that the Socialist Deputies, even those to be returned by unlimited suffrage, will ever go back to an earnest and staunch anti-ministerialism. Well says the Unità of Florence, calling attention to a declaration by Nino Mazzoni, who has recognized, for once at least, the degeneracy in the cooperatives that Socialism, official and nonofficial, has brought about in Italy: 'The most pernicious influence is the fact that the cooperatives force Deputies in the parliament, or candidates for the parliament, to wear their shoes out on the stairways of the various ministries, first to procure a decision to do some public job, then to have it done immediately, then to have it awarded to this or that cooperative even against the judgment of the consulting experts, then, while the work is in progress, to obtain all the advances in money that from day by day prove necessary but which have not been stipulated in the contracts, and so on and so on [§2548]. Can a Deputy upon whom that kind of livelihood is forced ever be anti-ministerial in carnest? And will not the contemplated "Bank of Labour" be a source of moral corruption, of subservience of
2262. Political parties usually approach these facts from the ethical standpoint and use them to fight one another. The ethical aspect is also the aspect that most impresses the public, and so the adversary in religion or politics is generally accused, rightly or wrongly, of not living up to the norms of morality. Oftentimes morality means sex
Deputies and cooperatives to cabinets in power, of a chronic and unavoidable ministerialism? For every loan that has to be obtained, for every payment that has to be deferred, how many times will the Deputies not be compelled to kotow before the president of the Bank of Italy, or seek the intercession of the Minister or Undersecretary of Finance, and make tacit promise of some act of baseness?' " Corriere della sera, Jan. 6, 1914. The Executive Committee of the Milanese Chamber of Labour passed the following resolution: ". . . The Chamber of Labour registers vigorous protest with the Federation of Cooperatives of Production and Labour of Milan, for its efforts, in contempt of the self-respect of organized labour, to obtain contracts for public works in Libya, which are tossed out as 'biscuit' by the Government under the vulpine pretext of desiring to help cooperatives of working-people, but actually with the design to discredit the vigorous opposition of the labouring classes to colonial enterprise, and draw its teeth."

The favours obtained by cooperatives in the Southern provinces were not as lavish as the favours showered upon cooperatives in Romagna for the purpose of taming the Socialists there; so Deputies from the South were very bitter in their comments on expenditures in Romagna. Deputy Tasca di Cutò, also a Socialist, alluded to them in a speech in the Chamber on Mar. 4, 1914-verbatim report in the Giornale d'Italia-as follows: "Tasca di Cutò: 'The state cannot, from considerations of an electoral and doctrinal character, continue to be one vast laboratory of orthopedic accessories for the various cases of economic rickets that require attention; nor can it be allowed to hold the bag for privileged individuals, whether these belong to high finance, or to certain labour groups who are already settling back on their haunches in a shabby economic cooperativism. While the number of our emigrants is increasing in alarming proportions, the state has become a regular subsidizer of unsound speculations, emanating now from groups of workers, now from groups of capitalists connected with high finance. (Loud applause. Exclamations. Protests from a few seats at the extreme Left.)' " The rest we take from the Corriere della sera: "Marchesano (to the Socialists): "The government gives favours only for favours received!' (Catcalls.) Tasca di Cutò: 'Must not some limit be put to this system where so-called civil expenditures are gradually coming to look like those other disbursements which I have just described as "unproductive"? I ask if we are to go on with a policy of public works that is an end in itself and is determined by considerations of electoral advantage and public peace, a policy which, under pretext of relieving unemployment, is intensively promoting unemployment itself. (Vigorous applause from the Majority benches. Loud protests from the Socialists.)'"
Shortly before this there had been a tumultuous session in the Chamber to determine whether a promise made by Minister Sacchi to aid land-reclaiming schemes in Northern Italy to the tune of thirty or forty millions a year, to be taken from the Cash-on-hand and Loan Fund, was binding or not on the new cabinet. The principal purpose of the expenditures for said "improvements" was to provide good
morality ( $\$ \$ 1757 \mathrm{f}$ ), which is the kind that rouses the greatest emotion in many people. That sort of accusation was widely used against the powerful in days gone by, and it still serves, on occasion, as a political weapon in England. It was on charges of that variety that the political career of Sir Charles Dilke was cut short. History shows no correlation between such shortcomings-or even greater ones-and an individual's political worth. The correlation seems more plausible when the sins involve appropriations of other people's property, or bribery. Yet even in those regards the individuals who rise to prominent places in history are generally far from being free from blemish, and the differences, if we choose to keep to the field of ethics, are differences in forms rather than in substance. Sulla, Caesar, Augustus, brutally distributed the property of private citizens among their veterans. Modern politicians distribute them more artfully and more pleasantly among their partisans by favouritism, patronage, and other similar devices. ${ }^{1}$
Consideration of the situation from an exclusively ethical standpoint prevents perception of the uniformities in correlations of facts that obtain in it. Suppose we have a certain social system in which the uniformity obtains that in order to govern those in power have to grant favours and protect the interests of financiers and promoters
contracts for certain cooperatives and to reduce agents in the parliament to subservience to the Government.
In France expenditures for similar political purposes go under a different name, but they are not smaller in amount; in fact, they are larger. The case of state management of the Ouest-Etat railways is sufficient proof, the main purpose there being to provide votes for the Radical-Socialist party then in power. Liberté, March, 1914, takes the figures on the deficits incidental to state management from the report by Deputy Thomas. They are, in millions of francs, for the year 1909, 38; 1910, 58; 1911, 68; 1912, 76; 1913 (estimated), 84. Liberté adds: "The system of state management of railways necessarily leads to ruin by waste. . . . It is not by any means the fault of the technical engineers. . . . They are prisoners of a system that is itself nothing but an expression of graft, mistakes, and political interests. In that system the party that it is most important to satisfy is not the public that is served but the employees whose votes must be held. Of course it is the duty of the company to look after the welfare of its agents. . . . But in the 'Western,' not labour and service are most lavishly recompensed, but work at elcction-time, where the Deputies are at once creditors and debtors, now to this person and now to that. And these are the debts that are paid with greatest generosity." In Italy the very same causes help, among others, to explain poor railway service, late trains, frequent accidents, and thefts of freight and baggage.
$2262{ }^{1}$ There is an actual difference in substance between the two modes of action, but it has to be sought in another field ( $\$ 2267$ ).
of economic production, and, in their turn, must receive favours and patronage from them. The relation between rulers and speculators will as far as possible be kept dark. Still, every so often to some the connexion will come to light-it will be proved, that is, that certain $A$ 's, who are in power, have had relations of that kind; and almost always it will be certain $B$ 's, adversaries of the $A$ 's, who reveal the scandal. ${ }^{2}$ That much granted, procedure in accord with the methods
$2262{ }^{2}$ Take for a concrete example the Rochette affair in France, which may serve as typical of a very large class of facts. However, we must persuade ourselves deliberately to ignore a number of things in connexion with it: r. The country in which it occurred-for similar occurrences abound in other countries. 2. The form of government-for monarchies and republics are on a footing in such respects. 3. Political parties, for there are few differences between them. 4. Individuals, for if the things in question had not been done by those particular individuals, they would have been done by others, since they are really consequences of the social system.

To be certain we are getting our information from a source above suspicion, let us take the summing up of the spokesman for the Parliamentary Investigating Commission: Journal officiel, Chambre des Députés, 2d session, Apr. 3, 1914, p. 2282: "It has been established that in March, igir, between the twenty-second and the thirtieth-for my part dates are of little consequence, the fact alone being important [An answer to derivations designed to obscure the main issue by arguing about incidental questions of date.], M. Monis, Minister of the Interior and Premier, at the request of his colleague M. Caillaux, asked M. Fabre, State's AttorneyGeneral, to come and see him. M. Monis, Premier and Minister of the Interior, and stranger to matters of the courts by the very constitution of the ministry to which he belonged, communicated to M. Fabre-call them orders, call them instructions, call them a mere expression of personal views, I am not interested in such niceties[Again an answer to derivations designed to obscure the main issue by irrelevancies] remarks that gave M. Fabre to understand that the government was concerned to find some way to postpone the Rochette case, a matter that had already been dragging along for four years. [During which years Rochette, thanks to the protection of politicians, was continuing to organize fraudulent corporations and pocketing money, most of which, however, trickled on to the press and to one politician or another.] . . What was the point of attack in 191r? What was the criticism? Fault was being found with the brutal and uncalled-for action of the police in the bodily seizure of Rochette with the help of a paid and pretended witness. [The $A$ 's against the $B$ 's. In the second act of the drama it will be the $B$ 's against the $A$ 's.] M. Jules Delahaye [from the floor]: Yes, the magistrates were sharply criticized for too great haste, and for needless brutality, as you say. . . . But it has to be yes or no: Was the stock exchange given a 'tip,' or was it not, with a view to causing a crash in the Rochette securities? Is it true or not true that five days before the warrant for Rochette was issued, that 'tip' had been delivered by M. Y. D.-since certain brokers were informed in advance of the arrest? . . . The Commission (through its spokesman) [He reads Fabre's digest of his conversations with Monis.]: 'On Wednesday, March 22, 191r, I was sent for by M. Monis, the Premier. He wanted to see me about the Rochette case. He told me that the government was
of experimental science would be as follows: $\mathbf{1}$. With regard to real movements, to determine whether the case were accidental, exceptional, or one of a large class of similar cases. In the latter event, one would have to determine what uniformity was indicated by that class of cases and in what correlation the uniformity stood with
anxious not to have the case come to trial on April 27, a date long since agreed upon; that it might embarrass the Finance ministry, which already had the liquidation of the religious congregations on its hands, the matter of real-estate credits, and others of the same sort. [The sort where certain individuals appropriate public monies with the well-compensated assistance of politicians and newspapers.] The Premier ordered me to have the presiding justice of the Chamber of Correction put the case over till after the court vacations of August-September. I protested vigorously. . . . The Premier stuck to his orders. . . . I felt certain that that incredible thing was all a put-up job of Rochette's friends. . . . I sent for the presiding justice, M. Bidault de l'Isle, and with some emotion stated the predicament in which I had been placed. Finally M. Bidault de l'Isle consented to the postponement out of consideration for me. That evening, Thursday, March 30, I called on the Premier and told him what I had done. He seemed very much pleased. . . . In the Premier's waiting-room I had seen M. du Mesnil, editor of the Rappel, a newspaper that was defending Rochette and from time to time insulting me. He was there, doubtless, to find out whether I had submitted.' [The spokesman for the commission continuing:] That is the situation, and I have a right to say that when one reads that document and notes the feelings of the Attorney-General in penning it, one inevitably gets the impression that that is an accurate statement, describing the facts just as they were. . . . M. Bidault de l'Isle . . . yielded. He granted the postponement, and you already know what followed. Rochette was enabled to continue his operations, to go on plundering the national savings . . . from April, 1911, to February, 1912, and more generally down to the time of his flight abroad. There you have the brutal fact, the material fact, which has been so long denied in the lack of any proof, but which is today as clear as the light in this room. . . . In my judgment, what is urgently demanded of Republicans at this moment, and my judgment is the judgment of a Republican of the Left, is to establish the independence of the courts."
And that, precisely, was what was not done, even to the slightest extent, because it could not be done without a far-reaching change in the social system! Not once from the day when Attorney-General Bulot proclaimed that the magistrate had to bow to the "fait du prince" (§ 1824 ), has anything, anything whatever, been done in France to secure independence for the magistrate; and that shows the strength of the forces that are working against a reform of that kind. M. Briand remarked before the Commission, p. 2288 of the same report, and very soundly: "Oh, the courts are not free? But where does the trouble lie, gentlemen? How can you expect our judges to be altogether free? Their appointments, their promotions, their dismissals, their careers, their lives, are all in our hands!' M. Maurice Violette (from the floor): 'But you have been in power yourself a number of times!' [Derivation: actually, the $B$ 's are no better than the $A$ 's. The spokesman for the commission hints, p. 2282, at the reasons why magistrates have to take orders from politicians, who in turn are tools of the financiers:] But there you are: all our judges are not other uniformities prevailing in the society in question. 2. With regard to virtual movements, assuming that it is considered desirable to prevent the recurrences of such cases, to determine what ties, among those susceptible of elimination (§ 134), have to be eliminated or modified in order to achieve the desired result.
heroes! I will even add, to be quite fair, that not all of them are required to be, and that some of them, men with large families, may be so situated as not to be able to make a practice of heroism. M. Fabre may have remembered the fate of one of his predecessors, M. Bertrand, who fell victim to his courageous resistance to governmental pressures. And besides it was not the first time pressure had been brought to bear upon him. He had met similar difficulties, notably at the time of the troubles in the Champagne $\left[C f . \S 1716^{5}\right]$. M. Bidault de l'Isle, for his part, was nearing the end of his career and did not care to compromise or jeopardize the position and the future of the Attorney-General."

After all that, one might imagine that the spokesman for the commission would have gone on and concluded that the incidents that it condemned were a consequence of leaving power with a ministry to issue orders to a court judge. But nohe says: "It is just another case, gentlemen, of the drawbacks inherent in that sense of loyal comradeship that prevails among us." That again is one of the usual derivations, designed to divert attention, by stressing the secondary and leaving the main untouched.

The same Journal officiel, p. 2291: "M. Maurice Barrès . . . 'Among the members [of the commission investigating the Rochette affair] were men who were bound, tied, controlled, commanded, by sentiments of friendship and loyalty in misfortune. On those I shall make no comment. Others judged that in making himself a mouthpiece for the desire of a lawyer, his friend, M. Caillaux had meant to be obliging, had merely given vent to a spontaneous good nature, to a sense of camaraderie: that in yielding to M. Caillaux's request, M. Monis had merely responded in the same feelings of goodwill, camaraderie, eagerness to be accommodating. But those same commissioners found that the Briands and the Barthous were great rascals, mercilessly abusing instinctively good souls, such as Caillaux and Monis, who had been led into difficulties by their sheer good nature. [Derivation serving for the counter-attack of the $A$ 's upon the $B$ 's.] "Let's help each other along." That was the feeling uppermost in the minds of the commission [Not that commission only, not in one country more than another, but in all the men who make up the general staff of speculation and in all countries where speculation is supreme.], and it was in singular accord with the definition that Anatole France gave of our régime as a "system of mutual accommodation": "C'est le régime de la facilité." The problem is not a simple ordinary problem. You are not called upon to judge individual shortcomings. You are asked to pronounce and decide whether you accept the failure of our present system.' M. Jules Guesde [from the floor]: 'Not of the republican system. The same sort of thing goes on in monarchical England and imperial Germany. It is the capitalist system that is at fault.'" There is some truth in Guesde's remark, but only if the phrase "capitalist system" be amended to read "a system ruled by 'speculators.'" "Speculators" could perfectly well hold the reins in a Socialist system, and in fact their influence reaches deep down into the Socialist press and among Socialist leaders.

That manner of reasoning is hardly ever-one might say neverfollowed. ${ }^{3}$ And that, in the main, for two reasons: first, that, human beings as we have repeatedly noted, commonly prefer derivations, and especially ethical derivations, to logico-experimental reasonings; and second, that the few who might be capable of seeing things as they really are have an interest in diverting public attention from
$2262{ }^{3}$ Occasionally someone takes a step along the road that would lead to a scientific solution, but he very soon halts, in fear of shocking this or that principle, this or that dogma. The same Journal officiel, p. 2308: "The President of the Commission [Jaurès]: ‘. . . I have a right to denounce in the name of the country this universal conspiracy of silence and equivocation. To it you owe the fact that instead of solving this mystery at the proper time two years ago and settling it through a commission appointed by you, it has dragged along from intrigue to intrigue, furnishing those whom the Attorney-General has called "enemy brothers" with means for mutual negotiation and intimidation. [The battle between the $A$ 's and the $B$ 's, in which, Jaurès forgets to add, his Socialists also took a hand and likewise in the interests of financial powers.] Well, gentlemen, I say that the time has come for the country to be freed of this system of intrigues by groups and cliques. . . . The time has come for us squarely to face the great and formidable danger that is threatening it. A power that is not new but is growing in strength is hovering over it, the power called finance-high finance, low finance. . . . [The promoters and owners of business should not be forgotten, nor the fact that the power in question has a strong prop in the conduct of the Socialists. After comparing the power of modern finance with the power of the old feudalism Jaurès continues:] This new power is as subtle as it is formidable. It conquers silently. [Even the Socialist press and the Socialist associations succumbing.] It makes its way into interests and consciences [Not excepting Socialist interests and consciences.], and a time comes when a nation that believes itself sovereign and solemnly celebrates the rite of the ballot [One of the dogmas cluttering the quest of the orator for experimental facts.] is suddenly led away into captivity by the power of money. That power triumphs in the disintegration of our political parties. [A statement that is contradicted by the facts.] It triumphs in a swarming of newspapers which, resting on no central ideas, can live only by clandestine subsidies. [Even the press of welldefined parties considers it useful and helpful to have its share in the largess distributed by the financial powers and the politicians. At this point Jaurès abandons his quest for experimental causes, leaves the solid earth, and goes soaring away into the clouds.] No! Organized democracy must [Must! But it doesn't!] rise against organized finance [Just now it is kotowing to finance, not fighting it. When will the change come?] but it must [Again an expression of a hope or desire instead of a search for relations actually existing between facts.] be an active organization having its centre in an idea, its flame in a conviction and a faith, its rallying force in a doctrine and a program. [Sunt verba et voces et praeterea nihil. What follows is a quotation by Jaurès of the testimony of the Attorney-General before the Investigating Commission, in which he used the words "enemy brothers" (frères ennemis)]: "I have served under thirteen Ministers of Justice. May this thirteenth one not bring me bad luck! Do you think it an easy matter to live and hold on among a host of statesmen who are tearing at one another? [While the $A$ 's and $B$ 's
them. The $B$ 's, remember, are in no sense trying to prevent everybody from doing the things they complain of, but only the $A$ 's. Their object is not so much to change the social system as to turn it to their own advantage by unseating the $A$ 's and taking their places. From that standpoint it is better to represent the facts as consequences not of the social system, but of the rascality of the $A$ 's. The so-called subversive parties, which contemplate the destruction

are fighting it out, the third party fattens.] I held my ground as best I could among these "enemy brothers." "" Liberté, Apr. 20, 1914: "The Friendly Association of Magistrates, at a convention attended by 400 delegates representing a membership of 1,900, has adopted a number of recommendations, notable among which some dealing with the moral and material situation of the judge and the need of protecting the administration of justice from interference by politicians. Two hundred magistrates attended the banquet that closed the convention, grouped about M. Bienvenu-Martin, Keeper of the Seals. In a loudly applauded after-dinner speech, M. Braibant discussed the deeply regrettable interference of the legislative authorities with the orderly administration of justice. It was a legend, he said, in the magistracy that to obtain advancement and reach a satisfactory situation a judge needed to be a diplomat, surround himself with friends, and not be afraid to join the followings of high and powerful patrons. 'The Friendly Association of Magistrates,' cried M. Braibant, 'was organized for the express purpose of providing our colleagues with guarantees against such interference from the executive and legislature powers.' M. Willm, Deputy from the Seine, also alluded to the incidents that cost M. Fabre his post as Attorney-General: 'He resigned,' he said, 'with the esteem and respect of all his colleagues.' 'But that,' interrupted M. Bienvenu-Martin, 'is a criticism of my personal policy.' M. Willm denied that any such criticism of the Keeper of the Seals had been intended and concluded amid great applause: 'Justice must be above influence, outside of and above all parties, and the best way to save the Republic is again to give those who are seeking justice the impression that the courts know no such thing as weakness.'" Jouvenel, La république des camarades, pp. 178-79: "Besides, if the magistrate nceds the government, the government often needs the magistrate. The whole scandalous history of the Third Republic comes down to a series of compromises and conflicts between the executive power and the `judiciary authorities [§ 2548 ]. The Union Général crash, Panama, the Dreyfus, Humbert, and Rochette affairs, have been mere episodes in the back-stage life of the Seine courts during these last thirty years. . . . When a Minister of Justice asks an Attorney-General to appoint an investigating judge or court president who will be 'reliable,' he knows very well how the request will be interpreted. A judge whe has just been promoted is as a rule much less 'reliable' than one waiting for an advancement. A judge who is approaching the age of retirement is more independent than a man exposed to dismissal without pension. [In Italy there is also the danger of being transferred from a desirable location to some second-rate or out-of-the-way place. That exerts a powerful influence on judges who are not heroes, and heroes have never been very numerous at any time in history.] Not a file of any magistrate [in the archives of the Ministry of Justice] but contains at least a dozen recommendations from politicians. Ministers order promotions and transfers in the courts by weighing one such recommendation against another."

of the present social order, ought, it might seem, to follow a different tack. As a matter of fact they do not, because the changes they desire are not, on the whole, of a type that would prevent recurrences of the scandals in question. So they follow the lines of the ethical derivation, merely adding that the rascality of the $A$ 's is occasioned by the "capitalist" system that they are trying to destroy. The $A$ 's and $B$ 's welcome such derivations, for they centre attention on remote and very improbable eventualities, and divert it from causes much closer to hand and far easier to deal with. ${ }^{4}$

So the argument rambles on, stressing ethical considerations more and more, and the best derivations, from the standpoint of the people who are using them, are those that divert attention from what are the danger points for them. In most common use are the following: I. Since it is the $B$ 's who have brought the misdeeds of the $A$ 's to light, friends of the $A$ 's take the offensive against the $B$ 's, and say, that after all they are no better than the $A$ 's-and in that they are altogether right and are therefore believed by many persons in all good faith. So the very ticklish question as to whether the existing political system may not in some way be accounting for the misconduct of the $A$ 's and $B$ 's, which is duly brought to light-of the $A$ 's by the $B$ 's and of the $B$ 's by the $A$ 's-is worked over into a harmless question as to the relative moral worth of the $A$ 's and the $B$ 's. That question is virtually unanswerable, so after a season of talk

[^46]the great excitement over the "scandal" involving the A's simmers down to nothing. 2. A variation on the preceding. It is shown that in calling attention to the misdeeds of the $A$ 's, the $B$ 's are prompted by purely partisan interests. Many other derivations of that kind are available, the purpose of them all being to stress the question, "How and why has the misconduct of the $A$ 's been brought to light?" instead of the question, "Has there been misconduct, and if so, what is the cause of it?" 3. Other derivations that do not compare the $A$ 's with the $B$ 's but take them separately. As regards the $A$ 's, there is the trick that works so effectively for the defence in trials by jury. One goes into the past life of the defendant in great detail, so thatthe accusation is lost sight of in the mass of data. The A's have been good patriots. They have served their party loyally. And no end of gther such things are brought out, though they are altogether irrelevant to the-charge in point. One derivation that is widely used is to assert, truly or falsely, that the $A$ 's have derived no direct pecuniary benefits from the alleged misconduct, with no allusion to the profits direct or indirect=or to intangible profits such as distinctions, influence, and other benefits of the kind-which have accrued to their relatives, friends, supporters, voters, and so on. Nothing, further, is said of the indirect profit they have enjoyed by winning and holding power through the help of the persons whom they have benefited and of the press which has been paid or directly favoured by financiers who have had protection. ${ }^{5}$ But even if it could be shown
$2262{ }^{5}$ It is not easy to determine just how much money the press collects from financiers for showing goodwill towards them and towards the politicians who are their friends. The Panama exposé mentioned figures that were exceedingly large, and plenty of other evidence goes to show that that was by no means an exceptional case. So-called publicity outlays are very considerable in the cases of certain firms. A publicity agent, M. Rousselle, was on the stand before the commission investigating the Rochette affair, and his testimony has to be taken into serious account as one of the very few available declarations betraying facts that are unknown, or not very well known, to the public. "M. de Folleville: 'You are a publicity agent? Specifically, you were connected with the Rochette enterprises?' M. Rousselle: 'I did publicity for the Rochette enterprises, as for any number of other bankers. When a banker wants to issue securities or introduce new stocks on the market, it is as necessary for him to advertise their advantages as it would be for any ordinary commodity. To do that he resorts to newspaper publicity. The publicity agent discusses the conditions on which the papers can be induced to help, the conditions, that is, on which the information furnished will be published. A remuneration is agreed upon as results begin appearing (en cours de publicité). The publicity agent pays the sum stipulated. The manner of payment varies according to the bank's
that in doing the things they did the $A$ 's were inspired by sentiments of the purest and loftiest morality, that would not show that they did not do the things they did and that the public was not injured by their misconduct. And that, as usual, means replacing the question as to the fact and the damage with the irrelevant question as to the moral value of the $A$ 's. Similar derivations are used, mutatis mutandis, against the $A$ 's. Instead, that is, of proving the fact and the damage of the misconduct of which they are accused, it is shown that the $A$ 's are of little or no account morally-an entirely different question. There are similar derivations for dealing with the $B$ 's, with similar substitutions of problems. 4. Many derivations urge hushing everything up lest harm should be done to friends, the party, the
credit.' M. de Folleville: 'How large were Rochette's expenses for publicity?' M. Rousselle: 'A certain number of Rochette enterprises, so called, are posterior to his arrest. For the real Rochette enterprises, those antedating his arrest, I disbursed, I should say, roughly, two millions (francs). In the later enterprises, a million more or less.' M. de Folleville: 'You kept books for such disbursements?' M. Rousselle: 'In matters of financial publicity I act as a personal representative. When the work is over, I report back to my banker as to how I have used the sums entrusted to me and give him the papers bearing on the various transactions.' M. de Folleville: 'Do you keep books in such a way as to show what use you have made of the money?' M. Rousselle: 'These matters are too old to allow me at this late date to reconstruct them in detail. I could give totals. As regards beneficiaries, I very much doubt.' M. Leboucq: 'Do you deal directly with the newspaper editors?' M. Rousselle: 'As a rule I do not deal with the political editor of a paper, but with someone representing him.' M. Leboucq: 'You are a publicity agent on your own account? What is your procedure when you are dealing with a paper?’ M. Rousselle: 'Certain newspapers deal directly. Others lease their space. The tendency at the present time is towards leasing (affermage). At the time of Rochette, that was rather the exception.' M. Leboucq: 'When you are discussing terms, do you have a quota fixed in advance-so much for each paper?' M. Rousselle: 'Yes.' M. Leboucq: 'In connexion with the Rochette enterprises, did you raise the perquisites of any particular newspaper?' M. Rousselle: 'Prices on the whole were the same that I gave for enterprises that were not Rochette enterprises.' M. Leboucq: 'What was the percentage of such disbursements as compared with the gross totals of the enterprises?' M. Rousselle: 'Three per cent.' M. Delahaye: 'It has been said io per cent.' M. Roussclle: 'Apart from publicity in newspapers, Rochette spent a good deal on circulars and in publishing special newspapers.' M. Leboucq: 'Do you not find the discrepancy of 7 per cent somewhat large?' M. Rousselle: ‘One would have to see the books. Rochette used mail publicity as part of his method for launching paper.' M. de Folleville: 'Did he use many bond-salesmen?' M. Rousscllc: 'I imagine he did. He had branch offices in various parts of the country. He had banks that were working for him on the side." " The simple-minded public pays for all that, admires and cheers those who flecee it in that fashion, reposes its faith in the newspapers that defend them, and calls the state that encourages them the "ethical State."
country. Such arguments come down in substance to the contention, more or less attractively veiled, that it is not so important to prevent corruption as to prevent its becoming known. ${ }^{6} 5$. Finally come procedures that are tricks rather than derivations, the idea being to embrace as many individuals as possible under the accusation of misconduct. That is a very easy matter, since corruption is the rule rather than the exception in certain governments. The measure is very effective, because, as Machiavelli in his day wrote, Mandragola, Act IV, scene 6: "When a thing concerns the many, it behooves the many to keep watch over it." Sometimes one stands amazed to see the $B$ 's at the moment of victory, when they are pushing the $A$ 's over the precipice, suddenly halt, begin to hedge, and end by resting content with half a victory. But there is a reason for that. They know perfectly well that their own tail is made of straw and that someone may touch a match to it. The many honest ingenuous souls who are ignorant of the real nature of things are attended to with
$2262{ }^{6}$ Testimony of M. Barthou before the Rochette Commission: "I said to M. Caillaux: 'Things that greatly astound me are going on at the Ministry of the Interior. The Premier sent for the Attorney-General and told him to have the Rochette case continued.' M. Caillaux answered that he had himself asked M. Monis to request a continuance. He told me that Rochette had the list of his expenditures in launching one or another of his earlier enterprises, that he intended to publish it, that the publication would cause a sensation, and that he had seen M. Monis to tell him to prevent the revelation." Testimony of M. Monis: "M. Caillaux added that if the continuance were refused, Rochette's attorney would make a startling opening address alluding to issues of securities that had involved losses to savingsbanks and had not been prosecuted." So then: There are a certain number of pirates, and the official appointed to destroy all pirates saves one of them that the others may rest secure from punishment. Journal officiel, p. 2288: "M. Aristide Briand . . . 'The Rochette affair once out of the way, my intention was to send for the Attorney-General. I would have asked him for the original of the document. Then I would have taken my own copy of it and burned the two papers in his presence, and that is that! Someone will say to me: In so doing, you would have prevented the country from knowing the truth about a matter of grave importance. Gentlemen, that matter did not entail the juridical consequences which I feared. But it might have assumed, without any possible justification, the proportions of a scandal. I congratulate myself on not having occasioned it. [Applause. "Hear! Hear!" from the Centre and the Left.] I congratulate myself as a man in the government, as a Frenchman, as a Republican. And I have congratulated myself all the more since I have been reading the newspapers abroad and have become aware of the importance that is attached to such things outside our country.' " Such sentiments are shared by many people. We may safely conclude therefore that only a very few facts of that kind come to light. What we can know at best is a few typical cases of a body of fact that is exceedingly extensive.
derivations in endless variety that serve to conceal the real causes of corruption under veils of tolerance of human frailties, pity, community pride, patriotism, and the like.
2263. The men who make earnings at all extensive through political and financial manipulations may be divided into two categories. First come those who spend about all they earn, and take advantage of that circumstance to point out that they can have made nothing by way of political and financial intrigue, since they are not rich men. Then come individuals who have made not only enough to cover huge expenditures, but large fortunes besides. Into these two groups fall the new-comers in the governments of our modern countries, while owners of hereditary fortunes gradually disappear from the governing class. In some rare case the manipulations of this or that group of speculators are discovered, and the revelations turn to their harm. But the number so caught represents a very small fraction of the numbers actually engaged in such activities. The majority escape all penalty, all reproach, and some of them, in numbers relatively few but absolutely not so few, achieve great wealth and high honours and come to govern their countries. In Italy almost all the great fortunes made in recent decades have come from government concessions, railway construction contracts, and enterprises subsidized by the state or protected by customs tariffs; and not a few individuals have climbed over those routes to the highest honours within the gift of the kingdom. That is why the whole system looks to the clever politician like one great lottery offering premiums now great, now not so great, now quite insignificant, and which, alas, even involves the professional risk of ruin. But that risk is no greater, after all, than the risks of loss or ruin incidental to most professions.
2264. It sometimes happens that the merchant who fails in business is more honest than the man who makes a fortune. Just so, in some cases, the politician who is found out is one of the less culpable. Luck may have been against him, or he may have lacked the ability, the energy, the effrontery in corruption, required for saving himself. "Seldom," says Machiavelli (\$ 1704), "do men know how to be altogether evil or altogether good." In these battles between politicians it is often the worst who come off best. It is comical at such times to see them sit in judgment on people less guilty than
they and hand out sentences in the name of virtue and morality; and one thinks of the scathing witticism of Diogenes who, "once seeing some magistrates taking one of the treasurers who had stolen a bottle to prison, remarked, 'Lo the big thieves taking the little one to jail., " ${ }^{1}$ Certain it is that if justice lies in "giving to each his due," many of these convictions are not "just," because the victims are getting more than their due. ${ }^{2}$
$2264{ }^{1}$ Diogenes Laertius, Diogenes, VI, 45 (Hicks, Vol. II, p. 47): Өєaбá $\mu \varepsilon \nu$ б́s $\pi о т \varepsilon$

 to in Greek literature under one name or another.
$2264^{2}$ In Italy in 1913 the Palace of Justice Investigation ( $\$ 2259^{1}$ ) unearthed a document that summarizes the norms which, so long as the present system endures, have to be followed by any concern that intends to make contracts with the state. The document is summarized in the Rivista popolare, May 15, 1913, as follows: "It would be to the interests of the concern: (i) To continue putting up with things, as it is doing today, (2) meantime dropping all questions at issue-they can be taken up again at some other time! (3) To get acclimated with the personnel at the ministry. By appealing to the minister the concern precludes his being interested and makes a leap in the dark. Will the minister be so honest, so far above any attack, as to protect the concern against all contingencies and against all the individuals who are stalking it? . . . 4. To examine: in case the work is to be carried on as it is today, what the financial results would be if the concern granted demands and made none. For not honest firms, but only dishonest ones can have dealings with the government, concerns which, strong in the damage they have suffered, sit tight, and watch for a mistake or a strait on the part of the bureaucracy, in order then to 'go in and argue matters.' "
The Rivista goes on: "The investigating commission styled this 'diabolical plan' a 'reprehensible scheme, not at all ethical.' [If the commission did not know that that plan is the plan that is followed and has to be followed by any concern having dealings with the state, it was displaying the greatest ignorance; if it did know, it was displaying no little hypocrisy.] That was the least it could say. [No, it could and should have added that the fault lay not with the person who jotted down in that plan things that everybody knows, but with the system which made such a plan inevitable.] But in his own defence, Deputy Abignente asserted, with rare courage, that one had only to read it to grasp its spirit and its propriety. His assertion, we repeat, is proof of the Deputy's daring. ['The daring required to repeat in public things that everybody is saying in private.] But he is uttering the truth when he adds after finishing his reading of the document: 'This sketch is the history of all enterprises connected with public works in this country. [That is the truth, the whole truth, and nothing but the truth.] They have been carried on in that fashion because of defects in our organization'-defects that Deputy Abignente denounced before the Chamber, as he states, on June 5, 1905." One ought to add, however, that the present organization cannot be abandoned without replacing it with another of the same sort, because such things are nccessary if politicians and their partisans are to make any money. Deputy Abignente's constituency understood that one man could not properly be blamed for faults inherent in the system;
2265. Small countries such as Switzerland, with very honest populations, may remain outside this current which has come down in a muddy torrent from the past to the present and is flooding all the great civilized countries today. It has often been remarked that the absolutist régime in Russia was not less corrupt nor less corrupting than the ultra-democratic system of the United States. Free-traders used to say that there was one cause for both cases-the protective tariffs, which prevailed in both countries; and there is some truth in that, for it cannot be disputed that protective tariffs open a wide field for corruption. But there are other causes also, since political corruption is just as conspicuous in free-trade England. The modicum of truth would be made larger if instead of protective tariffs one were to say economic protection-protection of business. Yet even if economic protection were eliminated, there would still be other fields for corruption, such as military supplies and munitions, fortress construction, ship-building, public works, state concessions ( $\$ 2548$ ), the administration of justice (on which Deputies and other politicians have so much influence), the distribution of favours and honours within the gift of the state, apportionment of taxes, "social" legislation, so called, and so on and on. ${ }^{1}$
2266. As a few typical proofs of these assertions, suppose we take different countries under varying systems of government for the first six months of the year 1913. We find: for Russia, the usual charges of corruption in the army and navy departments; in Hun-
and so when he had resigned in consequence of censure at the hands of the commission and the Chamber, he was re-elected not only to the same session of the parliament, but again to the next session in the general elections of 1913.
$2265^{1}$ In September, 1913, Iniziativa, asking the how and the why of facts of the kind, wrote: "It is not so much that the Deputies are bad; it is because the voters, and especially the local 'bosses' (grandi elettori) are as bad as possible. It is the method of selecting and electing Deputies that is defective. An article in Avanti dwells on the criteria that govern the announcement and promotion of candidacies in many places. 'Among people in the South,' writes the Socialist organ, 'the conviction is wide-spread (or at least bchaviour conforms with such a conviction) that even when one requests the mere recognition of a right of any government burcau, one necds . . . support from one's Deputy, or a letter from some influential person [ $\$ 2268^{\circ}$ ]. Naturally that is a system that is patented and guaranteed to produce Deputies who will be 'ministerial' to the last ditch! In fact, even if on assuming representation of a district the Deputy has intentions of being honest and independent, he is obliged after a time to bind himself hand and foot to the administration and is forced ly his very constituents to accept that vassalage by their perpetual requests for 'influence' and 'letters.' 'I could,' adds the writer,
gary, banking scandals, the banks contributing millions to the campaign fund of the party in power; and a gambling scandal, a syndicate contributing $1,500,000$ crowns to the party campaign fund and 500,000 crowns to political intermediaries for the right to open a casino on Margarita Island. In England, the wireless telegraph scandal; in France, gambling scandals (licences for casinos); in Italy, the Palace of Justice scandal, to say nothing of the Libyan war-supplies scandal; in Germany, armament and army munitions scandals.

All these cases except the last involved primarily members of parliaments and precisely because, in all the countries mentioned except the last, members of parliaments hold the power and manage by intrigue to exert pressure upon the men in power when they are not filling executive posts themselves. Wherever Deputies can make and unmake ministries, there generally one may look for parliamentary corruption. Now thinking rather of times and parties: in France under Napoleon III, the Republicans made a great to-do over corruption in the imperial government; yet when later on they came to power themselves they showed in the Panama affair and similar scandals that on the score of corruption they could go it as fast as their predecessors. When the Right was governing in Italy the various Lefts raised a great hullabaloo over the corruption of their adversaries; and then when they got into power, they behaved as badly as their predecessors and in fact much worse. Now, it seems, we are to look forward to a golden age when "bourgeois corruption" will

[^47]stand aside for "Socialist honesty," but one may doubt whether that promise will be kept any better than the many similar promises that have been made in the past.
2267. If we look at all these facts from the outside, trying as far as possible to free our minds of the ties of sectarian passions, prejudices of country and party, utopian perfections, ideals, and so on, we see that, substantially, and whatever the form of government, men holding power have, as a rule, a certain inclination to use that power to keep themselves in the saddle, and to abuse it to secure personal gains and advantages, which they sometimes fail to distinguish clearly from party gains and advantages and almost always confuse with the gains and advantages of country. Wherefrom it follows that: I. Individuals holding power behave in more or less the same way under the various systems of government. The differences come in the substance, in other words, in the sentiments that prevail in the given population: the more (or less) honest the population, the more (or less) honest the government. 2. Uses and abuses of power will be the greater, the more extensive the government's interference in private business. As raw material increases, the amount that can be earned from it increases. In the United States, where the government tries to enforce morality by law, one notes gross abuses that are not observable in countries where there are no such restrictions or where restriction is on a smaller scale. ${ }^{1}$ 3. The governing

[^48]class sees to appropriating other people's property not only for its own use, but also to share with such members of the subject class as defend it and safe-guard its rule, whether by force or by fraudthe support the client lends to the patron. 4. In the majority of cases neither patron nor client is fully conscious of violating the moral norms that prevail in their society, and even when they are, they justify themselves either on the ground that after all others would like to be doing as they do or on the convenient pretext that the end justifies the means-and from their point of view what better end can there be than to keep in power? In fact, not a few of them in all sincerity identify that end with the best interests of their country. There may even be persons who believe that they are upholding honesty, morality, and the public welfare, whereas in point of fact their activities are but a cloak for the intrigues of men who are out to make money. ${ }^{2}$ 5. The government machine consumes, at any rate, an amount of wealth that is correlative not only with the total amount of wealth belonging to the private enterprises in which the government interferes, but also with the instruments that the governing class uses to keep in power, and consequently with the relative proportions of-Class-I-and Class II residues in the ruling class and in the class that is ruled.
2268. As regards the various parties within the governing class, we may distinguish two sorts of persons in each of them: $A$. Inimpossible, the Americans, and especially their women, are falling back on the 'five o'clock.' Between five and seven in the more popular resorts, curtains are carefully drawn, lights are turned on, and that artifice creating an illusion of nighttime, the dancers give themselves up to the excitements of the turkey-trot and the 'grizzly-bear.' Mayor Gaynor has had such establishments watched by his agents, and police reports have revealed horror upon horror, it seems. Deeming that such offhand morals are not consistent with the régime of democratic austerity that Mr. Wilson has inaugurated in the White House, Mayor Gaynor yesterday urged upon the legislature of the State of New York a bill calculated to strike a deathblow at these eccentric dances. Henceforth dancing is to be forbidden in all public places. However, the unhappy Mayor is still not at the end of his pains. There is one last refuge for the tango-the private home. In one of the more worldly drawing-rooms in Washington a new fad has just been launched that will drive the Mayor to despair. Lights are extinguished and the dancing goes on in utter darkness. To find their way about the couples have no guide save a little pocket flash-light carried by the male partner. It gives a very curious effect and is the very latest vogue."
$2267^{2}$ Late in the year 1913, Huerta was President of Mexico. The government of the United States was showing itself intensely hostile to him, while the Eng-
dividuals who aim resolutely at ideal ends and unswervingly follow certain personal rules of conduct. B. Individuals whose purpose in life is to strive for their own welfare and the welfare of their associates and dependents. Such individuals may be in turn divided into two categories: $B \cdot \alpha$. Individuals who are content with the enjoyment of power and honours, leaving the material profits to their fellows. $B-\beta$. Individuals who pursue material benefits, generally in the form of money, both for themselves and for their henchmen. People who are kindly disposed towards a party will call the $A$ 's in that party "honest men" and sing their praises. Adversaries of the party will call them "fanatics" and "sectarians," and hate them. The $B-\alpha$ 's are generally considered "honest" by friends, while they are
lish Government, which had begun by befriending him, was now deserting him, just to avoid difficulties with the United States. The conflict at bottom was exclusively a matter of business interests. While he was President of Mexico in 1900, Porfirio Diaz had granted oil rights over an extensive territory to Henry Clay Pierce, and Pierce had sold them to the very powerful Standard Oil Company. An English concern, the Eagle Oil Company (Compañia Mexicana de Petroleo Aguila) had come to be a competitor of the Standard Oil. President Madero succeeded Diaz. He had favoured the American company-and not without personal profit-and had thought of decreeing a nullification of the concessions to the English concern. Huerta, on the contrary, confirmed them, and that made him the object of wrath on the part of the Standard Oil, of the Standard Oil's friends and customers, and of other American companies or trusts, which were all desirous of exploiting Mexico with the help of the United States Government. Wilson, the President of the United States, said nothing of all that. He said that he could not recognize Huerta because Huerta had not been "regularly" elected, and he showed great indignation that Huerta had come into power through a revolution, so violating the sacrosanct dogma of election by popular vote. In that way Wilson was substantially defending American trusts abroad, though at home he was posing as an enemy of the trusts. That is not all. Wilson had been elected as a pacifist and an anti-imperialist. In trying to intervene in Mexico he entered upon a policy that spelled war and imperialism. There is no way of determining whether he was or was not conscious of the inconsistency. On the one hand it is hard to admit that he alone was ignorant of what everyone else knew about the rapacious designs of American trusts upon Mexico; and if the attempt to force a government of American choice upon an independent country like Mexico is not imperialism, it is hard to imagine what imperialism could be. On the other hand we have already seen that there may be such things as war-pacifists (\$§ I705 f.), and abundant proofs are available to show that the faith of certain democratic humanitarians is so great as to blind their eyes to facts that are glaringly obvious and induce them to embrace views that are in the highest degree absurd and veritable rubbish. Wilson may be one of that type. We have no way of knowing. That problem, however, is of intcrest only to moralists. It has no bearing whatever on the quest for the uniformities prevailing among social facts,
viewed with indifference as regards "honesty" by their opponents. When the existence of the $B-\beta$ 's is discovered, they are called "dishonest" by everyone; but friends try to prevent the fact of their existence from becoming known, and to attain that end they are capable of denying that daylight is daylight. As a rule the $B \cdot \alpha$ 's are more costly to a country than the $B$ - $\beta$ 's,-their veneer of honesty facilitating all sorts of intrigues that are designed to appropriate other people's property for distribution within their political cliques. One might specify that tucked away among the $B \cdot \alpha$ 's are not a few individual's who take nothing for themselves but are careful to enrich their families. ${ }^{1}$ The relative proportions of these types depend very largely on the relative proportions of Class I and Class II residues. In the A's, Class II residues by far predominate, and so they may be called "honest," "fanatical," or "sectarian," according to the point of view. Çlass I residues predominate in the $B \prime s$, and that makes them better fitted to exercise power. When the $B$ 's get into power, the $A$ 's are a dead weight on their hands, though they do serve to give the party a certain complexion of respectability. This latter purpose, however, is served far better by the $B-e^{\prime}$ s, who are a fairly rare commodity and are very much sought after by all political parties ( $\$ 2300$ ). The relative proportions of Class I and II residues in the following of the party, in the party members who are not actually administering power, and in its voters, correspond to, without being identical with, the relative proportions of those residues in the governing element, in the general staff. Only a party rich in Class II residues can elect any great number of $A$ 's; but such a party also elects, unwittingly, a certain number of $B$ 's, since they are shrewd, circumspect individuals, deft in the arts of combinations, and they readily deceive ingenuous voters who are rich in Class II residues. In our political

[^49]systems in the West political parties fall into two general classes: I. Parties that alternate in governing a country, so that while one is in power the others stand in opposition. II. Intransigent parties, parties of lost causes, that never get into power. It follows from what we have been saying that the former (the parties that alternate in power) will contain a minimum of $A$ 's and a maximum of $B$ 's, and the intransigent parties, a maximum of $A$ 's and a minimum of $B$ 's. The situation may be stated in different language by saying that parties which never attain power are frequently more honest, but also more fanatical, more sectarian, than parties which do. That is the meaning of a common aphorism in France to the effect that "the Republic was a fine thing under the Empire." All that, essentially, is a result of the system. In the parties that get into power a first selection is made at election-time. Barring exceptions-and they are few-a person cannot be elected Deputy unless he pays and is willing to grant, and more lavishly still to promise, governmental favours. That makes a mesh which lets very few $A$ 's get by. Candidates who are wealthy enough to buy seats in the parliament, thinking of them as luxuries, amount almost to $A$ 's; and it is strange, yet nevertheless true, that next to the $A$ 's they are the most honest of politicians. They are getting to be few in number nowadays, because the sums required for buying an election are rising to unheard-of heights, and those who pay them out of their own pockets are concerned to get them back in earnings, while those who either cannot afford them, or do not care to, charge them up to the administration to be paid in the form of concessions and favours of various kinds. The competition in this field is terrific, and to come to the top a person has to be exceptionally well supplied with combination-instincts (Class I residues).
A second and more thorough-going sifting of the raw material takes place in the choice of ministers. Candidates for the parliament have to make promises to the voters. Ministerial candidates have to make promises to the Deputies and be able to assure them that they will look after them and their political followings. ${ }^{2}$ Ingenuous souls

[^50]imagine that to do things like that a man needs merely to be a rascal. They are wrong. Rare gifts of acuteness and aptitude for combinations of every kind are absolutely necessary. Ministers do not have strong-boxes that they merely have to open to get money by the handfuls to scatter among their partisans. They have to look over the field of business with a discerning eye to discover subtle combinations in economic favouritism, neat ways of doing favours to banks and trusts, of engineering monopolies, manipulating tax assessments, and so on; and in other domains, influencing courts, distributing decorations, and the like, to the advantage of those on whom their continuance in power depends. And meantime one has to do one's best to keep the $A$ 's in other parties from getting together. A person with a faith opposite to the faith of the $A$ 's will not get very far with that; but if one has no faith at all, no convictions, if one has almost no residues except residues of combinations (Class I), one will find it easier to influence the $A$ 's, nay, take advantage of their very convictions to get them on one's side, or at least to draw the teeth of their opposition. We may therefore be certain that in the parties which alternate in governing a country, Class I residues by far predominate; and the system being what it is, matters cannot be otherwise; and for that reason our system is tending more and more towards becoming a demagogic plutocracy. The various parties are for ever accusing each other of dishonesty back and forth. They are right or wrong according to the point of view. Almost all parties have their $B-\beta$ 's, so that if one considers that element only, one may justly accuse a party of dishonesty. Parties also have their $B-\alpha$ 's, so that if one thinks of these exclusively, one may or may not accuse a party of dishonesty, according to the meaning that is attached to the term. Few the parties, finally, that do not have their
letters to other chiefs when they travel abroad, and in return receive blind homage and obedience from them." And shortly thereafter he adds: "The simplest thingswhich were obtained in the days of the Turks by the recommendation of some notable (and my honourable colleagues will observe that notables in Tripoli perform, or at least used to perform, towards the local bureaucracy the same lubricating functions that we Italian Dcputies perform in relations between the public and the bureaucracy of the kingdom) -are now obtained only after months and months of pressure and delay." Interesting this comparison between the Italian social system and a quasi-feudal system, because it is made by a person who is describing the facts without letting himself be carried away by preconceptions and theories $\left(\$ 2307^{1}\right)$.
$A$ 's, and considering them exclusively one will say that a party is honest. Thinking rather of relative proportions between $A$ 's and $B$ 's in a party, one will certainly find parties in which the $A$ 's predominate and which may therefore be called "honest." But in a great many other cases, one cannot make out whether there is any great difference in the relative proportions of $A$ 's and $B$ 's. In the various parties contending for power all that one can say is that the $A$ 's are mighty scarce. Meantime the lower classes are still rich in their Class II residues; so that administrations which are in reality inspired by purely material interests must at least pretend that they are inspired by ideals, and the politicians have to shroud themselves with veils-often very transparent veils-of honesty. When one of them is caught with his hand in the bag, the opposition party makes a terrible outcry, trying to take advantage of the mishap for its own purposes. The party of the alleged culprit tries at first to defend him; and then, if it finds that task impossible or too difficult, it throws him overboard, much as a storm-tossed ship unloads ballast. The public looks on very much like an audience at a play; and if there chances to be a touch of human interest or of the sex interest, it has the time of its life and free of charge. Insignificant side-lights crowd out main issues, and the real issue, in other words, the social and political system that breeds such scandals, is altogether ignored. ${ }^{\text {a }}$ If a minister is caught dictating a court decision, the country begins to shout at the top of its lungs, but no one ever demands that magistrates be made really independent by being freed of ministerial control. That too has its reasons. The opposition parties are eager, to be sure, to use the incident to pull their rivals down from power, but are firmly resolved, when they get there themselves, to do the same things. And then again, the public grasps only the concrete, particular fact and never manages to get interested in abstract, general questions. So "scandal" follows on "scandal," each leaving the same weather it found. While one is breaking out, the other is ripening to break out in its turn, and people are shocked at each new case, regarding as the unusual what is the absolute usual and the conse-
$2268{ }^{\text {a }}$ [In all the literature devoted during the years 1932-33 to the case of Mayor Walker of New York, I doubt whether one will find as trenchant an analysis of that whole phenomenon as is contained in these three sentences penned twenty years in advance of it.-A. L.]
quence of a system that they have willed or tolerated. Moralists assume that the scandal is due to the accidental rise of a "dishonest" man to power, that it is altogether parallel to the case of a cashicr embezzling from his employer. That is not at all the case. It is no fortuitous chance that raises a man of that stamp to power. It is a matter of selection, the choice being dictated by the nature of the system. To validate the comparison with the dishonest cashier, one would have to assume that the cashier was not chosen in the usual way, but that the employer went out to look for him among the persons most likely to rob a till and best qualified to do so by gifts of light-fingeredness and other such talents. ${ }^{3}$
$2268{ }^{3}$ Sometimes the $B$ 's split into quarrelling factions, and when that happens, their recriminations throw light on intrigues that would otherwise remain in the dark. Among our contemporaries in Europe, the rise of nationalism provoked just such a split. In his La Germania alla conquista dell' Italia, pp. 66-82, Preziosi dcscribes under one of its particular aspects a situation that is general. Noting the large number of manufacturing concerns in Italy that were subsidiaries of the Banca Commerciale, he continues: "If we go on from the economic question to the political, it becomes apparent that all the concerns mentioned, and others besides, with factories of varying size and importance scattered all over Italy and providing work for tens of thousands of hands, are in effect gigantic election agencies, their activities being coordinated with the activities of the many branch offices of the shipping-companies that are likewise sprinkled all over the country. The influence of such companies on political and administrative elections is exerted, naturally, in their own interests. That explains why so many Italian politicians and men otherwise prominent in public life are directly or indirectly hitched to the chariot of the Banca Commerciale and indirectly to German policies. In Italy, as in all other countries living under parliamentary régimes, the Deputies are, with few exceptions, the most humble and obedient servants of their constituencies and cannot free themselves from local influences. One may readily guess from that what efforts Deputies dependent for their elections upon such concerns have to make and the compromises to which they are obliged to lend themselves. The concerns are well aware that money is today more than ever the backbone of the political contest. They therefore vie with one another in making campaign contributions and so assure themselves of the considerate remembrance of the parliamentarians that are so gratified." Preziosi goes on to quote, p. 75, a passage from the Rivelazioni postume alle memorie di un questore, published in 1913 by a former police chief of Milan, and points out that newspapers made no allusion to the passage. It reads: "The Banca Commerciale . . . is known for the immeasurable influence it has always exerted on the political, economic, and financial life of the nation. For many years past, owing to the assiduous labours of the late Senator Luigi Rossi, it has managed to have a say, directly or indirectly according to circumstances, about the make-up of the successive ministries. It imagined at any rate that it had them under its patronage. [Just such a condition of demagogic plutocracy was observable towards the end of the Roman Republic. We shall consider it in Chapter XIII.] . . . Unfortunately
2269. We cannot do without some conception of the economic resuts of the various types of government ( $\$ 2258$ ). As regards expenditures, it has been assumed that they could be known from the amounts levied in the form of taxes, or otherwise acquired by the state. But that figure and others of the kind represent only a fraction of a country's expenditures, for account has to be taken of the costs of economic and political favouritism, of the wastage-resulting from so-called social legislation, and in short of all other measures involving expenditures and waste, even if they do not figure in the state budget. After the cost of the government plant has been determined in one way or another, its product has to be computed. That is a very difficult problem, and in fact it cannót be solved in all its numberless ramifications. Approximate solutions have had to be adopted, therefore. One such is nowadays in great vogue. It is not, however, ordinarily presented as approximate, but as an absolute. It is obtained by assuming that the government provides for "public needs," and does so by levying taxes. That is a way of balancing the two sheets in the socio-economic ledger of the state, and the value of product is automatically equalized with cost.
2270. Theoretically that solution has the advantage of lending itself to easy calculations for arranging expenditures and income in the most convenient way. To put the situation very briefly, a certain requirement, $A$, is taken for granted; the cost is put at $a$, and an amount equivalent appropriated from revenue and apportioned among the taxpayers. Then, to satisfy the need for logical developments, a series of derivatives are put forward to show the "need" and to justify the apportionment that "ought"-so it is preached-to

[^51]be made, according to the sentimental principles of one or another of the many social moralities current. In that way one gets the solution most compatible with the sentiments of the author of the theory and of his followers, but not the solution that best pictures the facts as they are. ${ }^{1}$
2271. Noteworthy among such derivations is a pseudo-scientific variety obtained by extending the notions of pure economics to the social "needs" of a people. It is assumed that such "needs" are satisfied by the "state"; then by consideration of marginal utilities, one derives the norms of a certain equilibrium between "needs" and the "sacrifices" required for satisfying them. So one gets theories that may conform to formal logic in certain cases but which are so far removed from realities as at times to have nothing in common with them. The divergence arises in any number of ways. Suffice it here to specify the following: r. The concept of "needs" is" in no way definable, and cannot therefore serve as a premise for strict reasoning. The economists were called upon to deal with a difficulty of that type, and they found no way of surmounting it, except to draw a distinction between an objective utility that they decided to ignore, and a subjective utility (ophelimity) that they made the sole basis for determining the economic equilibrium. But that was not the end of it. They were further obliged to admit, in the first place, that the individual is the sole judge as to whether or not the subjective utility exists, and in the second place, that he is the sole judge of its amount. All that could have a meaning, as applied to a community, only if the community could be considered as a single person ( $\$ 2130$ ), with unity of sensations, consciousness, thinking; but since that assumption does not square with the facts, neither can the inferences drawn from such a hypothesis square with the facts. The concept of "public need" is used in order to eliminate artificially the difficulties that arise from the necessity of considering, if one would keep in touch with realities, the various sorts of utility (\$§ 2115 f.).
2. Even assuming that the concept of "need" is definable, we have still not eliminated all the major causes of error, and one in par-

[^52]ticular forces itself upon us as of great importance. The reasoning based on public "needs" assumes that human beings satisfy them by logical procedures. Now that cannot stand. Non-logical actions figure very very largely in the situation. It is true that they also play a certain part in concrete economic phenomena, but that part as a rule is relatively small and may be disregarded in a first approximation. A theory assuming that human beings act logically in procuring economic property yields conclusions which are verified by experience, at least in great part. Things stand quite otherwise as regards concrete social phenomena. In some of them-and a very important group it is-mon-logical conduct prevails to such an extent that a theory envisaging nothing but logical conduct fails to yield eyen a first approximation, but leads to conclusions that have little if anything to do with realities.
3. Reasonings, finally, of the kind we are here examining disregard very important by-products of the government plant-the effects on class-circulation, for instance. It is true that the term "public needs" is so elastic that, if one chooses, one may crowd anything into it, and say that class-circulation of a given type and to a given degree of intensity is a "public need," just as one could also cram into it a "need" of stability in government, a "need" of revolution, or a "need" of replacing one governing class with another, and so on ad infinitum. But it is also true that a term that may mean so many things ends by meaning nothing and that an argument in which it serves as premise strays away into mere talk.
2272. Practically, the doctrine of "public needs" ( $\$ 2270$ ) is useful to the governing class, or a class aspiring to power, as justifying its control and having it more readily accepted by the subject class. Suppose the governing class, $A$, desires to pass a certain measure, $X$, which will be all to its own advantage. Evidently, something will be gained by calling $X$ a "social need" and trying to make the subject class, which is to derive no advantage from it, yet is to provide the funds, imagine that it is designed to satisfy one of its "needs." If then someone says that he is not conscious of any such need, he is told at once that he "ought" to be. National defence is commonly classified among the "public needs." A country, $G$, is holding a province, $A$, in subjection. The inhabitants of $A$ feel no need whatever of being united to $G$; indeed they feel the opposite "need" of breaking
with $G$ and combining with the country $F$. The country $G$ taxes all its citizens, including the people living in the province $A$, in order to increase armaments against the country $F$ and so to hinder the province $A$ from seceding to $F$. It would be accurate to say that the tax serves the advantage of those who are holding the province $A$, or, if you will, satisfies a "need" of theirs. But the preference is to say, in flat defiance of the fact, that the tax satisfies a "public need" of all the inhabitants, including the inhabitants of $A$; for in such language the fact of the oppression that is being suffered by $A$ is made less apparent. In the same way, here is a country where a Socialist or Syndicalist party says that it feels no "need" at all of a war that the rest of the population wants. It helps to say that the war satisfies a "national need," for so one conceals, attenuates, overpasses, disaccord between those who feel the "need" of the war and those who, so to speak, feel a "need" of not having it. Sophistries of that kind are dissembled by the intentional ambiguity of the term "public need" (derivations, IV- $\gamma$ ). It may mean no less than four distinct and different things: 1 . An actual need of all the members of a community. 2. An actual need of certain members of the community, and also certain specific "needs," such as the "need" felt by "honest men," "patriots," followers of a given faith, and so on. 3 . A need that an actual majority of the community declares to be a "need of the community." 4. A need that the majority of a certain assembly, or of certain individuals legally designated to functions of governing, or of individuals who have acquired them by cunning, force, or otherwise, declare to be a "nced of the community." Usually arguments designed to show the utility of satisfying such needs consider only 1 , while the conclusions are calculated to cover 2 , which, thanks to the indefiniteness of the language, turns out to be simply what the author of the derivations considers desirable; or to cover 4, which is, at bottom, a mere expression of the will of the group in power. ${ }^{1}$
$2272^{1}$ Speculators are generally opposed to local liberties and variety in legislation, because they find it easier under centralized and uniform legal systems to ply their trade and force their will upon a country. But they do not state that motive. They use derivations. If $A$ and $B$ are two parts of the same country, they merely exclaim at the absurdity of $A$ 's having one set of laws and $B$ another, without giving any reason for their amazement and without specifying whether their theory is to be extended to different countries, so leading to uniform legislation for the whole
2273. In what is called the science of finance we often get, therefore, two kinds of derivations: 1. Derivations that aim at drawing inferences from certain ethical or sentimental principles and which may go far wide of realities. 2. Derivations that aim at giving a theoretical tinge to results which have been arrived at in an entirely different manner. These reach conclusions that accord with reality, but for the simple reason that the conclusions have been determined in advance. If one keeps to the naked facts, it is readily apparent that governments try to get all they can out of the public and are never embarrassed by lack of "needs" to satisfy. Their one check is resistance on the part of the taxpayer. The practical financial science of a minister of state in no sense lies, therefore, in a quest for theoretical demonstrations of this or that theorem or for the logical implications of this or that principle. It comes down altogether to finding ways and means for overcoming the taxpayer's resistance, for plucking the goose without causing too much honking. That science-or art, as one chooses-has been brought to great perfection in our day, so that in the ministries of the various countries there are now certain traditional norms for extracting money along lines of least resistance. There are ways of taking advantage of moments of great excitement that may arise in a country; ways of estimating the forces prompting expenditures and originating in individuals who are to profit by them, and the forces running counter to new taxes and originating in individuals who will be damaged by them; ways, finally of stimulating forces of the one type and of diminishing the others. It is after all such circumstances have been taken into account that ministers of finance decide upon new expenditures and new taxes. There can, moreover, be no harm in covering such designs with a coating of derivations that will transfigure them as logical consequences of this or that sentiment. That, in fact, may help; for there are people who are not greatly, if at all, world. Of late they have come forward with another interesting derivation. They say: "The aim nowadays is to save energy. There must therefore be no talk of new political duties for citizens. We must get rid of all the political complications that are still left and get a purely commercial state with uniform laws." It is something like a safe-crackers' convention passing a resolution to the effect that "The principal aim nowadays is to save energy. Dogs and night-watchmen should therefore be abolished. All strong-boxes, furthermore, should be of the same make in order to promote efficiency in safe-cracking, for in that case a burglar who has learned to crack one safe will be able to crack them all."
affected by the eagerness for new expenditures or by resentments against new taxes, and such persons may be fooled by a well-conceived derivation. A government is never short of such sophistrics, and theorists are always available to provide new ones. It should not be forgotten, however, that the derivations are consequences of the government's policies, never the policies consequences of the derivations. ${ }^{1}$
2274. If we would solve the problem stated in $\$ 2258$ (relative costs of government by armed force and by political "machines"), we must first get rid of all the derivations of which we have just seen examples, and then, bearing the complexity of the situation in mind, look for the aspects that are essential in it. Among these, certainly, will be those which we have already considered-the effects on economic and social prosperity, on defence against possible attacks from abroad, on public safetty, on speedy and impartial justice, on public services, and on many other government functions. But of equal if not greater importance will be, further, effects on classcirculation and on the stimulus or depression indirectly experienced by the national economy in correlation with those respective manners of government. It must not be forgotten that oftentimes a ruling class will aim at certain results but indirectly occasion others, some of which will be unforeseen and unwanted. People in power may, for instance, establish protective tariffs in order to benefit
$2273{ }^{1}$ Pantaleoni, Cronaca, pp. 262-63: "Who does not remember the Old Age Pension Fund manoeuvre? The government owes the pensioners a yearly income, an annual amount that is chargeable, under a well-ordered finance, to ordinary budget revenues. Such the first position in which the political prestidigitator finds himself. Now comes the second: 'Since that annual amount is, roughly speaking, always the same, or again, since it is easy to predict what the total maximum amount is going to be so long as the pension-list remains the same, let us capitalize that amount by banking enough debt-certificates for the interest to cover that annual amount exactly. The item is now funded.' Then comes the third motion: 'Let us now sell those certificates and use the revenue for railways, highways, harbour improvements, fortifications, and retirements of treasury-bonds, which in their turn have served a hundred different purposes, and recover the pension annuity by charging it off to ordinary budget revenues, where they ought to be anyhow.' The three steps require, of course, a certain length of time. They are not taken by the same ministry nor even by the same Chamber. And the press, which called the man who consolidated the pension annuity a great financier, now calls the man who reverses that process an even greater one. But, really, cannot such operations be managed without all the sundries incidental to the clandestine detour? Apparently not! Mundus vult decipi."
members of their clique, but incidentally and as a result in no way intended, stimulate class-circulation. From an ethical standpoint a measure may be judged apart from all other social phenomena, but from the standpoint of social utility that cannot be done; the effects of the measure on the equilibrium as a whole have to be considered. A measure that is reprehensible from the ethical standpoint may be altogether commendable from the standpoint of social utility; and, vice versa, a measure commendable from the ethical point of view may be deleterious from the standpoint of social utility. But in that connexion it is better for the subject portion of the population to believe that there is an exact identity between the ethical value of a measure and its social utility.
It would be a long and difficult task to consider this matter, even keeping to the essential details. Let us barely touch upon it, just to get a very general notion of it, and for that purpose we might consider certain types of governments known to us from history.
(1) Governments relying chiefly on physical force and on religious or other similar sentiments. Examples would be the governments of the Greek cities in the age of the "tyrants," of Sparta, of Rome under Augustus and Tiberius, of the Venetian Republic during the last centuries of its existence, of many European countries in the eighteenth century. They show a governing class made up of individuals with Class II residues predominating over Class I residues. Class-circulation is generally slow. They are not expensive governments. On the other hand they fail to stimulate economic production, whether because they are conservative by temperament, recoiling from new enterprise, or because they put no premiums in classcirculation on individuals distinguished by instincts for economic combinations. If, however, such instincts survive in the population at large, the country may enjoy a moderate economic prosperity (Rome in the days of the High Empire) provided the government sets no obstacles in the way. But in the long run the obstacle usually arises, because the ideal of governments of that type is a nation that is crystallized in its institutions (Sparta, Rome in the day of the Low Empire, Venice of the Decadence). They may grow wealthy through conquests (Sparta, Rome); but since no new wealth is produced in that manner, the prosperity is necessarily precarious (Sparta, Rome). Furthermore, in times past, such régimes have
tended to degenerate into government by armed mobs (praetorians, janissaries), which can do nothing but squander wealth.
2275. II, Governments relying chiefly ont intelligence and cunning.

II- $a$. If the intelligence and cunning are used chiefly to influence (entiments, the result is some type of (heocratic government) The type has entirely disappeared in our Western countries and on it therefore we need not linger. The governments of the ancient kings in Greece and in Italy may have approximated the type, in some respects at least; but we know too little of their history to be warranted in so asserting.

II-b. If the intelligence and cunning are used chiefly to play upon interests - which, however, does not necessarily imply disregard of sentiments-the result is governments like the demagogic régimes in Athens, the rule of the Roman aristocracy at various moments under the Republic, the governments of many mediaeval republics, and finally the very important type of government flourishing in our day-government by "speculators."
2276. All governments of the II type, even governments confining the use of intelligence and cunning to playing upon sentiments, have governing classes in which Class I residues predominate as compared with Class II residues. For to play artfully, shrewdly, and with success upon both interests and sentiments requires a governing class possessing combination instincts in high degree and unencumbered with too many scruples. Class-circulation is generally slow in the subtype II- $a$, but rapid, sometimes very rapid, in subtype II-b. It attains its maximum velocity under the system of our contemporary speculators. Governments of the II-a type are usually inexpensive, but they produce very little. They stupefy their populations, moreover, and kill every stimulus to economic production. Making no great use of force, they cannot make up for deficiencies in home production by wealth acquired through conquests abroad. In fact they fall ready prey to neighbour countries expert in the use of force and so disappear either by conquest or by internal decay. II- $b$ governments are expensive, oftentimes very very expensive, but they produce actively and sometimes enormously, so that there may be such an excess of production over costs as to assure great prosperity. But there is no guarantee that as expenditures increase the surplus will not shrink to much lower proportions, disappear, and perhaps
even change to a deficit. That depends on numberless conditions and circumstances. Such régimes may degenerate into government by shrewd but cowardly individuals who are easily overthrown by violence, whether from abroad or from within. That was the case with many democratic governments in Greek cities, and it played no inconsiderable part in the fall of the Roman and Venetian republics.
2277. In the concrete one finds combinations of these various types, with now the one, now the other, predominating. Governments in which the II- $b$ type in moderate proportions is combined with a considerable dosage of the I type may endure for a long time on a foundation of force, and without sacrifice of economic prosperity. This mixed type is represented more or less closely by the earlier Roman Empire. It runs the risk of the degeneration peculiar to type I, and of a progressive dwindling in the proportions of the II- $b$ type. Governments in which the II-b type in considerable proportions is combined with the I type in small proportions may also last for a long time, because they have a certain capacity for self-defence while achieving very considerable economic prosperity. They risk the degenerations peculiar to the II-b type and a progressive diminution of the type I element; and that almost inevitably exposes them to danger of foreign conquest. That development played its part in the destruction of Carthage and in the conquest of Greece by the Romans.
2278. Governments that rely chiefly on force in their relations represent combinations of the I and II-b types. That was more or less the case with the government of the Roman aristocracy in the heyday of the Republic.
2279. Economic periodicity. Rhythmical movements in one group of elements have their repercussions upon movements in the other elements, the resultant being the movement that is observable in the complex unit formed by the sum of the groups. Notable among such actions and reactions is the interplay between the economic and other groups.
2280. The economic status of a country may be qualitatively estimated by considering the observations of writers as to increase or decrease in its wealth. That method is exceedingly imperfect. Unfortunately it is the only one at our disposal as regards the distant past. We can see that Athens became a rich city after the Persian

Wars and poor after the disaster in Sicily, that Sparta was prosperous when she held the hegemony in Greece and poor after the battle of Leuctra. In the case of Rome, undulations are even more marked, and we can follow them all the way along from ancient, almost legendary, days down to the Middle Ages. In times nearer our own phenomena become much more general, undulations tending to be the same in several countries at one time-a result of their economic interdependence.
2281. Wherever economic statistics, however imperfect, are available, it becomes possible to replace qualitative with quantative estimates, and the substitution is always advantageous even if there are imperfections in the method used, for at the very worst the road is opened to perfecting results either by better statistics or by sounder methods of using them.
2282. In attempting to solve the problem as to the relations between movements in population and economic conditions, economists tried to discover at least the indices of such conditions. For predominantly agricultural countries the sizes of harvests might have been taken as indices, but the crop-yields not being known directly for periods in the past, indices were sought in the prices of wheat, the leading staple among our Western peoples. That index was accepted by Marshall as more or less accurate for England until down towards the middle of the nineteenth century, when that country became a predominantly manufacturing country. After that, indices were taken from movements in international trade and the amounts settled at the clearing-house. Clement Juglar noted, in studying economic depressions, that several other indices agree, and it is that agreement which goes farthest towards showing the general trend in an economic development. Various combinations of economic indices have been tried, to obtain a picture of the general economic movement in a given country, but so far little or nothing has been accomplished along that line. ${ }^{1}$ The main difficulty lies in the method of combining indices, and if their sum is taken, in finding coefficients for each. To put all indices on a footing with a coefficient of unity is impossible. That would mean offsetting increase in some very important economic department with decrease

[^53]in some department that is insignificant. What is needed is a coefficient that will stand in at least some remote relationship to the "importance" of the phenomenon. Not only is it difficult to find such a coefficient. Just what constitutes "importance" is not very clear. In point of fact there are as many "importances" as there are objectives that may be envisaged.
It might seem natural to say that the "importance" of a bond is its actual value. Suppose we are considering a hundred millions in public-debt certificates and a hundred millions in industrial stocks. The value of bonds and shares being equal, we assign an equal index to both. So, if the certificates go up to the value of one hundred and ten millions, and the shares fall to ninety millions, there will be perfect compensation. And that is all well and good if we want to know effects on the total capital of public debt plus stock values. But it is not so appropriate if we are trying to determine the economic trend. It is known that at times of business depression, publicdebt securities rise in price while industrial stocks go down. We should be coming nearer to realities, therefore, though still being left at a good distance from them, if, instead of balancing the tenmillion rise against the ten-million drop, we were to change the sign of the depreciation from minus to plus, add it to the appreciation, and take the sum of twenty millions as the index of the change in economic status. When many indices are added together with different coefficients we often get a precision that is misleading, and until science is farther advanced than it is now, much farther, it is better to keep to mere general indices, such as, in the case of England, the amounts settled at the clearing-house, or to other indices of the kind. ${ }^{2}$ Variations in the numbers of individuals in a given population are generally slight. They may therefore be disregarded as compared with fairly considerable economic variations, such as the variation, within brief spaces of time, in the amounts of clearing-house settlements, or the variations in international trade.

[^54]But there is a more important reason for taking the total of international commerce directly, and not that total divided by the number of individuals constituting population. What, after all, we are looking for is an index for the country's economic prosperity; and it is evident that if every individual continues to have the same income, and to produce the same quantity of economic commodities, the country's economic prosperity increases with increase, and decreases with decrease, in population. Suppose that in England the per capita average of international commerce and clearing-house settlements remains constant and that the population decreases by half. We would have to assume that England's economic prosperity had decreased. Otherwise, we should be carried to the absurd conclusion that if only one individual were left in all England and he made, trading in the furs of the wild animals that would then be flourishing in the island, an income equal to the per capita average now prevailing, England's economic prosperity would not have decreased. Vice versa, an increase in population-the per capita average for production and trade remaining the same-represents an increase in a country's economic prosperity. ${ }^{3}$
2283. Of great importance for variations in economic conditions in a given country are the inflow of monetary metals into it and, in our time, the production of gold, since all civilized countries are in extensive commercial communication and gold has become the international medium of exchange. Without giving too strict an
$2282{ }^{3}$ The same holds for the prices of commodities that figure in international trade. We need not insist on the point that estimates of such prices are imperfect and very unreliable. Even if they were perfect, we should not, in trying to obtain an index of economic prosperity, divide the totals of trade in those commodities by their prices. It is well known that periods of industrial prosperity are also periods of high prices and, vice versa, that periods of economic depression are periods of low prices. There are particular cases, besides, in which that relationship becomes more obvious. If we want an index of Brazil's prosperity, we have to consider the total price of the coffee exported. If we divide that total by the price per unit of weight, we get the quantities of coffee exported, which are far from being in the same relation to the country's prosperity as the total price. Similarly, as regards the prosperity of the Cape diamond mines, it is much more important to get a high total sales-price than to sell many diamonds for a low total. For that reason the mines there have combined in a syndicate to take appropriate measures for selling diamonds at prices that will yield high totals. One may presume that they have a better understanding of the standards of their own economic prosperity than certain writers show in making a not very intelligent use of statistics.
application to the quantity theory of money, since the thing undergoes too many perturbations, it is none the less certain that any considerable increase in the influx of monetary metals exerts a powerful influence on prices. That hypothesis has been verified in too many cases, from ancient times down to our own, to be explained as a merely fortuitous coincidence; and it is very largely a relationship of cause and effect-in no way barring the possibility that prices may react on the influx of monetary metals and on their production. In our day, further, the various methods of settling financial and commercial transactions without recourse to metallic media also influence prices extensively; but it should not be forgotten that such practices make the effects of any increase in a definite quantity of gold more appreciable, since that quantity becomes a more considerable fraction of the gold remaining in circulation. Issues of paper money-inflations, so called-affect social phenomena in some respects like the supply of precious metals.
2284. Many studies have been made on the history of the production of precious metals and on concomitant variations in prices, as well as on certain social effects of such phenomena. Attention has centred more particularly on the changes that variations in prices have occasioned in the situations of creditors and debtors and therefore also of the richer and poorer classes; and since price-variations have often been upwards, the rise in prices has been the case most thoroughly studied. However, other phenomena of equal and sometimes greater importance have been neglected, and notably variations of intensities in class-circulation and the ensuing political consequences. Very common, also, has been the error of substituting relations of cause and effect for relations of interdependence. The inflow of monetary metals or, in general, the production of precious metals, the consequent variations in prices, and the readjustments of monetary systems are all things arising under our category $b$ ( $\$ 2205$ ), in other words, they come under "interests," and they have to be considered as aspects of the cycles in the reciprocal influence of social elements that we studied in $\$ \$ 2206 \mathrm{f}$.
2285. It must not be forgotten that the clements in category $b-$ the body of interests-operates in the cycles for the most part as a whole, and that the phenomena depending upon inflow of precious metals are only a part of that whole. The effects of such things may
therefore be partially offset by counter-effects from other phenomena, just as they may be intensified.
2286. Observable, in times ancient and modern, are many coincidences between abundance of money in a given country and the country's economic and political prosperity, though one is unable to determine very clearly just what is cause and what effect. It would at any rate be a grave mistake to assume that an influx of currency metals necessarily induces prosperity. Athens was prosperous while tribute was coming in from her allies and while she was mining silver to large amounts in the Laurium. As for the allied tribute, it was, to be sure, a cause of prosperity; but it was also an effect, since it was exacted by Athenian power. The silver from the mines was predominantly a cause but also in part an effect; for had the Athenians been a poor and weak people, they would not have had the slaves and other capital required for operating the mines. Ancient Rome knew her greatest prosperity at a time when conquests were bringing gold, silver, and copper into the city from the territories conquered in Asia, Africa, and Europe. In that case the influx of currency metal was predominantly an effect of the conquests. Modern nations need gigantic sums of money to provide armaments that were not needed by ancient peoples, so that if Rome's monetary wealth may have been of some little service, directly, to her conquests, it was certainly not the main cause of the victories of the Roman people. In those days, it follows, Combination I (§ 2206-residues influencing interests, etc.) was of much greater importance than Combination II (interests influencing residues, etc.), whereas there may be no such difference in the case of modern peoples. Combination III (derivations on residues, interests, etc.) was, as usual, of little importance. As for Combination IV (class-circulation on residues, etc.), it worked in a direction counter to Combination I, tending to augment, or to conserve, Class I residues; and that was one of the causes of decline under the Empire ( $\$ 2550$ f.).
2287. Different is the case where influx of precious metals is not a consequence of foreign conquest or of some other contingency extrinsic to the economic field, but is in part an effect of prosperity itself, prosperity enabling a people to procure the metal. That was strikingly the case in a number of the mediaeval communes and
republics, where good money and economic prosperity went hand in hand in a relationship of mutual dependence.
2288. Those few cases excepted, the Middle Ages were a period of material and intellectual poverty, and also a period of monetary poverty. One cannot say that the latter was the cause of the former; but it would be rash to say that it was altogether irrelevant, since their correlation was strikingly emphasized by developments in the period following.
2289. The discovery of America was one of those many unforeseen and unforeseeable events which suddenly occasion great and far-reaching changes in our category $b$-in interests. The discoveries made by industrial science in the course of the nineteenth century were another; but they were consequences of prosperity to a much greater extent than the discovery of America, which was achieved with a scanty, in fact an insignificant, outlay. Between the last decade of the fifteenth century, when America was discovered, and the middle of the seventeenth century, two very interesting periods coincide in Europe: a period of economic, intellectual, and political prosperity, and a period of great abundance in money and of extraordinary rises in prices. Phenomena in the two periods seem to be much more strictly correlated than they do in the cases of Rome ( $\$ 2286$ ) or the Middle Ages ( $\$ 2288$ ). In fact, if the first impetus was given by a fortuitous incident, the discovery of America, the movement continued with accelerated intensities because conditions in Europe became more and more favourable to the production of wealth; and that was chiefly a result of the gradual rise to predominance of Class I residues and of the uses to which the sentiments corresponding were turned, people now applying themselves by preference to the arts and sciences rather than to theology or magic. The first impetus came, therefore, from Combination I (residues on interests, etc.), but the movement went on in response to Combination II (interests on residues, etc.); and it would be difficult to say which was on the whole the more important of the two combinations. Combination IV (class-circulation on residues, etc.) seems to be just as important, and it operates in the same direction as the first two. And that is the case also with Combination III (derivations on residues, etc.), which, however, though not a negligible quantity, has little influence on the trend of events.
2290. From the middle of the seventeenth century down to about r720, we get, very roughly speaking, a quiet period as regards economic prosperity and a period in which the production of precious metals shows no great variations. But between 1720 and 1810, roughly, comes a period of rapid increase in the production of precious metals and a period of economic prosperity, which is chiefly apparent in England, the Continent being engrossed in the wars of the French Revolution. The Revolution seems to be connected primarily with Combination IV, as a phenomenon of class-circulation. From 181o on we begin to get statistics, very imperfect at first, but gradually and continually improving, so that we are able to bring our findings to much greater exactness.
2291. The description that we have so far been giving is very much like drawing a line on a map to represent a chain of mountains. In reality there is no line called the Apennines, dividing Italy into two parts, nor a line called the Alps that gives a northern border to that country. All the same, that general and very crude picture has its uses.
2292. Even today, though statistics help to bring us closer to what is real, we are still forced to keep to generalities and look for comprehensive pictures that ignore details. ${ }^{1}$
2293. Let us take, as an example, the movement in French foreign trade. ${ }^{1}$ Drawing a graph from the statistics available, and attentively observing the curve so obtained, we note, in chief, three types of variation: i. Accidental variations. 2. Short-period variations. 3 . Long-period variations.
I. Accidental variations. They interrupt the general trend but very briefly, the curve at once resuming its former trend. Notable, for instance, the break in the year 1848, and even more so, in the year 1870 . So long as the forces determining the dynamic equilib-
$2292^{1}$ We have already indicated the method for studying these things in general (§1718). We now have to apply it to the particular case with which we are here dealing. The study here is taken in part from my study entitled: "Alcune relazioni tra lo stato sociale e le variazioni della prosperità economica," Rivista italiana di sociologia, XVII, Nos. V-VI, September-December, 1913. The reprints of the article were issued in September, 1913, before the appearance of those numbers of the Rivista, and even before that an advance summary had appeared in the Giornale d'Italia, Aug. 3, 1913. $\$ 2293$ is reproduced verbatim from the article in the Rivista.
$2293{ }^{1}$ For statistical tables sce Appendix II to the article just mentioned ( $\$ 2292^{1}$ ). Here we give nothing but conclusions.
rium continue to function, that equilibrium, if an accidental force chance to disturb it, is at once re-established (as soon, that is, as the disturbing force is removed- $\$ 2068$ ), and the development resumes its normal trend.
2. Short-period variations. These have often been perceived and partially studied under the name of "crises." Notable the crisis of the year 188r. The curve shows an ascending section along which accidental variations are observable, and a descending section of the same type. Characteristic the transition from the ascending to the descending section; it is not gradual, it is abrupt. An unusual spurt in prosperity often presages a drop in the near future.
3. Long-period variations. They have not so far been studied, chiefly for lack of the requisite statistical data. Taking the curve of the trade trend as a whole, and trying to disregard the short and accidental variations, one observes that its progress is not uniform. Periods of rapid increase are followed by periods of slight increase. or depression, which are followed in turn by periods of increase. For instance, between the years 1852 and 1873 there was a period of rapid increase interrupted by the war of $1870-7 \mathrm{I}$ and followed by a period of slight increase, or even depression, extending from the years 1873 to 1897 . Then comes another period of rapid increase extending from 1898 to 19II. Similar periods are observable, though on a much smaller scale, in the past. From 1806 to 18 ıo there is a decline. Then from 1816 to 1824 comes a period of depression, and then a period of increase between the years 1832 and $1846 .{ }^{2}$
2294. If similar graphs are drawn for England, Italy, and Belgium, we get similar conclusions. Distinguishable in all those countries are three long-period variations extending roughly from 1854 to 1872 , from 1873 to 1896, and from 1898 to 1912. Emigration statistics in Italy, clearing-house settlements in London, and theatre-ticket sales in Paris confirm these inferences. ${ }^{1}$ We are evidently deal-

[^55]ing therefore with a phenomenon of a fairly general character.
2295. After 1870, as is well known, the production of silver became so great that that metal could not continue to be used as real money, and in civilized countries it eventually came to be coined only as a form of fiduciary currency. So, whereas down to the nineteenth century we considered the combined production of gold and silver, beginning with the nineteenth we have to consider goldproduction only, gold gradually becoming the sole coinage for real money.
2296. The annual average of gold-production that stood as low as $189,000,000$ francs in the decade from 1841 to 1850 became $687,000,000$ francs in the five years between 1851 and 1855, and remained in that neighbourhood until the end of the half-decade between 1866 and 1870 . We therefore note a certain correspondence between a period of economic prosperity extending from 1854 to 1872 and a period of great gold-production. In the five years 1871-75 average annual gold-production falls to 599,000,000 francs. Beginning with 1875 we get statistics for separate annual productions. There is a period of decreasing or constant production ending about 189 I . Very fair the correspondence between that period and the period of economic quiet between 1873 and 1876. Beginning with 1892, when gold-production stood at $750,000,000$ francs, and coming down to 1912, when it stood at $2,420,000,000$ francs, there is a period of great and rapid increase in gold-production roughly corresponding to a period of great economic prosperity from 1898 to 1912.
2297. The correlations mentioned must not, we again caution, be interpreted in the sense that the increase in gold-production was the cause of the economic prosperity. It certainly figured as a cause in its effects on prices and, to an even greater extent, on class-circulation, but it was also beyond any doubt an effect of the prosperity. At the present time gold is no longer being obtained in major part from alluvial soils, as was the case at first in California and Australia. It is dug in mines requiring very costly underground operations and very expensive machinery. Gold-production, accordingly, is now possible only after enormous outlays of capital and so depends on economic prosperity itself, the latter becoming cause after having been effect. It is further to be noted that gold-production results in increased prices, but that these in turn react upon gold-production by
increasing the cost of mining. There are many mines of low-percentage ores that cannot be operated at the present time at current costs of labour and machinery and which could be exploited the moment those costs dropped ever so little. That will probably be the case as mines with high-percentage ores are exhausted.
2298. These correlations all pertain to the economic category, to interests (element $b, \S 2205$ ). They serve to show how the structure of the complex $b$ is made up in its various elements. But we must not stop at that point, but go on and examine its influence upon other categories and their reactions upon it. That we have already done in the particular case of protective tariffs, and we made it our point of departure for a discussion of economic favouritisms and, even more generally, of cycles of action and reaction between the various categories of elements ( $\$ 2208$ f.). In that case we deliberately ignored undulations. But what we said at that time will serve, with slight additions and modifications, to give us an understanding of the phenomenon even when undulations are considered.
2299. Suppose we keep to the economic and social status of the civilized peoples of the West from the beginning of the nineteenth century down to the present time. The most important Combinations (\$2206) are II (interests on residues, etc.) and IV (classcirculation on residues, etc.). In fact, looking first at the most important element in the situation, we may consider, for a first approximation, a restricted cycle in which interests $b$ influence classcirculation $d$ and, then again, class-circulation reacts upon interests. It would be difficult, not to say impossible, to separate the two elements in the cycle, so it is better to consider the latter as a whole.
2300. If one were to state in a few words the differences obtaining between the social state, $M$, before the French Revolution and our present state, $N$, one would have to say that the difference lies chiefly in a present preponderance of economic over other interests and in a greatly accelerated circulation between classes. In our day the foreign policies of the various countries are almost exclusively economic (\$2328), and domestic policy comes down more than anything else to economic conflicts. Furthermore, not only have obstacles to class-circulation disappeared, barring some few restrictions in Germany and Austria, but such circulation has become very intense in the fact, owing to assistance from economic prosperity. Now-
adays almost anybody who possesses a good supply of Class I residues and knows how to use his talents in industry, agriculture, commerce, and the arts; in organizing financial enterprises, honest or dishonest; in duping the good-natured producers of savings; in obtaining licence to exploit less clever neighbours by political influence, customs tariffs, or other favours of all sorts and kinds-is certain, unless he has very bad luck indeed, not only to amass wealth but to win honours and power, to become, in a word, a member of the ruling class. The men who get to be leaders of that class (still barring exceptions as, to some extent, in Germany) are those individuals who best manage to serve the economic interests of the ruling class. They get their pay sometimes directly in cash, sometimes indirectly by money given to members of their families or to friends, while then again they sometimes rest content with power and the honours that go with power, leaving the filthy lucre to their henchmen. Individuals of that sort are in greater demand than others for governing a country. And, in truth, they are safe from the shafts of the opposition, which, in order to be understood by the good-natured public, has to use the language of derivations and therefore stands constantly on watch to discover some venomous charge of "immorality" that it can hurl at its adversaries. The art of scandalmongering has been brought to high perfection, and a politician who too naïvely appropriates a few thousand dollars is easily thrown out of office if he is not rescued by the "machine" that he has benefited; whereas the politician who takes nothing for himself, but gives millions, even hundreds of millions, of the public's money to his henchmen, retains his power, mounts in public esteem, and goes on to new honours ( $\$ 2268$ ).
2301. Class-circulation at the present time, therefore, raises to membership in the ruling class large numbers of persons who destroy wealth, but even larger numbers who produce wealth; and certain proof that the activity of the producers prevails over the activity of the wasters is ready to hand in the fact that the economic prosperity of our civilized peoples has increased enormously. In the years following 1854 in France, at the time of the fever for railwaybuilding, not a few dishonest financiers and no fewer politicians made fortunes and destroyed vast amounts of wealth; but immeasurably vaster amounts of wealth were produced by the rail-
ways, so that the net result of the operation was a great increase in French prosperity. ${ }^{1}$
2302. In periods of rapidly mounting economic prosperity (\$2294) governing is much easier than in periods of depression. The fact can be determined empirically by comparing political conditions and social conditions during the economic periods distinguished in § 2293. The successful period of the Second Empire in France coincides with the period of economic prosperity that began in 1854 . Difficulties began appearing later on, and it is probable that even had there been no war in 1870 the Empire would have encountered very serious dangers in the period from 1873 to 1896 . There were plenty of troubles for the governments ruling in that period, not only in France, but in other countries. More or less everywhere in Europe that was the heroic age of Socialism and Anarchism. In order to govern at all Bismarck himself, as powerful as he was, needed "exceptional laws" to deal with the Socialists. In Italy the period culminates in the revolt of 1898 , which was quelled only by force. Then again, from 1898 down to the present time [1913], we get another period of easy government or, if one wish, of government not too difficult, which culminates as regards Italy in the year 1912 in the collapse of the opposition parties and an easy dictatorship for Giolitti; while in Germany, the Socialists in the Reichstag-how times do change!-approve new and huge appropriations for armament; and in England the pacific successors of the Fenians of $1873-98$ easily obtain "Home Rule."

Compare, if you please, the effects in Italy of the Abyssinian War that occurred in the $1873-98$ period, and the effects of the Libyan War that occurred in the 1898 -1912 period ( $\$ 2255$ ). For the moment we are not considering causes and effects, nor even relations of inter-dependence-we are merely noting coincidences, which may even be fortuitous. Whatever may have been the causes, it is certain, very very certain, that the Italian public took the Abyssinian War and the Libyan War in very different ways. The so called subversive

[^56]parties rose against the Abyssinian War with energies carried to an extreme. The Libyan War they accepted, either approving or in resignation; and only by hook and by crook could a party hostile to the Libyan War, which called itself the Official Socialist Party and was short, to tell the truth, in influential leaders, manage to secede from Socialism as it had been up to that time. And for France one may compare the opposition to colonial enterprises in the days of Jules Ferry (within the $1873-98$ period) with the assenting or resigned acceptance of the Morocco venture (falling within the 1898 1912 period), which was far otherwise costly and hazardous. The contrast surely is just as marked as in the case of Italy. And compare, again, the excitement in the French public following the discovery of the Panama embezzlements by various politicians with the calmness and indifference it manifested toward the no less dishonest and no less considerable peculations that accounted for the notorious "billion of the Congregations." It really seemed in this latter case as though many people, in thinking of such pirates, were saying to themselves: "Poor devils, they took a great deal of money, that is true; but after all there is money enough to go around, for us as well as for them." But before such tolerance can become the rule, the melon has to be big enough to provide, in addition to the big slices that go to the "statesmen," the smaller slices that go to the politicians, and at least a sliver apiece for many minor individuals. For one of the amazing things in this world is the ferocious zest for honesty, morality, and all the other fine things that a slim diet will inspire in a politieian- Compare, finally, the furious conflicts that raged around the Dreyfus affair, which may be said to have amounted to a great revolution, with the much more pacific politicosocial conflicts of the 1898-1912 period, and one will be forced to grant that something has changed in the atmosphere of political society.
2303. It would be easy to marshal many other facts of the kind from the present, nor would it be hard to find their parallels in the past. It is a trite observation that in remoter times poor harvests and famines spread ill humour among subject classes and readily impelled them to revolt; and, in times nearer our own, crop-failures and famines were not irrelevant to the course of events in the French Revolution. It is hard to admit that so many coincidences
should be merely fortuitous. Some relation there must be between phenomena that are so regularly found in company.
2304. That conclusion is confirmed by analysis, which also gives us an insight into the character of the correlation. Evidently it may vary as social conditions vary. Famines used to drive peoples to revolt just as hunger drives the wolf into the open. But the relation between economic conditions and the temper of a people is something much more complex in peoples of high economic development, such as those of our time.
2305. In their cases, as stated above ( $\$ 2299$ ), it is better to consider in the main the restricted cycle in which $b$ (interests) influences $d$ (class-circulation) and vice versa. One might say briefly that since modern governments are keeping in power less and less by resort to force and more and more by a very expensive art of government, they have a very urgent need of economic prosperity in order to carry on their activities, and that they are also much more sensitive to any variations in prosperity. To be sure, even the older governments, which relied mainly on force, began to totter whenever want cruelly asserted itself; for then their force was met by another and greater force born of despair. But they could feel safe until changes in economic conditions reached that limit, whereas every change in economic prosperity, even no very great change oftentimes, makes itself felt on the far more complex and protean organization of governments that rely chiefly upon the costly arts of economic manipulation. To drive a despot's subjects to revolt economic sufferings far more serious were required than are required to cause a government nowadays to lose an election. It is readily apparent, therefore, that if the economic periods that we distinguished in $\S 2293$, and which did not reach limits of abject poverty, had occurred under governments relying mainly upon force, they would have coincided with social and political situations far less widely contrasting than the situations that are actually observable under governments relying largely upon the art of economic combinations.
2306. In arranging for the combinations that are indispensable to their existence modern governments commonly spend in a given period more than their revenues would allow, covering the difference by contracting avert or secret debts, That enables them to have the benefits of the money now and shoulder the burden
of payment off upon the future. That future becomes more and more remote, the more rapidly economic prosperity increases; for in virtue of that increase, the yield from current imposts increases without any increase in taxes themselves and future state surpluses are expected, in part at least, to make up for past deficits. Our governments have gradually become accustomed to that state of things, which is so convenient and profitable for them, and they now regularly discount future surpluses to pay for present expenditures. That is happening in many countries and in many ways, notable among which the keeping of special or extraordinary budgets parallel with general or ordinary budgets; the entering of proceeds from new debts as state revenues; the charging off of expenses incurred by specific administrative departments of the state as debts owing to the state and therefore as credits, the state so becoming debtor and creditor at the same time, and items that are really liabilities being represented as assets. Then when, in virtue of such tricks and others still, an actual deficit has been changed into a fictitious surplus, well-paid journalists are commissioned to broadcast to the world the glad tidings of the country's prosperous financial condition; and if someone ventures to question such sleight-of-hand in accounting, he is accused of "discrediting the country." ${ }^{1}$

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## 2307. Such procedure occasions no serious difficulties in periods of

 rapidly mounting economic prosperity. Natural increases in budget revenues cover the manipulations of the past, and the future can be relied on to take care of those of the present. The difficulties comefinancial report he takes no account of such expenditures in his first computations of the totals of their administration, and he is so enabled always to report the existence of large effective surpluses, and thereupon to charge against each apparent surplus whole series of new and larger expenditures that may themselves have been already contracted for and paid. And so it comes about that in the face of a grand budget total that shows a deficit in Classification I of $257,000,000$ lire and which, even if we eliminate all Libyan expenditures from it, still shows a deficit of more than $7,000,000$, the country is still being given the false impression that the fiscal period of 1912-13 ended with an actual surplus of a hundred or more millions and that the ordinary budget was able in that year to pay off forty-nine or more millions of Libyan War debts. For the last three years tricks in budget-accounting have become so numerous that it is now very difficult for the parliament to get a clear conception of the real state of things. In the first place, in the budgets of the various ministries there appears today a long list of actual expenditures to meet which the minister is authorized to draw upon current accounts either with the Cassa Depositi or with specified local banks or trust-companies or upon so-called Treasury advances; and only a fixed annual expenditure is entered for a longer or shorter term of years, while in the actual administration of that service the money is spent within a much shorter term. . . . There are, besides, a number of important categories of extraordinary expenditures on the allotments of which, as established by various bills, the minister, in special bills of authorization (or even in some unnoticed section of a budget bill), has gradually reserved authority to draw in advance by ministerial decree. In the Navy Budget Bill for the year 1914-15 there is even a request for authorization to do the same for the list of ordinary expenses for fleet-maintenance up to $20,000,000$ a year, so anticipating appropriations for fiscal periods posterior by four years. Is it not a little silly to charge by law an expenditure that has already been allotted, and even paid, to an eventual surplus of a given service, instead of charging it purely and simply to that service itself? What does it mean to enter a sum among receipts for the year 1914-15, representing it as drawn from a former appropriation, and of counterbalancing it, in the expense column, with a corresponding sum designated as reimbursement for a pretended 'Treasury advance,' a rcimbursement, in other words, for an unconfessed deficit, or an overstated real surplus from an earlier account? No meaning whatever, given the principles upon which our budget regulations are based! They are empty forms, mere devices for depriving entries and totals of all clarity. Magliani, in his time, invented ultraextraordinary expenditures for public works that were to be met by increases in the public debt, and in that way he managed to withhold such expenditures from his computations of surpluses and deficits. Today all that sort of thing seems primitive and antiquated, and far more specious and refined methods are in vogue. An article is voted into some law or other, even the Budget Law, or is ordained by decree, stating, more or less explicitly, that such and such expenses will be met by drawing upon the Cassa, or by the ordinary resources of the Treasury, or by the current account with the Cassa Depositi. From that moment it is possible, if one wishes, to incur all those expenses without accounting for them in totals of the service to which
in periods of depression, and they would be far worse if a depression at all protracted were to supervene. The social order is at present such that probably no government could remain unaffected during such a period; and tremendous catastrophes might occur and in
they are allotted as presented in the financial reports. So one is enabled to declare a surplus in the budget in question, and then to apply that surplus either to new expenditures or to reimbursements of the Treasury for advances made under some other form.
"So, further, the trick of the rotating surplus is also made easier. Suppose we imagine a sequence of several fiscal periods for which extraordinary expenditures are authorized, for example, $150,000,000$ for building ships, to be paid in five equal instalments. For the first year, let us say, the Treasury Minister succeeds in one way or another in claiming an effective surplus of $30,000,000$. After announcing such a surplus, he proceeds to draw in advance on the allotment of the following year, charging ivoff against that first surplus. So the account in question is lightened by $30,000,000$ and if-just for a hypothesis-it would have balanced without the advance, with the advance it will present a favourable margin of $30,000,000$. The minister proceeds accordingly to announce a second actual surplus of $30,000,000$ for the following year as well, going on to draw again in advance on the allotment for the next succeeding year; and so on from year to year, so that with a single generous initial surplus of $30,000,000$, the minister is able to announce in his financial reports five successive surpluses totaling $150,000,000$, whereas it is only $30,000,000$ at the end of five years-granting that the original surplus was real in the first place. In case he does not succeed in charging off the first advance on future allotments, as determined by special bills, against a real surplus in Category I, he can resort with just as great advantage to the trick of 'Treasury advances'-by charging off the advance drawing against the first fiscal period in Category I, but counterbalancing it by entering in the receipts column of Category III a corresponding sum as drawn on the Cassa Depositi. That procedure has a number of advantages, in addition to the advantage of satisfying anybody who wants to know about expenditures: r. The advantage of not altering general totals for purposes of Treasury accounting in summing the totals of the various categories. 2. The advantage of not accounting for the expenditure in question in the next ensuing financial report to the damage of the net surplus, on the specious argument that it is a mere question of an advance on an allotment. 3. The advantage of being able to represent the corresponding levy the following year to reimburse the Treasury in Category III as an improvement in national resources. In a word, as regards the stage-setting, so to speak, in the parliament, the expenditure in question never appears in its true essence and substance at any time either before or after it is made. . . . I have done! And let no one, more solito, try to hush criticism, however honest and dispassionate, on the ground that it will impair the nation's credit abroad."

Minister Tedesco made a reply to Sonnino not denying the facts, which were after all undeniable, but pointing out that procedures analogous to his own had been the rule since 19ro-and in that he was not wrong, the only question being of a more or a less. From the standpoint of parliamentary politics, the question that Signor Tedesco raises is of interest as permitting praise or blame of this or that individual. It has slight if any bearing on the research for uniformities that is our one concern here. Substantially Signor Tedesco's defence confirms the uniformity we have de-
magnitudes far greater than any that history has hitherto recorded. ${ }^{1}$
2308. But leaving such hypothetical contingencies aside and keeping to real movements, we now see one of the reasons for the coincidences noted in $\$ 2302$-the fact that in periods of economic - depression a government has to demand greater sacrifices of the governed, while the benefits it can bring to the public and to its own supporters are fewer and smaller. On the one hand, it has to pay for past extravagances to meet which it had relied on increasing revenues that have now failed; and on the other, if the period of depression is prolonged, it becomes increasingly difficult to get money to spend by mortgaging the future.
2309. Economic circulation stagnates and so does class-circulation; for no means are available for rewarding, either naturally as a consequence of the existing system, or artificially by direct fiat of the government, those individuals who give evidence of possessing . in high degree aptitudes for those economic and political combinations upon which our governments depend. Governing cliques find it difficult to tame their adversaries because of the scarcity of sops to
scribed. Speaking before the French Senate, M. Ribot made similar strictures on the French budget, nor could he be refuted by the ministers in the cabinet. But that too is not important. Such situations arise not through fault of this or that politician, but chiefly as consequences of the pluto-demagogic system that is nowadays called democracy. M. Ribot all along has lovingly hoed and watered the plant. Now that it is bearing its fruits he raises a cry of alarm and astonishment. No one can see just why.
$2307{ }^{1}$ Pietri-Tonelli, Il socialismo democratico in Halia, pp. 22, 24-25: "It is uniformly observable in all modern democratic régimes hat the decisive political power is distributed variously among the bureaucratic classes, which include office-holders high and low, both civil and military, and politicians high and low. These two categories of persons are so closely bound by ties of mutual assistance to one another and to speculators of all kinds as to form an indissoluble trinity. Success and advancement in office are nearly always facilitated by the support of politicians [ $\$ 2268^{2}$ ]. The outcome of elections is largely influenced by the administration in power through support of various kinds, business men providing the necessary funds [ $\$ 2268^{3}$ ]. Politicians moreover are the more influential in proportion as they are successful in obtaining favours for their constituents and to the extent of their backing by men of affairs. . . . For that matter, in places where the Socialists or the Popular party control local administrations, favouritism in awarding and, even in creating salaried positions has not diminished-only the colour of the individuals favoured has changed: once they were black, now they are red. Sometimes . . . the same persons have changed in colour, provided the opportunity has offered, and provided they have never declared any pronounced political colouring other than that of the party in power. That posts have been created everywhere to the limits
throw them; and even if there is enough to go round among the leaders, the rank and file has to be left with empty maws, and it makes a noise and refuses to follow them. Differing circumstances in the budget forbade Crispi and allowed Giolitti liberally to subsidize cooperatives and other Socialist organizations as well as the manufacturing and banking trusts. That certainly was one of the causes, important or unimportant as it may have been, of the differing fortunes of those two statesmen ( $\$ 2255$ ). And when, in 1وL3, there was a first touch of economic depression in Italy the rank and file in the Socialist party refused to follow leaders who had been tamed of yore, and turned to others who ran in the elections on platforms frankly hostile to the Libyan War and to military expenditures. The old leaders in growing so tame had forgotten that the masses still cherished the ideals that they themselves had lost either of their own accord or in deference to favours from the government. Those popular ideals the government could not combat by appealing to selfish interests in the masses through lavish ex-
of the possible is beyond question. In fact, speaking to that very point, the head of a city administration controlled by the Popular party candidly remarked to me not long ago that if only he were able to create some twenty new offices to hand out every year, he could certainly succeed in silencing opposition not only from individuals in his own party but from opposing parties." That, in fact, is pretty much the way governments are run, not only in Italy, but in other countries. But that method of governing requires money, a great deal of money. A particular case, the case of war, has been studied by Federico Flora in a book called Le finanze della guerra (War and Finance). He concludes: "It is begun with cash on hand, it is sustained by loans, and finally paid for by taxes." It is evident that the situation will be different according as the liquidation takes place during a period of rapid increase in economic prosperity, or during a period of reduced increase or, what is worse, of depression. Governments trusting too far to future liquidations may some day find themselves in a serious predicament. Michels, Zur Soziologie des Parteiwesens, p. 255 (Paul, p. 267): "Every time the labour party founds a cooperative or a savings-bank that offers intellectuals a secure livelihood and an influential position, one observes flocking to it a host of individuals who have no Socialist sentiments whatever and are looking for nothing but a good bargain." In Italy, and not only in Italy, such cooperatives and people's banks can prosper only with the help of politicians. As a result not only individuals who benefit by such institutions, but others who hope to, join the followings of the politicians, support them, defend them, procure honours and power for them, and receive the favours they receive by way of compensation. That system is very expensive. Oftentimes in order to enable a favourite to make a mere pittance the state has to spend large amounts that are more or less wasted. [Cf. the amusing description of such manoeuvring in the intrigues required to win a title for Signor Alamanni in Ferrero's novel, The Sevent Vices.-A. L.]
penditures. So opposition to the government and to the leaders who had become its instruments became more wide-spread and more intense.
2310. We are now in a position to complete our survey of the contrasts between the "speculator" and the "rentier" ( $\$ 2234 \mathrm{f}$.). Periods of rapid increase in economic prosperity are favourable to speculators, who grow rich and win places in the governing class if they do not already belong to it, but unfavourable to people who live on incomes more or less fixed. These latter drop behind, either because of the natural rise in prices or because they are unable to compete with the speculators in securing the favours of politicians or public. Effects are just the reverse in periods of economic depression. ${ }^{1}$
2311. It follows that when periods of rapid increase in economic prosperity are more the rule than periods of depression, the governing class gets richer and richer in speculators, who contribute Class I residues to it in powerful dosage ( $\$ \$ 2178$ f.); and poorer and poorer in "gentlemen"-in people living on virtually fixed incomes -in whom Class II residues are generally the more powerful. That change in the composition of the governing class tends to incline a people more and more to economic enterprise and to increase economic prosperity until new forces come into play to check the movement ( $\$ \$ 222 \mathrm{I}$ f.). The opposite is the case when the periods of economic depression or, what is worse, of economic retrogression, are the rule. The first situation is exemplified by our modern civilized peoples. Examples of the second would be the peoples of the Mediterranean basin under the declining Roman Empire down through the Barbarian invasions and into the Middle Ages. ${ }^{1}$
2312. In civilized societies producers of savings perform a function of very great importance ( $\$ 2228$ ). They remind one of the bees that gather the honey in the honeycomb, and of them one may say: Sic vos non vobis mellificatis, apes! It is no exaggeration to assert that a ptople's civilization stands in direct ratio to the quantity of savings that it possesses or puts into use. If economic prosperity increases, the quantity of savings used in production likewise increases.

[^58]If economic prosperity wanes, there is a decrease in the quantity of savings devoted to production.
2313. Before we can go farther along this line we must refer back to the two groups, $S$ and $R$, considered in $\$ \$ 2233-34$ and which for mere purposes of convenience we decided to name "speculators" and "rentiers." When savers get their requirements for living from their savings, they belong in great part in the $R$ group-the class of people, that is, who have fixed or virtually fixed incomes. They are people of quite opposite traits to the people in the $S$ group, to the "speculators" ( $\$ 2232$ ). They are, in general, secretive, cautious, timid souls, mistrustful of all adventure, not only of dangerous ventures but of such as have any remotest semblance of not being altogether safe. They are very readily managed and even robbed by anyone deft in the opportune use of sentiments corresponding to Class II residues, which are very strong in the $R$ 's. ${ }^{12}$ Speculators, on the
$2313^{1}$ One notes nowadays a tendency to put into the $R$ group small stockhoters in corporations, who are exploited especially by executives and directors and a few large stockholders. Various devices are used, according to the country, and always, of course, with the complicity of the legislator. In England the trick of "reorganization" is in great vogue. It consists substantially in dissolving a corporation and then immediately reorganizing it under another name, stockholders in the of corporation receiving in the new provided they pay a certain-quota. They are thus given the alternative of either losing everything or spending more money, the unwilling stackholder not being allowed simply to demand the return of his share in the old corporation's assets. Certain corporations have "reorganized" several times in that manner. The directors set up a certain number of "the boys" who "underwrite" or "guarantee" the operation; that is to say, in consideration of a bonus, which frequently reaches considerable figures, they undertake to redeem on their own account such stock as shall not have been taken up by the old stockholders. There are corporations that have never paid a penny in dividends to their stockholders but which every two or three years yield very fair profits to their directors in that manner. In some few cases the operation may be advantageous to the stockholders at large; but they are not allowed to distinguișh between such cases and others, for the law does not reserve to the individual stockholder the right to withdraw at any moment and get back his share in the assets. In Italy the legislator at first made the "mistake" of granting that right, but he soon hastened to correct the error in deference to high lords of finance who were friends of the politicians. Avanti, Mar. 12, 1915: "Great bank speculations. We are informed that three large banks have merged in the course of the last few days. . . . To facilitate the operation the government took the appropriate measures for side-stepping the civil and commercial code by introducing a bill in the parliament to suspend for the period of one year the right of stockholders in corporations to withdraw." Even when such a right obtains, the difficulties in the way of exercising it are so numerous and the costs so great that nearly always it remains a dead letter. So all roads are closed whereby the simple producer or possessor of savings might escape the pursuit of the
other hand, are usually expansive personalities, ready to take up with anything new, eager for economic activity. They rejoice in dangerous economic ventures and are on the watch for them. In appearance they are always submissive to the man who shows him: self the stronger; but they work underground and know how to win and hold the substance of power, leaving the outward forms to others. No rebuff discourages them. Chased away in one direction, speculators. The bill alluded to by Avanti was passed by the parliament and became law. Giornale d'Italia, Apr. 1, 1914: "Report of stockholder's meeting, Bank of Rome (Stockholder $T$ speaking): 'Last year conditions in the bank were excellent. What has become of the millions that are now confessed lost? The only excuse that he [the President] can think of is the loss incidental to investments in Libya. But is that a loss of the past year or of the years before that? You have been doing a patriotic work in Libya, and as an Italian I congratulate you warmly. But I am not only an Italian. I am also a modest saver and I ask you: what use have you made of my savings? . . .' When, said the speaker, the question of merging the three banks came up, his heart warmed to the thought that he could avail himself of his right to withdraw, 'but changes made in the commercial code . . ' The President (interrupting): 'I feel called upon to declare that the Bank of Rome had nothing whatever to do with the steps that were taken to obtain a modification in the law of withdrawal.' "
$2313{ }^{2}$ As regards the susceptibility of the rentier to hoodwinking by sentimental appeals, one of the most amusing inspirations on the part of Latin speculators has been anti-Clericalism. They have shown a veritably master hand in taking advantage of sentiments of antipathy to the clergy that were prevalent in the masses in order to divert attention from their own lucrative "operations." While a simple-minded public was arguing itself hoarse over the temporal power, the infallibility of the Pope, the religious Congregations, and other such matters, the speculators were quietly filling their pockets. In that they were helped by the ingenuousness of their adversaries, who met them with anti-Semitism, not observing that in so doing they were keeping to a ground altogether favourable to the speculators and helping them to distract public attention from their exploits. In all the years that the anti-Semites have been fighting, what have they gained? Nothing, absolutely nothing! And what have their adversaries gained? Power, money, honours! Anti-Clericalism is sometimes just a pretext for favours and reprisals on the part of politicians. Liberté, Mar. 13, 1915: "'Raggings, injustices, irritations, insults, sufferings!' Such the terms in which M. Barrès epitomizes the picture of the scandals to which the assignments of indemnities to the families of men at the front are giving rise all over France. Local feuds, political animosities, election manoeuvres, inspire most of the officials or deputy officials appointed by the Prefecture. 'The commission,' writes a woman of the Jura district, 'has informed me that I shall receive nothing because my husband was a practising Catholic. My request has been rejected because my husband did not belong to the Mayor's party.' So writes a woman from the Ariège. "'You are for the priests," they answered.' That from a woman of the Lot! A Socialist newspaper prints a whole list of such complaints this morning and draws this conclusion: 'So free-thinkers are suffering at
they come buzzing back, like flies, from some other., If the sky darkens, they take to their cellars, but out they come the moment the tornado has blown over. With their unfaltering perseverance and their subtle art of combinations they override all obstacles. Their opinions are always the opinions most useful to them at the moment. Conservatives yesterday, they are Liberals today, and they will be Anarchists tomorrow, if the Anarchists show any signs of getting closer to power. ${ }^{3}$ But the speculators are shrewd enough not to be all
the hands of Clerical officials.' Which proves, in any event, that the distribution of war-relief is occasioning scandal and protest on all sides without distinction as to parties."
$2313^{3}$ At the time of the Dreyfus affair in France the French speculators were almost all Dreyfusards, and less out of any love for the Jews than from an instinct they had that their advantage lay in fighting for Dreyfus. It is interesting to note the great prevalence of group-persistences in the anti-Dreyfusards, along with a great deficiency in the combination-instincts-in political skill. The anti-Dreyfusards fought on such terms that victory could have brought them little if any advantage, and defeat utter ruin, as was in fact the case. In truth, in the event of victory all they could have won would have been the satisfaction of keeping an unfortunate, and perhaps an innocent, man in prison; and in the event of defeat, they could only look forward to oppression at the hands of their adversaries. Their agitation would have become intelligible if prosecuting Dreyfus had been conceived as a means of securing the help of the army in making a coup d'état. It is unintelligible as an end in itself. Evidently, they were not able and, in their lack of any courage, were unwilling, to overthrow the régime, and consequently they were left groping in the dark. They were not even shrewd enough to spend the "billion of the Congregations," but jealously guarded it for their enemies to pilfer at their leisure. People who are timid and cherish great respect for the law have no business to be toying with such adventures.

The influence of residues of group-persistence is clearly apparent in those individuals who believed Dreyfus guilty, closed their minds to all else, and faced every danger so only he were kept in prison, not considering that when so many guilty persons escape it matters little really whether one more or one less goes free. Then again, among their adversaries there were individuals who could see nothing but the presumed innocence of Dreyfus and sacrificed everything so only an innocent man were saved. The difference between the two groups lay solely in the fact that different people were using them. The anti-Dreyfusard forces were destitute of any leadership even remotely comparable to the very astute leadership that the speculators supplied to the Dreyfusard party. To mention just one of the many individualities that might be pointed to-what leader on the side of the anti-Dreyfusards could compare in ability with Waldeck-Rousseau, who led the Dreyfusards to victory like the shrewd and ⿺𠃊nscrupulous lawyer he-was, indifferent as-to the means he used for his client? Waldeck-Rousseau is the ideal type of the leader the speculators like to get for themselves. He had always been an encmy of the Socialists-and he became their ally. He had always been a patriot, and he handed his country's army over to an André and its navy over to a Pelletan. He had always defended the sanc-
of one colour, for it is better to have friends in all parties of any importance. On the stage one may see them battling one another, Catholics and pro-Semites, monarchists and republicans, free-traders and Socialists. ${ }^{4}$ But behind the scenes they join hands, speculators all, and march in common accord upon any enterprise that is likely to mean money. When one of them falls, his enemies treat him mercifully, in the expectation that if occasion requires they too will be shown mercy. Neither the $R$ 's nor the S's are very adept in the use of force, and both are afraid of it. The people who use force and are not afraid of it make up a third group, which finds it very easy to rob the $R$ 's, rather more difficutt to rob the $S$ 's; for if the S's àre defeated and overthrown today, they are back on their feet and again in power tomorrow.
tity of private property, and he dangled the "billion of the Congregations" as booty before the eyes of his partisans. He had always been a conservative, and he came forward as leader of the extremest revolutionaries; in very truth, neither sentiments nor scruples ever laid any obstacle in his path, nor did they distract him ever from the pursuit of his own advantage.
$2313{ }^{4}$ The novels of "Gyp" contain many keen observations of fact in this connexion. Cotoyan, in Un mariage chic, is the type of a very large class of living creatures.
$2313{ }^{5}$ Jouvenel, La république des camarades, pp. 53-54; 45-46: "Above all cliques and parties [among the Deputies], all rivalries between man and man, there is one imperious sovereign rule: to respect the traditions of the house and do no comrade any harm. Among comrades there can be differences, but never hatreds-fights, but with soft gloves. Angry as one may be, one cannot forget that one's anger is at a colleague [Read: accomplice.]. Even when an argument grows discourteous, it is never without its touch of brotherliness. The circumstances that place you at swords' points today will change tomorrow when you will need one another-why then utter the irreparable word? [The writer elsewhere describes the relations between ministers and Deputies, and what he says applies to conditions in Italy as well as in France and every other country that has a parliamentary form of government.] When a Deputy has passed his forenoon soliciting favours in the offices of the ministers, he spends his afternoons checking up on them. Half his day for asking favours, the other half for securing guarantees! When he gets a good stock of guarantees, he is not less exacting as regards the favours. When he has had a lot of favours, he is sometimes less severe as regards the guarantees. That is only human." Avanti, Mar. I, 1915: "The election budget. It is, of course, the budget of the Ministry of Public Works plus the budget of the Ministry of Posts and Telegraphs. One Deputy wants a bridge, another a road, another a railroad, another a trunk-line for automobiles . . . each reserving the right to complain later on that expenses are mounting and the works that are executed are useless-though never with the sincerity to confess that they serve to increase the prestige of the Deputy in the eyes of his half-witted constituents, who grant that he may be a great scoundrel, but hold that all the same he docs not neglect 'local needs'" (\$2562 ${ }^{1}$ ).
2314. Very clear proof of the scant courage of the rentier is the supine and stupid resignation with which he accepts fundings of public debts in the various countries. At the time of the first conversions, there might have been some doubt as to the advantage of accepting them or not. But by this time, after no end of examples in which bonds have sunk below par after conversions, acute intellectual blindness is required in order to hope that a new conversion can have any different result. At the time of the last conversions it is inconceivable that the holders of English and French bonds should not have learned enough from the past to foresee what was in store for them. In 1913 English "consols" dropped to 72 and French "consols" to 86. If, in the course of the next few years, those bonds should again rise above par, holders would be very stupid or very cowardly to accept a new conversion. All that would be needed to block any sort of funding would be an agreement between a fairly small number of holders. But it would be easier to induce a flock of sheep to attack a lion than to get the slightest trace of vigorous action out of such people. They simply bow the head and let their throats be cut. ${ }^{1}$ French savers allow themselves to be fleeced by their government precisely like a flock of sheep. The French *Government grants or denies to foreign governments "the privilege
$2314^{1}$ Investors sometimes hail conversions with joy. All sellers of merchandise lament drops in the selling-prices of their wares. The one exception is the producer of savings, who rejoices when the interest-rate on money falls-in other words, the value of the commodity he produces. If anyone tried to reduce the wage of a given group of workers from 4 to 3.50 lire, they would raise an outcry, go on strike, defend themselves; but when, by a conversion of bonds, the saver gets 3.50 instead of 4 lire from the state, he does not lift a finger to defend himself and all but thanks the statesmen who fleece him. Interesting is another strange illusion peculiar to savers: They cheer whenever there is a rise in the prices of public-debt certificates that they purchase with their savings, and wear long faces whenever there is a drop; whereas the purchaser of bonds ought to be eager to get them at the lowest price possible. Among the causes of the illusion, the following is perhaps to be reckoned. Let us imagine a saver who already owns certificates of public debt to the value of 20,000 lire and saves 2,000 lire annually, investing them in more bonds. If the exchange price of public-debt bonds rises io per cent the saver's 20,000 lire become 22,000 , and he imagines that he is the richer by 2,000 lire. But that would be the case only if he were to sell his bonds; if he keeps them he is worth not a penny more and draws the same annual income. Furthermore, the 2,000 lire that he saves every year and invests in public-debt certificates net him less income; for he receives io per cent less than he would have received had the exchange price of the bonds not risen. In a word, he is worse off than he was before.
of floating loans in France not with a view to protecting the nation's savings but with an eye to its own political conveniences, which sometimes incidentally go hand in hand with the private conveniences of certain plutocratic demagogues, and at other times are nothing else. Add to that the various taxes on the buying and selling of bonds, stamp-duties and the like-all of which bear upon the investor. Some savers in France, it is true, are now beginning to look after their own interests and are sending their money abroad; but such foreign investors represent but a very small fraction of the total as regards both their number and the amount of their savings.
2315. Another example of a lesser but far from negligible importance is the conduct of French investors of Clerical leanings in the years preceding the suppression of the religious congregations and the confiscation of their property. It was known beyond any doubt that sooner or later, and sooner rather than later, that was going to happen; yet the owners of that kind of property did not succeed in devising the flimsiest combination to avoid the impending loss. On the contrary they saw to it that it should be all the graver through their mania for owning real property-by giving to their wealth, in other words, the form most readily susceptible of confiscation by a government. And yet it would have been the easiest thing in the world to prevent, at least to a large extent, a robbery foreseen and foretold. The cash and the paper could have been deposited abroad for safe-keeping. As for the real estate, if the French investors were really bent on owning it, they could have assigned the deeds'to a corporation, holding the majority of the voting stock themselves, but selling a few on the exchanges in London, Berlin, and New York-just enough to bring anybody minded to rob the corporation into complications with England, Germany, and the United States.
2316. But such stupidity is in no wise peculiar to our contemporary French Clericals. From the days when the Oracle at Delphi was plundered down to our own, one notes an unbroken stream flowing from the producer or holder of savings into religious institutions, which governments proceed to rob exactly the way an apiarist ${ }^{\text {a }}$ makes annual extraction of honey from the hive that the worker

[^59]bee tirelessly keeps filled for him. ${ }^{1}$ That is just a particular case of something much more general: In human societies, as known in historical times, the producers and holders of savings are continually being robbed of them. As regards means: The thing is done by
$2316^{1}$ Bouché-Leclerq, Histoire de la divination dans l'antiquité, Vol. III, pp. 158-59. Towards the year 590 b.c., "the Oracle at Delphi was getting to be the biggest bank in the world. All around the temple rose 'Treasures' filled with votive offerings from one people or another, from princes, cities, winning athletes, reformed criminals, rich philanthropists eager to do something for the temple, notori-ety-seekers of all sorts who were concerned to get their names before the public. With the income from gifts of real estate, with the fines that were imposed, with the interest that accrued, the Oracle came to own an enormous capital, which was being rapidly increased by intelligent management. Furthermore, since there was not in all Greece a safer place than Pytho, governments as well as individuals were in the habit of depositing precious documents there, testaments, contracts, promissory notes, even specie, and the priests took charge of such deposits, rewarding the trustfulness of the depositors by honorific privileges and distinctions. . . . So the Oracle came to hold enormous interests in its hands and showed itself disposed to increase its extensive clientèle. . . . Means of acquisition there were in plenty; but since it was as important to hold as to have, a superstitious terror was inspired in individuals who might be tempted to despoil the god. Visitors to Delphi were shown the statue of a wolf that was said to have revealed just such a thief to the prophetsanother story was that it had eaten the thief in question."

The history of the spoliation of the temple begins with legends that, most probably, as is usually the case, relate to the past impressions belonging to the times in which they originated. Among such thieves was Hercules, no less. Bouché-Leclerq, Vol. III, p. 109, quotes a legend that alludes to a wrestling-match between Hercules and Apollo for possession of the prophetic tripod; but another legend mentions robbery outright: "And he set out to rob the temple": Apollodorus, Bibliotheca, II, 6, 2: $\tau \delta v \tau \varepsilon$ vaòv $\sigma v \lambda a ̈ v i_{i} \varepsilon \lambda \varepsilon$. [Frazer, Vol. I, p. 241: "As the Pythian priestess answered him not by oracles, he was fain to plunder the temple, and, carrying off the tripod, institute an oracle of his own."] A legend quoted by the scholiast of the Iliad, XIII, v. 302 (Dindorf, Vol. II, p. 15) after Phereses, shows the Phlegyae burning the temple at Delphi and being destroyed by Apollo for that crime. In historical times, the series of "Sacred Wars" fought to punish attacks on the temple and the god's property begins with the wars against the Chrysseans, $600-590$ b.c. The Second Sacred War was declared against the Phocians, during the years $355-346$ в.c. Philomelus, leading a troop of highly paid mercenaries, occupied Delphi (Diodorus Siculus, Bibliotheca historica, XVI, 28, 1-2, and XVI, 30, 1-2; Booth, Vol. II, pp. 103-04). He began by laying taxes on the richer inhabitants. Shortly, not satisfied with such sources of income, he extended his depredations to the treasures belonging to the temple, asserting, perhaps in good faith, that it was just a loan; and just as probably, as is the case in our time, there were innocent souls who took his promises at their face value. Grote observes in that connexion, History of Greece, Vol. XI, p. 252, note 3: "A similar proposition had been started by the Corinthian envoys in the congress at Sparta, shortly before the Peloponnesian War; they suggested as one of thcir ways and means the borrowing from the treasures of Delphi and Olympia, to be afterwards repaid (Thucydides, Historiae, I,
viplence-war, plunder, individual assaults; or by trickery and de-ceit-special tax-laws aimed at holders of savings; issues of fiat money, and certificates of public debt that are sooner or later repudiated in whole or in part; monopolies and protective privileges;
121, 3). Perikles made the like proposition in the Athenian Assembly; 'for purposes of security, the property of the temples might be employed to defray the cost of war, subject to the obligation of replacing the whole afterwards' . . . (Thucydides, Ibid., II, 13, 5). After the disaster before Syracuse, and during the years of struggle intervening before the close of the war, the Athenians were driven by financial disasters to appropriate to public purposes many of the rich donatives in the Parthenon, which they were never afterwards able to replace." The promises made by the French Government to honour the assignats of the Revolution, and similar promises made by other governments, have had at one time or another a similar fate.
Curtius, Griechische Geschichte, Vol. III, p. 423 (Ward, Vol. V, pp. 74-75), remarks that the strength of Philomelus rested on hired troops: "In the circumstances it would have been a miracle if Philomelus had managed to adhere to the moderateness of which he had made a formal law. [The very same thing happens to modern governments that depend for their strength on the advantages they can procure for their supporters.] The temptation was too strong. There they were, absolute masters of the richest treasure in Greece! When their money gave out were they to hand the country over to their bitterest enemies? To tell the truth, after having gone that far there was no choice left. So a Treasury was created (Diodorus, Op. cit., XVI, 56; Booth, Vol. II, pp. 126-27), and on its responsibility the funds in the temple were tapped, at first, no doubt, in the form of loans, though as time went on the procedure became bolder and less scrupulous. [As is the case, in modern times, with issues of fiat money and public loans.] Objects that had reposed for centuries 'under the threshold' of the temple were scattered to the four winds of heaven. Not only was the gold melted down into coins, but holy relics were confiscated, and jewels coming down from the heroic age could be seen sparkling at the throats of the mistresses of the officers.
"It was said that 10,000 talents (to a value of about $11,000,000$ dollars) were put into circulation in such ways. The money was used not only to pay wages to the soldiers, but also abroad to win the support of influential people, such as Dinikha, wife of Archidamus, King of Sparta (Theopompus, Hellenica, Fragmentum 258; mentioned by Müller, Vol. I, p. 322. Pausanias, Periegesis, III, Laconia, 3, 2, accuses that royal pair of accepting bribery), and to work upon opinions in the enemy camp."
Onomarchus, and Phailus after him, as successors to Philomelus, did even worse. At last the Phocians, overcome by Philip of Macedon, were condemned to pay an annual fine to a large amount. So a compensation between the theft and its punishment was established from the ethical standpoint, but not from the economic standpoint; for the mercenaries never paid back the money they had received in high wages, and the fine was paid to some slight extent in the form of restitutions, but more largely by fresh assaults on private property.
The Third Sacred War, 339-338 в.c., has no bearing on our present interests.
We have no information as to the occupation of Delphi by the Locrians and the Aetolians in the year 290 b.c. In the year 278 b.c. the Gauls attacked Delphi, to be defeated, according to Greck tradition, the god being interested in defending his
neasures of all sorts designed to alter the prices and conditions that would prevail under free competition; and so on. The simplest form is the direct spoliation by violence of certain numbers of savers, often selected by chance and with a view only to their wealth. That sanctuary, successfully, according to another tradition reported by Livy, Ab urbe condita, XXXVIII, 48, 1 : "Even Delphi, from time immemorial the common oracle of the human race, the navel of the world, did the Gauls despoil" ("Etiam Delphos, quondam commune humani generis oraculum, umbilicum orbis terrarum, Galli spoliaverunt").

After each new robbery the treasury at Delphi was refilled by the piety of the faithful ( $\$ 2316^{5}$ ). Sulla, accordingly, found it in flourishing condition when he took possession in his turn (Plutarch, Sulla, 12, 3-5; Perrin, Vol. IV, p. 363). At the time of his campaign in Greece, "since he was in need of large amounts of money for purposes of war, he violated the sacred asylums of Greece and sent for the richest and most beautiful offerings at Epidaurus and Olympia. He wrote to the Amphicthyons at Delphi that it would be well to put the treasures of the god in his safe-keeping; for he would guard them most carefully and, should he use any of them, give them back intact."
That is what the powerful, in general, say when they are raising loans either by love or by force. Sometimes they keep their promises; sometimes they forget them, or haggle and hedge. Sulla behaved, on the whole perhaps, a little better, though not so very much better. After the battle of Chaeroneia (Plutarch, Op. cit., 19, 6; Perrin, Vol. IV, p. 391) "he put aside half of the [Theban] territory and dedicated it to the Pythian Apollo and the Olympian Zeus, ordering that the income from those lands be handed over to those gods in repayment of the money that he had taken." Bouché-Leclerq, Op. cit., p. 197, remarks in that connexion: "Apollo surely knew what his bill against the Thebans would be worth, once Sulla had departed." These successive and repeated plunderings impoverished the temple altogether in the end. Strabo, Geographica, IX, 3, 8 (the text is corrupt. Strabo's French translator, La Porte du Theil, renders, Vol. III, p. 458:) "Being the object of greed, even the most sacred wealth is difficult to keep. So the temple at Delphi is now very poor; for even if the larger number of the tokens that have successively been dedicated there are still left, everything of any real value has been taken away. In olden times, however, the temple was very rich." In the Didot collection, the passage reads: "But wealth, being offensive to envy, is hard to keep, even be it sacred. Nowadays the temple at Delphi is very poor so far as monies are concerned. As regards the votive offerings, part have been taken away, though part are still there." [Jones, Vol. IV, pp. 357-59: "But wealth inspires envy and is therefore difficult to guard, even if it be sacred. At present, certainly, the temple at Delphi is very poor, at least as far as money is concerned; but as for the votive offerings, although some of them have been carried off, most of them still remain."]
The Emperor Constantine completed the ruin of the temple, carrying away such objects of art as still survived there in his day to decorate his new capital at Constantinople.
Just one example now from the hosts of operations in modern times that bear some resemblance to Sulla's loans on the treasure of Delphi. Stourm, Les finances de l'Ancien régime et de la Révolution, Vol. II, pp. 338-42: "After following, down to the re-establishment of order, the history of the partial bankruptcies declared each
corresponds in a certain way to the, hunting of wild animals. Forms that are progressively more complicated, more and more ingenious in character, and more and more general in bearing keep appearing as we come down in history; and they correspond to the rearing of domestic animals. The analogy holds even for the consequences. The first sort of chase destroys incomparably more wealth and occasions far greater disturbances than the second.
Considered as to its manners of application, the operation that takes the savings of the savers may be more or less direct or indirect; the contribution may be forced or, to some extent, voluntary. Illustrative of the first manner would be the impost, the forced loan, the assault on inheritances, and the measures, so frequent in ancient times, that are designed to cancel or alleviate indebtedness. ${ }^{2}$ The second manner is, in the typical case, an operation developing in two acts. In the first act, individuals give their savings to certain corporations, especially religious corporations-to temples-or they entrust them to the state or to institutions guaranteed by the state. In the
half-year by the revolutionary government on arrears in interests on the public debt, we now come to its default on the capital of the public debt that it declared in an official and final manner in 1797. How painful it is, as we turn to this failure so unpleasantly famous of the 'Consolidated Third,' to recall the proud resolution of the Constitutent Assembly at the outbreak of the revolution, the bill of June 17, 1789, whereby 'this Assembly declares that, the public debt having been placed under the guardianship of French honesty and the French sense of honour, no power has the right to utter the infamous word "bankruptcy," no power has the right to betray the public faith under any form or designation whatsoever! . .. The bill of September 30, 1797 ( 9 Vcndémiaire, an VI), known as the law of the 'Consolidated Third,' that was voted by the two Councils, erased from the ledger for ever two-thirds of the public debt. It stipulated the reimbursement of the twothirds mobilized in bonds and maintained only one-third of the amount of each subscription. . . . The interest on this remaining third was itself paid in fiat currency down to the year 180r." Such practice has been followed by many modern governments. You are owed 100 lire. You are given a piece of paper with a pretty engraving on it, and the figure, "ioo lire." What have you to complain of? The powerful like to seem respectful of the laws of their ethics even when they are violating them; and there are always complaisant writers a-plenty to supply them with the derivations they need to justify themselves, and professors a-plenty to teach such derivations with all the authority of their chairs.
$2316^{2}$ Pareto, Cours, § 449-53. The author of the Cours erred in not freeing himsclf entirely of ethical considerations. For example, he said, §450: "One must rid one's mind of the preconception that inclines one to believe that robbery is not robbery when it is carried out in legal forms." That is a derivation of the I- $\beta$ type (sentimental assertion). His mind was freet when he wrote, § 44 I : "There is hardly an economist who does not feel called updn to decide whether 'interest,' in other
second act, such corporations or institutions are robbed, now by a foreign enemy, now by a powerful private individual, often by a national government, which, also often, appropriates the sums that it had recognized as a debt or had undertaken to repay. Operations of the first group are altogether or chiefly voluntary. At the promptings of religious myths, which were once pagan, were then Christian, and are now nationalistic, individuals are induced to hand over their savings in the hope of winning favours from their gods, or else under the lure of promises to pay annuities, or in hopes-often mistaken hopes-that they will get back both interest and capital. ${ }^{3}$ Operations of the second group ensue as a matter of course, following lines of least resistance. The money is appropriated wherever it happens to be, and at points where, for lack of any efficient resistance, it is least well defended. ${ }^{4}$ It does make a difference whether a sum of money is taken through a tax or through a loan that is later to be repudiated, and whether it is taken directly or through measures of so-called protection, for in the masses those devices pro-. voke resistance of very different kinds.
words, rent on savings, is just, equitable, legitimate, moral, or natural. Those are questions that overstep the domain of political economy and furthermore cannot possibly be answered unless one sees fit to define in advance just what such terms mean." In those last two remarks lies the germ of this present Treatise on General Sociology.
$2316^{3}$ Dictionnaire encyclopédique de la théologie catholique, s.v. Biens ecclésiastiques (missing in Wetzer): "The Judao-Christians were unwilling, as Christians, to fall short of what they had formerly done as a matter of duty as Jews. They sold what they possessed and laid the moncy therefrom the feet of the Apostles. The pagano-Christians made haste to imitate such devoted zeal, all the more since the pagan religions themselves had accustomed their believers to offering sacrifices to the gods and gifts to the priests; and since among the new converts there were many persons of wealth, considerable sums of money were thus paid into that voluntary community of property that was formed by the first Christians." In our day believers belonging to the various humanitarian, imperialistic, or patriotic sects are following the example of the faithful of paganism and Christianity.
$2316^{4}$ Dionysius of Syracuse good-naturedly chaffed the gods he robbed. Cicero, De natura deorum, III, 34, 84: "Of such as bore the inscription in the old Greek style: '[property] of the good gods,' he said that he intended to put their goodness to some use (In quibus quod more veteris Graeciae inscriptum esset, 'bonorum deorum,' uti se cortm bonitate velle dicebat.)" According to Justin, Historiae Philippicae, XXIV, 6 (Clarke, p. 205), the leader of the Gauls justified the pilfering in the temple at Delphi with the words: "The gods are rich-it is well that they give to mortals"; and further: "The gods cannot be in any need of property, since they are so lavish with it to humans." Our modern pilferers doubtless feel the same way about it, but, barring some exceptions, they express themselves less cynically.

As regards time, the spoliation takes place either in the form of catastrophes coming at long intervals-of centuries in some casesor in the form of developments recurring at briefer intervals, such as the losses inflicted on savers during "economic depressions," or again in the form of legislative or other enactments that are of continuous operation, such as the "leitourgias" (obligation to finance public rites) and the "trierarchias" (obligation to outfit a trireme) in ancient Athens and the progressive taxes of our day. In all those connexions, in a word, we get instances of those fluctuations of great, moderate, or minor scope which feature economic and social phenomena in general (\$2293).

Largely under pressure of ethical sentiments, violent fluctuations come to look like catastrophes, and it is assumed that no account need be taken of them in considering a society that is functioning normally and regularly. That is just an illusion. Actually they differ from other fluctuations only in degree, and they are, on the whole, as regular, as normal, as any other development in human society. ${ }^{5}$
$2316^{5}$ So from earliest legendary times down to our own, spoliations of sacred properties have proceeded regularly, the pilferings of pagan property finding their successors in pilferings of Christian property. One cannot help seeing in such phenomena the effects of one same identical force operating through the remotest centuries down to our time. Dictionnaire encyclopédique de la théologie catholique, s.v. Biens ecclésiastiques (Wetzer, s.v. Kirchenvermögen): "It is certain that the Church owned real properties by about the year 300, for in the year 302 Diocletian confiscated such properties and five years later Maxentius restored them. . . . The edict of Licinius, promulgated conjointly with Constantine and according unrestricted liberties to the new religion, ordered that all properties which had been taken away from Christian communities be returned. The properties of pagan temples were transferred to the Church along with certain contributions from the Imperial treasury. . . . This benevolent policy of the Emperor was on several occasions interrupted or disturbed, notably under Julian the Apostate, who stripped the Church even of her sacred vessels. But the devotion of Julian's successors compensated the Church for the losses she had suffered under him."

From that time on in history one notes an unending series of goings and comings of ecclesiastical properties, very like the ebbs and flows of the tide. Muratori, Dissertazioni sopra le antichità italiane, LXXIII (Vol. III, p. 436) [Antiquitates: De monasteriis in beneficium concessis]: "To the churches, or to their patrons and stewards, the faithful in their piety and devotion brought great affluence. . . . The remainder of their wealth and power the men of the Church got for themselves working diligently and with all their strength of brawn and brain for the advantage of the sacred places committed to their care and for their own. In every century, on the other hand, there have been other elements among Christians who could think of nothing better (cui nihil antiquius fuit) than to pilfer the patrimony of the Church and make it their own by every possible device. The clerics and especially

Forms, in any given fluctuation, may change, substance is constant. Formal, primarily, is the difference between the old debasings of metallic currencies and the modern issue of fiat money, between the ancient loans made from sacred treasuries and certain modern issues
the monks always shrank from labouring in the field of the laity; but the laity, on their side, left no stone unturned (nihil intentatum relinquebant) to gather into their own barns in the most expeditious manner possible the harvest garnered by the ecclesiasts. . . . On the causes of this unfortunate circumstance I have touched in a preceding essay. Here I will mention one other-the wicked habit of certain kings of making gifts of the lands of the Church, and especially of the monasteries, either to assure themselves of the loyalty and affection of their barons, or to encourage their mercenaries to greater efforts in war, so winning easy reputations for liberality and gratefulness by lavish spending of what belonged to others (liberalitatis et grati animi famam facili rei alienae profusiones captantes)." Exactly what is going on in our day.
Ecclesiastical property, however, is enriched not only by the piety of the faithful, but by the hopes they have of being compensated for their gifts either in this life or in some other. This feeling of a sort of contract with the divinity; of a do ut des, which was preponderant in Roman times, does not vanish with the advent of Christianity. Fustel de Coulanges, La monarchie franque, pp. 566, 568, 574-75: "Everybody in those days was a believer. Belief, as regarded the mass of the laity, was neither very extensive nor on a very lofty plane. There was very little thought in it and it had nothing abstract or metaphysical about it. But it was only the more cogent for that reason upon the mind and the heart. [Residues and interests with a minimum of derivations.] It came down to this, that the principal business of each individual in this world was to make a place for himself in the next. Interests private and public, personality, family, city, state-everything bowed the knee to that intellectual conception, everything gave ground before it. [But there were exceptions, just as there are today in the case of our humanitarian and patriotic religion. In every era of mankind there have been plenty of foxes to exploit the faith of other people.] Credulousness had no limits. To believe in God or the Christ was nothing . . . people wanted saints to believe in. . . . It was a very crude and material faith. One day St. Columban learned that his property had been stolen while he was busy praying at the tomb of St. Martin. He goes back to the tomb and upbraids the Saint: 'Do you think I came to pray over your bones just to get my things stolen?' And the Saint felt obligated to discover the thief and procure the return of the stolen articles. A robbery is committed in the Church of St. Columba in Paris. Eloi hurries back to the sanctuary and says: 'Listen carefully to what I have to say to you, St. Columba: if you do not have the stolen property returned to this place, I shall cause the door of your church to be barricaded with a pile of briers, and there will be no more worship of you.' The next day, the objects were returned. [ $\$ 132 \mathrm{I}$. In our day such errands would be entrusted to an "immanent Justice" or some other creature of the sort.] . . . Donations were numerous. They are explainable in the state of mind and heart then prevailing. Once a person firmly believed in a future happiness as his recompense, it occurred to him quite naturally to use all or a part of his property to obtain that reward. A dying man could well calculate that his soul's salvation was worth a piece of ground. He figured up his sins and counted off a part of his estate against them. . . . Consider the language
of public-debt certificates, between the brutal seizures made in days of yore by force of arms and the financial operations of modern politicians, between the award of booty to armed mercenaries and the concession of favours to influential vote-getters. ${ }^{6}$ All the same
in which almost all such donations are couched: The testator declares that he intends 'to redeem (to "buy back") his soul'; that he donates a piece of land 'with a view to salvation,' 'for the remission of his sins,' 'to obtain an eternal reward.' From that it is evident that in the view of those people the gift was not gratuitous: it was an exchange-one gift for another: 'Give,' it was said, 'and unto you shall be given': Date et dabitur." Subscribers to certain (or rather uncertain) certificates of public debt reason in much the same way in our day.

The faithful gave, and the powerful received. The thing begins at a time when faith was profound. Gregory of Tours, Historia ecclesiastica Francorum, IV, 2 (Opera, pp. 270-71; Dalton, Vol. II, p. 117): "King Clothair had previously ordained that all the churches in his kingdom should pay a third of their income to the exchequer. All the bishops had, quite grudgingly, consented and subscribed to the edict; but the blessed Injuriosus, rising in wrath, courageously refused to subscribe, and said, 'If thou dost take away the things that are of God, the Lord will shortly deprive thee of thy kingdom. . . And he departed in dudgeon from the King's presence without bidding him adieu. And the King was moved, and moreover, fearing the power of the blessed Martin, he sent messengers after the bishop with gifts, and begged the bishop's forgiveness and his intercession in the King's favour with the power of the blessed pontiff Martin."

Tirelessly the Councils rained fulminations and ecclesiastical penalties upon usurpers of Church properties. A council [read: Synod] was held in Rome in the year 504 with that primarily in view. Re-enacting regulations of previous Councils, it decreed in its Canon I (Labbe, Vol. V, p. 513): "Whosoever in dangerous arrogance shall presume to confiscate, or appropriate, or trespass upon properties of the Church (suppressing aut before sua: Ouicumque res Ecclesiae confiscare aut competere aut pervadere periculosa sua infestatione praesumpserit), unless he shall forthwith have corrected himself through satisfaction of the Church in the premises, shall be smitten with anathema. Likewise any persons who shall have withheld properties of the Church at the bidding or largess of princes or any individual of power, or by occupation, or by tyrannical seizure, and shall have transmitted them by inheritance to children or heirs, unless forthwith at the admonishment of the Pontiff and upon evidence of the truth they shall have restored the properties of God, let them be smitten with perpetual anathema." Great the shrewdness of the usurpers in question. They had thought of occupying Church properties on the pretext of safe-guarding them in intervals of episcopal interregnancy. The Council condemns them. In the year 909 a Council was held at Troslé, near Soissons: Fleury, Histoire ecclésiastique, Vol. XI, pp. 615-17, Vol. XII, pp. 15-18 (Labbe, Vol. XI, pp. 731-34): "The preamble to the decrees of the Council recites that 'The towns are depopulated, the monasteries ruined or burned, the open country reduced to solitudes.' . . . The decadence of the monasteries is then described: some have been ruined or burned by the peasants, others stripped of

[^60]an appreciable change is observable as regards forms, in view of the gradual elimination of the more brutal procedures. There are no recurrences, in our day, of violent spoliations such as Octavius, Antony, and Lepidus perpetrated to make sure of their troops
their properties and reduced all but to nothing; those of which some traces remain are going forward with no form of regular living. . . . The Council then expatiates on the respect due to ecclesiasts, the outrages to which they were at the time being subjected, and the plundering of properties dedicated to God." And for the year 956 Fleury says: "We also have a treatise by Atton de Verceil on the sufferings of the Church. It is divided into three parts. . . . The third relates to Church properties. 'We may,' says Atton, 'overlook the fact that on the death or expulsion of a bishop, Church properties are given over to pillage at the hands of the laity. For what matters it whether they be plundered after his death or while he is alive? And what purpose does it serve to guard the Church's treasure so carefully if the barns, the cellars, and all the rest be robbed? All the crops vanish. The harvests still ungarnered are sold in the name of the new bishop, and his ordination is postponed until all has been consumed; and finally the bishopric is given to the man who offers most. With the result that no lands are so often sold and plundered as the lands of the Church.'"
The Eastern Church was treated no better than the Western. Fleury, Histoire ecclésiastique, Vol. XI, p. 17, anno 1155: "The Emperor Manuel Comnenus reproclaimed a law that his father had made prohibiting seizure of the properties of vacant bishoprics. 'We have learned,' he said, 'that on the deaths of bishops, and sometimes even before they have been buried, local officials enter their houses and carry off everything they find therein and make seizure of the landed property of their churches.' " [As late as the sixteenth century, part of the popular festivities connected with the election of a Pope in Rome was a raid on the residence of the successful Cardinal, which was thoroughly sacked.-A. L.]
If piety was not the only motive of the donation, impiety was not the only cause of the spoliation. Urgent need of cash has often been the leading consideration. Sulla may well have believed in Apollo while he was plundering the temple of that god. Pious Christian monarchs acted not otherwise, and in our times sincere humanitarians often find ways to get rich through their religion. Charles Martel was a devout prince, yet he too was accused of robbing the Church. Frantin, Annales du moyen âge, Vol. VI, pp. 455-56: "Charles's captains, accordingly, were his first vassals; and the new finance, if one may so say, that he created was based on the Church properties, the plunder from which he apportioned among his men. Not only Church properties, but the churches themselves, the monasteries, the episcopal chairs, fell prey to his sacrilegious liberality. 'The episcopal sees,' says a writer of the time, 'he handed over to laymen and he left no power to the bishops. After a victory one of his captains received the sees of Rheims and Trèves for himself as his recompense. The monasteries were invaded, ruined, or destroyed, the monks being driven away to live without discipline and to find refuge where they might.' 'Charles,' says another writer, 'destroyed throughout all France the little tyrants who were usurping authority: whereafter, in the intent of rewarding his soldiers, he confiscated Church properties and distributed them to his men. Such violent usurpation of the ecclesiastical patrimony took place all through the course of his long wars.' Finally, says the Chronicle of Verdun: 'Charles dispensed the public
patrimony in unheard-of profusion to his warriors, who began to be called soldiers [men fighting for pay, that is], and who flocked to him from all parts of the world under lure of gain.' The pillaging of the royal treasury, the sacking of towns, the devastation of realms abroad, the spoliation of churches and monasteries, the tributes that came in from conquered lands, were hardly sufficient for his greed; and when such resources were exhausted, he seized the lands of the churches. He bestowed bishoprics on his captains whether they were clerks or laymen, and there were sees that were left without pastors for years at a time."

Legend took it upon itself to punish the plunderers of the temple at Delphi. It also took charge of punishing Charles Martel. The thieves of Delphi received their due in this world. Charles received his in the next. It was St. Eucherius of Orleans who saw the soul of Charles Martel in Hell. The bishops call the attention of Louis the Pious to that fact in a letter: Decretum Gratiani, pars II, causa 16, quaestio I, canon 59 (Friedberg, Vol. I, pp. 78o-82): "Because, in truth, Prince Charles, father to King Pepin, first among all the kings and princes of the Franks separated the property. of the churches from them and divided it, for that thing alone, primarily, has he been damned eternally. For St. Eucherius, Bishop of Orleans, being in prayer and transported in rapture to the other world, among the other things that he saw by revelation of the Lord saw he Charles in torment in the nether Hell. ... [The angel who was guiding the Saint on the excursion in question explains that Charles is suffering such punishment because of his thefts, and that the only thing to do would be to redistribute the property that he left among the churches and the poor:] Whereupon, coming to himself, St. Eucherius sent for St. Boniface and for the Abbot Fouldray (Fuldradum) of the Monastery of St. Denis, and, reporting what he had seen, gave them for a sign that they should go to the tomb where Charles was buried, and if they should not find his body there, they could believe that what he was saying was the truth. And they, forthwith, hastened to the monastery aforesaid, where the body of Charles had been buried, and as they opened his tomb, a dragon was seen hastily to issue from it and the tomb was found to be blackened within, as though it had been burned. We have ourselves seen the men who were eyewitnesses to this thing, they being still alive in our time, and to us they gave their word as to the things they had seen and heard. And this becoming known to Pepin, son of Charles, he called a synod at LétinesPalais (Liptinas: Létines-en-Cambraisis) . . . and whatsoever he was able of the ecclesiastical properties that his father had seized he tried to restore."

To this passage Master Gratian adds: "Mention of this story is also made in the Life of the Blessed Eucherius. . . . Such division as Charles had made, in this way, of ecclesiastical properties, Pepin and Charles the Emperor prohibited. Before the eighty-third enactment in that same book a heading explains: '. . . This article was issued at Aix, because laymen were accustomed to apportion the bishoprics and monasteries among themselves for their own use, leaving to no bishop, abbot, or abbess aught more than was barely sufficient for the monks and priests to live.'"

Similar things have been happening from those days all the way along to our own time, when we come upon the suppression of religious corporations in Italy and France. The property of the churches was distributed, ostensibly, among the soldiers of Charles Martel. The "billion of the Congregations" vanished into the pockets of partisans of the French politicians. In both cases the operation may have been substantially beneficial to the country as assuring the stability of a given régime.
Thorold Rogers has well described the prodigalitics of Henry VIII in England
( $\$ 2200^{1}$ ). So too the practice of handing the taxpayer over to the greed of an agent and then proceeding to extort the ill-gotten gain from him has almost disappeared from civilized countries, or has at least been modified. ${ }^{7}$
and their consequences, The Economic Interpretation of History, pp. 35-36: "During the whole of English history, there never was a sovereign so outrageously and wantonly extravagant as Henry. He inherited an enormous fortune from his thrifty father, as fortunes in the sixteenth century went, and dissipated it speedily. His wars and alliances in which [he] subsidized the needy Emperor of Germany . . . cost him much, but his expenditure during time of peace was prodigious. . . . He seemed to have an idea that it was splendid and safe to entertain his nobles, and he made them quarter themselves in his numerous palaces. . . . If he could have got at it, he would have spent all the private wealth of all his subjects, and he made every effort to get at it. . . . He was popular in a way, for wasteful people generally are, even when they waste what does not belong to them. [That applies just as well to the politicians of our time.] The smaller monasteries went, and he soon came to an end of their accumulations. The larger ones he spared, declaring them to be the seats of piety and religion. He pledged himself that the spoil of the monasteries [being] given him, he would ask his people for no more taxes, not even for necessary wars. Soon the greater monasteries went. I believe that, foreseeing the storm, the monks had granted long leases of the lands, so that much of his plunder was reversionary. But the accumulated treasures of ages came into his clutches. A long afray of waggons carried off the gold, silver, and precious stones, which for nearly four centuries had aecumulated round the shrine of-Becket. This shrine was no doubt the richest in England, perhaps in Christendom. But there were others more ancient and nearly as wealthy, at Winchester, at Westminster, at a hundred sacred places. It is exceedingly probable that the accumulations of these holy places were, as bullion, equal to all the money in circulation the time. It vanished like snow in summer. . . The land the monasteries were said to have-been a third of the English soil, After these exploits he seems to have hardly dared to ask his people for money. But there still remained a way in which he could most effectually attack their pockets. He began to issue base money."

To carry the analysis on to other countries would merely result in collecting more facts of the same sort. In Germany the war of the investitures, the Reformation, the secularization of ecclesiastical principalities at the time of the French Revolution; in France, the distribution of the abbeys to abbots belonging to the Court; the expropriations of the First Republic, and the more recent expropriations of the Third-all are new instances of wide fluctuations in the curve of spoliation.

2316 ${ }^{7}$ Aristophanes, Equites, vv. 1147-49: The People (speaking): "I am forcing them [dishonest leaders] to belch out the money they have stolen from me." In Rome, towards the end of the Republic the provinces were handed over to speculators, who won the right to exploit them by showering largess upon the Roman populace. The despots of Asia and Africa had their subjects despoiled by stewards whom they in turn proceeded to strip. The kings of Christendom allowed Jews, usurers, and bankers to amass fortunes and then confiscated them. In France, the Regency allowed many individuals to get rich through scandalous speculations that it had itself promoted; then it forced them to give up the ill-gotten gains, with a few exceptions still more scandalous. On the speculations arising under Law's

The transfer of economic values that results from attacks on property may at times have the effect of increasing production. That is the case when the resources pass from the hands of people who are unable or unwilling to use them to the best possible advantage into the hands of people who make better use of them. But most often the proceeds of spoliations are wasted, the way the gambler wastes his winnings at play, and the ultimate outcome is a destruction of wealth. The veterans whom Sulla made wealthy men after a time were paupers again $\left(\$ 2577^{1}\right)$. People alive in our day are witnesses to the extravagance of individuals who grow rich in politics and to the waste in which they indulge. Taking the attack on property in conjunction with the voluntary prodigality of holders

[^61]of savings and their heirs, we get in those two things forces tending to counteract the efforts of producers of savings and considerably to restrict the accumulation of wealth.
The remarkable regularity with which the developments here in question recur in time and space leads one to the conclusion that in historical times in our societies the right of private property subsists only as tempered by behaviour and inclinations that run counter to it. We have, in other words, no example of a society in which the property-right subsists strictly without limitation. It is further apparent that one must not take one's stand on the narrow ethical ground where such attacks are viewed as unpleasant, reprehensible incidents offensive to law, justice, and equity; but on the broader
question, in all that, of a particular case of a thing that is general. Practical men often discern more clearly than thinkers. Saint-Simon, for instance, Mémoirs, Hachette ed., Vol. XI, pp. 274-75, ann2 1715, grasped the point that if one were to break the circle of spoliations, one would have to prevent the inflow of the money that supplied material for the repudiations; but he was mistaken as to the efficary of his means. He suggests bankruptcy pure and simple, and thinks it would have the good point that no one would any longer lend to the government and the latter would have to reduce expenses: "The louder the protests and the laments it [the declaration of bankruptcy] arouses, the greater the despair, through the ruin of so many people and so many families, both directly and indirectly [par cascade, a favourite phrase with the Duke.-A. L.], and consequently, the greater the disorder and embarrassment it occasions in the affairs of so many individuals, the more prudent the individual will be in the future. [In that Saint-Simon is wrong. Ages and ages of experience go to show that the ingenuousness of the investor is as incurable as the passion of the gambler.] . . . Whence two marvellously beneficial effects: inability on the part of the king to get hold of such immense sums for doing anything he pleases or, much more often, anything it pleases other people to put into his head to do for their personal advantage, an inability that would force a wise and moderate policy upon him, and prevent his reign from being a reign of blood and brigandage and perpetual war upon a whole Europe banded against him at all times and always in arms in the sheer necessity of defending itself. . . . The other effect of that inability would be to deliver France of a hostile race of men (un peuple ennemi) that is forever intent on devouring her with all the devices that greed can imagine and reduce to a deadly science [Which became the "science of finance" of our day.] by that mass of imposts [It is even greater in our time.] of one sort or another, the management, collection, and diversity of which is deadlier than the tax-rate itself, and by that horde of individuals who are withdrawn from all useful functions of society and busy themselves at naught else than destroying it, robbing private persons and upsetting intercourse of every kind." Those are words of an $R$, a rentier, a "man living on income." He sees one side of the medai. An $S$, a speculator, would have seen the other. [It would be profitable to reconsider the Semblançay case under Francis I in the light of this analysis by Pareto.-A. L.]
ground where they are viewed as ties that are the necessary counterparts of the ties established by the right of private property. ${ }^{8}$
The proofs of that thesis are supplied by history; but it is further confirmed by numerous inferences, notable among which the corollaries of the theory of compound interest.
It has long since been remarked that that theory, when applied to long intervals of time, yields results which are flatly belied by experience." "A centime placed on compound interest at the rate of 4 per cent at the time of the birth of Christ would yield by the year 1900 a fabulous amount in francs represented by 23 followed by 29 zeros. [More exactly the figure 23,085 followed by 26 zeros.] Assuming the Earth were made entirely of gold, thirty-one such Earths would be necessary to cash that sum in gold. A result quite as absurd would be obtained by dropping money from consideration and thinking of economic values, in general, as multiplying in that progression. A value of 100,000 francs placed at an interest of 3 per cent would yield in 495 years $226,000,000,000-$ in other words the present wealth, approximately, of France. According to Petty, the wealth of England in the year 1660 was $6,000,000,000-$ let us say 8,000,000,000 for the United Kingdom. If we take the Exchequer's valuations for the year 1886 ( $235,000,000,000$ ), the interest-rate required to transform $8,000,000,000$ into that amount in 226 years would be about 1.5 per cent. One may infer from that that only by exception can wealth increase in a geometrical progression equivalent to or exceeding a rate of t .02 per cent or I .03 per cent. . . . If the wealth of England were to increase according to the progression observable between the years 1865 and 1889, the English Government would get, within a few centuries, an altogether fabulous revenue. It is therefore certain that that progression cannot hold during centuries to come. . . .
"Life-insurance premiums are based on calculations of compound interest. They can be accepted so long as only small portions of the population and wealth of a country are involved. They would lead to utterly fantastic results if they were to apply to the whole of

[^62]a population or to any considerable fraction of a national wealth." If a few families had placed a centime at compound interest at the beginning of our era and been able to save the wealth so produced, they would long since have absorbed all the wealth on the globe. As regards distribution of wealth, one gets results as absurd as for the total wealth.
In the face of facts so solidly established, some writers have halted at the conclusion that the theory and the computations of compound interest cannot be applied to any notable portion of a population over any very extensive period of time, a conclusion, to tell the truth, that simply restates the description of the facts without explaining them. The author of these volumes had not himself gone beyond that point as late as the year $1896 .{ }^{10}$ The theories of sociology now
$2316^{10}$ Why is it that a writer should first stop at such a point and later on go beyond it? If that were a mere individual case, it might not be worth while to answer the question. But it has a more general bearing, and may furnish considerations that will have their use in the investigation of social phenomena. The author of the Cours insists at length on the necessity of taking account of the interdependences between phenomena. The main source of his error, therefore, cannot have been any general oversight as to that principle. One may nevertheless say that, in the particular, he has to some extent neglected interdependences between economic phenomena and social phenomena. But his error lies primarily in the fact that whereas he is careful to subject economic situations to a strict scientific analysis, in dealing with social problems he often accepts ready-made theories and a priori judgments supplied by the ethics that is current in his time in the society in which he is living. That principle has been and still is the guiding principle with many economists, and it is well therefore to call attention to the error. The author of the Cours seems, at least by implication, to hold that anything contrary to ethics is harmful to society and that anything that is declared reprehensible by common opinion, which he adopts as his own, ought to be avoided. The fact illustrates the potency of residues, and specifically of the II- $\zeta$ residues (sentiments objectified). IV- $\epsilon 3$ residues (group approbation) also figure. The author studies his economic problems with all possible care. Rightly or wrongly he felt he had obtained scientific demonstrations and was standing on solid ground so far as those problems were concerned. He was indifferent to any reproach that sentiment might make of him, and to prevailing opinions save as they were justified by experience. But on entering the field of sociological phenomena, he felt that he had not as yet subjected them to a thorough-going experimental anaylsis and that the ground was insecure under his feet. He hesitated to attack certain opinions the scientific fallacy of which he was not as yet in a position to demonstrate; and in such cases he subordinated his judgment to prevailing sentiments, or to his own. So derivations came leaping forward-II- $\boldsymbol{a}$ derivations, for example (authority). Economists of great and deserved reputation had held that debasings of currency were simple frauds, crimes of immoral governments; and unconsciously under the influence of that idea, which
permit us to complete that earlier investigation. If practical results do not substantiate the implications of the theory of compound interest, the fact is due not to any defect in the theory, but to the assumption of a premise that does not square with realities. Computations of compound interest implicitly assume that wealth is to accumulate over very extensive intervals of time at rates of interest not widely different from the rates observable in our time for accumulations of brief duration representing insignificant fractions of the total wealth.

Failure of the facts to corroborate conclusions soundly derived from a given premise is sufficient proof of error, or at least of incompleteness, in the premise. That must be the case with the premise just stated. But how explain the conflict between the results yielded by theory, according as it be applied to longer or shorter periods of time, to larger or smaller fractions of the total wealth?

If one ignore the fact that the rates of interests envisaged are more or less the rates actually observable, one might infer that as wealth accumulates it becomes less and less productive, so that, in the long run, the rate of interest approaches zero. That principle is vaguely present in optimistic theories of a diminishing interest-rate. But such theories are belied by the facts, which clearly show that from the heyday of Athens down to our own times, interest-rates have risen and fallen in successive variations but have failed by far to reach
had been nurtured in him by his masters, he succumbed to III-a derivations (accords with sentiments) and perhaps even to III- $\epsilon$ derivations (metaphysical). As regards logic, for that matter, he finds in it, and soundly, an incontrovertible refutation of the patter emanating from adorers of the "ethical state." In that, too, we have a thing that is general: a derivation that is fallacious inspires a refutation which, sound enough from the standpoint of pure logic, seems to be equally sound from the experimental standpoint. Marx evolves an absurd theory of value, which is a gross exaggeration of the theory of Ricardo: the author of the Cours refutes it, and thinks that thereby he has refuted Marx's Socialism. That is wrong. No dispute revolving around derivations touches the experimental substance of things.
The changes observable in these volumes arise primarily in the fact that the author has now carried the experimental method into the field of sociology; that he has striven, to the best of his knowledge and ability, to accept nothing a priori or in deference to the most venerable authority, to trust in no wise to sentiments, whether his own or of others, to resist any intrusion on the part of metaphysical and religious belicfs of one kind or another-in a word, to subject everything to the single test of experience.
zero in our day. ${ }^{11}$ We must therefore discard the hypothesis of a diminishing rate approaching, in the long run, zero; and we are constrained to assume, in that case, that if the accumulation of wealth that would result from real interest-rates fails to develop, it is because the accumulation is made impossible by successive destructions of wealth.

And that is exactly what observation reveals. History is replete with descriptions of numberless causes for the destruction of wealth. Some of them bear upon total wealth:wars, revolutions, epidemics, plunderings and burnings, wastage of all sorts. Others bear upon the distribution of wealth and prevent protracted accumulations in given families, given communities, not without indirect reactions upon total wealth: and such are individual attacks upon private property belonging to families and groups and transfers of wealth resulting from force or from prodigalities. So it turns out that the carves of accumulating wealth for families, communities, nationsall humanity-instead of showing the regular increase that a uniform rate of interest would yield, are undulatory lines fluctuating about an average medium curve ( $\$ 1718$ ). The curve for humanity as a whole shows beyond any question a certain amount of increase from the earliest historical times down to the present day, though there may have been periods of retrogression. Just as certainly there is a curve of increase for the given family, community, or race, though with periods of decrease.

The duration of the periods is long for the human race as a whole, less long for nations, ${ }^{12}$ fairly short for communities, very brief for families. The thing is, in short, only a particular case of a very general phenomenon ( $\$ 2293,2330$ ), the fluctuations revealing and representing the various forces that affect the social aggregate as a whole.

Economic effects are not the only ones to be considered-there

[^63]are others just as important. As regards class-circulation, measures that are catastrophic, or violent, or merely of far-reaching scope, may, along with consequences beneficial to society, have others that are harmful to a far greater degree than effects produced by measures involving persuasion or deception and which, for that very reason, affect only certain classes of persons. In fact, measures of the violent or catastrophic type affect all individuals alike whatever the position they occupy in class-circulation whereas measures of persuasion and deception primarily affect individuals who occupy very low stations on the social ladder owing to their simple-mindedness, ingenuousness, or credulity, or their lack of courage and initiative. Measures of the first type may therefore be far more destructive to socially useful elements than measures of the second type.

If, now, one were to conclude from all the above that private property or other institutions of the sort might be abolished altogether, that would be falling into an error that is very general among sociologists and economists, and to which we have repeatedly called attention: the error, namely, of using a qualitative instead of a quantitative analysis, of overlooking interdependences in social phenomena, of imagining that in explaining social phenomena one can confine oneself to a single tie among the many ties and modify the one without touching the others.

History of course supplies facts directly counter to those we have just been considering. History shows that in societies in which private property is apparently non-existent or reduced to a minimum, in which equality seems to prevail, private property, or similar institutions, along with inequalities, tend to develop. That fact emphasizes the necessity (the experimental necessity) of other ties working in a sense opposite to the equalitarian ties. ${ }^{13}$ And from that to conclude that attacks on private property, and other similar institutions, and on inequalities, can be suppressed altogether would be to go astray and fall into the same error. For such things are just another illustration of the composite character of the forces that are working upon society.

And there is, finally, onc other type of error of which we must beware, the error of confusing, as is often done, real movements
$2316{ }^{13}$ See Pareto, Systèmes socialistes, Vol. I, Chap. IV, "Real Systems," and especially p . 179.
with virtual movements. The fact that history shows certain groups of simultaneous ties functioning in every age proves that those ties are interdependent (real movements) not only among each other but also with other conditions determining the social equilibrium; it does not show that the forms under which the ties in question function bring to society the maximum of any given utility that might be desired (virtual movements).
2317. Owing to their poverty of spirit, producers and holders of savings have little influence on economic developments, which are determined by the total quantity of savings far more than by any resistance that the savers might offer to those who are trying to rob them. Carrying on the analogy of the bees (\$2316), the quantity of honey that the apiarist-obtains depends on the total quantity the bees have gathered, and not on any resistance they may offer to being deprived of it. ${ }^{1}$
2317 ${ }^{1}$ According to Neymarck, Journal de la Société de statistique de Paris, April, 1914, p. 191, at the end of the year 1912 the total value of negotiable securities in the world-government bonds, corporation stocks and bonds, and so onamounted to $850,000,000,000$ in francs. Of these $115,000,000,000$ to $120,000,000,000$ were held in France, $80,000,000,000$ of which were in French paper. Bygones being bygones, if it were possible to do the thing in such a way that future producers of savings would not be aware of it or, after all, in such a way that they would not be frightened on their own account, the $850,000,000,000$ could be taken away from their present owners without any great change in the economic productivity of the world. One would get merely a transfer of wealth from certain individuals to certain other individuals, with the perturbations that differing tastes and needs in the new owners, as compared with the old, might occasion in production. Not so if future producers of savings were to take fright; for some of them would then stop saving and the rest would hoard what they did save, so cutting of the essentials for expansion in production and bringing on economic ruin. The problem, therefore, that governments have to solve, and especially speculator governments, is to find ways to rob past producers of savings without frightening future ones. Not by way of theory, but empirically, following instinct, they have hit on the very best solution to the problem, which is to proceed very gradually step by step, taking a little nibble every so often, now here, now there, at the cake. Far from alarming future producers of savings, that system emboldens them, for the value of future savings rises in proportion as the burdens on existing savings are made heavier.
In 1913, for instance, there was talk of a tax on French government bonds. That forced a drop in the bonds on exchange. In a phenomenon so complex no exact relationship can be established between the tax-rate and the exchange quotation of a bond. Speaking hypothetically and just to give a concrete form to considerations so abstract, suppose the tax on the coupon is 5 per cent, so that instead of being worth 3 francs for every 100 francs in capital, it will be worth only 2.85
2318. In periods of economic stagnancy there is an increase in the quantity of available savings, and that is the groundwork for the ensuing "boom" when the amount of available savings will diminish and so open the way to another period of stagnancy. And so on indefinitely.
2319. Superimposed upon these two types of fluctuation is a third, of very long duration, generally to be measured in terms of centuries. Every so often, that is, those elements in a population which are able and willing to use force and are endowed with powerful residues of group-persistence shake off the yoke that the speculators or other sorts of individuals expert solely in the arts of combinations have forced upon them; and that marks the beginning of a new era, during which the defeated classes gradually return to power, to be eventually overthrown again, and so on and on (§2331).
2320. In studying such developments it is important to note that oftentimes in one same country there is a very extensive group of phenomena in which the evolution described is going on, and another small, perhaps very small, class in which the use of force is constant. The typical example of that would be the Roman Empire. There the evolution was going on in the civil population; but along-
francs. If the price of the bond falls from 92 francs, let us say, to 87.40 , the old investors lose a certain amount, while new investors neither gain nor lose and continue investing their savings at the same interest-rate they would have had if the stock had remained at 92 without a tax on the coupon. There are two other situations: r. If the stock remains above $87 \cdot 40$, old owners of savings lose less, and new ones lose a little, there being a general lowering in the earnings of capital. 2. If the stock goes lower than 87.40 the old investors lose more, and the new ones gain, there being a general rise in the earnings of capital. The first case is quite generally observable in periods of depression, the second in periods of "boom." Speaking now in general terms, in this second case the speculators gain in two ways: I. They appropriate some of the money that they took from the old investors. 2. For their own savings, which are easily made owing to increased profits, they get a higher earning on capital. That movement cannot go on indefinitely, not because of any resistance on the part of those who are robbed, but because of the falling-off in production that results from the higher interest on capital; and further, because the ease with which speculators are making money encourages people to spend rather than to save. It is readily apparent that with a grand world total of $850,000,000,000$ in savings, these consequences materialize very slowly; and before they can modify the course of events very profoundly forces of more rapid effect may interpose, such as international competitions in the advantages accorded to savings, or the use of force to deprive speculators of their prey.
side the civil population stood the relatively small group of praetorians, for whom there was no evolution and who supported the Empire by force and gave it its leader. Something of the same kind may be seen today in the German Empire, though on a much smaller scale. The persons in the categories mentioned have friends, clients, and dependents of one sort or another, with whom they are now in accord, now in disaccord, and who have to be taken into account in estimating the social action of such persons. Conspicuous from that standpoint in our day are the relations between employers and employees, and between politicians and office-holders, and so on ( $\$ 2327$ ). ${ }^{1}$
2321. Suppose now we enlarge the restricted cycle we elected to consider in $\$ \$ 222$ I f., where we decided to confine ourselves to interests, $b$, and class-circulation, $d$, and consider the influence of those elements upon residues, $a$, and derivations, $c$. The influence on derivations is readily detected, because it is displayed in literature and in numberless other ways. Not so the influence on residues, which has to be unravelled from those various manifestations. The common error is to assume that it is much larger than it actually is.

[^64]Not so long ago, one might easily have imagined that the cycle $b d$ $d b$ had modified residues, $a$, very extensively in the direction of eradicating from humanity all save rational and humanitarian sentiments; but then suddenly a great wave of nationalism supervenes, and, to a lesser but still conspicuous degree, imperialism and syndicalism came to the fore; while there are revivals in the old religions, in occultism, spiritualism, and metaphysical moods, the sex religion attains extremes in a ridiculous fanaticism, and belief in dogmas new and old asserts itself under many forms; all of which goes to show that the cycle in question had exerted far greater influence upon derivations than upon residues.
2322. Something very similar happened in ancient Rome in the days of Hadrian and Marcus Aurelius. At that time the curve of prevalence for intellectualism and rationalism reached its high point. It really seemed then as though the world were thenceforward to be governed by reason. But with the advent of Commodus the curve begins to decline, not so much, as many writers are still saying, because of that Emperor's "vices" as from a natural reaction, like many other reactions observable in history; and, meantime, in the lower strata of Roman society a bounteous harvest of faith was ripening, soon to be garnered by pagan philosophy, the worship of Mithras and other cults of the kind, and finally Christianity.
2323. That in no sense implies that there has been no influence of the cycle $b d-d b$ upon residues, $a$, but merely that whereas within the cycle itself violent rhythmical variations, periods of pronouncedly differing traits, are observable, residues, $a$, show much more tenuous effects.
2324. The cycle $b c d-d c b \ldots$ is an important one. That derivations, $c$, should adapt themselves to changed conditions in class-circulation, $d$, is readily understandable; and they reflect, though to a lesser degree, changes in economic conditions; and so far as that is the case they may be regarded as effects of those causes. As the ruling class is gradually enriched in elements showing a predominance of combination-instincts (Class I) and becomes more and more disinclined to a frank and open use of force, derivations adapt themselves to such concepts of life. Humanitarianism and pacifism rise and prosper. There is talk of a world to be ruled by reason and logic. Old traditions are regarded as outworn prejudices. One has
only to glance at literature-Latin literature under the Antonines; European, and especially French literature, in the latter half of the eighteenth century, and then again in the latter half of the nine-teenth-and the traits described become strikingly apparent.
2325. Observable, on occasion, is the parallel development of another literature chiefly designed to effect changes in the apportionment of profits between the governing class and its adjutants: in Rome, between patricians and plebeians, Senators and knights, in the matter of war-booty and tributes from the provinces; in our countries, in the apportionment between politicians and speculators, manufacturers and working-men, in the matter of proceeds from economic favouritism and the tributes levied upon possessors of fixed incomes, small stockholders, and producers of savings. The larger the total to be apportioned, the hotter the battle and the more copious the literature it inspires, a literature that serves to show the merits and deserts, or the crimes and perniciousness, of this class or that, according to the spontaneous or well-paid predilections of the writer. Not a few "intellectuals" and humanitarians, sincere of faith and poor of spirit, gape in open-mouthed astonishment at such portentous demonstrations, and dream of a world that will some day be ruled by them; while the speculators, well aware of their fatuousness, look on approvingly, certain as they are that while people are engrossed in them and dote on them, they can go leisurely on filling their pockets.
2326. Early in the nineteenth century, either because it was richer in Class II residues than now or because it had not yet been taught of experience, the governing class by no means considered such derivations innocuous, and much less to its advantage. It persecuted them, therefore, and tried to control them by law. Gradually in course of time it discovered that they in no way constituted obstacles to ruling-class profits, that sometimes, indeed oftentimes, they were a help. The scowl changed to a smile and the law no longer punishes them. In those days rich bankers were almost all conservatives. Nowadays they hobnob with revolutionaries, intellectuals, Socialists, and even Anarchists. The most virulent invectives against "capitalism" now get into print through the subsidies of "capitalists." Capitalists who have not the courage to go that far find some cosy corner
at least among the Radicals. ${ }^{1}$ An interesting example of that sort of thing would be the celebrated Mascuraud Committee in France. It is made up of wealthy members of the manufacturing and commercial classes, who advance to the very limit where Radicalism turns into Socialism. Similar things are observable under different names in Italy, England, Austria-Hungary, Germany. Were the thing not there before one's eyes, it would seem incredible that in every country the defenders of the proletariat are not proletarians themselves, but well-to-do and sometimes very wealthy people, as is the case with certain Socialist Deputies and literary men. To tell the bald truth, the proletarians have no enemies in any party. In books and newspapers, on the stage, in parliamentary debates, all the members of the well-to-do classes declare that their one interest is the welfare of the working-man. They differ only as to the means of achieving that ideal, and it is around the various proposals that political parties are formed. But can it really be that all rich or well-to-do members of our present-day bourgeoisie have grown so solicitous for the welfare of others, and so indifferent to their own? Who could ever believe that we are living in the company of so many saints and apostles of renunciation? May not a Tartuffe or two, con-
$2326^{1}$ For certain special influences that attract numbers of persons who are not speculators into the Socialist or democratic parties, see Michels, Zur Soziologie des Parteiwesens, pp. 251-54 (Paul, pp. 263-66) : "There are kindly charitable souls, provided in abundance with all they need, who sometimes feel an impulse to devote themselves to a propaganda bearing on their special situation. . . . Not a few individuals of no great brains, and with bank-accounts to be matched in size only by their love of paradox, have conceived the fantastic notion that in view of the imminence of the revolution, they can save their fortunes only by joining the labour party in advance and so winning the influential and helpful friendship of its leaders. [They are following with no direct profit a policy that the speculators follow to very great profit.] Still others among the rich think it their duty to join the Socialist party because they regard it as a refuge against the rage of the poor. Very often, again, the rich man is brought to embracing Socialism in sheer despair of finding any new enjoyments. . . . But there are other elements also among Socialists of bourgeois origin: in the front rank of the phalanx, those who are malcontents out of principle; then even more numerous individuals who have personal reasons for discontent. . . . Many of them, consciously or unconsciously, hate the authority of the state because they have never been able to reach power. . . . Then there are persons more or less closely approximating the types mentioned . . . eccentrics, for instance. . . . There are people who stand at the top of the social ladder but feel irresistibly impelled to go down. . . . Then come the disappointed and the despondent."
scious or unconscious, be lurking somewhere among them? When certain men of means, such as M. Caillaux, go to such pains in fighting for the progressive income-tax, are they really and solely inspired by eagerness to give of their wealth unto others, and not in the least by the opposite thought, of bringing the wealth of others unto themselves? All things are possible, but some things seem hardly probable. Appearances may be one thing, realities quite another. When rich people pay good money to lecturers to preach to them that they should divest themselves of their goods, they might seem to be out of their heads; but they show that they are in full possession of them as they proceed to fill their pockets while others chatter. Speculators would seem to be mad in advocating and actually establishing the progressive income-tax; but their wisdom becomes apparent when, as the result of that gesture, they are enabled to work manipulations that net them much more than the tax takes away. ${ }^{2}$
2327. Manufacturers too once believed that every increase in wages meant a decrease in profits; but experience has now shown them their mistake, that they can increase both wages and profits at the same time, the increase coming out of the pockets of small stockholders and producers of savings, and people living on fixed incomes. The discovery was first made by manufacturers benefiting from protective tariffs. They would naturally have preferred to keep all the profits; but in time they came to see that it was to their advantage to share them with their help, and that even after deducting the working-man's share and the compensation due the politician for sending the rain of protectionist manna, a very handsome profit was still left. That is why it is much easier to settle strikes nowadays than it used to be, especially in protected industries, or industries that sell their products to the state. In fact, managers of such industries have learned how to take advantage of strikes and

[^65]turn them into profits ( $\$ 2187^{1}$ ). The man of brains can always find ways for turning apparent damage to account.
2328. The intelligence and ingenuity of the speculator transpires also in international politics. Preparations for war are profitable to speculators because of the economic activity required for the manufacture of armaments, and because they can utilize the sentiments of nationalism in their political battles. But war itself involves grave dangers to their dominion, because on the battle-field the man of courage is of more account than the man of subtle wiles, and they always pale at the thought that some victorious general may strip them of their power. So, with the assistance of their good friends the "intellectuals," they try in every way to persuade the civilized peoples that the reign of force is at last at an end, that great wars have become impossible through the deadliness of modern instruments of destruction, that it is sufficient if huge sums are spent on armaments in preparation for wars, though the wars will never occur. But when it comes to appropriations, they meet the competition of other devourers of the public budget, who want money for "social reforms" or other such purposes, and they have to come to terms with them. In their newspapers, as best fits their shrewd combinations, the financial syndicates are one day preaching peace and concord, exalting the miracles of international law and the blessings of "peace through law," and the next day they are instigating international discords and preaching defence of a nation's "vital interests," its special "rights," its "civilization." But the masses of people at large more or less second such manoeuvres, and that fact supplies an interesting example of derivations and of the way in which identical sentiments may be directed towards different goals. But not always are those who provoke a tempest able to quell it at their pleasure, and the speculator is always in danger of overreaching himself in trouble-making and bringing on the war he so greatly abhors. Today cunning is in the saddle, but that does not mean that force will not be in the saddle tomorrow, be it only for a brief ride. ${ }^{1}$

[^66]2329. Oscillations in derivations in correspondence with social oscillations. The phenomenon is of great importance. As a manifestation of ideas and doctrines, it appears in conflicts between various sentimental, theological, and metaphysical derivations, and between such derivations and the methods of the logico-experimental sciences. To write their history would be to write the history of human thought. As a manifestation of the forces that are operative in a society, it appears in conflicts between the sentiments corresponding to various residues, chiefly Class I and Class II residues, and therefore also in conflicts between logical and non-logical conduct. It is a very general thing, therefore, and under one form or another dominates the whole history of human societies. No wonder then that we should have frequently encountered it along our inductive path. Specially interesting are the two following cases. In the first place, considering doctrines transcending experience, we found ourselves confronted with the question as to how it comes about that experience works so differently in sentimental, theological, and metaphysical derivations and in scientific reasonings ( $\$ \$ 616$ f.) ; and we had to give some hint as to the answer, though deferring the more thorough-going examination to our present chapter. Then, later on, in considering derivations we had to ask ourselves how and why certain derivations, so patently false, fatuous, absurd, from the experimental standpoint, nevertheless persisted and recurred for century after century ( $\$ \$ 1678 \mathrm{f}$.). That fact implied a very serious objection to our characterization of such derivations in such terms; for one could properly wonder how in the world people could have failed to perceive for that length of time that they were false, fatuous, absurd. At that time we could neither disregard that question altogether and proceed without an answer, nor yet could we completely answer it, for lack of knowledge that we could not acquire till later on. We therefore had to rest content with merely

[^67]broaching an inquiry that we are now to complete. Meantime, as we went on, we found the problem widening in scope ( $\$ \$ 1678$ f.), and it stands before us now in the form of a mutual correlation between an undulatory movement in residues and an undulatory movement in derivations, and between both those movements and other social phenomena, among which, very especially, the economic. Considering long periods of time, the relative proportions of Class I and Class II residues may vary very perceptibly, especially as regards the intellectual classes in society; and in such cases very significant situations arise in connexion with derivations.
2330. Even when stated in such terms, which are very broad, the problem is just a particular aspect of a more general problem-the problem of undulations in the various elements constituting social phenomena and of the mutual relations of those elements and their undulations. ${ }^{1}$ In all periods of history, one may say, people have had some conception of a rhythmical, periodic, oscillatory, undulating movement in natural phenomena, social phenomena included. The notion is probably correlated with residues of group-persistence (Class II) arising from observation of the periodic alternation of night and day, the seasons, the phases of the Moon, and later on, in a day of astronomical observation, the movements of the celestial bodies. In other departments of life the attention is caught by periodic alternations of good crops and bad crops, abundance and famine, prosperity and depression. ${ }^{2}$ Uninterrupted is the succession in
$2330{ }^{1}$ Pareto, Cours, §925: "The molecules that, taken in the aggregate, make up the social body are in perpetual oscillation. We can, for the purposes of a given analysis, consider certain average economic situations, just as we may consider a mean level of ocean tides. But those are mere conceptions that in no case have any real existence."
$2330{ }^{2}$ Numberless such notions can be documented, all the way along from the dream of Pharaoh (Gen. Chapter 41), who saw seven fat cattle and seven lean ones, seven fat ears of corn and seven withered ones, down to the Jevons theory of a correlation between economic crises in the West and periods of crop-failure in India. Pharaoh saw the lean cattle and the lean ears eat the fat ones, not the reverse. So in our time many economists restrict the term "crisis" to the descending segment in an economic wave, and seem not to be aware that the ascending period leads to the descending period, and vice versa. [The allusion above is to W. S. Jevons, Investigations in Currency and Finance, pp. 217-18. Jevons's son, Herbert Stanley Jevons, The Sun's Heat and Trade Activity, pp. 15-31, correlated barometric pressurcs in Córdoba, Argentina, and Bombay, India, with harvests in the United States.-A. L.]
individuals, new ones replacing those who die, and one age succeeding another-childhood, manhood, senility. The notion of such a succession suggests itself as regards families, cities, peoples, nations, all humanity, as tradition or history comes to embrace a certain expanse of time and the curiosity of the intelligent turns to such matters. Then again the spectacle of terrestrial cataclysms prompts, under the influence of persisting abstractions (residue II-ס), to a more or less deliberate application of the principle of rhythmic movement to the universe as a whole. In all these different cases, finally, the requirement of logical elaboration (residue $I-\varepsilon$ ) and residues of persisting uniformities ( $\mathrm{II}-\varepsilon$ ), lead to the fabrication of doctrines that come into thriving vogue with metaphysical and pseudoexperimental appendages.

What probably happens is that writers reasoning a priori or dogmatically, as well as metaphysicists in great majority, instinctively extend to the whole universe impressions they have received from this or that body of fact, and so come to assert that everything is subject to a rhythmical movement. There are writers, however, who reach the same conclusion by hasty generalizations that far overstep the facts, which for that matter they distort. ${ }^{3}$
$2330^{3}$ The doctrine that the universe has undergone a series of creations and destructions seems to have been held by Anaximander, Anaximenes and Heraclitus (Fragmenta, 20), though the fragments of those writers that survive have been variously interpreted. One of them was fairly obscure even to Cicero, who remarks, De natura deorum, III, 14, 35, that since Heraclitus has not seen fit to make himself clear, what he says may be disregarded. After all, such matters of interpretation are without bearing on investigations such as we are making here. We may stop at the fact that certain ancients had the idea in question and of that there can be no doubt in view of Aristotle, De coelo, I, Io, 2 (Hardie-Gaye, Vol. II, p. 279b); Physica, VIII, I, I (Hardie-Gaye, p. 250b) and Diogenes Laertius, Heraclitus, IX, 8 (Hicks, Vol. II, p. 415). Diogenes ascribes to Heraclitus the declaration that "the world is one, being born of fire and consumed anew in certain periods alternating from age to age, as Destiny determines." And cf. Eusebius, Er'angclica praeparatio, XIII, 13 (Opera, Vol. III, pp. rif7-18). The Stoics had a similar doctrine, whether or not derived from earlier philosophers: Eusebius, Ibid., XV, 18 (Opera, Vol. III, pp. 1347-48) ; and Cicero, Ibid., II, 46, 118. So we get one of the extremes mentioned. The other is represented by Herbert Spencer. In the second part of his First Principles he devotes a whole chapter to "The Rhythm of Motion." Giving a number of examples of such rhythms, he does not halt, as experimental science would require, at the conclusion that rhythm is a fairly general phenomenon, but yielding to his metaphysical hunger for the absolute, he concludes, p. 291: "Thus, then, rhythm is a necessary characteristic of all motion. Given the co-existence everywhere of antagonist forces-a postulate which, as we have seen, is necessitated by

Returns are noted, for the most part, in connexion not with phenomena that are sharply defined and characterized, but with abstractions that are more or less vague, so that, with resort on occasion to the doctrine of exceptions ( $\$ 1689^{3}$ ), the theory can be made to fit all circumstances and never fail of verification. Even in our day, in regard to phenomena with easily measurable indices, Jevons came out with his theory of "cconomic crises," leaving the term "crisis" inadequately defined. On the other hand, there is often a demand for a definiteness that can only give illusory results, as, for instance, the effort to determine exactly, or on the average, the period of time that will elapse between one return and the next; all of which is in deference to the instinct that prompts many people to give concrete forms to their abstractions (residue II-弓).

At times no limit is set to the oscillation; but then again, and more often, yielding to the instinct that prompts the human being to seek his own welfare and the welfare of his fellows, there is a more or less explicit conception of a limit, and generally it is a state of happiness. Only some rare pessimist locates the end in a state of unhappiness, or in complete annihilation.
With all deference to fanatics of the "historical method" and partisans of "complete bibliographies," a study at all extended of such theories would be of not the slightest practical use as regards any understanding of the phenomena presumably pictured by them. The effort required for such an investigation could much more profitably be devoted to objective study of the phenomena themselves or, if one prefer, of the direct testimony bearing upon them ( $\$ \S 95$, 1689), along with a search for measurable indices for the phenomena and for a classification of fluctuations in order of intensity, with the object, if possible, of determining what the major oscillations are, and of discovering a few of the very numerous correlations prevailing between oscillations in different phenomena ( $\$ \$ 1718$, 1731 , 2293). Study of the theories may, indeed, throw light on the derivations of which they are made up; and that again must always be an objective study, save that the subject-matter is not the phenomena pictured by the theories, but the statements of them, their litera-

[^68]ture. We have already given so many examples of such derivations that we need touch on them but very briefly here.
Plato had the vision of a perfect city, and at the same time he could not help seeing that the actual cities he knew about were not organized on his model. On the other hand, he was preaching in order to translate into reality the city of his dreams. He therefore had to admit the possibility of its existence, merely carrying it outside the present world, either backward to the past or forward to the future, or both together. So his ideal city became either an origin or a goal, or else the origin or goal of a certain evolution, which, as a result of the metaphysicist's fondness for generalization, is represented as a universal evolution. ${ }^{4}$ Plato, of course, knowing everything, also knows the length of time each cycle will require: "As regards divine generations, the revolution is comprised in a perfect number." As regards mortal generations-human beings-Plato's specifications are so vague that none of his modern commentators have ever been able to make head or tail of them. The ancients were more fortunate, but they were not considerate enough to share their light with us, so that we are left in the dark as to just what the number was. That is a great loss indeed, though it is partly offset by the fact that other writers have given us other numbers of the same sort and surely just as probable. ${ }^{5}$

[^69]In his Politics, at least, Aristotle uses less metaphysics than Plato and comes a little closer to the experimental method. He criticizes Plato's theory, though one has to admit that his strictures bear rather on forms than on substance, and are not always well taken. Of all the ancient historians Polybius comes closest to experimental reality in his investigations. He is a worthy predecessor of Machiavelli. At first blush one is astounded at seeing him (VI, Fragment III, 5), taking over Plato's theory to the extent of transcribing it as an explanation of the transformations occurring in the government of the ancient city. It may well be, however, that he thought he was recording experimental facts, his error lying chiefly in a hasty generalization that led him astray from the real world. When he comes to a comparison of various republics he discards Plato's as a fiction of the imagination. ${ }^{6}$ In a treatise on Generation and Corruption that is attributed to Aristotle, one notes the concept of a continuous transformation, and it is further stated, in clarification of the notion, that the transformation has to occur in a circle (II, ir, 7). That amounts to generalizing the theory of Plato.

Many writers have worked on that common background (it has its experimental element) of unbroken oscillations. Vico's theory of "recursals" (ricorsi), primarily metaphysical in character, oversteps
any more than there is in their political life. The second childhood of the aged is not the childhood they knew as children. The Restoration was not the same as the Old Régime. While a reaction against the achievement of the Revolution was in progress, that achievement was to a great extent being consolidated, deriving new vigour from the older ideas with which it was associated." Such reflections imply abandonment of the notion of cyclical revolutions with discontinuous periods, and tend towards the conception of a wave-movement with continuous variations that experience actually reveals in certain phenomena. Ferrari, Teoria dei periodi politici, pp. 15-16: Ferrari does not fail to appreciate the difficulty "of separating one generation from the one before it"; but he thinks he can solve the problem by considering changes in government, and is carried to the consequence "that generations are renewed with governments every thirty years. Every thirty years a new plot unfolds, every thirty years a new drama appears with new characters, every thirty years there is a new dénouement." Such statements far overstep the results yielded by experience.
$2330{ }^{6}$ Farther along, Fragment VII, 57, he explains changes in republics by noting that "all existing things are subject to corruption and change." That conception, however, he need not necessarily have derived from Plato, for it is a universal notion and translates the impression that is left on all human beings by the changes that go on in the world we live in.
the limits of reality almost as far as Plato's theory. ${ }^{7}$ For that matter, he confesses that his work reaches the same conclusions as Plato's. Vico still has admirers today, and probably will continue to have so long as the great stream of metaphysics that has come down across
$2330{ }^{7}$ At the beginning of Book IV in his Scienza nuova, Vico summarizes the matter he has expounded in his preceding chapters on the subject of "ideal cternal history" (which would be another variety of history to be added to the long list from which we gave specimens some distance back ( $\$ 2156-69,1580$ )). Says he, p. 785 (stresses on words Vico's own): "Soggiugniamo il corso che fanno le nazioni, con costante uniformità procedendo in tutti i loro tanto vari e sì diversi costumi sopra la divisione delle tre età, che dicevano gli Egizi essere scorse innanzi nel loro mondo, degli dèi, degli eroi e degli uomini, perchè sopra di esse si vedranno reggere con costante e non mai interrotto ordine di cagioni e d'effetti, sempre andante nelle nazioni per tre spezie di nature; e da esse nature uscite tre spezie di costumi; e da essi costumi osservate tre spezie di diritti naturali delle genti; $e$, in conseguenza di essi diritti, ordinate tre spezie di Stati civili o sia di repubbliche; $e$, per comunicare tra loro gli uomini venuti all'umana società tutte queste già dette tre spezie di cose massime, essersi formate tre spezie di lingue ed altrettante di caratteri; e, per giustificarle, tre spezie di giurisprudenze, assistite da tre spezie d'autorità e da altrettante di ragioni, in altrettante spezie di giudizi, le quali giurisprudenze si celebrarono per tre sètte de' tempi, che professano in tutto il corso della lor vita le nazioni. Le quali tre speziali unità, con altre molte che loro vanno di séguito e saranno in questo libro pur noverate, tutte mettono capo in una unità generale, ch'è l'unità della religione d'una divinità provvedente, la qual è l'unità dello spirito, che informa e dà vita a questo mondo di nazioni. Le quali cose sopra sparsamente essendosi ragionate, qui si dimostra l'ordine del lor corso." [This passage from Vico arouses Pareto's mirth because of its aggressive obscurity. Boven, Traité, Vol. II, p. 1547, virtually throws up the sponge. He transfers the passage verbally into a senseless French and then reprints Michelet's paraphrase, which is equally inaccurate. Put off the track in the first place by a misprint ("essa" for "esse"), Boven does note that Vico might have done better had he written "franchement en Latin." His style in fact evinces an extreme classicism, so that certain words have to be translated as though they were Latin. Taking the problems in order: "esse" refers to "età," not to "divisione" as Boven guessed. "Andante" goes with "ordine." "Uscite," "osservate," and "ordinate" with their nouns are predicates of "si vedranno." "Si celcbrarono" is used in the Latin sense of "practise." "Uomini" is the subject of "comunicare" and "spezie di cose massime" the object. "Spezie di lingue" similarly is the subject of "essersi formate," which again depends on "si vedranno." "Sètte dei templ" stands for sectas temporum and is coordinate in meaning as well as in grammar with "spezie." "Professano" is profitetutur, in the sense of "declare," therefore "show," "manifest," "exemplify."-A. L.] "Then there is the course that the nations traverse, following in a constant uniformity in all their varied and multifarious traits the three distinct ages that the Egyptians said had elapsed before their time in their world, to wit, the ages of the gods, of heroes, and of men. For they will be seen to conform to those three ages in a continuous and never interrupted progression (ordine) of causes and effects that is for ever developing (andante) in the nations according to three species of temperaments
the ages flows on in its course. The "theory of political periods" of Giuseppe Ferrari might seem to be taking us into the experimental field, but unfortunately that appearance is deceptive. ${ }^{8}$ Ferrari treats facts somewhat arbitrarily, often attaching to them a significance
(nature); whereof [will be seen to] proceed three species of morals (costumi) observing three species of natural laws of nations that are the foundations of three species of civil governments or commonwealths. And that on attaining civilized society men might communicate to each other all the three species of supreme things aforesaid, three species of languages were formed and as many alphabets, and to justify them [i.e., those same supremacies] three species of jurisprudences, supported by three species of authority and three species of reason in three species of judgment; which jurisprudences were practised in the three manners of the [three] ages, respectively, which the races and nations of men exemplify in the whole course of their lives. And these three special unities [i.e., of the three ages], with many others that follow from them and which will likewise be enumerated in this book, all lead to the general unity, which is the unity of the religion of one provident [i.e., foreseeing] divinity, which is the unity of the spirit that gives form and life to this world of nations. These things having been but incidentally touched upon heretofore, the order of their development will here be set forth."
We might glance in passing at the three sorts of morals (customs), p. 789:
$2330^{8}$ Teoria dei periodi politici, pp. 7-11, 75, 105-13, 134, 150, 175: "In our view the generation will be the fundamental element in every return. Like the sunrise it is always the same and continually repeats the same drama, in all periods of history, in all civilizations. . . . The average length of the individual life is not the average length of the political generation. . . . The average life of the political generation is to be calculated by taking men at the moment of their real birth, when they take charge of their families, their governments, their armies. . . . Then their intellectual life begins and its lasts thirty years, more or less. . . . The age of birth varies. Some men reveal themselves between twenty and twenty-five, and they are poets, painters, sculptors, masters of music. Others arrive at a later age, such as philosophers, jurists, historians, who require at least thirty years to conceive their plans, execute their many researches, apply their ideas, rectify inevitable mistakes, in a word catch the ear of the generation that is to applaud them. . . . [Exceptional individuals have two lives:] That is the case with Voltaire, who remained in the public eye from 1718, the year of the production of his Oedipe, down to 1778, the year of his death. But he led two lives that cannot be confused." Some generations are prolonged, others are shortened. Some are as short as nineteen years. There are preparatory, revolutionary generations and reactionary, conclusive generations. Political periods evolve in four times (generations): "Every new principle uses four generations, which it dominates in such a way as to make one single dramatic episode. And since principles are succeeded by principles, generations follow one another in groups of four at average intervals of 125 years. It took Christianity 115 years to become established: from the advent of Diocletian, who degraded Rome, to the death of Theodosius, which marks the fall for ever of the pagan world. France allows four times (generations) for religious reform, from 1514 to 1620 ; four for the modernization of the aristocracy, from 1620 to 1750 ; four for the Revolution proper, which is drawing to its close in our day."
they do not have. His main defect, which other writers under similar circumstances share, lies in his trying to force facts under inflexible rules that have an exactness which is altogether illusory. He would give rigid and immutable form to oscillations, which are

## "Primitive customs, as described to us in Deucalion and Pyhrra, who came just

 after the Flood, were all suffused with religion and pity. The second, as exemplified in Achilles, were choleric and susceptible, the third, 'officious,' inspired by a high sense of civic duty." As for the meaning of "officious," Vico explains, p. 858, in connexion with his three periods of time: "Latin writers under the Emperors call the duty of a subject the officium civile." The three kinds of alphabet are, pp. 799802: (1) Divine characters, called hieroglyphics, which all nations used in the beginning; (2) heroic characters; (3) common characters, which go with the various vernaculars. We shall spare the reader any further divagations of this sort; but it would be a pity to make no mention of Vico's strong faith in the story of the Flood and in giants. For the giants he has experimental proof (p. 208)-the weapons of enormous length belonging to ancient heroes that Augustus, if one is to believe Suetonius, kept in his museum, along with bones and skulls of giants of old. The fact, however, is that Suetonius, Divus Augustus, 72, says something quite different. Alluding to the villas of Augustus, he writes: "His own villa, though small, he decorated with statues and paintings, with porticos and groves, with antiques and curios, such as bones of sea-monsters and wild animals exceptional for size, which are popularly called (quae dicuntur) 'giants' bones', and weapons of famous soldiers" [arma heroum, being that is, co-ordinate with membra, not the predicate of quae dicuntur, as Vico read it.-A. L.]. Interesting as regards derivations is Vico's use of the number 3 with the mystical properties so dear to metaphysicists and theologians.In Book V Vico treats "of the recursal in human affairs through the renaissance of nations." Epitomizing, p. 958, the substance of the earlier books, which were devoted "to illumining with clearer light the era of the second barbarism (which had been even darker than the era of the first barbarism, which itself had been called dark by that great scholar of early antiquities, Marcus Terentius Varro, in his division of eras); and also to showing how God Greatest and Best [Ottimo Grandissimo Dio, Jupiter Optimus Maximus] had applied the designs of this Providence, with which He has guided the nations in all things, to the realization of the ineffable decrees of His grace . . . forasmuch as, having in superhuman ways declared and established the truth of the Christian religion against Roman power by the miracles of the martyrs and against the false wisdom of the Greeks through the teachings of the Fathers, there still being destined to arise armed nations that were everywhere to combat the true divinity of their Maker, He permitted a new order of humanity to be born among the nations to the end that it might be firmly established according to the natural course of human affairs themselves. With that eternal design He brought back times truly divine, during which everywhere, in order to dcfend the Christian religion of which they are protectors, the Catholic kings donned the dalmatic of the deacons and consecrated their royal persons." Finally Vico gets to a conclusion, p. 1036: "So then let us conclude this work with Plato, who makes a fourth sort of commonwealth wherein the supreme rulers are honest upright men, the which would be the true natural aristocracy. Such a commonwealth as Plato conceived Providence hath so ordained from the first be-
essentially variable, essentially protean. Under lure of that illusion, he imagines phenomena that have nothing to do with realities, such as "thinking generations," lasting on the average about thirty years, and "political periods," made up of four "thinking generations" and lasting about a hundred and twenty-five years. Metaphysicists as a rule are contemptuous of facts (\$82r): Ferrari at least pays homage to them by trying to make them fit into the plan he has drawn. For that purpose he falls back, as many writers do, upon the great resource of exceptions ( $\S 1689^{3}$ ). Certain individuals, such as Voltaire, Goethe, Aristophanes, Sophocles, Rossini, and others, he endows with two "thinking lives." He admits delays and accelerations in "thinking generations" and in "political periods." In the different nations he finds certain "translations" of the periods, notes their "comparative velocity," in a word, himself partially demolishes the foundations of his own theory. All the same, as compared with metaphysicists generally he has the great merit of expressing himself clearly; and in a mass of details of misleading exactness and arbitrarily organized, one notes remarks which, like Draper's theories $\left(\$ 234 \mathrm{I}^{1}\right)$, come very close to experimental realities. The cases of Ferrari and Draper are like a great many others we have seen ( $\$ \$ 252-53,2214$ ): They catch a vision of the facts through a fog of metaphysics and pseudo-experience.
2331. Slight oscillations do not ordinarily appear in correlation; they are fleeting manifestations in which it is difficult, nay impossible, to discover uniformities. Correlations in wide oscillations are more easily discernible: they are manifestations of long duration in which now and again we succeed in recognizing a law (uniformity), either for some given phenomenon considered apart from others or for given phenomena as correlated with others. Such uniformities have long been perceived, though more often indistinctly and stated in no very adequate terms. When, for instance, corre-

[^70]spondences are noted between the wealth of a country and its manners and customs, one is dealing with uniformities in interdependent oscillations; but ordinarily the temptation is to overstep experience and go wandering off into ethical reflections.
A number of errors are commonly to be noted in studies of such uniformities. They fall into two classes: $A$. Errors arising from failure to take due account of the undulatory form that phenomena assume. $B$. Errors in interpreting that undulatory form.
2332. $A$-r. The waves in a curve represent periods of intensification and decline in phenomena. They may be described as ascending or descending. If they are at all protracted, people living in them readily get the impression that a movement is to continue indefinitely in the direction observable in their time, or is at least to terminate in some stationary condition without subsequent countermovements (\$§ 2392, 2319).
2333. A-2. That error is attenuated but not corrected when it is indeed assumed that there is a mean line about which the movement is oscillating, but it is also assumed that that mean line coincides with the line of one of the ascending phases of the movement. Never, or almost never, is it made to coincide with the line of a descending period. ${ }^{1}$
2.334. $B$-1. It is known that, in the past, the movement has shown oscillations, but it is taken for granted that the normal movement is a movement favourable to society in the direction of a uniformly increasing good. At the most, someone will concede that it is no more than holding its own but shows no decline. The case of a downward movement uniformly unfavourable is for the most part barred. Oscillations that cannot be disputed are regarded as abnormal, secondary, accidental-each has a "cause" that might be (§ I34) or ought to be remedied, whereupon the oscillation itself would disappear. Derivations in this general form are not common; but they are very common under the form next following ( $B-2$ ), and it is not difficult to see why; the human being has a propensity to seek his advantage and to shrink from anything that is to his harm.
2335. $B-2$. It is assumed that oscillations can be separated, keeping the favourable and eliminating the unfavourable by removing

[^71]the "cause." Almost all historians accept that theorem, at least implicitly, and go to great pains to explain just what this or that nation should have done to keep for ever in a favourable period without ever slipping into unfavourable periods. Not a few economists even know and are kind enough to inform the world how "crises" might be averted, the term "crisis" designating nothing but the descending period in an oscillation. ${ }^{1}$ All such derivations are commonly used in discussions of social prosperity ( $\$ \$ 2540$ f.). They are favourites with a great many writers who naïvely imagine that they are doing scientific work when they are really preaching moral, humanitarian, or patriotic sermons.
2336. $B-3$. Merely as a reminder-for we have only too often had occasion to allude to it-let us note the error of mistaking relationships of interdependence for relationships of cause and effect. In the case here in point the assumption is that the oscillations in a given phenomenon have causes of their own independent of oscillations in other phenomena.
2337. B-4. Disregarding correlations, actually, but still resolved to find some "cause" for oscillations in a given phenomenon, a writer will seek a cause in theology, in metaphysics, or in vagaries that are experimental in appearance only. The Hebrew prophets found the cause of descending periods in the prosperity of Israel in the wrath of God. The Romans were convinced that every evil that befell their city was caused by some violation of rites in the worship of the gods. To recover prosperity one had only to discover what the violation had been and make suitable amends. Many many historians, even modern historians, seek and find similar causes, now in "corruption of morals," now in the auri sacra fames, now in violations of the precepts of morality, law, or brotherly love, now in the sins of an oligarchy that is oppressing a people, now in capitalism, in too great inequalities in wealth, and so on and on. Of such derivations there is an assortment varied enough to please all tastes. ${ }^{1}$
$2335{ }^{1}$ Pareto, Cours, § 926: "The term 'crisis' is most often kept for the descending phase of the oscillation, when prices are falling. In reality that phase is closely bound up with the ascending phase, when prices are rising. The one cannot subsist apart from the other and the term 'crisis' should be kept for their sum."
$2337^{1}$ Pareto, Manuale, Chap. IX, § 82: "Causes of crises have been seen in each and every circumstance connected with them. In the ascending period, when every-
2338. In reality oscillations in the various elements that go to make up the social phenomenon are interdependent, as are those elements themselves. They are mere manifestations of changes in the elements. If one is bent on using at all costs the misleading term "cause," one may say that the descending period is the cause of the ascending period following, and vice versa; but only in the sense that the ascending period is invariably associated with the preceding descending period, and vice versa-that, therefore, speaking in general terms, the various periods are just manifestations of a single state of things, that observation shows them as succeeding one another, so that the succession is an experimental uniformity. ${ }^{1}$ The oscillations are of various kinds depending on the length of time required for their completion. The time may be brief, very brief, long, very long. Very brief oscillations are ordinarily accidental, in the sense that they reflect the action of momentary, ephemeral forces ( $\$ 233 \mathrm{I}$ ) ; those which evolve in fairly extensive periods of time reflect forces of some duration. Owing to our scant information as to very remote eras in history and our inability to foresee the future, very long oscillations may not look like oscillations at all, but seem to be permanent trends in a given direction ( $\$ 2392$ ).
2339. Returning now to the particular problem we set ourselves
thing is prospering, consumption increases and business men increase production. To do that savings are transformed into frozen and liquid capital, credit expands, and circulation becomes more rapid. Now every one of those various steps has been taken as the exclusive cause of the descending period, to which the term "crisis" has been applied. The only truth in that is that those phenomena have indeed figured in the ascending period that always precedes the descending period. . . . It is fantastic to speak of a permanent excess of production. If any such thing existed there would have to be somewhere constantly increasing deposits of excess merchandise. But no such thing has ever been heard of."
$2338{ }^{1}$ Pareto, Cours, § 926: "A crisis must not be thought of as an accident interrupting a normal state of things. The normal thing is the wave-movement, economic prosperity bringing on depression, depression bringing on prosperity. In regarding economic crises as abnormal phenomena, the economist is making the mistake a physicist would be making in thinking of the nodes and internodes of a rod in vibration as accidents independent of the movements of the molecules in the rod." And Pareto, Manuale, Chap. IX, § 75: "The 'crisis' is just a particular case of the great law of rhythm that prevails in all social phenomena (Pareto, Systèmes socialistes, Vol. I, p. 30). The social system shapes the crisis; it does not affect its substance, which depends upon the nature of the human being and of economic problems in general. Crises occur not only in private industry and commerce, but in public enterprise and finance."
in $\S 2329$, as to the interdependence of waves: It is clear that in order to solve it we have to take account of the forces that are working upon the various elements in the social phenomenon, the interdependences between which we are trying to determine. It will help if we divide such forces into two groups: 1 . Forces arising in the conflict between theory and reality, in the more or less perfect adjustment of theories to realities. They manifest themselves in differences that arise between sentiments and the results of experience. That aspect of the problem we may call intrinsic. 2. Forces tending to modify sentiments and arising in the relationships in which such sentiments stand towards other facts, such as economic and political conditions, class-circulation, and so on. That we may call the extrinsic aspect of the problem.
2340. I. Intrinsic aspect. ${ }^{1}$ At times, for individuals in whom Class II residues (group-persistence; the thing $A$ in $\S 616$ ) have declined in vigour while the combination-instincts (Class I residues) have intensified (while experimental science has gained in prestige, we said back there, in $\$ 616$ ), conclusions deriving from Class II residues (group-persistence) come to seem more strikingly at odds with realities, and that circumstanice gives rise to a feeling that such residues are "outworn prejudices" that had better be replaced with combination-residues ( $\$ 1679$ ). So, non-logical actions are mercilessly condemned from the standpoint of experimental truth and individual or social utility, and the idea is to replace them with logical actions, which are professedly dictated by experimental science, but in reality are based on pseudo-science and are made up of derivations of little or no validity. The situation is usually stated in terms of the following derivations, or others of the kind: "Faith and prejudice must give way to reason." It is held that the sentiment expressed in that derivation "demonstrates" the "falsity" of the grouppersistence residues, the "truth" of the combination-residues. At other times, when an inverse trend is in progress and residues of group-persistence are acquiring new strength while the combinationresidues are losing ground, contrary phenomena are observable ( $\$ 1680$ ). The residues of group-persistence that have weakened may

[^72]be beneficial, indifferent, or detrimental to society. In the first case, the derivations of the combination-instinct, on the basis of which the Class II residues are rejected, show themselves entirely at odds with practice, as tending to give the society forms unsuitable to it and which might even encompass its destruction. That is felt instinctively rather than demonstrated by thought; so a trend begins in a sense counter to the trend that had given predominance to Class I residues: the pendulum starts swinging in the opposite direction, and an opposite extreme is reached. Conclusions drawn from Class I residues being sometimes at odds with reality, they are said always to be-they are held, in other words, to be "false"; and that condemnation is carried on to the principles of experimental reasoning themselves, principles of group-persistence alone being regarded as "true," or at least as possessing a "higher truth." And such sentiments give rise to many derivations, among which the following: That we have within us ideas, notions, concepts, that are superior to experience, that "intuition" must take the place of "reason," that "conscience must assert its rights in the face of positivistic empiricism," that "idealism must replace empiricism, positivism, science," that "idealism is alone 'true science.'" It is firmly believed that this "true science," with its absolute, comes much closer to realities than experimental science, which is always contingent; that, in fact, it "is reality," and that experimental science, which is identified with the pseudo-science of the Class I residues, is misleading and harmful. In days gone by such opinions prevailed in all branches of human knowledge. In our day they have disappeared, or virtually so, in the physical sciences, the last noteworthy example there being Hegel's Philosophy of Nature; but they still persist in the social sciences. In the physical sciences they were eliminated by the progress of experimental science and because they were of no use. In the social sciences they endure, not only because experimental research in social science is still in a very rudimentary stage, but especially because of their great social utility. In fact, there are many cases in which conclusions drawn from residues of group-persistence (or, in other words, obtained by "intuition") come much closer to realities than conclusions that are drawn from the combinationinstinct and go to make up the derivations of that pseudo-science which, in social matters, continues to be mistaken for experimental
science. And-again in many cases-these latter derivations seem so harmful that the society which is not eager to decline or perish must necessarily reject them. But not less deleterious are the consequences of an exclusive predominance of Class II residues, not only in the physical arts and sciences, where their harmfulness is obvious, but in social matters as well, where it is perfectly apparent that but for the combination-instinct and the use of experimental thinking there could be no progress. So there is no stopping, either, at the extreme where Class II residues predominate; and a new oscillation sets in heading back towards the first extreme, where Class I residues predominated. And so the pendulum continues swinging back and forth from one extreme to the other, indefinitely.
2341. Such developments may be described in other terms that emphasize one or another of their interesting aspects. Keeping to surfaces one may say that in history a period of faith will be followed by a period of scepticism, which will in turn be followed by another period of faith, this by another period of scepticism, and so on ( $\S 168 \mathrm{I}$ ). ${ }^{1}$ Such descriptions are not in themselves bad; but the terms "faith" and "scepticism" may be misleading, if they are thought of as referable to any particular religion or group of religions. Looking a little deeper, one may say that society is grounded on group-persistences. These manifest themselves in residues which, from the logico-experimental standpoint, are false, and sometimes
$2341^{1}$ Draper had ideas that come more or less close to that doctrine, History of the Intellectual Development of Europe, p. 15: "The intellectual progress of Europe being of a nature answering to that observed in the case of Greece, and this, in its turn, being like that of an individual, we may conveniently separate it into arbitrary periods, sufficiently distinct from one another, though imperceptibly merging into each other. To these successive periods I shall give the titles of: x . the Age of Credulity; 2. the Age of Inquiry; 3. the Age of Faith; 4. the Age of Reason; 5. the Age of Decrepitude." Draper clearly has an intuitive perception of one of our wide oscillations. What he fails to see is that there is an indefinite sequence of them and that the major ones are simultaneous with any number of minor ones. Then again he lets himself be led astray by a mistaken analogy between the lives of nations and the lives of individuals. It is also strange that he should think of Socrates as initiating the "age of Faith" in Greece that was followed by an "age of Inquiry": Ibid., p. 106: "The Sophists had brought on an intellectual anarchy. It is not in the nature of humanity to be contented with such a state. Thwarted in its expectations from physics, the Greek mind turned its attention to morals. In the progress of life, it is but a step from the age of Inquiry to the age of Faith. Socrates, who led the way in this movement, was born b.c. 469. " Those who place Socrates among the Sophists come much closer to the facts.
patently absurd. When, therefore, the aspect of social utility predominates to any large extent, doctrines favourable to the sentiments of group-persistence are accepted, instinctively or otherwise. When, however, the logico-experimental aspect predominates, even to some slight extent, such doctrines are rejected and replaced by others that accord in appearances, though rarely in substance, with logico-experimental science. So the human mind oscillates between the two extremes, and being unable to halt at either, continues in movement indefinitely. There might be a resting-place, at least for a portion of the intellectual ruling class, if individuals here and there would consent to be persuaded that a belief may be useful to society even though experimentally false or absurd ( $\$ \$ 1683,2002$ ). Those few who look at social phenomena exclusively or at beliefs of others -not their own-may hold that view; and in fact we see traces of it in scientists, and we find it more or less explicit, more or less disguised, in public men who approach matters empirically. But the majority of human beings, people who are neither exclusively scientists nor far-sighted statesmen, people who do not lead but are led, and think more of their own beliefs than of the beliefs of others, can hardly hold such a view, either because of ignorance or because there is a distressing contradiction between having a faith that is to inspire vigorous action and considering that faith absurd. There is no saying that such a thing could never happen; but it remains a rare exception. In fine, to summarize what we have just been saying in a few words, the "cause" of the oscillation is not only a lack of scientific knowledge but, and chiefly, a confusion between two separate things-between the social utility of a doctrine and its accord with experience. The magnitude of that error we have already had frequent occasion to stress, and the harm it does to the quest for uniformities in the social field.
2342. No such development takes place for individuals who are not called upon to consider one or the other of the extremes. Many people live satisfied with their own beliefs and are not in the least concerned with the problem of reconciling them with logico-experimental science. Some few others dwell in the clouds of metaphysics or pseudo-science and worry not at all about the practical necessities of life. Many persons occupy intermediate situations and participate now more, now less, in the oscillation.
2343. 2. Extrinsic aspect. What we have just been saying has one defect that might become a source of serious error. It seems to lend colour to a tacit assumption that people think logically or pseudologically in choosing derivations. That is what might be gathered when we say that human beings accept derivations as the logical consequence of certain sentiments. Some individuals do that, but they are very few. The vast majority adopt residues and derivations under the direct impulse of sentiments. The intrinsic aspect just examined is important for the theory of doctrines, but is of no great significance as regards the theory of social movements. Such movements are not consequences of theories-the contrary, rather, is the case. Alternating periods of faith and scepticism have to be correlated, therefore, with other facts ( $\$ \$ 2336-37$ ).
2344. Let us begin, as usual, inductively. The oscillations we are trying to understand are like oscillations in the economic field ( $\$ 2279$ f.). They are of varying intensities. Let us disregard minor ones and keep to those of the larger magnitudes, the largest possible, in fact. That will give us a rough picture of the facts. We are looking for oscillations in residues in the masses as a whole. Oscillations, therefore, in the intellectual elements in a population-men of letters, philosophers, pscudo-scientists, scientists-are pertinent only as indices. In themselves they mean nothing; they have to be widely accepted in the masses at large before they can serve as indices of popular sentiments. The works of a Lucian, rising like an islet of scepticism in an ocean of credulity, have a significance of approximately zero. The works of a Voltaire, on the other hand, enjoyed wide acceptance. They are more like a continent of scepticism and therefore merit consideration as an important index. These are all imperfect tools, even more imperfect than are available for evaluating economic oscillations when accurate statistics are not to be had. However, we have to be satisfied with them, since we can get nothing better-for the present at least.
2345. Athens. Taking the situation in Athens, from the war with the Medes down to the battle of Chaeroneia, one first notes a period in which Class II residues appear in great abundance in the population in the mass, whereas the ruling class shows a great abundance of Class I residues. Let the number I in Figure 40 represent the date
of the battle of Marathon ( 490 в.c.) ${ }^{1}$ and the line $a b$ the intensity of Class II residues in the population as a whole. We get striking evidences, such as the conviction of Miltiades after the Paros expedition (489 в.c.), of the differences in strength of Class II residues in the lower classes and in the Athenian leaders. Later on, as Aristotle


Figure 40
testifies, De republica Atheniensium, 25 (Kenyon, p. 46), during the seventeen years following the war with the Medes the constitution remained in the hands of the Areopagus, though it was breaking down a little at a time, till in 460 b.c. came the reform of Ephialtes, which deprived the Areopagus of its constitutional prerogatives. We have an excellent index of the intellectual movement during the period in the Oresteia of Aeschylus ( 458 в.c.). Unmistakable in that trilogy is the reflection of the struggle between those who were holding loyal to residues of group-persistence and those who were replacing them with combination-residues. ${ }^{2}$ The former were completely defeated. The point 2, corresponding to the year $45^{8}$ b.c.,

[^73]must therefore be located on a rapidly descending segment of the curve. ${ }^{3}$ But the curve dropped even lower in the ruling classes. Pericles purged himself of popular "prejudices" and prepared the ground for the rise of Alcibiades to power. ${ }^{4}$ Afterwards came a slight reaction, and the sceptical friends of Pericles were persecuted. Anaxagoras had to leave Athens (43I b.c.). ${ }^{5}$ At the point 3 , corresponding to that date, the curve rises somewhat. Then it drops again; and we have patent proof of that in the three comedies of Aristophanes: the Acharrians ( 425 в...), the Knights ( 424 в...), and the Clouds ( 423 в...) which, like the Oresteia, reflect the struggle between the champions and the destroyers of group-persistences. Not merely to the differences between tragedy and comedy are the different manners in which the conflict is treated in the Oresteia and in the three comedies of Aristophanes to be ascribed, but to the great differences in intensities in Class II residues in the Athenian people at the time when Aeschylus wrote his trilogy and at the time of the comedies. By the time of the comedies mythology has been defeated, and the war is being waged on the battle-fields of metaphysics and politics. ${ }^{6}$ We must mark the year 424 b.c. as point 4, and that will

[^74]indicate a new drop in the curve. The movement runs on down to the Melos affair ( 416 в.с.). That will be 5 , and something very close to a minimum in group-persistences for both rulers and ruled in Athens. Never had Greeks talked so cynically, discarding all thought of religion, morals, and justice-that was the time when Alcibiades was lording it over Athens. ${ }^{7}$ Then comes a very faint reaction: Alcibiades is accused of profaning the mysteries ( 415 b.c.). A still more
may disregard the Birds (4г4 в.c.) as an exception, but neither in the Frogs ( 406 в.c.) nor in the Plutus ( 409 в.c.) is there any trace of the bitter struggle that seethes in the first three comedies mentioned. It seems that by that time Aristophanes had grown resigned to a thing he could not help and began poking fun at the victors, just as at a later date the Greeks would poke fun at the Romans who had conquered their country, and just as, in modern times, the Legitimist salons laughed at Napoleon III, and, after the fall of the Right, the conservative salons at the democratic republic. Such mirth seems to be, as it were, the sour grapes of the vanquished.
$2345{ }^{7}$ One should read, in Thucydides, Historiae, V, 85-1 II (Smith, Vol. III, pp. 157-75), the long colloquy between the Athenians and the Melians. The Athenians insist, substantially, that the right of the stronger is always the better and that the gods themselves support it. The Melians must surely be aware that human conflicts are decided according to justice as between equals, but that "the strong exact what they can, and the weak make the best of it." That is a sound experimental observation true for all times and places; and if, from the days of Thucydides down to our own, it is ever and anon denied in many derivations, that is because, as we have so many times noted, derivations completely at odds with experience win assent if they accord with certain sentiments. The derivations may at times be beneficial, at other times harmful. In the present case they accord with so-called sentiments of "justice," and those have oftentimes been productive of good; because in the first place, they have availed to mitigate the sorrows of many people by inspiring hopes in a better future and inducing them to live, mentally, in a "better" world than the experimental world; and because, in the second place, to express sentiments through derivations helps to reinforce them; and sentiments of justice, so called, though they are readily smothered by interests and other sentiments-such as, in the circumstances here in point, sentiments depending on Class V residues (personal integrity), notable among which, nationalism-may sometimes prompt human beings to attenuate, be it ever so slightly, the evils caused by "injustice." The Athenians use another argument that continues current in international, and especially in civil, strife. They try to show the Melians that their subjection to Athens would have advantages for both peoples. The Melians ask whether they might not be accepted as neutrals. The Athenians refuse, because, they say, that would be detrimental to them. In that, again, we get an experimental observation, valid for all places and times, from the time of the conference at Melos down to the Treaty of Campo Formio, and applying to international conflicts, and to a far greater extent, to civil conflicts. Derivations running counter to it are numerous. They win assent for reasons such as we have described; but they are usually harmful and oftentimes result in utter ruin for states and social classes, because they dissuade people from adopting the one road to salvation, which lies in preparing guns and evincing the willingness, and the ability, to use force.
pronounced reaction is evident at the time of the prosecution of Socrates ( 399 в.c.), which we may designate as $6 .{ }^{8}$ After that we have no indications of any great changes in the Athenian people down to the battle of Chaeroncia ( 338 в...), which we mark with 7. That battle puts an end to the independence of Athens, and its history thereafter blends with the history of the rest of Greece down to the Roman conquest.
2346. As regards the intellectual class in Greece, the downward movement continues. It is chiefly notable at the "time of the Sophists," so called. As is usual with many other words of the kind, the term "Sophist" is so indefinite that exactly what it means is hard to say. In the course of centuries, it has come to mean an individual who twists arguments to suit his personal conveniences, and so it has acquired a strong ethical colouring. Since we are not concerned with ethics here, that definition can be of no service to us. We care not a whit whether a man took money for lessons in logic or gave them free. We are interested, however, in distinguishing individuals who aimed at undermining group-persistences, at substituting logical for non-logical conduct, at deifying Reason, from individuals who defended group-persistences, stood by tradition, were therefore favourable to non-logical conduct and burned no incense to the goddess Reason. For convenience of reference, suppose we call the former $A$ 's and the latter $B$ 's.
2347. Not a few writers contrast Socrates with the Sophists. Others say he was a Sophist too. The controversy cannot be settled unless the term "Sophist" is defined. We need not go into the matter here; but of one thing we are certain: that Socrates, and Plato
$2345{ }^{8}$ The trial of Socrates is merely the best known of a series of prosecutions that took place about that time and which indicate a popular reaction against unbelief in the intellectual classes. Decharme, La critique des traditions religieuses chez les Grecs, p. 140: "So towards the end of the fifth century one notes a wave of prosecutions for impiety of which only faint traces are to be noted in earlier ages. They bear witness to new progress in unbelief, and therefore deserve our somewhat closer attention." They show not only the progress of unbelief, but the intensity of popular sentiments reacting against it. It is interesting that in those prosecutions accusations of impiety towards the gods were not the only charges. There were complaints of a political and private character and, in general, charges of immorality. In a treatise, De virtutibus et vitiis, which is attributed to Aristotle, "impiety," á $\varepsilon^{\prime} \beta \varepsilon a$, is defined, VII, 2 (Solomon, p. 1251a, 11. 30-32), as "guilt towards the gods, towards the daimones, or even towards the dead, one's parents, one's country." One might therefore say that the term designates an offence against the principal group-persistences.
too, are to be classed among our $A$ 's, since both aim at undermining group-persistences in Athens and replacing them with products of their own thought. They may have differed from Protagoras, Gorgias, Prodicus, and others in the means they used; but their tendencies, whether they were aware of it or not, were the same.
2348. Writers, as a rule, wax indignant that Aristophanes should have named Socrates in the Clouds. They may be right from an ethical standpoint; but they are wrong from the logico-experimental standpoint as regards doctrines and social utility. Aristophanes was telling the literal truth when he says that Socrates and, to an even greater extent, Plato aimed at dethroning the Zeus of mythological tradition to transfer sovereignty to the "clouds" of their metaphysics. The daemon of Socrates is first cousin, at least, to the goddess Reason and own brother to the "conscience" of our Liberal Protestants. As for Plato, he so truly believes in the omnipotence of the goddess Reason that he trusts in her alone to create out of whole cloth a republic of human beings of flesh and bone. From the standpoint of social utility it is evident that working along that line the foundations of non-logical conduct on which society rests would soon have been demolished. Not, indeed, that the doctrines themselves could have had that effect. Quite to the contrary, they are themselves one of the effects of the social disintegration; and that is why the condemnation of Socrates was a useless thing and therefore stupid, wicked, and criminal, just as the condemnation of any man for expressing opinions deemed heretical by the people about him has been and continues to be useless and therefore stupid, wicked, and criminal. ${ }^{1}$
2349. At first blush, there might seem to be very great differences between the atheist Sisyphus, portrayed in a tragedy of Critias, and a devout soul such as Plato seems to be. And from the standpoint of ethics that may well be. But not from the standpoint of social utility. There the stress has to be laid on the traits common to the Sisyphus of Critias and the Socrates of Plato's Republic. Neither of them accepts the gods of tradition. Both refashion gods after their own patterns. Both, in other words, sap the foundations of grouppersistences by transforming them. Sisyphus expresses the opinion

[^75]that in the beginning there must have been some wise and learned man "who invented the gods in order to keep men to the paths of duty." But the Socrates of the Republic is just such a wise and learned man. If he does not invent gods out of whole cloth, he none the less reshapes the gods of tradition to fit patterns of his own, and for the same purpose as the law-maker of Sisyphus, to make men better, that is. ${ }^{1}$ That procedure is the more noteworthy in that it is a very general one. Our Modernists have inclinations towards it, and it is very definitely the procedure of the Liberal Protestants, who remould the Christ of history to their own taste and transform him into a creature of their own imaginations. In that we get a particular instance of the intrinsic aspect of our problem ( $\$ 2340$ ). When, in the minds of people of intellectual habits, traditional conceptions of certain group-persistences come into conflict with other conceptions that their pseudo-science deems better calculated to serve social
$2349{ }^{1}$ A long passage from the tragedy in which Sisyphus appears has been preserved by Sextus Empiricus, Contradictiones, IX, Adversuts physicos, II, De diis, 54 (Opera, Vol. II, pp. 55-62). It gives the substance of the play quite clearly: "Critias, one of the tyrants of Athens, seems properly to be classed among the atheists when he says that the law-makers of old thought of God as an overseer of the virtuous or wicked conduct of men, to the end that no one should covertly offend his neighbour, in fear of chastisement from the gods." The last two lines of the harangue by Sisyphus (vv. 41-42) read: "So, I wot, in the beginning, were men persuaded to believe in the race of daemons [gods]." And just previously (vv. 24-26): "In such ways very wittily did he advocate moral laws of his own device, concealing truth under garb of fiction" [Hervet: "verum sub umbra contegens mendacii"]. And now suppose we listen to Plato, Respublica, II, 17, 377D: "Adeimantus: But I do not understand just what fabrications you refer to as the 'biggest.' Socrates: The stories that Hesiod and Homer, and the other poets for that matter, have told us; for the myths which they have told and are telling to men are naught but fictions." But since the mythology of the poets was also the mythology of the people the Socrates of the Republic was at one with the Sisyphus of Critias in regarding it as fiction, and they were in agreement also in their purpose, which was to have a mythology that would be helpful to men. Plato finds fault with lines in the Iliad for representing Zeus as a dispenser of both good and evil (379D). He would have it said that Zeus does nothing but good, and that the evils which he inflicts upon mortals are for their benefit. In that he is adopting one of the affirmative solutions ( $B-1$ ) that we noted in §§ 1903 f . (and cf. § 1970); but, good metaphysicist that he is, he takes the greatest pains not to give trace of proof of his assertion, to which we are asked to assent simply because it has the assent of the speakers whom Plato himself supplics with words. Substantially he finds his proof in a "metaphysical experience," just as some of our contemporaries find theirs in a "Christian experience." Still an unfathomable mystery is why, in such egregious company, room should not be found for an "atheist experience."
utility, they follow one of two courses, both of which lead to the same goal: either they declare the traditional conceptions altogether false and fallacious; or else they modify them, transform them, make them over in their own way, not observing that in so doing they are destroying them, since the manifestations that they deem accessory are, instead, essential to the persistence of the group, and to suppress them is like depriving a man of his body and expecting him to live. The gods of Homer, with whom Plato picks his quarrel, were alive in the minds of millions upon millions of human beings. The god of Plato was never alive, and he has remained a rhetorical exercise on the part of a few dreamers.
2350. Variations in intensities in Class I and Class II residues seem to be in no way correlated with the democratic or aristocratic character of the system of government. ${ }^{1}$ In the Athenian aristocracy we find a Nicias, who shows a predominance of Class II residues, a Pericles, who gave pre-eminence to Class I residues, and an Alcibiades, who had almost no others, in that resembling the plutocratic demagogues of our day. The régime of the Thirty was kindly disposed towards Socrates, merely reprimanding him. A democratic régime condemned him to drink the hemlock.
2351. Nor do the variations in question seem to be in any way correlated with the state of wealth. If Class II residues began to weaken when Athens was prosperous, the reactions also occurred
$2350^{1}$ One must be on one's guard against the error of assuming that the cruelty of the Athenians towards the Melians was correlated with a predominance of Class I residues. Quite to the contrary, on many an occasion the Athenians evinced more humaneness than the Spartans, in whom Class II residues were uppermost. The difference lies, more than in anything else, in the character of the derivations used. They are more prolix and better compounded in the case of the Athenians; terser, less well knit, and sometimes brazenly mendacious in the case of the Spartans. Instructive from that point of view is the massacre of the inhabitants of Plataea, as recounted by Thucydides, Historiae, III, 52-68. The Plataeans surrendered to the Spartans on a promise by the latter that "the guilty would be punished, but none unjustly." Spartan "justice" ran as follows, Ibid., 52, 4-5: The Spartans asked the Plataeans "whether in the present war they had done anything in favour of the Spartans and their allies." The Plataeans marvelled at the substitution of such a question for the promised judgment. They argued at length, and were no less patiently refuted by the Thebans; whereupon the Spartans, Ibid., III, 68, 2-3, put the question to each individual Plataean; and, each in turn, being unable to answer yes, was forthwith executed. That is just one more of the countless examples that go to show that anyone promising to act "justly" promises nothing, "justice" being like a rubber band to be stretched to any length considered desirable.
while she was still holding prosperous. In her days of poverty, there is no apparent recovery in Class II residues. At the time of the Roman conquest, there was no return in Athens to the state of mind prevailing in the days of Marathon. The variations do seem to be somehow correlated with rapid increase in wealth, which appears conjointly with a weakening in Class II residues as well as with the ensuing reaction; but that may well be a fortuitous coincidence. Other situations would have to be studied before any certain conclusions could be reached in that connexion. ${ }^{1}$
2352. Variations in the intensities of Class I and Class II residues go hand in hand with variations arising from the intrinsic point of view ( $\$ \$ 2340$ f.), but what the correlations are we cannot determine. That they are not few is very probable. An Anaxagoras, a Socrates, a Plato may well have been inspired by forces of an intrinsic character; but it is hardly probable that such causes could have influenced a Critias or an Alcibiades, to say nothing of the Athenians who attended the conference with the Melians ( $\$ 2345^{8}$ ).
2353. Rome. Conditions in Rome before the second Punic War we cannot know with any exactness. Numberless facts go to show that one need pay little attention to the declamations by men of letters as to the "good old times." Vices there must have been in Rome, then as afterwards. They were merely less talked about, as practised on a less conspicuous stage, within narrower limits, and there were no literary men to leave record of them. Vices transpire even in the legends, though we are unable to determine their bearing on historical realities.
2354. Certain it is that in the second century before our era two
$2351^{1}$ The situation can be better stated in mathematical language. Let $p$ be an index of the relative proportions between Class I and Class II residues in a given population; $q$, an index of the wealth of the same population; $t$, the time. We get the equation:
$$
\frac{d p}{d t}=f\left(\frac{d q}{d t}\right)
$$
rather than the equation:
$$
\frac{d p}{d t}=\phi(q)
$$

Or, in order not to ascribe to our description an exactness it cannot have, we might say that $\frac{d p}{d t}$ depends much more on $\frac{d q}{d t}$ than on $q$. $C f$. an analogous situation in Parcto, Cours, § $180^{1}$.
concomitant facts come to the fore in Rome: a very rapid increase in economic prosperity and a decline in the residues of group-persistence in the masses at large, but to a still greater extent in the upper classes ( $\$ \$ 2545$ f.). Then comes a reaction, as was the case in Athens and in other situations of the kind to which we shall come in due course, the only differences lying in the nature and the intensity of the reaction. The action and reaction appear therefore in conjunction, and it is their sum as a whole that is to be viewed as correlated with variations in wealth ( $\$ 235 \mathrm{I}^{1}$ ) and in class-circulation. ${ }^{1}$
$2354{ }^{1}$ Polybius is the best authority we have on this matter, provided we stop at his facts, disregarding his theories as to their causes. The facts may be epitomized more or less as follows: I. In the day of Polybius, group-persistences were still much stronger in Rome than in Greece. Cf. Polybius, Historiae, VI, 56 (a passage of capital importance already quoted above in §239); VI, 46 (analysis of the Cretan system); XX, 6; XVIII, 37 (on Roman chivalry); XXIV, 5. Also Plutarch, Philopoemen, 17 (Perrin, Vol. X, pp. 303-05) (debaucheries of the Greeks at Chalcis); Polybius, XXVIII, 9; XXXIII, 2; V, 106. 2. A rapid weakening in group-persistences is next observable: Polybius, IX, io (on the sack of Syracuse, Roman year 542, 212 b.c.); and XXII, II-I3, after the conquest of Macedonia (Roman year 586, I68 b.c.). Other writers of varying authoritativeness may be quoted to the same effect: Valerius Maximus, De dictis factisque memorabilibus, IX, I, 3: "The end of the Second Punic War and the overthrow of Philip, King of Macedonia, gave an impulse (fiduciam) to rather licentious life in our city." (Roman year 558, ig6 в.c.). In his Historia naturalis, XVII, 38 (25) (Bostock-Riley, Vol. III, p. 527), Pliny mentions a lustration that was performed by the censors in the Roman year 600 and adds: "Piso, a writer of weight, dates the decline of good morals in Rome from that time." And in XXXIII, 53 (Bostock-Riley, Vol. VI, p. 136), he relates: "In his triumph in the Roman year 565, Lucius Scipio displayed 1,450 pounds weight of chiselled silver and $\mathrm{r}, 500$ in gold plate. But the thing that struck a severer blow at morals was the gift of Asia (Minor) by Attalus. The legacy from that king was deadlier than the victory of Scipio. Rome abandoned all restraints in bidding for the precious objects that were sold at the auction of Attalus. That was in the year 622 . During that interval of fifty-seven years Rome had learned to admire, nay to love, exotic luxuries. Morals moreover received a violent shock in the conquest of Achaia, in that same interval, and specifically in the year 608. That victory contributed sculpture and painting, to cap the climax. That same period saw the birth of Roman luxury and the death of Carthage, and by a fatal coincidence, people had both the opportunity and the appetite for plunging into vice." Florus, Epitoma de Tito Livio, I, 47, 2 (III, 12, 2; Forster, p. 213), remarks, with some exaggeration, that the hundred years preceding the extension of Roman conquests overseas were years of extraordinary virtue: "The hundred years before that age had been pure, devout, and as we said, golden, without wickedness or crime, the virtues of the pastoral school still remaining innocent and unspoiled." The next hundred years, he goes on, were years of great military successes, but of serious domestic corruption, and he voices doubts as to whether the conquests were profitable to the Republic. Ibid., 8 (Forster,
2355. The historians have seen the facts but, misled by the common mania for ethical interpretations, they have not managed to grasp the relations between them ( $\$ \$ 2539$ f.). They have used a number of ethical principles very extensively, never, however, going to any great pains to check them on the facts. There is the principle that wealth tends to corrupt morals, yet one need only glance about to see that England in all her wealth is not more corrupt than certain provinces of Russia in all their poverty; and that the morals of the prosperous Piedmontese are not in any way worse than the morals of the very poor peasants in Sardinia or the Italian South. If one prefer to limit the comparison to a given people at different times, could it be said that the morals of Milan or Venice in our day are worse than the morals of those same towns a century ago? And yet they have grown enormously in wealth.
Another principle might be stated in paraphrase of Pliny's apothegm (Historia naturalis, XVIII, 6, 7, 35): "Latifundia perdidere Italiam" ( $\$ 2557$ ). The growth of inequality in wealth is taken for granted-it is not proved, because no proof could be given. Some think it is made sufficiently obvious by pointing to examples of very wealthy citizens. But that is not enough. It must further be shown that wealth has not increased in the same proportions in the other classes in society-and there are facts in abundance to show that such an increase is at least possible. There is no proof, further, that a country showing numbers of rich people is necessarily in deca-
p. 215): "For what else provoked these civil upheavals than too much prosperity? The conquest of Syria first corrupted us, then the legacy of Asia bequeathed by the King of Pergamum. All that wealth, all those luxuries, ruined the morals of the age and reduced a commonwealth that was already sunk in vice to the very depths (quasi sentina). . . . Whence the dissension between the knights and the Senate as to the administration of the courts unless it be from greed, that the state revenues and the courts themselves should be prostituted for gain?" Velleius Paterculus, Historia romana, II, I, I: "The earlier Scipio had opened the road to Roman power, the later Scipio, the road to Roman luxury. Indeed, the fears of Carthage once removed, the rival in empire once out of the way, there came not so much a turn as a mad rush away from virtue to vice. The old discipline was abandoned, and a new one introduced. The whole city turned from vigilance to somnolence, from arms to pleasure, from industry to laziness." Cf. Dio Cassius, Fragment 227, Gros ed., II, 27: Reimar ed., Vol. II, p. 71; and Sallust, Bellum Jugurthinum, XLI [§ $2548^{8}$ ], Bellum Catilinae, X. Then Livy, Ab urbe condita, XXXIX, 6, 4: "Exotic luxury was first introduced into the city by the army that served in Asia." Justin, Historiae Philippicae, XXXVI, 4 (Clarke, p. 26I): "So when Asia became a property of the Romans she sent her vices along with her wealth to Rome." Cf. § 2548.
dence. After the Napoleonic wars one notes simultaneously in England extensive latifundia belonging to English lords and a very great national prosperity. The trusts in the United States today correspond exactly to the Roman latifundia, and they prevail side by side with a prosperity such as the world has never before witnessed. We will say nothing of "capitalism," which, explaining everything (§ 1890 ), necessarily explains the decline of Rome and other countries. For some writers the democratic régime was the ruin of Athens. For others, the aristocratic régime was the ruin of Rome.
2356. Duruy takes the transformation that came over Roman society after the Punic Wars as his text for a sermon (\$2558). Says he: ${ }^{1}$ "In accord with the wisdom of the nations, we are going to say that that wealth which is not the fruit of honest toil and of all those virtues that attend it is of no benefit to those who hold it; that ill-gotten riches depart the way they came, leaving a deal of moral wreckage behind them. And then we are going to add, with the experience of economists behind us, that gold is like the water in a river: if it overflows suddenly, it spreads devastation abroad; if it comes slowly in a gentle circulation through a thousand channels, it creates life on all hands." Therefore, dear children, to draw the moral of such a pretty fairy-story-to be perfect it needs only to be written in rhyme or set to music-be good, virtuous, and industrious, and you will live happy lives. But do not read history, for you would be put to it to reconcile what you find there with such assertions. Take, for example, Corinth. Wealth in Corinth was certainly much more the fruit of honest toil, and much less the fruit of conquest, than it was in Rome; yet Corinth was conquered and sacked by the Romans. If that wealth "which is not the fruit of honest toil . . . is of no benefit to those who hold it," Corinth should have conquered and sacked Rome. And, if it is true that "ill-gotten riches depart the way they came," and if the wealth of the Romans was "ill-gotten," how comes it that they enjoyed it for so long a time after the period that Duruy is criticizing and that they were stripped of it by the Barbarians, who acquired such wealth as they had not by honest toil, but by conquest and robbery? ${ }^{2}$

[^76]2357. All such trappings must therefore be stripped from the narratives of the historians in an effort to get at the naked facts. In doing that, one finds that the two phenomena mentioned in § 2354, rapid increase in wealth and a weakening in Class II residues, are undeniable facts, that they are the counterparts, as we have just seen, of developments in Athens, and of still others that we are shortly to encounter. We therefore have to ask whether in that we have just a series of coincidences or are dealing with a relationship of interdependence.
2358. In Rome, as in Athens ( $\$ 2345$ f.), there were a number of reactions to the weakening trend in group-persistences, and they occasioned temporary defections in the general course of the movement. Notable, in the case of Rome, the reaction associated with the name of Cato the Censor. It was of brief duration and soon gave way before the general trend of the curve.
2359. A special circumstance interposes to make the situation in Rome more difficult to grasp in the period between the conquest
as widely taught in Duruy's time and as still widely taught, was less an investigation of experimental realities than a sort of ethical literature. Duruy continues, loc. cit., p. 225 (Mahaffy, p. 229): "Beginning with the second half of the nineteenth century, Europe has been secing just such a flood of gold pouring in from the placers of America and Australia. But such capital has been the product of labour and has been used by Europe to modernize her industrial plant, and an enormous increase in public wealth as well as in individual welfare has resulted from it." So the machinery in European factories, the railways, and so on were made of gold from America and Australia! A pretty metamorphosis, in fact! And in that Duruy is less excusable. Even in his day, there were few, very few "economists" who were still mired in the fallacy of the old mercantile economies that mistook gold for wealth, and gold for capital. Most economists at that time were coming a little closer to realities than that. But many historians know nothing whatever of economic science, and very little of the literary economics that is commonly taught, and imagine that they can make up for the deficiency with ethical disquisitions. So when they are called upon to deal with economic matters they straddle the goat of the greatest absurdities imaginable. Duruy further continues: "Whereas Rome leapt suddenly from poverty to wealth by war, pillage, and robbery, and the gold from her conquests served merely for the unproductive extravagance of those who got possession of it." So great the power of ethical group-persistences! In that Duruy is forgetting things that he knew very well and even taught to others. He forgets that if conquest was in fact one of the primary sources of Roman wealth, commerce too was a far from negligible factor in it. Roman mercatores and negotiatores are always turning up in history, numerous, active, and rich. He forgets the public works the Romans executed, among other things their roads, which contributed their share to increasing wealth.
of Greece and the end of the Republic: the intellectual influence of Greece upon the educated classes in Rome. That prevents one from distinguishing with any assurance between spontaneous products of the Latin mind and imitations of Greek literature, philosophy, and science. If, for instance, we knew nothing but the poem of Lucretius, we could not tell just what importance should be ascribed to it as indicating the state of mind of educated Romans. But the doubt is cleared away by Cicero's essay On the Nature of the Gods, and by many other facts of a literary and historical character. All of them point to the conclusion that towards the end of the Republic a number of group-persistences had weakened to a very considerable extent in educated circles.
2360. They had weakened to a far lesser extent in the lower classes, and that is a general case of which there are countless examples. The lower classes in Rome were undergoing a profound transformation through the influx of elements from abroad, especially from the East, all of them contributing their own peculiar intellectual habits to Rome. In that lies one of the main causes for the differing intellectual evolutions of Athens and Rome. ${ }^{1}$
2361. The low-water mark in group-persistences in the educated classes in Rome-and, for all we know, in the masses at large, there being no evidence on the point-seems to have been reached in the period between Horace and Pliny the Naturalist. Thereafter a gen-
$2360{ }^{1}$ Friedländer, Sittengeschichte Roms, Vol. III, p. 423 (English, Vol. III, p. 84): "We have two sources of knowledge for the religious situation in antiquity during the first two centuries of our era. They are of a very different character and are oftentimes contradictory in many respects. One is literature, the other the monuments, and notably stones bearing inscriptions. [The contradiction vanishes once one stops to reflect that the literary sources express the states of mind more especially of the higher educated classes, the inscriptions, public sentiments as a whole, and therefore the sentiments more especially of the more numerous elements-the masses proper.] Literature derives in the main from circles that had been affected by unbelief or indifference or circles that were trying to spiritualize popular beliefs, purify them, make them over by thought and interpretation. The inscriptions, on the other hand, derive in large part at least from social strata that had been less extensively influenced by literature and dominant literary attitudes, from environments where no need was felt to express one's opinions on religious matters, and where many would have been unable to do so at all clearly. They therefore testify, as a rule, to a positive belief in the divinities of polytheism, to a faith that is as immune to doubr as it is devoid of intellectual niceties, an altogether ingenuous spontaneous faith."
eral upward trend sets in, undulating, as usual, in the detail; and it continues on into the Middle Ages. ${ }^{1}$
2362. In the upper classes a reaction in the direction of a strengthening in the combination-instincts or, if one prefer, of resistance to the strengthening of group-persistences occurred under the reign of Hadrian, when Greek Sophists were for a short spell in great vogue in Rome; and it continued down to the beginning of the reign of Marcus Aurelius. That invasion of the Sophistic arts parallels only in minor respects the Sophist movement in Athens ( $\$ \$ 2346$ f.), and primarily because in Rome it was confined to insignificant numbers of intellectuals ( $\$ 1535$ ). Rome had no Socrates to carry the thought of the Sophists down to the masses; or, more exactly, the Roman masses had no proclivities towards such thinking. The cosmopolitan masses in Rome at that time could in no way compare, on the score of intelligence and education, with the Athenian populace of the time of Socrates.
2363. Thereafter the general trend towards a strengthening in group-persistences becomes a torrential onrush. In the pagan writers, in other words in those individuals who stood closest to the ancestral notions of the Graeco-Latin races, it was noticeably slower than in the Christian writers, who welcomed the vagaries of the Oriental religions with open arms. Even in Macrobius, who lived in the fifth century, one notes much more balance, a far clearer sense of realities, than in Tertullian, who lived in the third, or in St. Augustine, who lived in the fourth, or in other writers of that type.

[^77]2364. As early as the days of Polybius, and even more in the day of Pliny and Strabo, there were educated people evidently who held some perception of the possible intermediate state of mind where a faith is kept for its social utility, though it is recognized as experimentally false (\$2341). From that point of view, the writers of that period stood much closer to experimental realities than many of our own day who go to one extreme or the other where no halting is possible. Some faint reflection of that intermediate state of mind may have encouraged a few pagan writers to a relative indifference towards the fantastic Oriental religions that were sweeping the Empire. They could not imagine how such things could ever appeal to the intellectually higher classes, and in that they might not have gone far wrong had the Roman élite remained as they knew it. But that élite was in full decadence. Oriental superstitions did not in fact rise to the higher classes. The higher classes sank to them.
2365. The main cause of the decline is to be sought in phenomena of class-circulation, to which we shall come in due time ( $\$ 2546$ ). If Rome had continued to increase in wealth after the reign of Hadrian, as it had been doing towards the end of the Republic and in the early years of the Empire, and if, as then, the ruling classes had remained open to individuals who were well supplied with combination-instincts and were therefore able to get rich, the Roman élite might have held on above the level where group-persistences came to predominate. What actually happened was that the Empire grew poorer and poorer; class-circulation came to a halt; the combination-instincts found their expression in intrigues to court favour with the Emperor or other powerful individuals; and as a result a trend developed directly counter to the movement observable under the late Republic and the early Empire. Examination of the two contrary movements leads therefore to the same conclusion.
2366. In the West, after the Barbarian invasions a glimmer of cultivation still survives, perhaps, in the clergy; but it had certainly disappeared altogether in the rest of the population, which sank eventually into utter illiteracy. Just when that intellectual poverty reached its maximum cannot be determined, for lack of documents. By the time of St. Gregory of Tours (sixth century) it seems to have
been very considerable. ${ }^{1}$ Following the usual undulating rhythm, there is a slight fluctuation in the direction of an increase in intellectual activity at the time of Charlemagne; but shortly thereafter the general downward trend is resumed.
2367. And then suddenly, towards the end of the eleventh century and the beginning of the twelfth, comes a slight intellectual renascence in the educated classes, and one notes a rapid series of violent actions and reactions with regard to group-persistences in a few countries.
The intellectual movement gives rise to Scholastic philosophy. It makes its appearance among the clergy, the clergy being at the time the only educated class. It is brought about by the forces we identified in considering the intrinsic aspect ( $\$ 2340$ ). ${ }^{1}$ The movement for the population as a whole falls into two phases: (I) a gradual weakening in religious sentiments; then (2) a violent reaction tending to reinforce them. In the first case the movement is still chiefly an affair of the clergy, not, however, in its intellectual elements, but in the part belonging to the governing class. It is a particular case of the general phenomenon that group-persistences tend gradually
$2366{ }^{1}$ Guizot, Histoire de la civilisation en France, Vol. II, pp. i-2: "Studying the intellectual situation in Gaul in the fourth and fifth centuries, we found two literatures, the one sacred, the other profane. The distinction was noticeable in persons and in things: laymen and churchmen studied, thought, wrote, and they studied, thought, wrote on secular subjects and religious subjects. Sacred literature was gradually gaining the ascendancy, but it did not stand alone-profane letters were still alive. Between the sixth and eighth centuries there is no profane literature left-sacred literature is the only literature produced. All the studying and writing is done by clerics and, barring some rare exception, they confine themselves to religious themes. The outstanding trait in the period is the concentration of intellectual activity within the religious sphere.
$2367^{1}$ St. Bernard had a clear perception of this raid by the combination-instincts: Tractatus de erroribus Abaelardi (Epistolae, CXC, Ad Innocentium II pontificem), I, I (Opera, Vol. II, p. 1053) : "We have in France a man who now from schoolmaster has turned theologian. As a youth he toyed with the arts of dialectic. Now he is lunaticizing on the Scriptures. Doctrines that had long since been condemned and laid to rest, both his own and those of others, he is now trying to revive, adding new ones of his own. Of all things that are in Heaven above and on Earth below, he never deigns to know nothing, save only of the phrase 'I know not.' " And again, Epistolae, CCCXXX (Opera, Vol. I, p. 555) : "A new faith is being forged in France, the dispute raging not morally about the virtues and the vices, not reverently about the Sacraments, and not soberly and humbly about the mystery of the Holy Trinity, but against all that we have so far believed." Those, substantially, however different the forms, were the charges laid against Socrates.
to weaken in aristocracies and élites. In the second case the movement is characteristic, on the whole, of the subject and less cultivated classes. It too is a particular case of the general uniformity that reactions in favour of group-persistences come from the masses.
2368. Nominalism and Realism are two metaphysical theories, and therefore vague and indefinite from the experimental standpoint. Starting with an indefinite concept, differing conclusions can be drawn according to the route one follows. If we centre on the fact that in attributing "existence" to individuals only, Nominalism seemed inclined to consider only experimental entities, and press our reasoning along that line, we may think of logico-experimental doctrine as an extreme form of Nominalism stripped of all metaphysical accessories (§64). But other paths radiate just as well from the experimentally indefinite centre of Nominalism. One of them is indicated by St. Anselm, who complains, in allusion to the Nominalists, that there were heretical dialecticians who held "universal substances to be nothing but puffs of air"; ${ }^{1}$ and that position of the Nominalists can be interpreted to mean that no account need be taken either of abstractions or of the group-persistences which they express. If we follow that line to the end we shall be carried to the extreme where the residues depending on the persistences will be regarded as "outworn prejudices" ( $\$ \$ 616,2340$ ) which the rational man need consider only as childish fancies.
2369. In the same way, starting with an undefined Realism, we may, though with greater difficulty, arrive at a theory of non-logical conduct, and so come very close to realities. But much more easily one can reach the extreme where metaphysics takes the place of experience and imaginary entities are created by transforming abstractions and allegories into realities (§1651).
2370. The second routes, in the cases both of Nominalism and Realism, are those that bring one closest to the practical inferences which people actually drew from those doctrines. Considering the facts from that standpoint, therefore, we may say that the conflict between Nominalism and Realism made an issue between the two extremes noted in $\S 2340$. When group-persistences hold the upper

[^78]hand, species and genera acquire metaphysical "existence," and we get the Realist solution. But that solution runs aground on the facts of experience; so thereupon the metaphysical "existence" of species and genera is denied, and it is held that only the individual "exists" -the Nominalist solution.
An intermediate solution, which, were it not entirely metaphysical, might approximate a position midway between the two extremes of the oscillation, would be supplied by Conceptualism, which recognizes the "existence" of species and genera as concepts.
2371. Cousin ${ }^{1}$ declares that Abelard's Conceptualism is mere Nominalism, and he may be right as regards the field of metaphysics, which we choose not to enter. We are at no more pains to discuss the "existence" of the genus, the species, or the individual than to argue the beauty of the Theban Sphinx. Metaphysicists, fortunate mortals, know the meaning of the term "exist." We do not, nor have they been able to tell us, for we understand neither head nor tail of what they say, and because we fail to find any judge to settle their interminable altercations ( $\$ 165 \mathrm{I}$ ). We therefore ignore that type of research and confine ourselves to quarrels in which experience can act as referee.
2372. From the experimental standpoint, the Conceptualist solution contains a few more-not so very many more-real elements than the Nominalist solution, many many more than the Realist solution. Says Cousin: "Examining Conceptualism in itself, one readily sees that it is nothing but a wiser [What kind of a theory would be wiser than some other?] and more coherent Nominalism. In the first place, Nominalism necessarily includes Conceptualism. Abélard argues against his old master Roxellinus in these terms: 'If universals are just words, they are nothing, for words are nothing; but universals are things: they are conceptions.' Roxellinus might well have answered: 'Who ever dreamed of denying that? Assuredly when the lips utter a word, the mind attaches a meaning to it, and the meaning so attached is a conception of the mind. I am therefore a Conceptualist like yourself. But why are you not a Nominalist, as I am? To say that universals are mere conceptions of the mind is to say by implication that they are only words; for, in my language, words are the opposites of things [That precisely is his mistake:

[^79]words also manifest psychic states, which are "things" for those who look at them objectively.], and not admitting that universals are things, I had to make words of them. I never meant anything more than that. Rejecting Realism, I reached Nominalism, taking Conceptualism for granted.' " Probably! But, alas, what he took for granted was quite as important as what he explicitly asserted. ${ }^{1}$
2373. If, in fact, instead of lingering in the nebulous regions of metaphysics, Cousin had deigned to come down to the experimental earth, he would have seen that the question as to whether universals or, in general, abstractions, are or are not anything more than words is not the only question to be answered. There is the far more important problem of determining to just what psychic states such words correspond and especially whether they express grouppersistences of greater or lesser power, or are mere gambols of the fancy. The "Socraticity" that the Scholastics say finds its manifestation in Socrates is only a word, just as "justice" is only a word over which people have argued for century after century without ever succeeding in defining it; but the word "Socraticity" corresponds to a metaphysical abstraction that has never had the slightest influence on the social system; whereas the word "justice" corresponds to very powerful group-persistences that are the firm foundation of human society. A modern Roman exclaims "By Bacchus!" and calls on the god Bacchus by name exactly as the ancient believer did. In both cases Bacchus is only a word, but it expresses ideas or sentiments that are essentially different. We begin to get closer to reality, there-

[^80]fore, when we do not stop at the word but try to get at the concept that underlies it. If Roxellinus meant that nothing exists except things and words, he was to that extent departing from realities; and if that was his language, one can only say that it was the language of error. "Conceptualism" did well in making a start at least toward correcting it, but erred in halting at the opening of the road into which it had turned and not carrying the analysis further, distinguishing the various "concepts," and determining on experimental fact their nature and characteristics as a basis for their classification.
2374. The intellectual movement represented by Scholasticism is of the same type as the Sophistic movement in Greece, and there have been others still. It springs from a need of inquiry that is intensified by the strength of combination-instincts and is felt only by restricted numbers of individuals.
2375. Parallel to it, but distinct from it, is the trend towards a weakening in group-persistences in the less intellectual portions of the governing class. At that time it expressed itself in a special form. Appetites for material goods and sensual enjoyments are more or less constant forces, and they may be repressed by powerful religious sentiments. It follows that any predominance of material appetites is an indication of a weakening in religious sentiments and in the group-persistences to which they correspond. That, exactly, is what one observes in the period here in question. The clergy almost throughout had become concubinary, dissolute, grasping, simoniacal.
2376. On all that we have direct evidence; but even more abundant is the indirect testimony supplied by the bitter rebukes that were rained upon the clergy by reformers..It is an interesting fact that the action-the weakening in group-persistences in one portion of the ruling class-is known to us primarily through the reaction that it provoked in the subject class.
2377. Such movements of action and reaction are specially noticeable in Southern France (Catharists and Waldenses) and in Northern Italy (the Arnoldites of Brescia, and the Patarini of Milan). Those were districts more conspicuous than others in the Catholic world for rapid increase in wealth about that time. ${ }^{1}$ So

[^81]there we get another case where variations in economic prosperity go hand in hand with variations in the combination-residues, as compared with the residues of group-persistence (§2351 ${ }^{1}$ ). The more of such coincidences we meet, the lesser the likelihood that they are due to mere chance, and the greater the probability of a relationship of interdependence.
2378. The Roman Curia dealt with the three cases in different ways: It suppressed the Catharists and the Arnoldites, but struck an alliance, of brief duration to be sure, with the Patarini. A consistent policy underlay these apparent differences. The idea of the Church was to take advantage of prevailing residues as a means of maintaining its own power. The Archbishop of Milan was showing an inclination to deal with the Pope on an equal footing and may have been thinking of winning independence of him. Such power as the Patarini represented could therefore be used as a check on the Archbishop. Arnold of Brescia and the Catharists waged open war on the Pope and he had no choice but to fight back, defending in Provence, Brescia, and Rome the laxities among the clergy that he was condemning in Milan.
2379. In the course of his struggle with the Milanese clergy, Pope Nicholas II induced the Council of Rome, in 1059, to pass a canon forbidding the laity to hear Mass of a priest known to be living in concubinage (Labbe, Vol. XII, p. I38). That made the validity of the religious rite dependent on the personal character of the priest. But the same doctrine was later on condemned by the Church when held by the Waldenses. As we have seen, derivations prove the yea and the nay equally well. ${ }^{1}$ So in our day many Socialist Deputies
to the Pope, Epistolae, CCCXIV (Opera, Vol. I, p. 520) : "The Cremonese have hardened their hearts and their prosperity is working their ruin. The Milanese are a contemptuous lot and their self-conceit is misleading them. Their attention all engrossed in coaches and horses, they had none left for me, and my labours among them were in vain." [The "Patarini" were so-called from a poor quarter of Milan, the Pataria: as it were, "Slummers."-A. L.]
$2379{ }^{1}$ Decretum Gratiani, pars 1, distinctio 32, canon 5, tit. 7 (Friedberg, Vol. I, p. II7): "Mass shall not be heard of a priest keeping a concubine: Nicholas, Pope, to all bishops: No one shall hear Mass of a priest whom he knows of positive information to be keeping a concubine or secretly maintaining any woman." This is Canon 3 of the Twenty-fourth Roman Council held under Nicholas II. The prohibition was re-enacted by Pope Alexander II in 1063. See Baronio (Rinaldi), Annales ecclesiastici, anno 1063, XXXIV, and Decretum Gratiani, pars I, distinctio 32, canon 6 (Friedberg, Vol. I, p. 117-19). The Magister comments, loc. cit., p. I18:
inveigh against "capitalism" in order to curry favour with the electorate, and then protect the interests of "capital" in order to curry favour with the plutocrats.
2380. The reformers needed some raiment of derivation in which to garb their sentiments, and that, of course, was always very easily found. The Catharists seem to have resorted to the derivations of Manicheism, but they might have used the resources of any other heresy just as well; and had the Papacy been Manichean, they could have used derivations contrary to Manicheism.
2381. More interesting still is the case of Arnold of Brescia, who is said to have been a disciple of Abelard. ${ }^{1}$ Far from favouring the
"These rulings seem in principle to go counter to Jerome, Augustine, and others, who declare [Augustine, Epistolae, XXII, 6 (Opera, Vol. II, p. 91; Works, Vol. VI, pp. 53-54)] that the Sacraments of Christ are not to be spurned (fugienda) whether from a righteous or a wicked person, as the case of prelates guilty of simony hereafter following amply shows. But Urban II, in a letter addressed to the Provost of St. Iventius, clears up this inconsistency by saying: 'As to [your question] whether ordinations and other sacraments may be used when celebrated by individuals guilty of such crimes as adultery, violation of monastic vows, and the like, we answer that unless they are severed from the Church by schism or heresy we do not deny that their ordinations and other sacraments are holy and to be revered, in that agreeing with Augustine.' "So Socialists who are also fast friends with plutocrats might answer a similar scruple by saying: "If the plutocrat has not been excommunicated by us, but supports us and contributes to our cause, we do not deny that his 'operations' are righteous and praiseworthy." Bernard Guidon, Practica inquisitionis heretice pravitatis, p. 242: "They [the Catharists] say that confessions made to priests of the Church of Rome are worth nothing because since said priests are sinners, they cannot bind and loose, and since they are unclean themselves, they cannot cleanse another person." Moneta, Adversus Catharos et Valdenses, V, 5, §§3-4 (p. 433): "As to whether guilty priests can administer sacraments and preach, and whether they are to be obeyed, the heretics striving to sustain the negative. . . . The heretics known as the Catharists, and also the 'Paupers' in Lombardy, hold that such priests cannot administer the sacraments on the following grounds . . . [The Scriptural passages adduced by the heretics are quoted and refuted in detail. The conclusion is reached, §4, p. 336, that:] even though priests may be guilty as individuals, they nevertheless retain the prerogative of preaching and administering the sacraments and are owed obedience."

238 r $^{1}$ Baronio (Rinaldi), Annales ecclesiastici, anno II39, X, quotes the lines that "a celebrated poet of those days," Gunther of Liguria, devoted to Arnold of Brescia:
> "'Cuins origo mali tantaeque voraginis auctor extitit Arnoldus, quem Brixia protulit ortu pestifero, tenui nutrivit Gallia sumptu, edocuitque diu. Tandem natalibus oris redditus, assumpta sapientis fronte, diserto
reformers, who were trying to strengthen religious group-persistences, the theories of Nominalism tended to work against them. But derivations are of such scant importance that they may at times serve to express residues with which they would seem to be inconsistent. So Marxist theories today are not in any sense favourable to the plutocracy at present reigning, and yet they sometimes serve to defend it.
2382. The religious reaction of the Albigenses was crushed by the Roman Church, but it provoked another religious reaction within the latter. In that we get, under varying forms, a development that is general. It recurs at the time of the Reformation and again during the French Revolution.
> fallebat sermone rudes, clerumque procaci insectans odio, monachorum acerrimus hostis, plebis adulator, gaudens popularibus auris, pontifices ipsumque gravi corrodere lingua audebat Papam, scelerataque dogmata vulgo diffundens, variis implebat vocibus aures: Nil proprium cleri, fundos et praedia nullo iure sequi monachos, nulli fiscalia iura pontificum, nulli curae popularis honorem abbatum, sacras referens concedere leges, omnia principibus terrenis subdita, tantum committenda viris popularibus atque regenda. Illis primitias, et quae devotio plebis offerat, et decimas castos in corporis usus, $120 n$ ad luxuriam sive oblectamina carnis concedens, mollesque cibos, cultusque nitorem, illicitosque thoros, lascivaque gaudia cleri, pontificum fastus, abbatum denique laxos damnabat penitus mores, monachosque superbos.""

(" 'Cause of the trouble, author of the great confusion, was Arnold, whom Brescia bore of baleful lineage, whom France reared at slight expense and educated in due time. Thence returning to his native land and assuming the pose of a philosopher, he began to deceive the uneducated with his glib talk, assailing the clergy in bitter hatred, showing himself a fierce enemy of the monks, and a demagogue skilful at catching the ear of the mob. The priests and the Pope himself he ventured to sear with his spiteful tongue, spreading wicked beliefs through the people, dinning all ears with a variety of doctrines: alleging that the clergy could hold no property, that the monks had unlawfully obtained their lands and estates, that sacred laws had given to no pontiff fiscal rights and to no abbot the prerogative of governing the people, that all things were subject to lay authority, and that their management was to be entrusted to men of the people. Granting the clergy the first fruits and the tithes, and such offerings as the devotion of the people might make-but for
2383. The Reformation very strikingly manifests traits that we have already observed in other oscillations of the kind. In the first place, from the intrinsic standpoint ( $\$ 2340$ ), the Renaissance is partly a reaction of experimental reality against religious and moral prejudices; and if it takes the form of a return to pagan antiquity, that is a merely external trait that adds nothing essential to substance, being in that respect altogether similar to the return of the Reformers to Scripture. It is a very grave mistake to imagine that the Reformation in any sense furthered freedom of thought. On the contrary, it did an immense amount of harm to freedom of thought and halted the advance the Roman Church had been making toward tolerance and liberty. The Reformed and Roman Churches may be classed together as regards the scientific content of their doctrines. They both stand quite apart from the Humanists, who were coming much closer than they to experimental reality, by however much they may have failed of attaining it. But the Humanist movement, which had permeated even the College of Cardinals, was brought to a dead halt by the Reformation and the ensuing reaction in the Catholic Church.
2384. Considered from the extrinsic standpoint (\$2340), the Renaissance occurred in a period of economic prosperity. To that


#### Abstract

legitimate needs of subsistence and not for lusts or delights of the flesh-he altogether condemned high living, magnificence in forms of worship, concubinage and licentious enjoyments in the clergy, display on the part of the Popes, loose morals in the abbots, worldly pride in the monks.' ") And further, quoting Otto of Frisingen, Rinaldi explains: "Arnold was an Italian of Brescia, a cleric of the Church though ordained only as a lector. He had once been a pupil of Abelard. He was a man of no mean talents, though more distinguished for glibness of speech than for soundness of judgment. A lover of the unusual, eager for anything new, he was prone, as men of such temperaments are, to fomenting heresies and dissensions. Returning to Italy from his studies in France, he donned the habit of a priest, the more readily to deceive, and began to criticize and abuse everything, sparing no one, slandering the clergy and the bishops, persecuting the monks, and showering flattery only upon the laity. [An evident reflection of the popular character of the Arnoldite movement. Fundamentally it had nothing to do with the existence or non-existence of universals.] He said that priests who held property, bishops with palaces, monks with vast possessions, could in no wise be saved, that all such things belonged to the lay prince, who in his bounty should use them for the benefit of the laity." The usual excuse put forward by rulers for robbing religious institutions! It served pagan and Christian potentates, then the French Revolution, and finally it was adopted by that ultra-moralist, Waldeck-Rousseau.


fact there is no end of testimony. ${ }^{1}$ It was also an age of rapid rise in prices, as the result of the inflow of precious metals from the Americas. Old institutions could no longer stand the strain. Everything seemed to need reforming. The modern world was being born. And then a religious reaction sets in and, as usual, it comes from the masses. Their leaders cared little about religion save as a tool of government. But for the masses it was the chief concern, and they
$2384^{1}$ In his history of the Reformation in Germany, Geschichte des deutschen Volkes, Vol. I, pp. 594-95 (Mitchell-Christie, Vol. II, pp. 288-89), Janssen sees the facts as coloured by his faith, but, substantially, his description is not a bad one. He epitomizes conditions in Germany on the eve of the Protestant outbreak as follows: "[Germany at the end of the Middle Ages]: A flourishing condition in agriculture . . . an extraordinary development in industry and trade, a great wealth of mines, a commercial prosperity that surpassed that of any other Christian nation [An exaggeration: Janssen is forgetting Italy.], had all contributed to making Germany the richest country in Europe. Working-men on the farms in the country and in industry in the cities are for the most part very well off, materially speaking, at the beginning of the sixteenth century. But gradually the state of balance and the reciprocal influence of the great groups of labour are disturbed. Commerce begins to stifle value-producing labour. [An ethical derivation serving to take account of the rise of the speculator type to importance.] Price-manipulations and cornerings of commodities take place on all hands in spite of governmental measures, and the work-ing-classes begin to be exploited on a large scale by capital. [Another derivation of the same sort.] Wide-spread now the complaints about monopolies, forestallings, the high interest on money, the high prices of commodities of prime necessity, the adulteration of food-products, the manoeuvres of 'big' business men and capitalists [A description in terms of derivations of the predominance of speculators-they are all phenomena of our own day.], in a word, about the tyranny exercised by those who have over those who have not. [One of the symptoms by which the predominance of speculators may be diagnosed.] The effects of such abuses are all the more disastrous in that the rich parade their unbridled extravagance before the eyes of the poor. And the workers and farmers themselves feel the bad influence of the luxury that is prevailing all about them. Material prosperity has stimulated expensive living and pleasure-seeking, and these in their turn develop a growing eagerness for greater and greater profits and foster in all ranks of society a passion for owning and enjoying." That might as well have been written of what we see going on under our own eyes: it is "speculation" gone rampant.
Things were very much the same in France at that time. Imbart de la Tour, La France moderne, pp. 421-62: "The merchant is no longer selling on the spot a specified commodity. He is a middleman who procures and sells the most diverse products. . . . He has an eye out for everything. . . . In those circumstances there are no limits to what he may earn. . . . Owing to increased demand, a higher standard of living, a larger turnover, he can corner for his own profit all sources of wealth, and great fortunes begin to be founded on the ruins of some and the mediocre station of others. . . . The second half of the century witnesses the advent of hordes of large-scale business men, who are real speculators and manipulators of business and who are destined to drain off all the wealth produced by labour and
tried their best to enforce it now in one way, now in another. It was the objective of many of their activities. The Reformation, in short, was one of the usual reactions by which Class II residues (group-persistences) force a retreat upon Class I residues (the instinct for combinations).

## 2385. But since economic conditions that were stimulating Class I

by the soil. [The usual bias of the moralist: those speculators themselves produced huge amounts of wealth.] The outstanding trait in the merchant of that period is that, more than anything else, he is what is called 'the forestaller.' He deals in large quantities and gets them into his own hands. He buys to sell, and he sells what he does not yet own. [That always rouses the wrath of our moralists but, economically, it often has very good results.] In 1517, the number of fictitious markets has become so large and they are so much the rule that the scrivener of Orleans asks the public authorities to interfere. They interfere . . . but to no purpose. Nothing more spectacular than the Barjots, who had never been heard of in the Beaujolais, but who laid the foundations of their fortune in the vitriol mines and then became 'public merchants' of grains and wines, and the better to prosecute said business 'rent and hire several large benefices both secular and regular [i.e., of the Church], and the properties of several gentleman in the district.' The Barjots were not alone. Documents of the period are for ever mentioning these speculators who are swooping down on all the revenues (fermes) in a district and winning the exasperated jealousy and hatred of the people there. . . . Trader, speculator, collecting agent for public and private revenues, broker, banker, money-lender, as skilful at amassing money as he is at investing it, the merchant succeeds in turning to his profit that immense power which rules the world: capital. . . . Semblançay is not just an instance. He is a symbol. He epitomizes the whole history of those amazing upstarts whom a society in transformation has spouted up from its depths. Their emergence was doubtless in part the personal work of Louis XI, who liked contrasts. It was the recompense for the service they rendered, for their professional aptitude, their peculiar turn of mind. But it was also the work of circumstances that were then pushing the man of money to the fore as they had the man of war in a day gone by. [Just so in our day.] . . . But their mounting wealth also increased their influence. [Just so in our day.] Their private prosperity was bound up with public prosperity. In them royalty [In our day, democracy.] always found suppliers of funds who were pledged in advance, and they were always necessary [Just so in our day.] in the moments of embarrassment in which the Exchequer was always finding itself." At that time speculators served monarchy. In our day they serve democracy. Tomorrow they will serve Socialism, and day after tomorrow Anarchy, if necessary. They are always ready to serve anybody who will help them in their money-making; and to making money they are driven by their wealth of combina-tion-instincts and their poverty in group-persistences (Class II residues). "Bourgeoisie and absolutism [Today, democracy.] grew up together, the bourgeoisie fed by the absolutism, the absolutism strengthened by the bourgeoisie. . . . They [The Caillaux's of that day.] were all the more devoted to absolutism in that in working for its intercsts they were working for their own." The kings who gave all that power to speculators were preparing the way for the Revolution of ' 89 , and consequently for the fall of monarchy ( $\$ 2227^{1}$ ).
residues continued to prevail, those residues gradually began to regain the ground they had lost. "Reason" again set to work to demolish the edifice of "superstition," and that edifice, so far as the upper classes in society were concerned, collapsed towards the end of the eighteenth century, and perhaps a half-century earlier in England than in France; ${ }^{1}$ and then very much the same things happened as at the beginning of the sixteenth century. Two hundred years had been enough to complete the work. The philosophes of the eighteenth century were the heirs of the Humanists, and like them leaned toward paganism; for that is one of the many forms which the battle between Class I and Class II residues may assume, when Class II residues are defended by Christianity. The opposite might be true if the battle were waged in a pagan society-and that may actually have been the case in the early days of Christianity.
2386. The latter part of the eighteenth century was a period of economic prosperity. At that time we witness the first dawnings of modern transformations in agriculture, commerce, and industry. That circumstance favoured, as usual, a predominance of Class I residues, and was itself favoured by that predominance. The tide of economic prosperity rose first in England, and that is why the curve for Class II residues, as regards their relative proportions to Class I residues, first shows a drop in that country; and that also is why, in virtue of the undulating movement peculiar to that curve, even with
$2385{ }^{1}$ Porret, Le réveil religieux du XVIIIe siècle en Angleterre, pp. it-12. Despite a rich saucing of theological and ethical derivations, the facts are tolerably well described: "Towards the end of the seventeenth century the 'reasonable Christianity" of the philosopher Locke, deistic in theology, sensualistic in psychology, was predominant in England. The Gospel was looked upon as a mere system of morality and a rather vulgar morality at that. . . . Bishop Hoadley openly professed Deism. According to Judge Blackstone there was no more Christianity in the sermons of the more prominent preachers in London than in the orations of Cicero. Possessed of comfortable incomes and not obliged to keep taverns to make a living, as some of their predecessors had done, clergymen who got drunk in a genteel manner were by no means rare exceptions. Some were mere idlers about the drawing-rooms of society, others devoted themselves to letters, to poetry especially. . . . Better behaved on the whole, the churches of the dissenters hardly had any greater vitality. . . . Addison notes in 1712 that 'the very appearances of Christianity had vanished' and Leibnitz says in 1715 that even 'natural religion was languishing in England.' . . . Aristocratic society was in decay. Unbelief was on the aggressive, running from the most radical rationalism to brazen atheism. Successes in the book-trade went to unbelief. Woolston's addresses against miracles sold up to thirty thousand copies and the materialism of Hobbes could count a very considerable following."
economic conditions remaining virtually constant, England was the first country to experience a reaction toward a rise in the curve. ${ }^{1}$ So, both the action and reaction in England anticipated the corresponding movements in France. The action was "philosophic" in outward garb in both countries; the reaction, though substantially the same, assumed different forms, being Christian in England and democratic in France. The French Revolution was a religious reaction of the same type, under a different form, as the religious reaction in England, and also of the same type as the religious reaction represented by the Reformation. But it was soon to change its costume. Democratic and humanitarian in the early stages of the Revolution, it became patriotic and belligerent under Napoleon, then Catholic under Louis XVIII. The high point in the curve of the relative preponderance of Class II over Class I residues was reached, taking Europe as a whole, shortly after 1815; and the exteriors everywhere were Christian.
2387. But such movements are essentially undulatory, so that again there came a further drop in the curve-a sharp one, because it

[^82]corresponded to a swift and powerful wave of economic prosperity. Economic production was in process of transformation. Large-scale industry, large-scale commerce, international finance, were coming on the scene, and prospering. The Class I residues gradually regain pre-eminence, and the "positivists," "free-thinkers," and "intellectuals" of the nineteenth century resume their time-honoured task of undermining the edifice of "prejudice," so proving themselves the legitimate heirs of the philosophes of the eighteenth century. They did not wage their war in the name of paganism, as did the Humanists, or in the name of "common sense," as did the philosophes of the eighteenth century. The banner they bore aloft was the ensign of the goddess Science. The wave that they expressed attained its peak of intensity between the years 1860 and 1870. Thereafter it begins to fall away, and in the first decade of the twentieth century a reaction sets in in favour of group-persistences (Class II residues) [neo-idealism, nationalism, etc.].
2388. As is usually the case, particular undulations are superimposed upon this general trend, and care must be cxercised not to mistake the short waves for the general trend, that error being all the easier since it is the short wave that we have before our eyes, and in virtue of that proximity it may seem to have a greater importance than it actually has when the movement as a whole is viewed over a period of years ( $\$ 2394$ ).
2389. Noteworthy among such short waves is the undulation that occurred after the War of 1870 and which, though determined primarily by the conditions prevailing at that time in European societies, was also due in some small part to the personal influence of Prince von Bismarck. In his Kulturkampf Bismarck contributed, quite involuntarily, to the fight on Class II residues and so prolonged the predominance of Class I residues, He protected the Old Catholics for the sake of gaining momentary advantages, without perceiving that in that policy he was striking at the foundations of his imperial policy. Later on he thought better of the matter, and made his peace with the Roman Curia.
In all that department the Emperor, William II, showed himself more far-sighted than Bismarck, for he saw clearly that any conflict which tended to weaken group-persistences could in no way benefit the Empire. Bismarck, furthermore, and again for momentary re-
quirements of tactic, protected the anti-Clerical republic in France; and the effect of that measure too was to prolong the predominance of Class I residues. On the other hand, out of aversion to bourgeois liberalism, of which he had more than once had occasion to complain, he extended universal suffrage throughout the German Empire, so favouring the Socialist party and reinforcing certain residues of Class II. Others were also increased in intensity through the formation of the Catholic party of the Centre, so called, and through the spread of anti-Semitism. ${ }^{1}$
2390. At the present time the prosperity of the Class II residues seems to be chiefly entrusted to the intensification of patriotism in one form or another, such as nationalism and imperialism. Socialism is also stimulating other group-persistences that stand in conflict with patriotism, but of late, in this year 1914, it has been showing itself inclined to political combinations and is being permeated with Class I residues, with the result that it is offering a very feeble resistance to nationalism and imperialism. Many Socialists, in fact, are changing forms of faith, and may be seen combining, on one pretext or another, with nationalists and imperialists. On a subordinate plane, we are now witnessing revivals in various religions, from the Christian down to the sex and Prohibitionist religions, while metaphysics is again having its day, and nonsensical patter that fifty years ago seemed to have been discredited for ever is coming into vogue again. This oscillation is now in its first stages. How long it will last, and how far it will go, are things not given us to foresee; but what we know of oscillations in the past justifies the prediction that it will end in a new fluctuation of opposite trend.
2391. If one considers from a standpoint somewhat detached all these phenomena that so regularly occur and recur in history from the remotest past down to the present, one can only gather the

[^83]impression that such oscillations are the rule and that they are not likely to cease very soon. What is to happen years hence in a far distant future we do not know; but it is altogether probable that a course of events with a history so long is not to change in any near future.
2392. It is in no sense proved that the oscillations occur about a line, $a b$ (Figure 4I), corresponding to a constant proportion between Class II and Class I residues, and not, rather, about a line, $m p$, which indicates a diminishing proportion of Class II residues. Facts in great number lead one to believe that it is the latter line, $m p$, that


Figure 41
describes the general average movement. We have seen that classes of residues change slowly, but are not, for all of that, constant. The movement represented by the line $m p$ is in no way contrary, therefore, to the properties of residues. On the other hand, if conditions in our societies are compared with conditions in Graeco-Roman society, it is readily apparent that in many branches of human activity, as, for instance, in the arts and sciences and in economic production, Class I residues and the conclusions of logico-experimental science have forced a retreat on group-persistences. In political and social activity that is less apparent, and perhaps such effect as there may be is very very slight. But those are mere branches of human activity. If we consider modern life as a whole, we may safely conclude that Class I residues and the conclusions of logico-experimental science have enlarged the field of their dominion. To that fact is largely due, indeed, the great variety of traits in our modern societies as compared with the societies of ancient Greece and Rome.
2393. It is no great mistake, therefore, to judge that "reason" is coming to play a more and more important rôle in human activity. Indeed such a view is altogether in accord with the facts. But that
proposition, like all the formulas that literature substitutes for the theorems of science, is vague in meaning, and easily gives rise to not a few errors, among which one might specify the following:
2394. r. The formula can refer only to the social complex as a whole. It has widely differing values as applied to the various departments of society, and one goes wrong in imagining that political and social activities show the traits that are observable in the arts and sciences, and in economic production.
2. It describes a mean or average trend, and the average trend must not be mistaken for the real trend, strv. . . . So true is it that people are most strongly impressed by the facts they have before their eyes that a person situated, for instance, on the descending segment, st, of the curve [when "reason" is gaining over "faith"] will imagine that that represents the mean movement, that the rest of the curve will continue indefinitely downward in the same direction, or that it will never turn upward again-not foreseeing that the rising segment, tr, will eventually be appearing. Vice versa, a person situated on a rising segment, $t r$ [when "faith" is gaining at the expense of "reason"], will not foresee the drop $r v$. That happens more rarely, however, either because the general mean trend of the curve, $m p$, is contrary to that second opinion [and in favour of "reason" over "faith"] or because-the more cogent reason-the second opinion is in conflict with the theology of Progress, whereas the first is in accord with it.
3. An error of the same sort, though less serious, is to conceive of the mean curve as approximately coinciding with the trend of the short wave that is visible before one. So a person situated on the descending segment, $r v$ [where "reason" is gaining over "faith"], is led to believe that the mean curve is dropping more rapidly than is actually the case [that intelligence is gaining].
4. Finally, there is the common error of viewing the contingent observation of experience as something absolute. So theologies and metaphysics of retrogression, stability, progress, come into being, and people laud, exalt, glorify, the wisdom of the ancients and a golden age that they locate in the past; or the serene immobility of the dogmas of a religion, an ethical system, or a political and social constitution; or, again, the god Progress, the blessings of "evolution," and a golden age now located in the future. Time was
when almost all writers verily believed that the men of their day were physical dwarfs as compared with the giants who had lived of yore. Nowadays not a few writers, thinking of the moral rather than of the physical, and inverting terms, firmly believe that the men of our time are to be counted moral dwarfs as compared with the moral giants who will live at some future time, when the wolf shall lie down with the lamb and there shall be "a little more justice in the world." Along such lines the experimentally verifiable segments, strv, of the undulations become imaginary segments, grotesquely distorted, till sometimes they end by having little if anything to do with reality. ${ }^{1}$
2395. Such logico-experimental errors may sometimes be beneficial to society, but we need not add anything here to the much we have already said on that subject. Keeping to the correspondence between theory and fact, we see that the purpose of the scientific study of social phenomena is to avoid just such mistakes and replace figments of the imagination with the results of experience. The imaginary and the demonstrated fact may at times have something in common; but if one would acquire a sounder and broader knowledge of natural phenomena and escape the danger of going wrong, one must trust only in the results of experience as progressively corrected and recorrected by new observations.
2396. Society as a whole. We have now arrived at a general conception of the social complex, not only in its static but also in its dynamic aspects, and not only as regards the forces that are actually working upon it but as regards the outward appearances, the more or less distorted forms, in which they are perceived. Some few remarks about their bearing on logico-experimental studies such as we have been trying to prosecute in these volumes may still not come amiss.
2397. A logico-experimental study merely relates facts with facts. If that is done directly, merely describing facts that are observable simultaneously, we get pure empiricism. Empiricism may serve to discover uniformities if, by observation or experiment, one succeeds

[^84]in distinguishing not more than two categories of facts that stand in correlation. Once the categories multiply and effects become involved, it proves to be very difficult, and more often impossible, to find uniformities with the tool of pure empiricism. The sum of effects has somehow to be unsnarled. In certain cases that can be done materially by experiment. In others, experiment is out of the question or else fails to unravel the complication. Then one can only resort to hypothetical abstractions, now to one, now to another, testing each in turn with the idea of solving ideally what cannot be solved materially, accepting finally that hypothesis among the many which yields results that accord with experience. The manner in which the hypothesis has been reached may be absurd. That is of little if any importance; for the value of the hypothesis is tested not by the manner in which it has been conceived, but by the verifications that can be made of it.
2398. But if the hypothesis has been inferred in the first place from certain facts, $A, B \ldots P$, that circumstance in itself is a first step toward verification; for since the hypothesis has been inferred from those facts, they certainly will appear among the results it will yield. What remains to be seen is whether it will also yield the facts $Q, R \ldots V$, which have not yet been taken into the reckoning (§ $2078^{1}$ ).
2399. In these volumes, therefore, we might have followed a deductive method, positing our residues and derivations at the very outset as mere hypotheses, without explaining how we came by them, thence going on to show that they yielded results which accorded with the facts. Instead we elected to follow the inductive method, deriving our residues and derivations from facts in very large numbers. So, as far as those facts were concerned, the verification was made then and there, and all that remained was to extend the verification to other facts not as yet considered. That verification we proceeded to make and are still making. In a word, then, what we have been doing, and are still doing, is to establish relations between facts.
2400. There is nothing peculiar about such a method. It is the method general in all the sciences. Oftentimes in the sciences a hypothesis serves for a certain length of time and promotes progress
in a particular science; then it is replaced by another, which performs the same function until, in its turn, it gives way to still a third; and so on. Sometimes a hypothesis may hold its ground for a very long time, as was the case with the hypothesis of universal gravitation. ${ }^{1}$
The logico-experimental sciences are made up of a sum of theories that are like living creatures, in that they are born, live, and die, the young replacing the old, the group alone enduring ( $\$ 52$ ). As is the case with living beings, the lifetimes of theories vary in length and not always are the long-lived ones the ones that contribute most to the advancement of knowledge. Faith and metaphysics aspire to an ultimate, eternal resting-place. Science knows that it can attain only

[^85]provisory, transitory positions. Every theory fulfils its function, and nothing more can be asked of it. ${ }^{2}$

If such succession in doctrines is in great part determined by a single force, the successive stages may constantly approach a certain limit; their curve may have an asymptote (§2392). That is what is happening in the logico-experimental sciences. The force, and if not the only one at least the chief one, that is now influencing those sciences is the investigation of correspondences between theories and experience. Theories therefore are constantly getting closer to experimental reality; whereas in a day gone by other forces were at work and prevented attainment of that result. Economic and social doctrines are still subject to such forces, and for that reason they continue to be at variance with experimental reality, sometimes to very considerable degrees, and it is doubtful whether there be any asymptote for their oscillations.

If the succession of doctrines is determined by a large number of forces of approximately equal intensities, the movement revealed in the succession may be so complicated as to make it impossible to
$2400{ }^{2}$ Perrin, Op. cit., pp. 290-91. Noting the agreement of the results obtained in determining Avogadro's Number $N$ under widely differing circumstances, Perrin continues: "All the same, however urgently the existence of molecules and atoms forces itself upon us, we must always be in a position to state visible realities without resorting to invisible elements. And that, in fact, is very easy. We simply have to eliminate the invariant $N$ from the thirteen equations that have served to determine it in order to get twelve equations that deal entirely with sensible realities and express profound relations between first-hand phenomena as completely independent as the adhesion of gases, the Brownian movement, the blue of the sky, the spectrum of the opaque body, or radioactivity. . . . But we should never be so awkward, on pretext of meticulous accuracy, as to avoid introducing molecular elements into the statement of laws that we could not have obtained without their assistance. That would not be removing a prop that had become useless for a grown plant: it would be cutting the roots that have been feeding it and causing it to grow."

Much the same may be said of our theory of residues. Residues represent a constant element in huge numbers of varying phenomena. All the same, we might say, we ought always to be able to state concrete realities without appealing to abstractions. That we can do by eliminating the invariables called residues from among the many many equations that we have used in obtaining our abstractions and in which they represent nothing but concrete realities. But we should not be so unwary as to avoid, on pretext of exactness, the introduction of abstract elements into statements of laws that we have obtained with their help. It is to our advantage not to dispense with the important services that they can still render until progress in knowledge has replaced them with others, which in their turn will be kept as long as they are serviccable, and so on indefinitely.
find any general expression for it. But if such forces, without being so few as one, are at least not many, there are cases in which we can discover such an expression. We may, for instance, recognize movements as oscillating about a given point, whether tending towards an equilibrium in that position or continuing on indefinitely without any tendency of the kind. We have seen movements of that sort taking place under the pressure of two forces in the main: correspondences with experimental reality and social utility (\$§1683, 2329, 2391).

Only in a first approximation can the numberless forces operating in a concrete case be reduced to two. If, to carry an investigation farther, new forces are brought into consideration as an addition to the two main ones, we get movements that grow increasingly complicated and are harder and harder to manage ( $\$ \$ 2339,2388$ ). In these volumes we have succeeded in taking a few steps along that road ( $\$ 2343$ f.), but it bristles with obstacles, and they are too numerous to permit us to go as far as we should have liked. ${ }^{3}$
2401. Kepler's discovery that the orbit of Mars was an ellipse with one of its foci coinciding with the centre of the Sun was purely empirical, providing a summary description of the situation. In that case, owing to the imperfect observations available ( $\$ 540^{1}$ ), it was possible to distinguish the movement of one planet with respect to the Sun from the movements of the other planets. Had the observations been more nearly exact, no such distinction could have been made, Kepler would have found no ellipse, and that would have been a serious obstacle to the advancement of astronomy.
Two cases have to be considered in this connexion:
2402. r. As regards our solar system, the obstacle might have been overcome without great difficulty. Some scientists would have observed that if the curve traversed by Mars was not an ellipse, it was in any case not far from an ellipse; and he could have suggested the hypothesis that if Mars and the Sun were considered apart from the

[^86]other planets, the curve had to be an ellipse, and that if that was not the case, it was because the Sun and Mars were not considered apart from the other planets.
2403. 2. The obstacle would have been much greater and perhaps insuperable if instead of our solar system, where the central body has an enormously greater mass than any of its planets, a system of stars and planets of no very appreciable differences in mass had been in question.
2404. Sometimes, though unfortunately very rarely, the facts correlated by statistics may be brought under the first case just mentioned: that is to say, by interpolation, a certain hypothetical curve can be found from which the real curve can be inferred by assuming perturbations. But much more often the facts of economics, and to a still greater extent of sociology, are to be brought under the second case.
2405. Newton advanced a hypothesis, known as the theory of universal gravitation, whereby if the Sun is assumed to be stationary with a planet revolving around it, one gets a curve something like the curve discovered by Kepler-an ellipse.
2406. That hypothesis has one peculiar merit that is rarely met with in other hypotheses of the kind. The relation between the hypothesis and the facts can be inverted. If it be assumed that a planet is moving in an ellipse about a stationary Sun, a law of gravitation results that is Newton's law exactly. Generally, in economics and sociology, a hypothesis may indeed imply the existence of certain facts, but those facts may lend themselves to many other hypotheses.
2407. Newton's hypothesis has also another very great merit, that so far at least [1914], taking the Sun and its planets as a whole, it has been adequate for explaining all the perturbations that have been observed in the movements of the celestial bodies. If that had not been the case, Newton's hypothesis might have stood, but it would have had to be supplemented with other hypotheses, the hypothesis, for instance, that the attraction exerted by the planets upon one another is different from the attraction between the planets and the Sun.

Needless to say, neither economics nor sociology possesses simple hypotheses as widely applicable as Newton's.
2408. In political economy and sociology, therefore, it is indispensable to consider many different elements in the complex phenomena that are directly recorded by observation. ${ }^{1}$ The simplest thing one can say in economics is that the economic equilibrium
$2408{ }^{1}$ Pareto, "Économie mathématique," Encyclopédie des sciences mathématiques: "From the strictly mathematical point of view, it makes no difference as regards determining the equilibrium whether the individual's conduct is known as a function of supply and demand or by index-functions. [In note 9, p. 596:] Only gradually, as I freed myself from the notions of the old political economy, did I come to replace the concept of ophelimity with the concept of index-functions. Ophelimity is used exclusively in my Cours; it gives way to indices of ophelimity in my Manuale. It is still further generalized in my Manzel." P. 606: "Cournot took $p F(p)$ as an index-function. He would have reached exactly the same result had he taken $F[p F(p)], F$ being an arbitrary function. He used index-functions without being aware of it. Cournot tried to extend his method to the case of free competition, but he was altogether mistaken in his inferences, and the consideration of indices inferred from quantities exchanged at given prices was abandoned for another method. . . . All the same, by reasoning correctly . . . index-functions can be deduced from a consideration of quantities exchanged at given prices." In my Manuel, p. 542, after suggesting an equation (9) that might be derived directly from experience and contains nothing but quantities of commodities, I add: "The equation (9) is the only one, strictly speaking, that we need in order to establish the theory of the economic equilibrium. Now that equation contains nothing corresponding to ophelimity or indices of ophelimity. The whole theory of the economic equilibrium, therefore, is independent of the concepts of utility (economic), usagevalue, and ophelimity. It needs only one thing: to know, that is, the limits of the relationships

$$
\frac{\Delta_{1} x}{\Delta y}, \frac{\Delta_{2} x}{\Delta z} \ldots
$$

A whole treatise on political economy could theretore be written starting with equation (9) and other similar equations, and it may be desirable some day to do that. [In a note:] That is one of many reasons why our theories are altogether distinct from those of the 'Austrian School,' so called." And I might add that in that respect they differ also from the theories of Walras, which I followed more closely in my Cours, and for which the concept of "rarity" ( $\$ 2078^{1}$ ) was an indispensable basis. Ibid., pp. 570-71: "Instead of experimenting to determine lines or varieties of indifference, suppose we experiment to find out just what quantities of goods the individual will buy at certain given prices." The required experiments are described in mathematical terms. Then comes the conclusion: "The greater or lesser difficulty, or even the impossibility, one might encounter in making these experiments practically is a matter of scant importance. The theoretical possibility of making them is sufficient for proving, in the cases examined, that indices of ophelimity exist, and for showing certain of their characteristics. So the indices of ophelimity and the laws of supply and demand are brought into correlation, and one may move back and forth from the ones to the others." Ibid., p. 571 (§43): "The theory of the economic equilibrium might be derived directly from the experiments just indi-
results from the conflict between tastes and obstacles; but the simplicity is only apparent, since one then has to go on and take account of an intricate variety of tastes and obstacles. The complications in sociology are greater still and by far. There, in addition to logical conduct, which is alone envisaged in economics, one has to deal with non-logical conduct, and then again, in addition to logical thinking, with derivations ( $\$ 99$ ).
2409. The laws, so called, of supply and demand cannot be deduced from statistics as to the quantities and prices of a commodity produced or brought to market. When economists said that an increase in supply brings a drop in price, they stated the law of an ideal situation that is rarely observable in the concrete. In working out theories in economics it is an illusion to believe that we get any closer to the concrete by starting with the laws of supply and demand than we do by starting with the "utility" of the early economists, or with the "marginal utility," the "rarity," or the "ophelimity," of more recent economists. ${ }^{1}$ Whatever we do, we are re-
cated"-therefore, without resort to the concepts of ophelimity, indices of ophelimity, or any other indices of the kind. To find the laws of supply and demand Walras considered the exchange of two commodities only [Éléments d'économie politique pure, pp. 43-106], and he was right in that, for difficulties are solved one at a time. But then it is necessary to go on from there and solve new problems. That is what I did in considering exchanges of several commodities, assuming first independent consumptions (["Di un errore di Cournot nel trattare l'economia politica con la matematica"], Giornale degli economisti, August, 1892), then assuming dependent consumptions (see my Manuel, and my article, "Économie mathématique," Encyclopédie des sciences mathématiques).
$2409{ }^{1}$ Partto, "L'économie et la sociologie au point de vue scientifique," Scientia, Bologna, 1907, p. 13: "Since the economic equilibrium was first studied on the basis of free competition, many people have imagined that pure economics envisaged that situation only. That is very like the mistake of imagining that because dynamics began by considering the movement of one material point, it could not deal with a system of points subjected to 'ties.' Pure economics can and does study all sorts of economic situations in addition to the case of free competition; and in view of the exactitude of its methods it gives exact definitions for the terms 'free competition,' 'monopoly,' and so on, which have been hitherto used more or less loosely. Among the groups of equations that determine the economic equilibrium there is one which contains the ophelimities of commodities consumed. That circumstance was the occasion for another mistaken impression, that the theories of pure economics were closely bound up with the concept of ophelimity ('rarity,' 'marginal utility,' and the like) and therefore could not stand apart from it. There is nothing to that. We can, if we choose, eliminate ophelimities from those equations, and get a new system that will determine the economic equilibrium just as well. This new system will contain a group of equations that will exactly
sorting to abstractions, and we cannot do otherwise. Theoretically one may start with any one of those considerations or indeed with any others; but however we start, we must use certain cautions that are overlooked by many writers who talk political economy without knowing the first thing about it. From the theoretical standpoint, again, one must not forget that consumptions of commodities are not independent, as not a few of the founders of pure economics assumed them to be. ${ }^{2}$ Nor can the undulatory movements of economic phenomena be disregarded, nor a great many other circumstances, such as speculation, which change the simpler form of the phenomena that, for purposes of convenience, was the one considered first.
2410. All that has just been said applies a fortiori to sociology. Little or nothing can be inferred directly from the mere description, and in that sense the apothegm that "history never repeats itself" is very true. Concrete phenomena have to be broken up into ideal phenomena that are simpler, that we may so arrive at something more nearly constant than the complex and ever shifting thing we have before us in the concrete. ${ }^{1}$ In these volumes we have sought
express the older, vaguer, and at times erroneous conception that was called the 'law of supply and demand.' "
$2409{ }^{2}$ Pareto, Manuale, Chap. IV, § Ir: "In order to make the problems with which they were to deal more manageable, a number of the founders of pure economics were led to assume that the ophelimity of a commodity depended only upon the amount of it at the individual's disposal. They are not to be blamed for that; for difficulties have to be dealt with one at a time, and to go safely one must go slowly. But now the time has come to take another step forward and think of the ophelimity of a commodity as influenced also by the consumptions of all other commodities." That subject is discussed at length in the chapter mentioned and in my "Mathematical Appendix." The Manzuale was published in 1906. Yet long years after that, and after the French translation of that work had appeared, a writer came along and criticized the theories of pure economics for considering only independent consumptions of commodities! Such the passion that blinds certain individuals, and such the ignorance that afflicts them! From the theoretical standpoint, the order of consumptions also has to be taken into account. A keen and very sound remark by Professor Vito Volterra led me to make a study of that subject, which I published in the Giornale degli economisti, July, rgo6, and summarized in my Manuel, pp. 546-56.
$2410{ }^{1}$ It was in deference to that principle, precisely, and to other principles of scientific sociology that Marie Kobalinska wrote a book that we have often quoted, La circulation des élites en France. If the rôles of classes of residues and derivations were inverted, if, that is, residues were very variable and derivations virtually constant, the evolution of human societies would have been altogether different
these less variable, these more constant, elements in residues and derivations. They might very well be sought in other directions. That is not so important as to be careful that wherever one goes looking for them, elements and forms that lead away from objective reality are not introduced. That "history never repeats itself" identically is just as certain as it is that history is "always repeating itself" in certain respects that we may call the main respects. It would be inconceivably absurd to imagine that history could produce an event identically repeating the Peloponnesian War, in the sense of being an exact copy of it. But then again, history shows that that war, which arose in the rivalry between Athens and Sparta, is only one item in an endless series of similar wars that have been brought on by similar causes, that in that sense there are numberless copies of it that are likenesses, to some extent at least, from the wars that arose in the rivalries between Carthage and Rome down to all the other wars that have been fought in all periods of history between then and now. In his Politica, V, 3, 7 (Rackham, p. 395), Aristotle says: "Finally, it must be evident that those who have been the cause of power [to a city], whether they be private citizens, magistrates, clans, or in short, any part of a people, are responsible for insurrections." In those words he was describing one of the main elements in the great many facts that were known to him, and he was foreseeing a great many other facts that were to come true after his time, the cases of Cromwell and Napoleon, to mention examples closer to our own times.
The main element in such happenings is in fact supplied by sentiments (residues), which have varied but slightly between Aristotle's time and our own. The same may be said of many maxims of

[^87]Machiavelli, which hold as true today as they were in his time. Classes of residues vary but slightly and but slowly, and they may therefore be counted among the elements that determine the constant, virtually constant, or at least not very variable .element in historical phenomena. The separate genera in a class of residues vary to a far greater degree and much more rapidly than the class as a whole, and we must therefore be cautious in giving them any such position. Derivations vary widely and very rapidly; and they are generally to be counted, therefore, only among the subordinate elements that determine secondary, variable, and for the most part negligible phases in a phenomenon. What we have just been saying furnishes the key also to a fact to which we have had frequent occasion to allude-that in a quest for sociological uniformities, too many facts, details too minute, may be a hindrance rather than a help; for if one dwells on all the petty circumstances that figure in a situation, one easily loses one's way, like a person travelling in a thick underbrush; one is prevented from assigning proper indices to the various elements, mistaking what is secondary for what is principal, what is very variable for what is quasi-constant, and so one ends by writing a piece of literature that is devoid of the slightest scientific value. ${ }^{2}$
2411. In the practice of the social sciences one must especially be on one's guard against intrusions of personal sentiments; for a writer is inclined to look not for what is and nothing else, but for what ought to be in order to fit in with his religious, moral, patriotic, humanitarian, or other sentiments. ${ }^{1}$ The quest for uniformities is an
$2410{ }^{2}$ Excellent works in sociology have been criticized for not considering "all the facts" and all details of the facts. That is to mistake a merit for a defect. For such an objection to be valid it has to be presentable in the following form: "You fail to take account of this or that fact which exerts an important influence on the main element in the phenomena in which you are looking for uniformities; and you overlook this or that detail which is just as important." Furthermore, as regards substance, adequate substantiation of the assertions would then have to be offered. But all such things are understandable only to a person who is using in the social sciences the methods that have proved so successful in the experimental sciences. [This note repeats remarks that were made in $\$ \$ 537^{1}$ and $17499^{6}$.-A. L.]
$24 I^{1}{ }^{1}$ And one must also be on one's guard against the eagerness, the mania, for practical applications. In my article on "L'économie et la sociologie au point de vue scientifique," Scientia, Bologna, 1907, I wrote: "Most sociologies have been offered professedly as substitutions of scientific thought for religious and political prejudices, and they have ended by propounding new religions. That is strikingly the case with
end in itself. Once they have been found, they may be made to serve other purposes. But to mix the two researches is harmful to both, and is in any case a serious and oftentimes insuperable obstacle to the discovery of experimental uniformities. As long as the natural sciences had to deal with such obstacles, they made little or no progress, and only as the obstacles became fewer in number and finally disappeared did they make the marvellous progress they show today. If, accordingly, one would remould the social sciences
Auguste Comte, but it is also observable in Herbert Spencer and in the hosts of humanitarian sociologies that each passing day brings forth [ $\$ 6$ ]. Sometimes there is an effort to disguise it under a scientific varnish, but it is a transparent varnish, and the dogma that would be concealed is readily discernible. . . . Sociologists who never get as far as working out a religious system insist at least on getting immediate practical applications from their 'science.' Practical applications will be possible some day, but that day is still far distant. We are as yet barely glimpsing the uniformities that the mutual dependencies of social phenomena present. An enormous amount of labour will still be necessary before we shall have acquired sufficient knowledge of those uniformities to enable us to predict with any assurance the social effects of any change in a given order of facts. Until that time, the synthetic empiricism of the statesman will still be far more trustworthy, as regards practical results, than the most scholarly analysis that can be made by the sociologist."
That was written in the year 1907; yet there are still people who imagine that the purpose of the scientific researches in which we are engaged is to be able to prophesy, in unchivalrous competition with Madame de Thèbes. So in days gone by there were those who expected political economy to prophesy commodity-prices. Similar opinions were ventured when mathematical economics first appeared and there were those who asked, "With all your calculations, can you tell what the price of wheat is going to be next year?" Such people are unable to distinguish between a virtual movement and a real movement, between a logico-experimental reasoning and a derivation, between a scientific proposition and a prophecy.

The form a logico-experimental reasoning takes with regard to virtual movements is: "Given the circumstances $A, B, C \ldots, X$ will occur." The requisite at bottom is that $A, B, C \ldots$ shall actually be experimental facts and the reasoning associating them with $X$ strictly logical. If from observation of the past it seems reasonably certain that $A, B, C \ldots$ will recur in the future, one may guess, with the same degree of probability, that $X$ also will recur. That is a scientific forecast ( $\$ 77$ ), a consequence of the uniformity associating $A, B, C \ldots$ with $X$, but remaining altogether distinct from that uniformity; so much so that the uniformity will hold even if the forecast with regard to $X$ fails to materialize; and that would happen not because of any failure in the connexion between $A, B \ldots$ and $X$, but because of the mistaken forecast that $A, B \ldots$ would recur in the future.
If the reasoning just noted is kept in form, but changed in substance, whether because $A, B \ldots$ are not, in some respect, experimental, or because the reasoning that associates them with $X$ is not strictly logico-experimental, we get a derivation. Such derivations have not the slightest validity as demonstrations and fail to in-
on the model of the natural sciences, one must proceed in them as in the natural sciences, reducing highly complicated concrete phenomena to simpler theoretical phenomena, being exclusively guided all the while by the intent to discover experimental uniformities, and judging the efficacy of what one has done only by the experimental verifications that may be made of it.

Many such verifications we have furnished in these volumes with regard to particular cases. We must now go on to a few others bearing on more general cases.
crease in the slightest the probability of the bald assertion that " $X$ will occur." If the assertion is the non-logical "hunch" of a practical man, it may have a high degree of probability in its favour. If it is the prophecy of a believer who lives in the clouds or of some individual who is exploiting the credulity of others, little reliance is to be placed on it-it must be packed off to keep company with the prophecies of those estimable seers who foretell lottery drawings.

If with the price of public-debt certificates at 8 I , the demand for them exceeds the supply, an economist can say that the price is going to rise. That would be a particular case of a uniformity studied by his science. If you want to know what the quotations on those bonds are going to be a fortnight hence, do not go to an economist-he can tell you nothing on the subject. Go rather to a statesman who is willing to share his "inside" information with you. That will enable you to infer, to a greater or lesser degree of probability, whether the demand is to increase or diminish as compared with the supply. Or else you might seek the counsel of a seasoned stock-broker, who may hit the nail on the head or miss by a mile. If he has often won money in speculations, he will more probably be right than wrong; but in any event it will be a probability that has nothing whatever to do with economic science. If, then, you go to a man who "has abiding faith in the destinies of the country" and therefore concludes that the quotations on its bonds must "necessarily" rise, kill two birds with one stone and ask him also what lottery numbers he has dreamed, for they will bring you good luck, and remember that his prophecies will be worthy of a distinguished place among the prophecies of Nostradamus or Madame de Thèbes. Of that sort also are the assertions of many "sociologists" who naively imagine that they are proclaiming sociological uniformities when they voice their desires or their sentiments, or retail the visions of their humanitarian, patriotic, or social religions.

## The Social Equilibrium in History

2412. We are to proceed, henceforward, to further experimental verification of the theories we have been expounding, by examining new facts, new relationships between facts.
2413. We have time and again been led to recognize that one of the principal factors determining the social equilibrium was the relative proportions of Class I and Class II residues in individuals. In a first approximation, that proportion may be considered from three points of view, by making the comparison: (I) between populations of different countries, or populations of a given country in different periods of history; or (2) between social classes, and more particularly between the governing class and the class that is governed; or finally, (3) as bearing on class-circulation within a population.
2414. Meantime we must be on our guard against two mistakes. First, the error of regarding the relative proportions of such residues as a "cause" and the social phenomena as an "effect." ${ }^{1}$
2415. Second, the error of regarding the prevalence of certain relative proportions of such residues in such correlations as the only determining factor and, what is worse, of regarding such a condition, even though it is a necessary condition, as a necessary and sufficient one. Furthermore, as a first approximation and for the sake of brevity, we are confining ourselves here to Class I and Class II residues, but obviously the other residues have to be considered too. However, not a few residues of sociality, personal integrity, and so on, have their counterparts among the group-persistences, so that they are taken account of indirectly in appraisals of Class II residues.

To make this point clearer, suppose we consider some analogous situations. If one is to get a good crop of wheat, the soil has to contain assimilable phosphorus and nitrogen in certain relative proportions. But that, evidently, is not enough. To say nothing of many

[^88]other indispensable conditions, weather has to be considered. If weather conditions are unfavourable, a soil containing the proper proportions of phosphorus and nitrogen may yield a poorer crop than a soil not so well provided with substance but enjoying more favourable weather conditions. However, in the long run there is a certain balance between bad-weather seasons and good-weather seasons, and on the average the soil containing the proper proportions of phosphorus and nitrogen will yield the larger crops. For that reason, chemical analysis of soils is far from being a useless thing. It is, in fact, the basis of modern agriculture.

Another example: In the case of a modern army probabilities of victory stand in correlation with certain relative proportions of artillery to other arms. Now that condition is not the only one; there are many others, in particular the condition that the army be well provided with food and munitions. Then again, though the condition specified may in certain cases be essential, it is never sufficient. A proper proportion of artillery to other arms is not by itself enough: ability to use one's equipment is also necessary. Just so, other residues besides those of Classes I and II have to be considered. One must consider whether or no the artillery has the necessary horses and sufficient quantities of ammunition, and is manned with good soldiers and competent officers commissioned and non-commissioned. So it is not enough that a governing class possess Class I and Class II residues in the proper proportions; it is also necessary that proper use be made of them. It is evident that if the combina-tion-instinct expresses itself in devising magical incantations instead of in economic or military activities, it will not amount to much; and if it is wasted on parlour intrigues instead of being applied to efficient government, it will amount to little indeed. ${ }^{1}$ If group-persistences exhaust themselves in ascetic, humanitarian, or other antics, they will

[^89]be socially as efficient as wooden cannon in a military campaign. All the same, in the long run, if the different arms in a military establishment are used with average ability and proper equipment, the advantage of proper relative proportions in the various arms will be apparent. So when residues are functioning in a manner on the whole conducive to social prosperity, the advantage of proper proportions in them will be apparent in the long run.

That is the theory we are now setting out to test on the facts.
2416. Suppose we take the mass-populations of different countries. On the axis $o z$ (Figure 42) we will put indices of the economic, mili-


Figure 42 tary, and political prosperity of the countries; on the axis $o x$, the various respective proportions of Class I and Class II residues (residues of other classes can also be considered). It will not be difficult to find countries, $p$, in which that proportion is small, in which residues of combination (Class I) are relatively few ( $O p$ ) as compared with group-persistences (Class II). We also find countries, $q$, where Class I residues greatly predominate (oq) over Class II residues. Then there will be other countries, $r$, that show an intermediate proportion, or. In a great many cases we notice that the indices of prosperity, $p a, q d$, are lower than the indices $r b$, and from that we conclude that the curve of the indices of prosperity very probably has a maximum, $s c$, corresponding to a proportion, os, which we cannot determine exactly, but which we do know stands somewhere between op and oq.
2417. Now instead of comparing different countries, suppose we compare the various situations in one country at different times. In this case, we can learn very little from considering the relative proportions of Class I and Class II residues in general. Taking a population as a whole residues change very slowly, and the effects of varying proportions may remain indistinguishable in the mass of effects of other more variable phenomena. But we can distinguish such effects from other effects by fixing our attention on proportions of residues in the governing class, for proportions in governing classes sometimes vary very rapidly. However, that variation is
strictly correlated with variations in class-circulation. So oftentimes we are able to determine nothing more than total effects, without being able clearly to distinguish the respective share that belongs to proportions of residues and to phenomena of class-circulation.
2418. Furthermore, the index of social utility depends not only upon proportions of residues in the governing class, but also on proportions of residues in the subject class. The actual situation therefore has to be pictured in a three-dimensional space. In Figure 43


Figure 43
the plane $x y$, taken as horizontal, is the plane of the figure. The axis $o z$, which is taken as vertical and is therefore not represented in the figure, will be the axis of indices of utility. On the horizontal plane the axis $o x$ will be the axis of relative proportions of residues in the governing class, the axis oy the axis of such proportions in the subject class.

Now let us cut various vertical sections, $h h^{\prime}, k k^{\prime}, l l^{\prime} . .$. parallel to the plane oxz (Figure 43). In each of those sections we find (Figures 43 and 44) maximum points, $c, c^{\prime}, c^{\prime \prime} \ldots$, and, comparing the various maxima, $s c, s^{\prime} c^{\prime}, s^{\prime \prime} c^{\prime \prime} \ldots$, we find one, $c^{\prime \prime}$, which will be greater than the others and will therefore indicate the most suitable proportions in the governing class and in the subject class.
2419. Ancient Greece was a laboratory of social and political experiments and it provides a rich storehouse of observations. The moment one approaches the phenomena alluded to in $\S 2416$, one
thinks of Sparta and Athens as illustrating the indices $p a$ and $q d$ in Figure 42. The great predominance of Class II residues in Sparta and of Class I residues in Athens is too obvious to require documentation. But it will be worth while to show in some detail how those two extremes in proportions kept the two communities from attaining the maximum of prosperity,



Figure 44 sc. Sparta rebuffed innovations because of her overbalance in favour of group-persistences (Class II residues). Athens accepted innovations out of hand, but she was unable to take full advantage of them because of her overbalance in favour of combinations (Class I residues).
2420. The chief utility of the sentiments of group-persistence is the resistance they offer to harmful inclinations of individual interest and to the impetuous sweep of passions. ${ }^{1}$ Their chief drawback is that they inspire a conduct that is logically consistent with them but detrimental to society. To perform their first, their conservative, function such sentiments have to be very strong. When they lose their vigour to any considerable extent they are unable to resist powerful interests and aggressive passions, and vent themselves in effects of the second sort only-those which are detrimental to society.
2421. That is what one observes in various episodes in Athens, and a typical example would be the case of Alcibiades. Alcibiades succeeded in persuading the Athenians, against the better judgment of the conservative Nicias, to undertake the Sicilian expedition. Had
$2420{ }^{1}$ Curtius, Griechische Geschichte, Vol. III, p. 52 (Ward, Vol. IV, p. 79) : "The moral health of a Hellenic city depended primarily on the fidelity of the living generation to past traditions, its faith in the gods of the fathers, its devotion to the commonwealth, its scrupulous respect for what custom and legislation had laid down as the rule of community life." That is true provided it be applicd not to rulers and ruled alike, but primarily to the ruled. Otherwise the Athenians under a Nicias, who followed the program Curtius describes to the letter, should have enjoyed greater prosperity than under a Pericles, who cared nothing for tradition and for the gods. As is well known, the exact opposite was the case.
sentiments of group-persistence been at all strong in the Athenians, they would have followed the view of Nicias, or would at the most have been satisfied with sending a small expedition that would have been no great tax on their resources. That, exactly, is what Sparta did, when, shortly afterwards, in her turn falling under the spell of Alcibiades, she sent Gylippus, but no one else, to the aid of Syracuse, with what few ships she could secure from Corinth. The Athenians, instead, sent a powerful army to Sicily, and it drained Greece of her strength to a very considerable extent. The Athenians, then, might at least have been sufficiently persevering in their resolve to disregard every little incident that arose to interfere with an enterprise so perilous and so critical. But they were too weak in Class II residues to attain that degree of devotion, while those residues were still strong enough in them to induce them to insist that Nicias, because he was considered an honest and a religious man, should serve as coleader of the expedition with Alcibiades and then to recall Alcibiades at the moment when his work in Sicily was most needed. The Spartans, too, later on, were eager to be rid of Alcibiades, but they did not dismiss him till they thought, rightly or wrongly, that they no longer needed him, and suspected that he was betraying them.

As will be remembered, while the fleet was making ready to sail from Athens, it was discovered one morning that the Hermic pillars about the streets of the city had been smeared with filth. The city was horrified at the ominous sacrilege, and evinced sentiments of group-persistence such as would have been manifested in other Hellenic cities. ${ }^{1}$ But strong as such sentiments may have been, they were not strong enough to overbalance the combination-instincts; and the Athenians kept Alcibiades in command of the fleet, though he had been accused of the sacrilege and though he himself, desiring
$2421{ }^{1}$ Grote, History of Greece, Vol. VII, pp. 172-73: "Amidst the mournful dismay spread by the discovery of so unparalleled a sacrilege, it appeared to the Athenian people-as it would have appeared to the Ephors at Sparta, or to the rulers in every oligarchical city of Greece-that it was their paramount and imperative duty to detect and punish the authors. So long as these latter were walking about unknown and unpunished, the temples were defiled by their presence, and the whole city was accounted under the displeasure of the gods, who would inflict upon it heavy public misfortunes." Well and good; but had such sentiments been at all powerful in the Athenians, they would have dropped the notion of an expedition to Sicily, and so have escaped far-reaching disasters.
an immediate trial for purposes of his own, remarked that "it would be wiser not to send him at the head of so great a fleet while such an accusation was hanging over him and before he had been purged of it." " The combination-instincts therefore prevailed at that time, the Athenians thinking only of what a wonderful idea it was to have Alcibiades in command of the expedition. And even so, had they stuck to their decision, the expedition might perhaps have succeeded. But there they were, suddenly changing their minds and, at the very moment when it is most important to keep Alcibiades in Sicily, they send a trireme from Salamis to bring him back to Greece to answer a charge of profaning the Eleusinian mysteries; and that was the cause of the flight of Alcibiades to the Spartans, where he began to plot the ruin of Athens. ${ }^{3}$
2422. Something of the sort happened in France at the time of the Dreyfus affair. The Eleusinian mysteries had been profaned at Athens. In France judicial guarantees had been profaned to the disadvantage of a man presumably innocent. That seemed to be a sufficient excuse for disorganizing and weakening all the institutions of national defence; for naming officers and generals not on the basis of their military merit, but for their knack at a low form of political intrigue; for entrusting the ministry of war to an André and the ministry of the navy to a Pelletan, all of which, had Germany attacked France at that moment, as Sparta attacked Athens, would have brought upon France a disaster of no lesser magnitude than the ruin of the Athenians in the expedition to Syracuse. ${ }^{1}$ The controversies that raged at Athens over the profanation of the Hermic pillars and the Eleusinian mysteries, and the quarrels that

[^90]raged in France over the Dreyfus affair, were largely masks and pretexts to cover passions and interests. But they had their effect as masks and pretexts, because they were not recognized as such by many people, but were supposed to be genuine expressions of sentiments; and the people who so accepted them were influenced by sentiments corresponding to certain residues of group-persistence (Class II).
2423. It would have been to the advantage of France had she been strong enough in group-persistences to withdraw from all adventures depending upon the combination-instinct. But that instinct prevailed in France as it had prevailed in Athens. France set out to establish her dominion in Morocco, forgetting, as Athens had forgotten in recalling Alcibiades, that wars are not fought with the chatter of politicians, the insipidities of "intellectuals," the underhanded combinations of plutocrats, but with the ability of generals and the devotion of soldiers. France escaped disaster at that time because there was no second Bismarck in Germany to play the rôle that Philip of Macedon played against Athens.
As we shall see more clearly ( $\$ \$ 2449,2434$ ), lessons of that sort are of little or no avail in preventing the recurrence of such mistakes; and that is another proof of the non-logical character of the conduct in question. ${ }^{1}$
$2423{ }^{1}$ On Nov. 28, 1913, a Radical-Socialist Deputy, André Lefèvre, declared without rebuttal in the Chamber: "Following the Tangiers incident we have had to submit to an injunction because the French army had only 700 rounds per gun. There are economies that come very high! If we had had an army and navy corresponding to our foreign policy we would not have been brought to the pass in which we find ourselves at present." The Prime Minister, M. Caillaux, replied: "It is, alas, true that the efforts required have not always been made, and that we have had to make up for lost time." G. Berthoulat comments on Lefèvre's speech as follows, Liberté, Nov. 30, 1913: "M. André Lefèvre is no friend of ours, politically, but it is only fair to say that when he talks he always has something to saya compliment that is rarely deserved by our Deputies in the parliament at the present time. M. Lefèvre delivered a peerless speech on the Army Reform Bill. His remarks yesterday were no less to the point, and no moment could have been better chosen for proving to the Chamber, while the country was listening, that if the ministers of the Bloc had not at all times treated national defence in an offhand manner, France would not be required to make such a great military and financial effort today. The bewildered indignation of our Jacobins in the face of his proof was truly comical. But was it so much of a revelation after all? Doesn't everybody know that at the time of Algeciras, M. Rouvier, out of his wits, let M. Delcassé down in the matter of the German ultimatum by remarking to a group
2424. Going back again to the Athenians, it is apparent that they learned nothing from the first recall of Alcibiades, for they repeated the same mistake. By leaving Sparta in the lurch, Alcibiades had restored the fortunes of Athens in a most unexpected manner. Obviously there was nothing to do but to allow him to proceed. But against the express orders of Alcibiades, his lieutenant, Antiochus, joined battle with Lysander on the sea and was defeated. That was a new excuse for the enemies of Alcibiades. On one of the usual charges of sacrilege they had him removed from command, and that was a second step towards ruin for Athens. It is plain enough that what was lacking in Athens was such a balance between the combination-instincts and the residues of group-persistence that while the combination-instincts encouraged to adventure, the grouppersistences would supplement them with the perseverance and firmness of resolve required for success in the schemes imagined.
2425. A similar lack of balance in the proportions of the two sorts of instincts is to be noted in Sparta, but with terms inverted. The Spartans certainly were not short in perseverance and steadfastness of purpose. What they lacked was the combination-instinct that would have enabled them to turn those traits to good account. Had Alcibiades not counselled the Spartans to go to the relief of Syracuse and occupy Decelea, no one knows how long Athens might have held out and whether the outcome would not have been unfavourable to Sparta. But once the opportune combinations of Syracuse of Deputies in the corridors in my presence, that 'since there was no French army or navy left, thanks to André and Pelletan, France had to back down?' And is it not also a part of history, vouched for by M. Bertaux himself, that at that time feverish efforts had to be made to provide for the most elementary needs of a ruined equipment and to use two hundred. millions from the secret funds for that purpose? M. Lefèvre was therefore saying nothing new, but he was the first to be courageous enough to raise the question on the floor of the Chamber. That story of the 700 rounds told by a man of the Left who set country higher than party was a cruel thrust for the survivors of the 'abject régime.' The Radical made a delicious comment on the episode: It reminds M. Lefèvre of 'certain proprieties.' But what propricties? The proprieties those responsible have been observing? A reminder of the truth would be more serviccable! M. Lefèvre's indictment is irrefutable. And evidently it should fall more especially upon the man whom the Radical calls 'the leader of the Republican party,' since every time M. Caillaux has been minister of finance he has collaborated diligently in the wastage of the food policy, all the savings he has made being at the expense of the army-savings, in other words, that he should never have made and which, added together, make up the lion's share of the present deficit." And cf. § $2465^{1}$.
and Decelea were set before the slow-thinking Spartans, they carried those enterprises out with perseverance, consistency, and shrewdness.
2426. Characteristic of Spartan character is the anecdote recounted by Herodotus, Historiae, IX, 52, of Amompharetus. That soldier, at the battle of Plateia, refused to execute a strategic retreat which his chief, Pausanias, had ordered, because it would have caused him to give ground before the Barbarians, and that would have been dishonourable in a Spartan. ${ }^{1}$
2427. The phenomena we are here examining are more strikingly conspicuous in the art of war, for there we get definite indices. Of all historical events, victories and defeats are the best known to us. In considering the activities of Alcibiades among the Spartans we encountered, without going to the trouble of looking for it, a most interesting fact that demonstrates how desirable it is that combina-tion-instincts should predominate in leaders and the instincts of group-persistence in subordinates. ${ }^{1}$ At bottom it was because Alci-
$2426^{1}$ Amompharetus, according to Herodotus, was the leading citizen of Pitana. Speaking of common historical errors, Thucydides, Historiae, I, 20, 3, remarks that there never was such a place as Pitana. [Actually what Thucydides says is that there never was a "Pitana company" in the Spartan army.-A. L.] That would cast doubt on the whole story in Herodotus. However, even if it were legendary, in whole or in part, that would make no difference as regards our purposes-to determine Spartan sentiments. Evidently a legend that is accepted as history has to accord with the sentiments it exemplifies.
$2427{ }^{1}$ Curtius, Griechische Geschichte, Vol. III, pp. 132-33 (Ward, Vol. IV, pp. 191-92). Without in the least contemplating any such theory as ours, Curtius supplies another example, from the story of Xenophon's Ten Thousand: "In those men obsession with present dangers kept up a state of constant exhilaration and it had destroyed all love of their home land in them. [Specific residues have weakened, but the loss is offset by other residues.] But how devotedly they remained attached to their oldest traditions- Dreams and poftents sent by the gods determine, as in Homer's camp, the most crucial decisions [ $\$ 24.40^{1}$ ]. It is with most pious fervour that they sing their paeans, light the sacrificial fires, build altars to the gods who have saved them, and celebrate games, at last, when the longed-for sea comes into view and their drooping strength and courage rally. Tribal rivalries can be discerned in the Ten Thousand; but the sense of community, the consciousness of national unity, holds the upper hand, and the rank and file has enough good sense [Read: enough Class II residues.] and abnegation [There the residue, as it were, in person.] to be obedient to those whom their experience and their intelligence [Class I residues.] indicate as the ones fit to command. And, miraculous as it seems [Not at all miraculous: it was the logical consequence of the residues Curtius is describing.], in all that motley horde of Greeks it is the Athenian who surpasses everyone in capacity and becomes the real saviour of the army. [As was
biades had men like the Spartans to execute his combinations that he was able to be of greater service to Sparta than to his native city, Athens. That fact suggests that the first distribution of residues is more efficient than the second, and much more efficient than still a third, where a Nicias is in command, while those who elect him and accept his leadership are strong in the combination-instincts. Of all that we shall shortly be seeing further and more striking examples.
2428. At the battle of Leuctra the tactical formation of the Spartans was still the one that had been in use at the time of the Persian Wars, whereas the progress made by the Athenians in that respect between the time of Miltiades and the time of Iphicrates had been enormous. ${ }^{1}$ But that was of little benefit to Athens. The Spartans could not get away from precedent. The Athenians could not take advantage of the innovations that came to them so easily, deficient as they were in the perseverance and steadfastness indispensable to victory. Athens stood to Sparta in some respects as Pyrrhus and Hannibal, in their time, stood towards Rome. But the analogy fails as we turn to Sparta. The Romans learned the art of war from Pyrrhus and Hannibal and used what they learned to good purpose. Sparta learned nothing from Iphicrates, and nothing from Chabrias and other able adversaries.
2429. It would have been easy therefore to foresee that both Sparta and Athens would succumb if ever they chanced to join issue with a people possessing ability to innovate combined with ability to make the proper use of novelties, a situation that arises in countries where our Class I-residues predominate in the leaders and Class II
the case with Pericles at Athens, Epaminondas at Thebes, Philip in Macedonia.] ... The Athenian alone had the higher cultivation of mind required to maintain order and discipline among those soldiers who had been brutalized by selfishness and to serve them under the most varied circumstances now as orator, now as general, now as diplomat. To him more than anyone the credit was due if, in the end, in spite of indescribable sufferings, among hostile peoples, over barren snowcapped mountains, and after losing their way many times, eight thousand Greeks at last reached the sea-shore." More exactly, and following Curtius's own words, it was due to the combination-instinct in Xenophon working in unison with the group-persistences in his soldiers. These latter are admirably described by Curtius.
$2428{ }^{1}$ Curtius, Ibid., Vol. III, p. 291 (Ward, Vol. II, pp. 412-13): "In spite of some seattered reforms, military art among the Spartiates was still based on the old arrangement by lines. They advanced upon the enemy with their old phalanx, a line of battle of equal depth throughout."
residues in the subject classes. That contingency arose in Thebes at the time of Epaminondas, and in Macedonia at the time of Philip and Alexander the Great (Figure 45). ${ }^{1}$ In those two countries improvements in the art of war were at once adopted, and they bore fruit as applied by leaders who were endowed with combination instincts in high degree and commanded peoples who had the grouppersistences required for steadfastness of purpose. They bore better


Figure 45
fruits for Macedonia than for Thebes because, through a greater intensity in their Class II residues, the Macedonians stood by their leaders more consistently than the Thebans did.
2430. Theban power rose and declined in a-very short space of time. The case is interesting to us here in that the interval was exactly the interval when the conditions indicated in § 2429 were fulfilled. The first of those conditions failed with the death of Pelopidas and Epaminondas. Thereupon the power of Thebes declined. The situation is worth examining more in detail.
2431. The rise of Thebes to power was altogether unforeseen. At the Congress of Sparta peace was made between all the Greek states except Thebes. Xenophon reports that, in view of the isolation of Thebes, "people in Athens were of opinion that the Thebans would be decimated, as the common talk was, while the Thebans themselves

[^91]left [the Congress] utterly downhearted." ${ }^{1}$ And then, forthwith, the Spartans, under their king Cleombrotus, invaded Boeotia. The Thebans were terror-stricken and feared that their capital would be utterly destroyed. ${ }^{2}$ Such alarm was justified, considering the great strength of the army under Cleombrotus and the reputation of Sparta, which up to that time had never known defeat.
2432. To the rescue of Thebes came "prejudices" corresponding to Class II residues. "Because of the great glory of its forefathers, which had been hallowed down from heroic times, the city of the Thebans rose full of courage and aspired to great things." ${ }^{1}$ So far, however, Thebes was only on a footing with Sparta, who was also thrilling with the glory of her past. The Thebans, Diodorus continues (loc. cit.), "had leaders of great courage, outstanding among whom, three: Epaminondas, Gorgias, and Pelopidas." But there too the Spartans could not have been greatly inferior, for they had Agesilaus and Cleombrotus.
2433. Epaminondas had genius in high degree for military combinations, but Cleombrotus was no fool, and gave proof of that by his tactic in advancing into Boeotia. The Boeotians were expecting him to come along the regular highway from Phocis. He attacked instead over the difficult passes of Thisbe, and reached Creusis. ${ }^{1}$ The

 $\dot{a} \pi \bar{\eta} \lambda \theta o v$. Diodorus Siculus, Bibliotheca historica, XV, 51, 2-3 (Booth, Vol. II, p. 40): "The Lacedaemonians, accordingly, decreed to attack the Thebans, who stood so deserted by everyone, and reduce them to slavery. And since it was known that the Lacedaemonians were making huge preparations for war and that no one was doing anything for the Thebans, everyone assumed (äтavтés $\dot{i} \pi \varepsilon \lambda a ́ \mu \beta a v o v)$ that the Thebans would be crushed with no great difficulty. Those, therefore, who were friendly to them grieved at their plight, foreseeing the calamities that were in store for them, while their enemies were jubilant."
$2431{ }^{2}$ Plutarch, Pelopidas, 20 (Perrin, Vol. V, p. 389).
$2432{ }^{1}$ Diodorus Siculus, Bibliotheca historica, XV, 50, 6 (Booth, Vol. II, p. 40):


$2433{ }^{1}$ Grote, History of Greece, Vol. X, p. 176: "That prince [Kleombrotus], with a degree of military skill rare in the Spartan commanders, baffled all the Theban calculations. Instead of marching by the regular road from Phokis into Bocotia, he turned southward by a mountain-road scarcely deemed practicable, defeated the Theban division under Chaereas which guarded it, and crossed the ridge of Helikon to the Bocotian port of Krcusis on the Crissaean Gulf. Coming upon this place by surprise, he stormed it, capturing twelve Theban triremes which lay in the harbour."
difference lay in this, that in Sparta innovations had to remain within the circle of Spartan institutions, group-persistences being so strong in the people that they would tolerate no innovation that overstepped traditions. At Thebes the military commanders could deploy their army as they thought best, the strength or, if one prefer, the character of the Class II residues in the people not prohibiting departures from old customs.
2434. Before the battle of Leuctra the Spartans had had plenty of warnings as to the desirability of changes in their tactical formations. In the year 390 b.c., through a clever manoeuvre with his peltasts, the Athenian Iphicrates had destroyed a corps of six hundred Spartan hoplites under the walls of Corinth. ${ }^{1}$ But Spartan inertia was not in the least stirred on that account, nor was it shaken by the tremendous defeat at Leuctra. Free to do as he pleased, Epaminondas altogether changed the battle-order then in use not only among the Spartans but among all the other peoples in Greece. He anticipated the strategy of Napoleon that lay in so manoeuvring as to be overwhelmingly superior to the enemy at a given moment at a given point. It had been customary with the Greeks to begin battle, as far as possible, over the whole front of an army. Epaminondas deployed his troops obliquely, so that the left, headed by the
$2434{ }^{1}$ Xenophon, Hellenica, VI, 4, I2 (Brownson, Vol. II, p. 59). Nepos, Iphicrates, I: "Iphicrates, an Athenian, won his glory not so much through the magnitude of his achievements as through his expertness in military tactics. As a general there was no one in his time who could be compared with him, nor was his superior to be found among those before him. He had long experience in warfare, often commanding armies, never suffering a defeat through fault of his own, and often winning by sheer skill. He introduced many things that were new in the art of war, and made great improvement in things that were old." Grote, Op. cit., Vol. IX, p. 335, considers it legitimate to base the following description of the improvements introduced by Iphicrates on the references in Cornelius Nepos and Diodorus Siculus: "He lengthened by one half both the light javelin and the short sword, which the Thracian peltasts habitually carried; he devised a species of leggings, known afterward by the name of iphikratides; and he thus combined, better than had ever been done before, rapid motion-power of acting in difficult ground and open order, effective attack either by missiles or hand to hand, and dexterous retreat in case of need." As a result, p. 337, "the successes of his light troops were remarkable. Attacking Phlius, he entrapped the Phliasians into an ambuscade, and inflicted on them a defeat so destructive that they were obliged to invoke the aid of a Lacedaemonian garrison for the protection of their city. He gained a victory near Sikyon and carried his incursions over all Arcadia to the very gates of the cities; damaging the Arcadian hoplites so severely, that they became afraid to meet him in the field."
"Holy Battalion," was held by the hoplites fifty ranks deep, a formation unheard of up to that time. ${ }^{2}$ So he would be in a position to attack the Spartan right, where the King and the chief commanders were stationed, in overwhelming force, and the crushing rout there would give him a complete victory. Things turned out as the Theban captain had foreseen. "As the battle was joined, both sides fighting furiously, matters were even. But gradually the men under Epaminondas prevailed owing to their valour and their close formation, and many of the Peloponnesians were slain; for they were not strong enough to withstand the fierce attack of those picked soldiers; but of those who resisted some fell and some were wounded, all receiving their wounds in front." ${ }^{3}$ Later on, in the battle at Mantineia, Epaminondas again used the tactic he had found so successful at Leuctra; ${ }^{4}$ and the Lacedaemonians, who had learned nothing from their defeat, stuck to their old formation to their great loss.
2435. The "prejudices" that saved the Thebans by giving them
$2434{ }^{2}$ Xenophon, Hellenica, VI, 4, 12, says that the Spartans had deployed the enomotias [companies of twenty-five, thirty-two, or thirty-six men, according to different writers] in three ranks [Brownson: "three files abreast"], which made their army twelve men deep, at the most, while the Theban army was nowhere less than fifty shields deep. Centuries later Vegetius was to describe with praise a battle-formation of the same sort, De re militari, III, 20 (Clarke, pp. 143-44): "There are seven manners or kinds of battle order in a pitched battle (cum infesta ex utraque parte signa confligunt: when the hostile standards come together from each side). One is on a long front, with the army in a square, the way battles are almost always fought nowadays. However, experts in arms do not consider that order of battle the best. . . . A second is the oblique line, which is the one many experts prefer. With this line, even if you have only a few troops but are on the proper terrain, you can win a victory against a foe superior in both numbers and training (virtute). The procedure is as follows: Just as the opposing lines are coming together in battlearray, you draw back your left from the enemy's right quite a distance (longitus) so that neither missiles nor arrows can reach it. But with your right you join with the enemy's left, and open the battle there. Using your best cavalry and your most experienced troops, you attack and outflank his left, driving it back or overrunning it so that you reach his rear. Once you have begun to rout the enemy from that point of vantage you will surely win, since your reserves will keep coming up, and the part of your line that you have held off from the enemy will be in no danger."
$2434{ }^{3}$ Diodorus Siculus, Ibid., XV, 55, 4 (Booth, Vol. II, p. 44).
$2434{ }^{4}$ Polybius comments, Historiae, XII, 25, 4 (Paton, Vol. IV, p. 379): "The affair at Mantincia occasioned a display of great variety and great science in generalship."
courage to resist the Spartans almost ruined them before the battle began, because of their fear of certain omens; but the quick-wittedness and good sense of Epaminondas came to the rescue, changed the evil omens into good ones, and even supplemented them with some specially good ones, which were provoked for the occasion. As a result, instead of being handicapped the Thebans were greatly benefited by their faith in presages.
2436. As they were marching out of Thebes the army encountered a crier leading a blind slave ${ }^{1}$ and proclaiming a decree that the man must not be allowed to leave the city. The words were interpreted as a bad omen for the departure of the army. But Epaminondas immediately recited a line from Homer (Iliad, XII, v. 243), to the effect that "to be fighting for one's country was the best of omens." A worse omen supervened. "The camp scribe," Diodorus continues, "was marching along in front holding aloft a lance with a ribbon on the end, so publishing the orders of the captains to the army. It chanced that a gust of wind blew the ribbon loose from the lance and it fell on the shaft of a memorial monument on a spot where some Spartans and Peloponnesians, who had fought under Agesilaus, were buried. Again the older soldiers fell to begging their captains to lead them no farther, the gods having given manifest evidence of their disapproval." Diodorus states that Epaminondas marched on, contemptuous of the presage, but one of his subsequent remarks lends greater credibility to the account given by Frontinus, to the effect that Epaminondas twisted the presage in his favour by an ingenious interpretation ( $\$ 2439^{1}$ ). ${ }^{2}$
Moreover, to turn the superstition of his soldiers to good account,

[^92]he was ingenious enough to go on and invent favourable omens out-right-many of them, and such good ones that no one could have wished more or better.
Xenophon was alive in those times and he must certainly have had opportunities for talking with veterans of Leuctra. He says, Hellenica, VI, 4, $7-8$, that the Thebans gained great self-confidence from an oracle which foretold that the Spartans were to be defeated on a spot at Leuctra where two young girls, on being violated by certain Spartans, had taken their own lives ( $\$ 1952$ ). Moreover, the gates of temples in Thebes opened of themselves and the priestesses declared that in that the gods were promising victory. Nor was that all. It was further reported that the vases in the Temple of Hercules had vanished, which signified that Hercules had gone off to war. Xenophon, pious and credulous soul, adds: "Some say, however, that all those things were but tricks of the captains.". ${ }^{3}$
 Things were just the other way round with the Athenians; and that shows how important it is to consider quantities in residues. At first the Athenians were handicapped by the fact that their Class II residues were too weak to induce them to heed the prudent counsels of Nicias and refrain from the Syracuse venture, yer strong enough to induce them to name Nicias as one of the commanders of the expedition. Grote, History of Greece, Vol. VII, pp. 351-52, fails to make that dist tinction, and therefore involves himself in a gross error. Quoting the kindly judgment that Thucydides passed on Nicias, he continues: "Thucydides is here the more instructive, because he exactly represents the sentiment of the general Athenian public towards Nikias during his lifetime. They could not bear to condemn, to mistrust, to dismiss, or to do without, so respectable and religious a citizen. [Class II residues. That applies very well to the second half of the work of Nicias-to his command in the Sicilian expedition, but not to the first half; for he tried to dissuade the Athenians from undertaking the expedition and was not listened to.] The private qualities of Nikias were not only held to entitle him to the most indulgent construction of all his public short-comings [His advice against going to Sicily was certainly not one of them.], but also insured to him credit for political and military competence altogether disproportionate to his deserts. [True, if applied only to his conduct of the Sicilian expedition; untrue, if applied to his advice against undertaking it.] . . . Never in the political history of Athens did the people make so fatal a mistake in placing their confidence. [The same stricture is in point here. The fact gives Grote occasion to justify the demagogues:] No demagogic arts or eloquence would ever have created in the people so deep-seated an illusion as the imposing respectability of Nikias. [Yct Grote refutes himself in explaining how the eloquence and the wiles of Alcibiades created in the Athenians the illusion that the Sicilian expedition would be a good thing against the better judgment of Nicias, who foresaw disaster.] Now it was against the overweening ascendancy of such decorous and pious incompetence, when aided by wealth and
2437. Diodorus probably drew his information from the writings of Ephorus, now lost. He bluntly alleges a trick and gives further details. ${ }^{1}$ According to his story, Epaminondas bade certain travellers who came from Thebes report that the weapons hanging in the Temple of Hercules in that city had disappeared. That implied that the heroes of old had taken them to join in the battle on the side of the Boeotians. Another traveller, returning from the cave of Trophonius, said that the god had bidden him admonish the Thebans to institute public games in honor of Zeus-the-King at Leuctra, after their victory. "This stratagem [on the part of Epaminondas] was furthered by a Spartan, Leander, an exile from Lacedaemonia,
family advantages, that the demagogic accusatory eloquence ought to have served as a natural bar and corrective." That would, to be sure, have been a great thing as regards the second half of the work of Nicias. The great misfortune for Athens was that it happened for the first half. Grote himself says, loc. cit., p. 159: "The position of Nikias in reference to the measure is remarkable. As a dissuasive and warning counsellor, he took a right view of it; but in that capacity he could not carry the people along with him." Grote asserts, it is true, that the Sicilian enterprise would have been profitable to Athens had it been properly managed, but there are no proofs for any such hypothesis. Furthermore, as regards faith in presages, it may be advantageous if a far-sighted leader can use it to induce a people to undertake and carry out a profitable enterprise; it may be disastrous if the leader shares the same sentiments as the people and the presages are taken as intrinsically meritorious instead of being used as means to ends. The presages were favourable while the Sicilian expedition was in preparation, and the Athenians complained bitterly of that when things turned out badly. Thucydides, Historiae, VIII, I, I-2. Euripides, Helena, vv. 744-60 (Coleridge, Vol. I, p. 345), makes himself the mouthpiece for Athenian sentiments of scepticism and contempt for prophecies. He concludes: "Sound judgment and discernment are the best of seers." Nicias perhaps lacked the wit-he certainly lacked the will-to interpret the oracles and prophecies in his own favour as against undertaking the expedition. He would have done that had he been like Epaminondas, and the Athenians would have believed him had they been like the Thebans. Presages again put in an appearance when the Athenians have to decide whether their navy should leave the harbour at Syracuse ( $\$ 2440^{1}$ ), and apparent again are the disastrous consequences of Nicias's belief in them.
$2437^{1}$ Op. cit., XV, 53, 1-4 (Booth, Vol. II, pp. 42-43). Polyaenus, Strategematon, II, 3, 8, also hints broadly at trickery. Noting that the Thebans were terrorstricken, he adds: "Epaminondas won them over by two devices." And he tells of a message from the cave of Trophonius predicting victory for the side that should be the first to attack; and he says further that Epaminondas went with his soldiers to the Temple of Hercules, where, following orders that had been given him, the priest had furbished the weapons and left the temple doors open. That was interpreted as a presage of victory. And cf. Frontinus, Strategematon, I, II, I6 (Bennett, p. 78).
and at the time serving as a soldier in the Theban army. Summoned to the assembly, he asserted that the Spartans had an ancient oracle to the effect that they were to lose their hegemony when they should be defeated by the Thebans at Leuctra. To Epaminondas there also came certain rustics, interpreters of oracles, who said that a very grievous misfortune was to overtake the Lacedaemonians near the tomb of the daughters of Leuctrus and Scedasus, and for the following reason. Leuctrus was the man for whom the plain had been named. His daughter and the daughter of a certain Scedasus, both young girls, had been violated by Lacedaemonian emissaries. Unable to endure the unspeakable insult, invoking curses on the country that had sent the odious legates, they took their lives with their own hands." Nor was that yet all. Plutarch relates that a most timely dream came to Pelopidas, ordering him to sacrifice a "virgin with auburn hair" to the young girls violated by the Spartans, and that, after some debate and other doings calculated to have their effects on the soldiers, the auburn-haired virgin was recognized in the person of a bay colt, and the colt was forthwith sacrificed. ${ }^{2}$

[^93]2438. Pelopidas and his friend Epaminondas-had' a profound knowledge of the human heart. Had Pelopidas merely dreamed of sacrificing a mare outright, the dream would have made a far slighter impression on the soldiers than the anguish of a terrible human sacrifice, happily avoided by an ingenious interpretation. The Romans, less civilized than the Greeks and perhaps in greater terror, resorted in similar circumstances to the human sacrifice and would have no substitutes ( $\$ 75^{8}$ ).
2439. Adroitness in combinations in Epaminondas and Pelopidas, and perhaps in other Theban leaders, had given a good account of itself when coupled with a moderate quantity of group-persistences in the Theban masses. ${ }^{1}$ The same combination, with a greater distance separating rulers from ruled, was to give a still better account of itself in the case of Philip of Macedon and his subjects.
2440. At the time of the Persian wars as well, aptitude for combinations in Themistocles, combined with a moderate supply of group-persistences in the Athenians, gave evidence of its efficiency when Themistocles induced the Athenians to abandon their city and
rificed her there to the joy of all, and the vision of Pelopidas and the sacrifice were the talk of the camp." Pausanias, Periegesis, IX, Boeotia 13, 5 (Dindorf, p. 451), knows the names of the two girls, Molpia and Hippo, and in all good faith recounts the presages as actual happenings.
$2439{ }^{1}$ Curtius, Griechische Geschichte, Vol. III, p. 365 (Ward, Vol. IV, p. 514), compares Athens and Thebes, Pericles and Epaminondas: "The ascendancy of those two individuals is to be explained by their high and varied culture. [That cannot stand. Both in Athens and Thebes ignorant demagogues enjoyed the full confidence of their fellow-citizens. Curtius comes closer to experimental realities in what follows:] In Thebes also we find an altogether aristocratic leadership functioning in the full midst of a democratic system [Different words for the combination we mentioned.], personal power vested in an individual of outstanding intelligence [Better: combination-instincts]. Epaminondas, like Pericles, also governs his country as a man trusted by the people [Who have little understanding and by not re-electing him "bocotarch" place the country in danger again.] as general (strategos) re-elected from year to year. [The very great disadvantage of a combination in itself a good one.] In that position, like Pericles too, he had to suffer from the fickleness of the citizenry and the hostility of an opposition that saw in his rule a violation of the equality guaranteed by the constitution. Men like Meneclidas at Thebes play the part of Cleon at Athens. [The terms of the combination are now inverted: individuals who have the talents for obedience are now governing those who have the talents for commanding-a situation that is ruining Athens and greatly endangering Thebes; Macedonia is still safe, not being stricken with that malady.] Epaminondas put up with all attacks and humiliations with the equanimity that great souls manifest. In war he had, like Pericles, been invariably successful
repair to Salamis. Inverting terms, we get bad results from a distribution of residues whereby Nicias, commanding the Athenians, was induced by his group-persistences to place his trust in oracles and so led the army under him to complete ruin. ${ }^{1}$ Those instances
in all enterprises of importance, because he had combined the greatest shrewdness with the utmost energy and especially because he had the gift of rousing the enthusiasm of his soldiers and animating them with his own spirit. [But to an even greater extent because he knew how to take advantage of their sentiments.] He taught them, as Pericles taught the Athenians, how to master their superstitious prejudices." At that point Curtius quotes Diodorus, Op. cit., XV, 53, on the episodes preceding the battle of Leuctra ( $\$ 2437$ ). But that account in no way shows that Epaminondas taught the Thebans how to master their prejudices. It shows that he fomented them in order to use them for his own purposes. He did not tell his soldiers that the oracles were silly prattle; he met bad omens with better ones. Diodorus speaks clearly enough in the very passages that Curtius quotes. He says, XV, 53, 4 (Booth, Vol. II, p. 42): "Seeing that the soldiers were filled with superstitious terrors in view of the presages, Epaminondas strove to remove their fears by intelligence and strategy" (Miot translates, Vol. IV, p. 529: "in his enlightened intelligence and his military conceptions"): '0 $\delta \cdot{ }^{\circ}$ 'E $\pi a \mu \varepsilon \tau v \omega v \delta a s$ ó $\rho \bar{v} v$ тò̀s

 dorus goes on to recount the tricks Epaminondas used.

This mistake on the part of a historian as able as Curtius is noteworthy as arising in the mania historians have for ethical sermons, instead of keeping to descriptions of fact and relationships between facts. Quite unwarily the historian is now and again convinced that he is called on to assert the superiority of knowledge over ignorance, of virtue over vice. Curtius therefore unqualifiedly glorifies the intelligence of Epaminondas, without observing that his success was due to the ignorance of the people whom he led and manipulated. Grote, Op. cit., Vol. X, p. 347, describes the despair of the soldiers after the death of Epaminondas at Mantineia: "All the hopes of this army, composed of such diverse elements, were centred in Epaminondas. All their confidence of success, all their security against defeat, were derived from the idea of acting under his orders. All their power, even of striking down a defeated enemy, appeared to vanish when those orders were withdrawn. We are not indeed to speak of such a proceeding with commendation." And there we are back again in the field of ethics! Ignoring the question of praise or blame, which has nothing to do with the matter in hand, we note simply that such sentiments in the Theban soldiers show the strength of their group-persistences, which in this particular case take the form of an unlimited faith in their captain, almost of worship for him. And in that we find corroboration for our theory, that the maximum of utility is realized when the leader has the combination-instincts required for command, and his soldiers the sentiments and prejudices that make a religion of obedience.
$2440^{1}$ Had the Athenians left the harbour of Syracuse they would have escaped the total ruin that later overtook them. Everything was in readiness for the departure, which could easily have been made. "But early in the evening on the day before the time set for the departure, there was an eclipse of the Moon. Nicias, accordingly, who was superstitious by nature and all the more nervous in view of the pestilence in the army, referred the matter to the soothsayers. Their response
show that oracles are good things if they are used by rulers, who perhaps have no faith in them, as means of persuading their subordinates, but harmful if they are taken at face value by rulers and used as an end in themselves, not as means of persuasion. To make
was that it was customary to wait three days before setting sail. Demosthenes [who was in favour of getting away] and those who were with him had to consent in deference to the gods." Thucydides, Historiae, VII, 50, 4: "A majority of the Athenians, in deference to conscientious scruple, exhorted the generals to postpone [the departure]. Nicias, as a man, was even too superstitious and prone to such things. He said that no decision as to breaking camp should be taken before they had waited, as the soothsayers prescribed, three times nine days." And cf. Polybius, Historiae, IX, 19, 1-4 (Paton, Vol. IV, p. 45).

Had Nicias been as free from prejudice as Epaminondas or Pelopidas, he could readily have found derivations adequate for convincing the army that the eclipse was favourable to retreat. They were found after the fact to save the face of the prophecies. Plutarch, Nicias, 23, 5 (Perrin, Vol. III, p. 293): "For the presage [of the eclipse], as Philochorus says, was not unfavourable to anyone obliged to flee, but exceedingly favourable rather; for darkness is the ally of those who are acting in fear, and light is their enemy."

In similar circumstances Dio, and, after him, Alexander the Great, found ways to interpret eclipses to their own advantage. Plutarch, Dio, 24 (Perrin, Vol. VI, pp. 49-51) (Dio being about to advance against Dionysius): "After the libations and the customary prayers, there was an eclipse of the Moon; whereat Dio was not in the least surprised, for he knew that eclipses recurred at fixed periods and that the shadow that darkened the Moon came from the interposition of the Earth between the Moon and the Sun. But the soldiers were terrified, and since they needed somehow to be reassured, the soothsayer Miltas came forward and said that they should be of good cheer and look forward to the greatest successes; for the gods were showing by that sign that some luminous thing was to suffer an eclipse, and since there was nothing more luminous to the eye than the tyranny of Dionysius, it was that glare that they would eclipse the moment they set foot in Sicily."

While Alexander was advancing on Darius an eclipse of the Moon occurred, but Alexander straightway sacrificed to the Moon, the Sun, and the Earth, and found or commandeered individuals to help him. Arrian, De expeditione Alexandri, III, 7, 6: "Aristander found that the eclipse of the Moon was favourable to the Macedonians and Alexander, that the battle would be fought during the month, and that the sacrifices presaged victory for Alexander." Rufus Curtius, De rebus gestis Alexandri Magni regis Macedonum, IV, io (Cambridge, pp. 100-01): The soldiers, worried by the lunar eclipse, were grumbling: "Things were getting to the point of mutiny, when he, undaunted [whether at the presage or at the panic of the soldiers: ad omnia], bade the officers and commanders of the soldiers to gather at headquarters (praetorio) and ordered the Egyptian soothsayers, who he thought were very expert in matters touching the weather and the stars, to state their views. Now they knew perfectly well that the heavenly bodies (orbes) fulfil predestined cycles of time and that the Moon is eclipsed (deficere) either when it gets under the Earth or is overshadowed by the Sun. However, they did not explain to the untutored crowd the reason that they knew. They said that the Sun stood for the
the proposition general, and so applicable to times that know no oracles, one need merely replace the term "oracles" with the term "group-persistences" (\$2455). Furthermore, it will be just as well if the doctrine here stated be not very generally known to the masses who are to be influenced, for the artifice, to be fully efficient, has to remain concealed. It loses little if any of its efficiency, however, if it is known to some few scholars; for daily experience shows that people continue to believe assertions that stand in flattest contradiction with the known results of logico-experimental science.
2441. Philip of Macedon lived at Thebes in his youth and learned the art of war from Epaminondas. ${ }^{1}$ Had he been a citizen of Sparta
Greeks and the Moon for the Persians, and that whenever there was an eclipse of the Moon it portended ruin and slaughter for the Persian hordes. And they enumerated ancient examples of kings of Persia who had been shown by eclipses of the Moon to have fought under the disfavour of the gods. Verily nothing exerts a more powerful influence upon the multitude than superstition, though the mob is impotent, savage, undependable, when its fancy is caught by some fatuous

## belief."

Our "intellectuals" forget this message from the experience of the ages. Nowadays no one believes that lunar or solar eclipses have the slightest influence on the fortunes of war, but many people do believe that they are influenced by the "justice" or "injustice" of the cause that is committed to arms. Modern rulers are no longer called upon to worry about eclipses; but it is just as well if they go to some pains to make people believe that the cause for which they are fighting is "just"; and it is not bad either if they are not too sure of that themselves, if, that is, they follow the example, not of Nicias, who believed in the influence of lunar eclipses; nor of Napoleon III and his minister Ollivier, who placed their reliance on the "justice" of their cause; but, rather, of Themistocles, Epaminondas, Dio, and Alexander, who knew how to use omens for the furtherance of their plans; or even of Bismarck, who listened while other people chatted about justice, but as for himself saw to it that he was the strongest in guns; and when he began tinkering with the Ems despatch, he did not ask the advice of a moralist, but inquired of Moltke and Roon whether the army was ready and able to win.
$2441^{1}$ Plutarch, Pclopidas, 26 (Perrin, Vol. V, pp. 405-07): "Pelopidas . . . received Philip, the king's brother, as a hostage, along with thirty other young men from prominent families and took them with him to Thebes. . . . That was the Philip who later on made war upon the Greeks to subjugate them. At that time he was still a boy and was reared at Thebes in the house of Pammenes. It seems accordingly that he began by emulating Epaminondas, having perchance been impressed by his activities in military science and in the conduct of armies, the which were but a small part of that great man's talents. As for the temperance, the justice, the magnanimity, the good manners, for which Epaminondas was truly great, Philip partook in no way of them whether by nature or by emulation." Grote, Op. cit., Vol. XI, p. 209: "His mind was early stored with the most advanced strategic ideas of the day, and thrown into the track of reflection, comparison, and invention, on the art of war."
or Athens he could have accomplished little, for opposite reasons. But he was called upon to lead a people in whom prejudices were strong enough to assure their obedience to their king, yet not strong enough to prevent the reforms that he set out to introduce. The Macedonian kingdom was not an absolute monarchy, but it was much stronger than the Spartan. Had Epaminondas not been slain at Mantineia but lived a few years longer, he might successfully have checked the rising power of Macedon. Such the rôle of chance in human affairs! Certain forces persist over long periods of time, others are accidental and of brief duration. In the end the former prevail, provided they last.
2442. At another extreme, Athens had generals of the greatest ability at that time, but she could neither keep them nor take advantage of them. Timotheus and Iphicrates seem to have been in no way inferior to Philip, but to their misfortune, they had to work with Athenians, who were enamoured of novelties, doted on court trials and prosecutions, and were incapable of the serious discipline that is made possible by group-persistences. An indictment and a trial disposed of Timotheus and Iphicrates at one fell swoop and left the city defenceless against the formidable power that was rising in Macedonia. ${ }^{1}$
2443. Where sentiments of group-persistence are not very strong, people readily surrender to the momentary impulse without giving adequate thought to the future, forgetting the larger interests of the community under the sway of uncontrolled appetites. The Mace-

[^94]donians obeyed Philip in everything, and after him Alexander. The Thebans followed the lead of Epaminondas. Then they indicted him, though he issued victorious from the trial. The Athenians cared little for their generals. They tormented them, persecuted them, condemned them, lost them through fault of their own. The lessons taught by past experience are of no avail for the future, there being no sense of group-persistence.
2444. Phenomena altogether similar are observable in a comparison between Germany and France from the time of the Second Empire down to our day [1914] ( $\$ 2469$ f.). Germany in a way wesembles Macedonia or Thebes, France suggests Athens. The force of group-persistences makes up for deficiencies in that logico-experimental knowledge whereby the individual citizen might understand that his indirect utility is sacrificed when the utility of the community is sacrificed beyond a certain point. Those Athenian citizens who paved the way for the defeat at Chaeroneia ${ }^{1}$ and those French citizens who paved the road to the capitulation at Sedan, did so to their own individual damage.
2445. Such phenomena are often examined from the single standpoint of forms of government-democratic, oligarchic, or monarchical. All the woes of Athens have been laid at the door of the Athenian democracy, and there have been efforts to acquit democracy of such blame. It is undeniable that forms of government do have their influence on social phenomena; but it must not be overlooked that in the first place, such forms are, in part at least, products of the character-traits of the peoples involved, the traits, therefore, being far more important as causes of the social phenomena; and that in the second place, identical forms of government may yield entirely different results, a thing that clearly proves the presence of more powerful causes that assert themselves regardless of forms.
2446. To the fact that Macedonia had a monarchical form of government we must attribute the circumstance that after his total defeat by Onomarchus, Philip of Macedon none the less retained his power and was so enabled to even the score. Had he been a general of the Athenian republic, he would probably have been condemned to death, an eventuality that might have nipped the rise of Macedon in the bud. Had he been a general of the Theban republic, he

[^95]would have been dismissed, as was the fate of Epaminondas, and that again would have been a serious loss to Macedonia. From that one might be led to the conclusion that owing to the stability of command which it provides, the monarchical form is favourable to a country's prosperity; and the conclusion may hold in many cases. But it does not hold in others. Stability of command is a good thing when the command is good=in the hands, for instance, of an Epaminondas or a Philip. Of that there can be no doubt. It is also a good thing when the leadership is just average. The harm that is done by changing horses in midstream may far overbalance the advantage of removing a man of little talent from power. But it is certainly disastrous if it keeps absolute incompetents, such as many of the Roman Emperors were, in power. ${ }^{1}$ The conduct of the Athenians
$2446^{1}$ Interesting among the derivations used in defence of the monarchical form of government is the rebuttal that is offered to the objection that history shows many instances of harm done by that type of regime. It is answered that the harm would not have been done had the king been a "good" king, capable, and fitted to command. Of that, in truth, there can be no doubt. But that is not the objection. The objection is that monarchy cannot guarantee that the monarch will have those qualities nor that, possessing them, he will keep them all his life long. In his Souvenirs d'un vieil homme, pp. 178-79, Dugué de la Fauconnerie tries to acquit the imperial government in France of responsibility for the terrible disaster of 1870, and argues: "To assert his personal authority the Emperor would have had to be the emperor he had been at the time of the Constitution of $\mathbf{1 8 5 2}$, or at least to have remained what he had been in 1863. . . . But that water, alas, had gone over the dam. The poor Emperor had gradually yielded to the pressure of the parliament and with the sole result of finally resigning the authority he held from the nation into the hands, let alone of an Ollivier, of Orleanists such as Buffet and Daru. Nothing could now be done." Suppose we ignore the question of fact and take the statements at their face value. Dugué de la Fauconnerie refutes his own thesis by picturing an emperor who held absolute power and the force to maintain it, and yet allowed himself to be dispossessed by parliamentary politicians. If, as the writer would have it, the evils ensuing were attributable to those intrigues, the first responsibility lies with the weakness of the sovereign who handed power over to them; and since the imperial form of government offers no guarantee that an emperor of that type will not come along every so often, the responsibility oversteps the individual, Napoleon III, and rests with that form of government. That is all hypothetical, of course, keeping strictly within the scope of the statements of Dugue de la Fauconnerie. The excuses Ollivier himself finds for his ministry are of the same sort. First of all, the bad faith of Bismarck and the Hohenzollerns, as though the chief business of a Prime Minister were not, precisely, to keep the bad faith of an enemy from harming his country. Then the opposition of the Right, which prevented him from knowing the true state of the Emperor's health and therefore led him to consent to the Emperor's taking the field as commander-in-chief of the army -as though it were not the business of a Prime Minister to keep informed on such
and Thebans towards their generals was by no means a necessary consequence of the republican form of their governments. There was a republican form of government in Rome when after the defeat at Cannae all orders of citizens in the state marched forth to meet the defeated consul on his home-coming to tender him their thanks for not having despaired of the Republic. ${ }^{2}$ Republics are not necessarily obliged to listen to men like a Cleon in Athens, a Meneclidas in Thebes, or a Caillaux in the present-day French Republic.
2447. Von der Goltz remarks, ${ }^{1}$ anent conditions in Prussia before the battle of Jena: "In France the civil authority always defers to the army, whereas in Germany the prevailing spirit in the civil government, as well as in the public at large, is always to block the military authority. [Now the terms are precisely inverted: what could then be said of Germany can now be said of France, and vice versa.] That, in brief, was the opinion of Scharnhorst, and he used to add: 'It has been said, and rightly, that the French with a republican government are governed monarchically, while the Allied Powers, with their monarchical governments, are managed like republics.'"
2448. After power in France passed into the hands of people of the state of mind manifested in the Dreyfus affair, the French Reessential matters, and his duty to resign if he is placed in a position where he cannot do the things required for the country's defence.
Equally untenable, as regards Italy, were the self-justifications of Lamarmora after Custozza and Baratieri after Adua. A leader has to know and foresee, and the man who does not know and foresee had better leave the task of exercising command to someone else and quietly return to his fireside. Ollivier shows the harm done to France by the regency of the Empress during the War of 1870 . No republican government would ever dream of putting a country's fate into the hands of such a woman. Rochefort wrote in the Lanterne, Aug. 8, 1868, p. 34: "Her Majesty the Empress of the French presided at the Cabinet meeting yesterday. How surprised I should be were I to hear that Mme. Pcreire had presided over the Directors' meeting of the Crédit Mobilier!" One may sometimes receive good advice from an enemy. If Napoleon III had heeded that very sound remark by Rochefort, he might have averted the fall of his government, or at least made it less probable. As Ollivier said, the Second Empire committed suicide, the Empress-Regent aiding and abetting.
$2446{ }^{2}$ Livy, Ab urbe condita, XXII, 61, 14: "At that time patriotism in the city was at such a high pitch that when the consul who was largely responsible for the disaster came home, obviam itum frequenter ab omnibus ordinibus sit et gratiae actae quod de republica non desperasset." And Livy adds: "Had he been a Carthaginian general, no punishment would have been great enough for him."
$2447{ }^{1}$ Von Rossbach bis Jena und Auerstadt, p. 517.
public greatly neglected national defence. But the Empire had neglected it almost as badly. On the other hand the conservative Republic, after 1871, made defence its chief concern. No correlation can be detected, therefore, in the French case, between forms of government and efficiency in providing for national security.
2449. As we have had frequent occasion to point out, in the quest for social uniformities, past and present throw a reciprocal light upon each other. Facts from the present are better known in the detail and so afford a clearer understanding of the past. And when the past parallels the present in one relationship or another, it forms the groundwork for our induction that those relations constitute a uniformity-are a law.
2450. If, for instance, one would clearly understand what happened in ancient Athens, one must consider what happened in France beginning with the ministry of Waldeck-Rousseau. The French disasters in the War of 1870 were very considerably due to the stress on political instead of on military considerations. Political were the reasons for the march on Sedan, political the reasons for Bazaine's inactivity at Metz. If would seem as though a counntry that had received such tremendous lessons would banish politics from military matters for ever after. But what do we see actually? Wal-deck-Rousseau verily deserves a niche beside the worst demagogues in Athens. He set out to disorganize the whole military establishment of Erance for political reasons, and in furtherance of a policy so disastrous to his country he handed the Ministry of War over to General André, who spent his time in vulgar political intrigues, altogether neglecting national defence and to such an extent that when, in 1905, there was danger of war with Germany, it was necessary to improvise on the spur of the moment the prime essentials for a defence of the German frontier, which André had left deliberately unprotected as a favour to his political accomplices. ${ }^{1}$

[^96]2451. Nor is that all. In France as in Athens the same mistakes were repeated, for, the same causes operating, the same effects ensue. In igri a new threat of war made the French authorities aware that General Michel, who had been entrusted with the supreme command for political considerations, was not the man to exercise it. ${ }^{1}$ His chief merit was his subservience to the politicians. Colonel Picquart had been made a general for the services he had rendered in the course of the Dreyfus affair. In the manoeuvres of 1910, it seems, his work had not been of the highest grade; but in order to avoid saying as much, which would have embarrassed the politicians, General Michel, contrary to long-established practice, did not publish his review of manoeuvres at once, but temporized, and eventually delivered himself of the gentlest and mildest criticism possible.
2452. Under threat of war General Michel had to be replaced. Everybody recognized that on the basis of military merit, General Pau was entitled to Michel's post. But Pau would assume command only on condition that he be given the deciding voice in nominations of generals and that they be chosen solely for military merit, quite apart from political influence. That condition the government could not accept, and it rummaged about for another commander who would be-more malleable in political hands. ${ }^{1}$
even with his enemies in the elections. Certainly he was aware of the military ineptitude of André, who had become a general only through pressure from Brisson. However, he accepted that caricature as Minister of War because Brisson and Léon Bourgeois both demanded it (Joseph Reinach, Histoire de l'affaire Dreyfus, Vol. VI, p. 121), and Bourgeois had saved the ministry in the session of May 28. Time was when the resignations of the chief of staff and the commander-in-chief would have frightened Waldeck-Rousseau, who had in common with all the Gambettists a deep interest in army matters. Now he had to let the Radicals have their way, along with the 'beplumed cephalopod' (words of Clemenceau) who was their favourite minister. [Luckily for France and the Latin countries, Germany had no Bismarck and no William I at that moment.] A deal of corruption was required to hold that provisory majority together till election-time. Waldeck-Rousseau had selected as general secretary to his ministry a man who would wince at no scruple. There was a mad scramble for melons, and in the rush the Socialists in the parliament were not the least cynical." Yet there are still people who believe in all sincerity that the ministry of Waldeck-Rousseau represented the triumph of political and social righteousness.
$2451^{1}$ As carly as 1866 Stoeffel, speaking of Moltke (Rapports militaires, Oct. 25, 1866, p. 39), had remarked on the advantage of having a powerful and competent chief of staff.
$2452^{1}$ Gazette de Lausanne, Aug. 3, 1911: "Speaking of a reform designed to give the controlling voice in the High Council of National Defence to civilians, the writer says: 'What was required was not that commanders of land and sea forces
2453. Read now what Isocrates has to say, Antidosis, 26-27 (Norlin, p. 26I), as to the causes underlying the conviction of Timotheus at Athens, and it will be apparent that both causes and effects are constant. He tells how he warned Timotheus: "You see what the mob is like, how bent it is upon pleasures (Norlin: "how susceptible it is to flattery") and therefore leans more to those who wheedle its appetites than to those who act honourably, more to those who pleasingly and amiably deceive it than to those who labour for its benefit in all earnestness and wisdom." He advises him to manoeuvre in such a way as to have the politicians with him. Timotheus replies (Norlin, pp. 263-05) that the counsel is undoubtedly sound, but that he cannot change his nature and stoop to the level of those who cannot tolerate people with qualities superior to their own-cannot, in a word, resign himself to what Faguet, in our day, has so well called the "cult of incompetence."
2454. What Isocrates says is said also by many writers, though oftentimes in the futile and fallacious form of the moral sermon, or in that other form, equally futile and fallacious, of the attack on this
should be admitted to the Council as extra members, but that all members of the higher councils of army and navy should be admitted on a par with everybody else.' 'A lean toward reaction!' cries M. Messimy. 'An effort to drown the government under a flood of generals and admirals!' Perhaps, in view of that, I may in my turn denounce this incorrigible mistrust that is hypnotizing people of the Bloc as regards the dangers professional military men represent for this wretched civil power that is for ever in danger. So long as such alarms go no further than merely spoiling the sleep of those who feel them, there is no great harm. But it becomes more serious when they inspire measures that may weaken our national defence. It was probably under the influence of the same democratic suspiciousness that M. Messimy proposed suppressing the title, not of generalissimo, for that title never existed, but of vicepresident of the High Council of War. Everyone admits that in such matters questions of person take precedence over all others. With General Pau, the army would have accepted any title, however cacophonous, and any order of precedence. With General Joffre it might have asked permission to think twice. There is no doubt today . . . that considerations of the basest political character were responsible for General Pau's refusal. It seems that that energetic and distinguished soldier insisted on a decisive voice in nominations of corps commanders, not only as regarded the future but as regarded the past; and he made no secret of the fact that he contemplated a number of executions, that notably of a general officer, as scandalously incompetent as crudely self-conceited, whom the caprices of politics have placed in command of one of our principal army corps. That had to be prevented at any cost, and nothing of the sort was to be feared from General Joffre, a man of distinguished intelligence, but a bit of an intriguer too, and, as I am also informed, a Freemason. Luckily intelligence makes up for a lot of things!" That was not all. The politicians wanted more and better. They hit upon a most ingenious combination whereby, by
or that form of government ( $\$ 226 \mathrm{r}$ ). It was not, as some would have it, the democratic form of the Athenian system that was responsible for the defects in question. Both the democracy and the defects were products of the Athenian temperament taken in conjunction with all the circumstances in which Athens was situated at that time. ${ }^{1}$ Comparisons between one nation and another, or between various epochs and circumstances in a given nation, serve to bring out the effects of permanent forces, disengaging them from the effects of contingent ephemeral forces, chief among them such
laying a responsibility that was their own on the general staff, they could get command of the army into the hands of their henchmen. On July 13, 1914, Senator Charles Humbert, reporting for the Army Commission, laid before the Senate the lamentable inadequacy of French armaments. A debate also took place in the Chamber. Liberté, July 17, 1914: "After M. Humbert's charges, the Chamber understood that it could do nothing but share the pained surprise of the Senate. Nothing is said before the higher assembly that the Deputies do not know. . . . The Chamber, or rather the Radical majority that has been governing the country uninterruptedly for fifteen years, was so little in need of opening an investigation on the inadequacy of war-materials that it was itself responsible for that condition. It has continually refused to vote the appropriations asked for by the General Staff. . . . The facts, the dates, the figures can be quoted. Three Ministers of War, who have embodied majority sentiments with peculiar fidelity, have not feared to side against their own department in order to play the game of the anti-militarists and keep them in the majority in the cabinet." Deputy Driant revealed in the Chamber the background of the move made in the Senate: "What astonishes one is the astonishment in the Senate, and if anything can be more astonishing, it is the indignation of M. Clemenceau. He has served three years as Prime Minister. He gave us a weak and incompetent Minister of War. The campaign that is now opening is designed to effect a change in the high command and replace the present incumbents with a politicomilitary clique." That was not denied by anyone. Deputy Lefèvre figured that between the years 1900 and 1912 France had spent $1,056,000,000$ less than Germany on armaments. On that point Liberté remarks: "In 1898 our army was without a peer. . . . About 1900, policies change, and we get War Ministers whose names were General André and General Picquart. From that time on, all army requirements have been systematically cut, while the German army has been enlarged at an annually growing rate."
$2454{ }^{1}$ In general "speculator" governments are not only deficient in certain Class U residues, but also fail to take advantage of high-powered group-persistences in their subjects; and that comes about because people are inclined to judge others by themselves and have no clear comprehension of sentiments they do not themselves possess. The war that Italy fought in Libya furnished a remarkable instance of that. Giolitti, at the head of a speculator government, did not want any such war. Driven willynilly into it by powerful public sentiments corresponding to Class II residues, he prepared the country for it in a political, not in a military, sense with consummate skill and in a manner truly worthy of a master of the art of combinations (Class I). But he was not able to conduct the war in such a way as to strengthen
as depend upon the character of the individuals whom chance elevates to the seats of power. ${ }^{2}$
That is why we have examined the case of France at some length, as providing three very striking examples: first the Empire, which neglects national defence and dares not require of the country the sacrifices that are indispensable to security; then the conservative republic, which, immediately after the War of 1870 , requires those sacrifices, the country cheerfully assenting; finally, after 1900, a democratic republic that dares not, and cannot, demand sacrifices of an unwilling country. If one keeps to the comparison between the Radical republic and the Conservative republic, the blame might be laid on the spread of democracy. But that inference fails to stand the public sentiments in question, nor to obtain the necessary sacrifices from the country without resistance. He gave the atmosphere of an economic enterprise-the only type of enterprise the speculator thoroughly understands-to what should have been an enterprise grounded on national sentiments, a type that is in great part stranger to the speculator mind. If his government had demanded pecuniary sacrifices of the country at a time when war enthusiasms were at their height, the sacrifices would have been joyfully made, and far from cooling public ardour for the new enterprise, they might even have enhanced it; for in circumstances of that kind the case is not rare where love of country warms in proportion to the sacrifices that are demanded of it. Such a thing is inconceivable to the speculator. He cannot believe his ears when he is told that there are people who judge an enterprise otherwise than by a computation of profit and loss. And so, with their own minds preoccupied solely with such matters, the Italian speculators were convinced that the only way to interest the Italian public in the Libyan War was to persuade the country that it was an excellent economic "deal," that it could be carried to a conclusion without new taxes, without any decrease in expenditures on public works, without the least damage to the state budget. To do that they resorted to one trick or another, even-reporting budgets that were "doctored" so as to show surpluses where the were really deficits $\left(\$ 2306^{1}\right)$. They were further steered in that direction by another attribute of the speculator temperament, an inclination to worry only about the present, never about the future. Such tricks worked for a time, to be sure, but they did all the greater harm when at last the truth could no longer be kept concealed. In all that policy the speculators failed to take proper advantage, as they might have done, of the great forces embodied in the country's enthusiasms and, being neglected in that fashion, the enthusiasms gradually cooled.
$2454{ }^{2}$ In Athens forms of government at the time of Themistocles and at the time of Demosthenes, though both democratic, were to some extent different; but the lifferences were not great enough to explain why the Athenians resolutely cmbraced the very severe sacrifices counselled by Themistocles in order to resist the Persians, while they failed to make the much lighter sacrifices recommended by Demosthenes in order to resist Philip of Macedon. The explanation is to be found only in the different relative proportions of Class II residues in the Athenians at those different times.
once the comparison is extended to the Empire, which, without being democratic, behaved exactly as the Radical republic behaved. In the same way, if the comparison is confined to the Empire and the Conservative republic, one might, as many have done, ascribe the disasters of 1870 solely to personal absolutism. But that conclusion fails to stand the moment the comparison is made between Empire and Radical republic. In the latter there is no personal absolutism, but there is the same unpreparedness that led to defeat in 1870. Everything, on the other hand, becomes perfectly clear if one centres on intensities in Class II residues. Where those residues are strong and are kept stimulated by a prudent government that is skilful in taking advantage of them, a population willingly assumes the burdens of preparedness for war. Where they are weak or are weakened by a government that is concerned solely with certain material interests and does not look forward to the future, the population refuses to assume the burdens of national defence. ${ }^{3}$ If history be studied attentively, one sees that nations on the road to defeat and ruin have very rarely failed of warning signs that should have -
$2454{ }^{3}$ Whenever a nation, $A$, in which Class II residues have weakened and in which, accordingly, material and momentary interests prevail, is threatened by a nation, $B$, in which Class II residues are strong and which in consequence is inclined to sacrifice material and momentary prosperity to future and more abstract interests, the nation $A$ may properly be warned in the words that Demosthenes addressed to the Athenians in just such circumstances.

In order to keep the funds in the Theoria (the Athenian budget for public spectacles) intact and spend them on public festivals, the Athenians were neglecting military preparations against Philip and paving the way for the defeat at Chaeroneia. Modern countries, in order to make sure of "social" and other "reforms" that provide leisure and material enjoyments for the followings of politicians, neglect expenditures that would be essential to the maintenance of national independence. Demosthenes, Philippicae, II, 3: "In all cases where a man is inspired by a desire for dominion he must be met with works and deeds, not with words; and we orators are the first to refrain from urging deeds upon you, O men of Athens, in fear of your wrath against us." Ibid., IV, 55: "If one chances to speak of the doings of Philip, straightway someone rises to say that one must not lose one's head and suggest war. And then he goes on to portray the delights of living in peace and the annoyances of maintaining a large army; and he adds: 'There are people who are trying to get the money for themselves' and other fictions that wear the false face of truth."

The chief defect in the derivations that are used by pcople who shrink from the sacrifices necessary for their country's defense to justify their indolence and their greediness for material pleasures, lies in their forgetting that war may be forced upon a pcople that docs not want it, and that if it is unprepared, it faces utter ruin. Grote, History of Grecce, Vol. XI, p. 290: "Demos at home had come to think that
counselled a change of course, and that few, very few, have had governments so lacking in vision as not to foresee the impending doom. Forces adequate for spurring the nation to look to its defence have been there; but they have been more or less effective according to their intensities, and the intensities have depended primarily on the intensities of Class II residues in the governing classes, and they have been offset by greater or lesser resistance according to the greater or lesser intensities of those same residues in the subject classes. The Roman people conquered the Greeks and the Carthaginians chiefly because those sentiments of group-persistence that are, known as love of country, and those other sentiments that supplement and reinforce love of country, were more intensely felt in Rome than in Greece and Carthage, her rulers meantime possessing Class I residues in abundance so that proper advantage could be taken of the residues in the masses.
2455. The utility of certain combinations of residues of Classes I and II is apparent, even if one considers only small groups of people, or even one or two individuals. It was, perhaps, owing to the fact that Bismarck and William I were called upon to work together
the city would march safely by itself without any sacrifice on his part, and that he was at liberty to become absorbed in his property, family, religion, and recreations. And so Athens might really have proceeded, in her enjoyment of liberty, wealth, refinement, and individual security-could the Grecian world have been guaranteed against the formidable Macedonian enemy from without." Were it not known that Grote wrote his history long before the War of 1870, one could not be too certain that he was not thinking of France during the last years of the Empire when he wrote of the Athenians, Ibid., Vol. XI, p. 278: "The superiority of force was at first so much on the side of Athens [of France during the war of 1866] that if she had been willing to employ it, she might have made sure of keeping Philip at least within the limits of Macedonia [Prussia within the boundaries she had had before the war with Austria]. All depended upon her will; upon the question, whether her citizens were prepared in their own minds to incur the expense and fatigue of a vigorous foreign policy [whether Napoleon III were disposed to follow such a policy instead of dreaming along in his fanciful humanitarianism]-whether they would handle their pikes, open their purses, and forego the comforts of home, for the maintenance of Grecian and Athenian liberty against a growing, but not as yet irresistible destroyer. To such a sacrifice the Athenians could not bring themselves to submit; and in consequence of that reluctance, they were driven in the end to a much graver and more irreparable sacrifice-the loss of liberty, dignity, and security." The disaster that France suffered in 1870 was not so grave as the disaster that overtook Athens in the war with Macedon, but there is no telling how serious another such disaster might be if, in a near future, the same causes still holding, similar effects should ensue.
that they were able to do great things. A well-known story that Bismarck used to tell ${ }^{1}$ clearly shows how "prejudices" (group-persistences) in King William I saved the Prussian monarchy in 1862. At that time the quarrel between the King of Prussia and his parliament had reached a very serious pass. The King was returning discouraged from Baden to Berlin, and Bismarck rode out to meet him in order to persuade him. Says he: "Still under the influence of his talk with his wife, he was visibly depressed, and when I asked his permission to report on what had happened during his absence, he interrupted with the words: 'I see perfectly how it is all going to end. Down there, in the Opern Platz, under my windows: first your head and, not so very long thereafter, mine!' I guessed-and eycwitnesses were later to confirm the impression-that during his week's sojourn at Baden he had been tormented with variations on the themes of Polignac, Strafford, Louis XVI. When he had finished I asked simply: ‘And after that, Sire?' 'Why, after that-we shall be dead!' 'Yes,' I resumed, 'after that we shall be dead. But we are going to die sooner or later anyway, and could we possibly die in a more glorious manner? . : Your Majesty is called upon to make a fight. Your Majesty cannot capitulate. You must resist the violence that is being done you, even at the risk of your person.' The longer Ltalked in that tone, the higher the King's spirits rose and the more he looked and talked like the military man he was, fighting for monarchy and country. [Group-persistences, Class II residues.] When facing 'external,' personal dangers, whether on the battle-field or from the would-be assassin, he was a man of a rare intrepidity that came natural to him. ... He was the ideal type of the Prussian officer carried to the highest degree of perfection, the officer who, in the service, marches to certain death without regrets, without fear, with the simple words, 'Yes, Commander,' but when called upon to act on his own responsibility, fears criticisms on the part of his superior and the world at large more than he fears death. [Absence of Class I residues: but Bismarck had what King William lacked.] . . . Now . . . the upshot of our talk there in that badly lighted compartment on the train was that he came to look upon the rôle which the situation was creating for him from the standpoint of the army officer. Once more he was the soldier, above all

[^97]else the soldier, and he saw himself in that situation as an officer who had been ordered to defend the post assigned him to the death, come what may."
Had Charles X, Louis Philippc, MacMahon, thought and acted in that manner in France, they would not have been overthrown so readily.
2456. The Italian war of 1859 had shown to the governors of Prussia on the one hand, and to the people ruling in France on the other, the urgent necessity of improving their military establishments. Both countries applied themselves to the task, but with quite different outcomes. William I, who had far less power and far greater opposition in his country than Napoleon III had in his, attained his purpose fully. Louis Napoleon failed. Why? Sustaining the erroneous thesis that France was perfectly prepared for war in 1870, Emile Ollivier admits, in self-contradiction, that preparations could not be completed either in 1860 or in 1867 ( $\$ 246 \mathrm{r}$ ).
2457. We have already seen ( $\S 1975^{3}$ ) what his excuses were as regards preparations after 1860, and we examined them in their bearing on the problem as to the accord between virtuous conduct and happiness. Now let us look at the facts he gives from the standpoint of the relative proportions of Class I and Class II residues in ruling and subject classes respectively. Though formally differing, the two aspects substantially coincide; for acceptance of the ethical principles on which Ollivier based his conduct depends, in fact, upon Class II residues, which may be beneficial or harmful according as they prevail, in the main, in rulers or ruled.
2458. Napolean III appears in history in two outstanding guises: as the unwitting leader of a band of "speculators" ( $\$ \$ 2465^{1}, 2463^{1}$ ) who used him as their tool; and then as a kindly upright soul with a prevalence of Class 11 residues ( $\$ 1975^{\circ}$ ). ${ }^{1}$ It was of no mean ad-
$2458{ }^{1}$ Busch, Tagebuchblätter, Vol. I, p. 569 (English, Vol. I, p. 315), Dec. 23, 1870: "Conversation at table turned on Napoleon III. The Chief [Bismarck] regarded him as a man of limited intelligence. 'He is much more good-natured and much less acute than is ordinarily supposed,' he said. 'Why,' Lehndorff interrupted, 'that is just what someone said of Napoleon I-"a good honest fellow, but an idiot."' 'No, seriously!' replied the Chicf. 'Whatever one may think of his coup d'état, he is really kind-hearted, sensitive, sentimental, but his intellect is not brilliant, and his education limited.'" Bismarck was wrong as regards Louis Napoleon's education, or at any rate he chose to be wrong. Napolcon III was a well-educated man, much better educated than Bismarck; but he was a humanitarian, a dreamer, the tool of a
vantage to him that his government began with a period of increasing economic prosperity ( $\$ 2302$ ) and covered it.
2459. The central idea in Ollivier's history, L'Empire libéral, is to contrast a good, honest, virtuous sovereign (Napoleon III) with a king who was a wicked, evil-minded bandit (William I); and Ollivier is so deeply engrossed in his moral theme as not to observe that the praises he heaps on the sovereign he is defending are the worst accusations conceivable, making him out an inept individual altogether destitute in far-sightedness. If Napoleon was the man Ollivier represents him as being, he may have been a perfect gentleman, but he was a no less perfect idiot $\left(\S 1975^{3}\right)$. If he did not comprehend what was going on in Germany, he could have comprehended nothing at all; and one can only laugh at a man who is enough of a dreamer to imagine that a sovereign can enjoy a "moral supremacy" without asserting a supremacy of force. Later on he was to meet Bismarck. Had he asked him what he thought of such a preposterous idea, he would certainly have given the Chancellor a moment's keen amusement.
2460. But whatever, after all, the causes of the Emperor's inertia, the explanation given by Ollivier might be sound, and we have to examine it. All we know of the character of that humanitarian daydreamer who came to be called Napoleon III shows that some little truth there was in the cause alleged by Ollivier, though it cannot be the only cause, nor even the main one, since when in time it lapsed, the alleged effects continued.
2461. Ollivier himself supplies the proof, Vol. X, pp. 347-48. In 1867 everyone could foresee that war was possible. ${ }^{1}$ The childish group of men who were amassing wealth by speculation. What is the use of having brains if they are to be used to one's own undoing, as Napoleon III used his when he conceived the astonishing idea of lending assistance to the various nationalities that were organizing in Europe-the best conceivable policy for leading his own country to ruin? A less intelligent sovereign would have clung to tradition (Class II residues) and done everything in his power to keep neighbours of France, which had been a united country for centuries, disunited. One might imagine that if Bismarck had had the temperament of Napolcon III, and vice versa, the destinies of Prussia and France would have been reversed. But that would be an erroneous inference. In a country like Prussia a Napolcon III in Bismarck's shoes would have amounted to little or nothing, and a Bismarck in the Emperor's place in France would have amounted to little more.
$246 r^{1}$ Maupas, Mémoires sur le Second Empire, Vol. II, p. 188, says that at the time of Sadowa "the Emperor was obsessed, and everybody knows how much, with
dream of a "moral supremacy" scemed to have vanished, and Napoleon III appointed a "High Commission made up of eminent individualities from all orders in his government, to find ways and means for putting our national forces in a position to guarantee the defence of our territory and the maintenance of our political influence." ${ }^{2}$ Marshal Niel drafted a bill for strengthening the army. The Legislative Body appointed a commission that was opposed to asking of the country the sacrifices that were required. The Emperor resisted, and even threatened to dissolve the Legislative Body. But the commission held obdurate. "The Emperor thought at first that he would pick up the glove that had been thrown at him and reenact in France the struggle between William I and the Prussian parliament. Rouher developed as much vehemence in dissuading him from that as he had used in intimidating the High Commission. . . . Marshal Niel yielded in his turn . . . 'It would have been better to get more; but what we are getting will be sufficient.' And without even awaiting orders from the Emperor he began negotiating with the commission, agreeing that whole classes of young men would not be enlisted, but only annual contingents to be fixed by the Chamber. The Emperor was painfully surprised at that concession on the part of his minister. When he was told of it he buried his head in his hands and sat silent for some moments, crushed. Deserted by everyone, there was nothing for him to do but be resigned." ${ }^{3}$
2462. Here we are on the way to finding the real explanation. William I was surrounded by men like Roon, Moltke, and Bismarck. Napoleon III was surrounded by men like Randon, Niel,
the idea that we were destined sooner or later and inevitably to have a war on the Rhine."
$2461^{2}$ Op. cit., Vol. X, p. 382. Ollivier devotes a whole chapter (pp. 264-79) to "The Inevitability of War with Prussia." Granier de Cassagnac, Souvenirs du Second Empire, Vol. III, p. 256: "No one will deny that war was a foregone conclusion from the end of the year 1866, after the defeat of Austria at Sadowa."
$246 I^{3}$ Something of the kind may one day be written of Poincaré as President of the French Republic. Towards the end of 1913, he had to resign himself to accepting the Doumergue ministry, which was bent on disorganizing national defence. As regards persons there is the difference that Napoleon III could, and would not, while Poincaré could not and there is no knowing whether he would or would not; but certainly as regards forms of government, Empire and Republic were in the same boat in their results.
and Rouher. But that is not all. The circle of the governing class has to be widened. In Prussia one finds a hereditary monarchy supported by a loyal nobility: Class II residues predominate; in France one finds a crowned adventurer supported by a band of speculators and spenders: Class I residues predominate.
2463. The democratic Opposition in France was no better than the Imperial party. Under one form or another a single idea came to the surface everywhere: "We want to get rich and enjoy life; we do not want sacrifices." ${ }^{1}$ Apparent in that again are the effects of weakness in Class II residues, which are among the strongest forces inspiring human beings to self-sacrifice. And the same weakness is again apparent when a Radical-Socialist government granted its voters a reduction of the term of military service to two years; and still again, in 1913, when the Three Years' Service Bill was fiercely opposed, though the change was absolutely necessary in view of the
$2463{ }^{1}$ Ollivier, Op. cit., Vol. X, pp. 382, 351-53, 558: "We were to think only of enjoying the blessings of quiet, of getuing rich. We were to see no other enemy than tuberculosis, grim product of the vices of peace which in a year's time claimed more victims than months of war. No ideal anywhere, in any form! How ask a people trained to such doctrines to have the military spirit and bless the good fortune of being confined to a barracks? To defend the country's independence? No one could believe that it was threatened. Besides, a vague fear grounded on no tangible reality is not enough to kindle in souls inured to pleasures a passion for the slaveries and sacrifices of military life. . . . Garnier-Pagès used to say: 'The influence of a country depends on its principle. Armies, rivers, mountains have had their day. The real frontier is patriotism.' All these themes were taken up and enlarged upon in the talk one heard. Who could be most eloquent in disparaging standing armies that were soon to be abolished (Magnin, Sept. 20 and 21, 1867), which create in our midst a race of men who are cut off from the rest of their fellow-countrymen (Jules Simon, Dec. 19, 1867)? Who could denounce most loudly that armed peace which, with all its nervous strain and its sacrifices, was worse than war, 'since it never ends and fails to give the one thing capable of compensating for struggle on the battlefield, the manly energy of peoples that are soaked in blood they have shed' (Jules Simon, Dec. 23, 1867) ? According to Garnier-Pagès, neither soldiers nor munitions were necessary. The levée en masse would be enough. 'The time the country got aroused,' he would say, 'we whipped Prussia and went to Berlin. When the Prussians got aroused they came to Paris.' (Dec. 24, 1867). Jules Favre would say: 'You talk of frontiers; but they have been abolished, frontiers! And what has wiped them out? The hands of our engineers, that line of double steel that goes winding through the valleys-civilization!'" By the time that estimable phrase-coiner went to Versailles to whimper in Bismarck's presence, he must have learned that in addition to "civilization" another thing called "force" had a little something to say about national boundaries. Bismarck used to laugh at tomfooleries of that variety. Busch, Tagebuchblätter, Vol. II, p. 145 (English, Vol. I, p. 408), Feb. 4, 1871: Of the ag-
enormous and formidable growth in the German army; and finally when the Barthou ministry was overthrown to the cry of "Down with the three-years law!" which Deputy Vaillant at least had the courage to raise while others were doing without saying.
2464. Marshal Niel begged the voluptuaries of the Majority to make some sacrifice for the army, but with little success. Said he: "'If you compel me to go too far with the numbers of men on furlough, we shall have regiments of inadequate complements with officers discouraged and sergeants and corporals absent on leave. The new system will seem to be a disgraceful thing and you will have caused its failure when it ought to triumph.' " ${ }^{1}$
2465. One gets an altogether different picture on turning to Prussia. Stoeffel was struck with it and warned his government to be on its guard, but to no avail. In France the army was subordinate to finance; in Prussia, finance to the army. ${ }^{1}$ Not that opposition was gressive anti-German platforms of candidates running for the French National Assembly, Bismarck said: "'Too much rhetoric! . . . They remind me of Jules Favre. On two or three occasions he tried that grand language on me. But it did not last long. I always brought him down to earth with a jesting remark' " $\left(\$ 2470^{1}\right)$. Yet that man came to head the country that he had done his part to ruin. The same absurdities were again audible in 1913 in opposition to defence measures made necessary by the increase in German armaments; and it was again preached that the enemy was to be met not with arms, but with humanitarian and pacifist principles. As an extreme concession there was again talk of the "armed nation," twin sister to the levée en masse before 1870, while again as then Frenchmen could be heard preaching disarmament and peace in their own country while the enemy was arming formidably for war. And all such things should occasion no surprise. Derivations are, and have to remain, what the crowds who heed them and esteem them like to hear. The charlatans of today use the same devices that were used by the charlatans of ancient Greece and Rome, just as our demagogues today are, to the letter, the demagogues of Rome and Greece.
$2464{ }^{1}$ Ollivier, Op. cit., Vol. X, p. 565.
$2465{ }^{1}$ It seems that at the time of Sadowa Napoleon III and his minister, Drouyn de Lhuys, thought of sending an observation corps to the Rhine. That might have changed the outcome of the war. Says Maupas, Mémoires sur le Second Empire, Vol. II, pp. 189-90: "For a moment . . . there was reason to hope that the policy of farsightedness and energy, which were openly favoured by M. Drouyn de Lhuys and Marshal Randon, had finally prevailed at the Tuileries. On July 5, the decrees convoking the Chambers and ordering the mobilization of our army had been drawn up and possibly signed, and they were about to be sent to the Journal officiel when influence highly placed and enjoying access to the Sovereign essayed one last effort upon him. Among the outstanding individualities who played a part in the final hour of that moving episode was M. Rouher. . . . What, then, could have been the motive of the Minister of State, in particular, in opposing the despatch of an ob-
lacking in Prussia. There was violent opposition; but it was possible to overcome it, owing to the traditions and prejudices active in a people that at that time had been hardly at all industrialized and to no great extent commercialized, and was little affected by the speculator temperament. Some of the contrasts prevailing between Macedonia and Athens in Philip's time have their counterparts in the antithesis between Prussia and France before 1870. "Members of the wealthiest families," says Stoeffel,' "all the most prominent names, serve as officers, submit to the hardships and exigencies of military life, preach by example; and, at such a spectacle, one is moved not only to esteem such an earnest and hardy people, but almost to fear the power that such institutions give to its army. . . . I have already said that in Prussia all the honours, all the advantages, all the favours, go to the army or to those who have seen service. The man who for one reason or another has not been a soldier cannot attain to any position in public life, and in town and country alike he is the butt of taunts from his fellow-citizens." In France, even after the terrible lesson of 1870 , the army remained subordinate to the politicians. Just as Machiavelli, mistaking the part for the whole, talked of "religion" (\$2532) where one has to think of Class II residues, so Stoeffel talks of "morale" where, again, one must think of Class II residues: "I must further call attention to a quality that is very peculiarly characteristic of the Prussian nation and contributes to enhancing the morale of its army: the sense of duty. It is developed to such a degree in all classes in the country that one never fails to marvel at it in studying the Prussian people. It not being to the point here to consider the causes of the thing, I content myself with noting it.
servation corps to the Rhine? The causes must not be sought in considerations of any higher order. . . . M. Rouher yielded to the influence of certain fanatical friends of Italy with whom he was intimate; and he was also subject to the pressure of the group of financiers and big manufacturers who had danced attendance upon him ever since his assumption of the Ministry of Public Works. In those men the passion for business paralyzed sentiments of patriotism. In the despatch of an observation corps to the Rhine, which would logically follow the mobilization of our army, they saw prolonged interference with the 'boom' in business. And they had succeeded in convincing M. Rouher that the real interests of the country lay in absolute neutrality, in inaction." Something similar occurred in 1905 when Rouvier, a worthy representative of the "lobbyists" (affairistes), dismissed Delcassé in obedience to an injunction from Germany. The same paralysis was also one of the reasons why Giolitti did not take to the notion of a Libyan War.
$2465^{2}$ Rapports militaires, Apr. 23, 1868, pp. 10I-04.

The most remarkable proof of this attachment to duty is supplied by the personnel of all ranks in the various departments of the monarchy. Paid astonishingly low salaries and burdened with large families more often than not, the men on the departmental staffs work all day long with indefatigable zeal, without complaining, without seeming to aspire to more comfortable posts. 'We are at great pains not to tamper with these men in any way,' Bismarck said to me the other day. 'This hard-working, underpaid bureaucracy does the best of our work for us and represents one of our main sources of strength.' "Something of the same sort was observable in Piedmont before 1859, and was not the least of the causes contributing to that country's successes.
2466. But all such things are impossible when Class I residues hold any great predominance, and speculation, business, finance, commerce, claim all talents of intelligence and industry. Before 1870 Prussia was poor and strong. Today she is certainly wealthier. But she may possibly be weaker unless the intensification of Class II residues in the subject classes, as manifested in Pan-Germanism and other phenomena of the kind, has offset the increase in Class I residues and, conversely, if it has more than offset it in the ruling classes. As for France, the situation today is very much what it was before 1870 . If Class I residues have not increased, they certainly have not fallen off. But meantime Class II residues have also been intensified in the lower classes, as attested by revivals in religion and metaphysics and by an increasing virulence in nationalism. One is left in doubt therefore as to the direction in which the relative proportions between Class II and Class I residues may have varied. ${ }^{1}$
$2466^{1}$ If $A$ is the index of the force of the sum of Class I , and $B$ the similar index for Class II, residues, our task is to discover, be it in roughly approximative terms, the variations in the equation:

$$
q=\frac{A}{B} .
$$

One of the greatest difficulties in the way of doing that lies in the fact that it is not enough to know that $B$ has increased in order to conclude that $q$ has increased; for $A$ may have increased enough to offset the increase in $B$, so that there will be little if any change in $q$; or indeed the variation in $A$ may have been such as to cause an increase in $q$, or, again, a decrease. One must therefore consider variations not only in one index, but in both, and try to evaluate them as best one can. We are most favourably placed for such an investigation when we can find phenomena directly dependent upon $q$ and therefore giving some inkling as to the manner of its variations.
2467. One must not forget, however, that in such reative proportions, it is always a question of mores or of lesses, not only as regards the subject classes, but also as regards the governing class, and that the maximum of political and military power is not attained at either extreme. In the years before 1866, Hanover had fallen completely asleep and, satisfied with her tranquillity, was making no provisions against possible eventualities. In one of his speeches Bismarck observed in that connexion:1 "The Honourable von Vincke has contended, with apparent soundness, that the Hanoverians had eaten their white bread first, as the French proverb says, that for a long time they had given no thought to the defence of their country, and that had they acted as their duty required, they would not have made those economies. Assuredly, gentlemen, a bad organization of national defence brings its own punishment. Because of neglecting defence, Hanover lost her autonomy, and the same fate awaits any country that neglects defence. That is the price one pays for it."
2468. The case of Hanover serves to show that the differences between France and Prussia in 1870 were not due to differences in race, as between Latin and Germanic. And not only that. Prussia herself was beaten in the Jena campaign for the same reasons, by and large, that France was defeated in 1870 .
2469. What does Von der Goltz say? In many places in his book ${ }^{1}$ one has only to change "Prussia" to "France" to get a description of what happened in 1870: "In those campaigns [on the Rhine] Prussia had put only a part of her forces into commission; because, as Clausewitz said, 'she desired to adhere to the mandates of a prudent caution.' She could console herself with the thought that if she chose to bring all her resources into play in a determined campaign, she could easily triumph over an inexperienced France." The French Government had had its warning from Stoeffel before 1870 and disregarded it. The Prussian Government had similar warnings before Jena and also disregarded them. "Connexions with the French armies had always been maintained. There had been no lack of opportunities for studying them, nor any lack of official reports as to their manner of being. As early as May 12,

[^98]${ }^{1798}$, Minister von Alvensleben had stated his view of Prussia's situation in a very remarkable memorandum: "To fight the French with advantage we must adopt their ways and methods, otherwise we shall always be in a situation of inferiority. . . . Le procure equal resources we must do as the French do-pillage our whole country before casting the dice. To get recruits we must draw on all our provinces.' Von Alvensleben was not unaware of the radical character of his proposal. He even feared that its adoption might provoke a revolution. Unfortunately he could suggest no middle course except an alliance with France." ${ }^{2}$
2470. Put Bismarck for Napoleon and Prussia for France and we get in Von der Goltz, Op. cit., p. 407, a description of the diplomatic events leading up to 1870: "Napoleon had completely fooled Prussia. But statesmen were not the only ones to fall into his trap. Many people in the public at large took the assurances of the Journal de Paris, August, 1806, as cash in advance: 'France and Prussia,' said that editorial, 'are bound by ties of closest friendship.' The most surprising thing about these days is that, when war was the threat of every moment, a great many Germans sat philosophizing not only on the abolition of standing armies, but on the possibilities of universal peace, which they thought was near at hand. 'Never have circumstances so conspired to make an epoch more propitious for the realization of that great ideal which will mean happiness for mankind.' So declared a scientist, in the news from Berlin, on May 9, 1805. . . . The mistake of the diplomats was the mistake of many others. The graver the danger grew, the sounder the slumber of people in their sense of security." Exactly as happened in France on

[^99]the eve of the War of 1870 , when she was sending her statesmen to international peace conventions; or again in 1905 , when the successors of those gentlemen were repeating the same absurdities on the eve of the Moroccan crisis ( $\$ 2463^{1}$ ). ${ }^{1}$
2471. The vogue that humanitarian derivations acquire at certain times is usually a sign of weakening in Class II and Class V (individual integrity) residues, which make for the preservation of individual and community. People who like sonorous words imagine that their declamations can take the place of the sentiments and the conduct that maintain the social and political equilibrium.
2472. Like France in 1866, Prussia, in the course of the year 1805, says Von der Goltz, Op. cit., pp. 466-67, "had the most favourable opportunity for action that had presented itself since 1740 . . . Only one step was necessary-and how differently would that army, so despised for its defeats at Jena and Auerstadt, be judged today, had statesmanship taken that step! . . ." P. 473: "While public opinion was rejoicing over the maintenance of peace and enlightened intelligences were calling the policy of hesitation the shrewdest diplomacy . . . the leading ideal of the two outstanding statesmen, Hardenberg and Haugwitz, who thought that they could take advantage of the great crisis without drawing the sword [So Napoleon III, in 1866.], was an incomprehensible hallucination, given Napoleon's [Bismarck's] manner of procedure. To try to obtain a share in the booty without adopting the explicit resolve to take it from the enemy is neither honourable nor prudent. . . . The policy of fishing in muddy waters is a dangerous one It is sound only when it is intimately bound up with a weadth of audacity and force; for
$2470{ }^{1}$ Journal des Goncourt, Vol. V, p. 59, Aug. 13, 1872: "Luncheon at Munich with Ring, first secretary of the [French] embassy at Vienna. He was the man who played diplomatic elephant-driver to Jules Favre at Ferrières. He talked of that lawyer's ingenuousness, of his confidence that he would overwhelm Bismarck with the speech he was preparing on the train. He boasted, poor lamb of the law-courts, that he would convert the Prussian to the doctrine of the brotherhood of the peoples by displaying before his eyes as the reward of moderation the popularity he would gain with future gencrations that would be locked in one world-wide embrace. The German Chancellor's irony threw cold water very soon on that childish illusion" ( $\$ 2463^{1}$ ). And there are still people who dote upon similar balderdash, which attains its maximum absurdity in the speeches of M. d'Estournelle de Constant, who at least has the merit of stating his position frankly, whereas there is considerable doubt as to the sincerity of many others who are using the derivations he uses.
no power will allow us to make a fool of it with impunity unless it is afraid of our strength. [Exactly what Machiavelli said, and what Napoleon III forgot in $1866\left(\$ 1975^{3}\right)$.] When, therefore, on January 24, 1806, the bulk of the army was demobilized while Napoleon was maintaining his forces on a war footing in South Germany, Prussia placed herself at the mercy of an enemy whom she had just galled and put on his guard by rattling her sword. Then, in August, 1806, she decided to make war, at a time when she could no longer deceive herself as to Napoleon's designs [Bismarck's, in 1870.], a resolve dictated by fear of attack, and possibly justified as a resort of despair. But the moment was altogether unfavourable. [Exactly as it was for France in 1870.] . . . After blunders so serious one could hardly count on a successful outcome. . . ." P. 377: "That policy, that sort of leadership, an unfortunate make-up of the general staff, numerical inferiority in forces, were the main extrinsic causes of the catastrophe." The same may be said of France in 1870. It is useless for Ollivier to lay the blame on the generals. They may have done badly, very badly indeed; but had they been under the orders of a Moltke and a William I, had they been working in a different political atmosphere, they would have done as well as the German generals. ${ }^{1}$
2473. Not a few people inragine that humanitarian sentiments are a product of democracy. That is a mistake. Humanitarianism may just as well prevail under monarchical or aristocratic forms of government. Democracy de facto must not be confused with the ideal democracy of the humanitarians, just as science de facto must not be confused with the fantastic "science" of the anti-Clericals.
2474. "The army," says Von der Goltz, Op. cit., pp. 512-14, "was anxiously watched to keep it from manifesting any signs of discontent. However tranquil Prussia seemed to be, and though confidence in the army was unshaken, the governing classes were not exempt from a secret fear of revolution. [So the monarchical, semi-feudal Prussia of 1800 presents the same phenomena as the republican, democratic France of 1900.] Mollendorf never ceased urging upon garrisons and patrols that when called upon to disperse gatherings,
$2472{ }^{1}$ [This passage from Rossbach zund Jena, to which Pareto refers in French translation, appears much rewritten in Von der Goltz's revised version of 1906, Chap. XII. The substance, however, is the same.-A. L.]
or, in general, to maintain the public peace, they should at all times act with patience and discretion and resort to moderate severities only when conciliatory measures had proved fruitless. The civil population was not to be incited to aggressiveness or resistance to authority by conduct or word of mouth on the part of the military. It should not be given any occasion for such things. The troops were absolutely forbidden to mistreat a trouble-maker in arresting him. He was to be dealt with with every consideration. Funk moreover recounts the following in his diary: 'Saxony had enjoyed peace for almost thirty years and an administration from which the military element had almost everywhere been eliminated. The bailiffs and burgomasters looked proudly down from very exalted heights upon the higher army officers, certain that in case of trouble the soldier would be convicted in any court.' What is here said of Saxony applies to Prussia as well, although to a lesser degree." Those are all dogmas of our present-day humanitarians. That is what is happening now (1913) in France, and what happened in Italy before the Libyan War. It is a specific trait of weak governments. Among the causes of the weakness two especially are to be noted: humanitarianism and cowardice-the cowardice that comes natural to decadent aristocracies and is in part natural, in part calculated, in "speculator" governments that are primarily concerned with material gain $\left(\$ 2480^{2}\right)$. The humanitarian spirit is to be classed among the Class II residues; but as we have already explained ( $\S 1859$ ), it is among the weakest and least effective of them. It is a malady peculiar to spineless individuals who are richly endowed with certain Class I residues that they have dressed up in sentimental garb.
2475. Von der Goltz, Op.cit., p. 522, quotes a poem that was written in the year 1807. "'In days gone by,' it ran, 'a hero's greatest glory was to die in battle for country and king. But since world and men have been cultivating civilization and philosophy, fighting to the death has come to be called 'organized murder.' So civilization brings us to sparing even the blood of our enemy." ${ }^{1}$ That exactly

[^100]is what our humanitarians are saying now. Von der Goltz concludes: "Beyond question, therefore, the spirit of the age was the main cause for the intrinsic weakness of the Prussian army."
2476. That was the conclusion reached by a practical man. It coincides exactly with the conclusion we reach by a theory that associates social phenomena primarily with sentiments (residues), and it is apparent once again that the damage resulting from an overstress of Class I residues is the same regardless of differences in nationality (Prussia in 1800, France in 1870). Whether the deviation from the relative proportions corresponding to the maximum of utility be in one direction or another, there are countries to show the harm that results from it.
2477. After this glance at the equilibrium in different countries, suppose we consider the equilibrium in various social strata, examining, that is, examples of class-circulation. It would be a good idea to begin by considering virtual movements, asking, that is, what means a governing class has at its disposal in order to defend itself by eliminating individuals who might conceivably overthrow it ( $\$ \$ 2192,1838$ ) as possessing superior talents of a type likely to be dangerous to its rule.
2478. I. Death. The infliction of death is the surest means, but also the most harmful to an élite. No race, either of men or of animals, can long endure-steh a selection and destruction of its best individuals. This device was extensively used by ruling families in the past, especially in the Orient. The individual who ascended a throne often exterminated all close relatives who might become pretenders to power. The Venetian aristocracy also made some little use of death to anticipate or punish the plots of individuals who showed a disposition to alter institutions in the state; or merely to eliminate some citizen who had grown too influential through ability, character, or power.
2479. 2. Persecution not carried as far as capital punishment: imprisonment, financial ruin, exclusion from public offices. This tool is not very efficient. It produces martyrs who are often more dangerous than friey would have been if let alone. It is of slight or no ad-

> Heisst fechten auf den Tod 'den Mord organizieren.' So schont die Aufklärung sogar des Feindes Blut."
[This last verse does not scan, but was so printed.-A. L.]
vantage to the governing class, but it does no great harm to the -élite-onsidered as a whole made up of a governing and a non-governing element. It may in fact sometimes be beneficial, since persecution tends to stimulate qualities of energy and character in the non-governing element-the very qualities that may be lacking in an aging élite; and the persecuted elements may end by replacing the governing element.
2480. The effect just noted for conflicts between the two elements in the élite is a particular case of a much more general effect, which is very frequently observable in conflicts between a governing and a subject class. One may say, that is, that a governing class offers effective resistance only as it is disposed to go to the limit in resistance, without hesitation, using force and resorting to arms whenever necessary. ${ }^{1}$ Otherwise it is not only ineffective; it may even benefit
$2480^{1}$ In June, 1914, revolutionary disturbances broke out more or less everywhere in Italy, but particularly in Romagna. They give an excellent example, on a miniature scale, of the principles here in point. At the moment when the revolt was at its height, on June 10, Premier Salandra sent the following circular to the Prefects: "Regrettable incidents have occurred in some cities of the kingdom. All hearts are saddened. It is supremely important to prevent recurrences of them. You are to devote all your efforts and your whole zeal to that end. The government is not an enemy. It has duties to fulfil, chief among which is the maintenance of the public peace. But in maintaining order it would have the resort to force, if indispensable, not untempered with greatest caution. In its task of restoring quiet it trusts that it will have the assistance of all citizens who love their country and believe that the common weal is best furthered by a common respect for the law and for public liberties."
With this humble and submissive utterance from the head of the government, who seems to be apologizing to his opponents for venturing to resist them, compare the article printed in Avanti, the official Socialist organ, on June 12: "Armistice. The general strike that came to an end yesterday was the severest popular uprising that has shaken the Third Italy since 1870 . Compared with the revolt of 1898 this strike has cost fewer lives, but it surpassed that 'Tragic Maytime' in scope and in depth. Two essential elements distinguish the recent general strike from all its predecessors: its extent and its intensity. There is just one gray page in the story of these days of fire and blood, and the General Federation of Labour took it upon itself to write it by suddenly and arbitrarily ordering the cessation of the strike, without consulting the Executive Committee of the Party. Another dark paragraph was written by the railway men, who learned that the strike was on thrce days late, and then learned of it only-not to strike. But all that does not injure the beauty of the uprising in its general outlines. We understand the pains and fears of reformism and democracy as they face a situation that will grow steadily more difficult for them. Premier Salandra, who is a liberal Conservative, and Sacchi, who votes against him, for us stand exactly on a par. We state the fact with a touch of the legitimate joy the craftsman feels as he contemplates his handiwork. We of course
its adversaries, and sometimes very greatly. The best example would be the French Revolution of ' 89 , where royal authority resisted just long enough to strengthen the rebellion, and then ceased at the exact moment when it could have crushed it. Other less striking examples could be found in other revolutions in France and one country or another, and also in the petty disturbances that sometimes occur in civilized countries. In 1913-14 the English Government imprisoned the "suffragettes" and freed them as soon as they went on hungerstrike. That solved the problem of finding the form of resistance that has a minimum of efficiency in favour of the government and a
lay claim to our share of the responsibility for the events that have occurred and for the situation that is now taking shape. If, to imagine the case, Bissolati had been Premier instead of Salandra, we would have done our best to make the general protest strike even more violent and more decidedly insurrectionary.
"Another period of truce in the social war has been in progress since last evening. Whether it is to be a long one or a short one we cannot say. We shall take advantage of it to continue our multifarious Socialist activities, to consolidate our political organization, to recruit new workers for our trade-unions, to occupy other redoubts in local and provincial governments, in short to prepare increasing numbers of moral and material conditions favourable to our movement; so that when the red clarion is again sounded, it will find the proletariat awake, ready, and resolved for the greatest sacrifices and for the greater and more decisive battle."
That language was the language of other Socialist papers. The Scintilla (Spark), for example, said, June 18, 1914: "The flood-gates of humanitarian sentiment have been opened. All kind hearts are now outpouring their unctuous deprecations of all violence' and their crocodilian tears of pity 'for all victims.' The newspapers of democracy, which are above all afraid of the effects the strike is to have on their pre-election deals, are now flooded with pathetic sermons, milk-and-water homilies on the dogma of 'revolution by evolution,' and lamentations on the sinister fatuity of violence. We are proud to note that the Socialist party has made and is making no contribution to this pap of revolting hypocrisy. . . . We have nothing to repudiate and no one to deny, not even the so-called teppa! Naturally we shall never advise, as we have never advised, anyone to throw paving-stones at police lines. We have no love for paving-stone revolutions: they are stupid. What especially exasperates us is the stupidity of people who seem to think they can meet army rifles, 'latest model,' with brick-bats. Our objection to the sling-shot rebellion is, therefore, a purely practical one-the attack is inferior to the reaction."
The fight between the fox and the lion! The one side relies only upon cunning to win its battle; there is not a word that betrays the virile, courageous spirit of the man who has a faith. The other side shows the opposite traits. The government does not care to be known as the enemy of its enemies. The latter reply that they are, and will continue to be, its enemies and the enemies of every other government of the kind; and not to understand them is indeed to be deaf and blind. So it is that the men who write for the Avanti [the editor at the time was Benito Musso-lini.-A. L.] show that they have the qualities of virility and frankness, the qualities that assure victory in the end and which, after all, are beneficial to the nation
maximum in favour of its adversaries. ${ }^{2}$ In Italy the "general strikes" and the more or less revolutionary disturbances that keep breaking the peace of the country are due in large part to the fact that the government resists just long enough to irritate its opponents, induce them to patch up their differences with each other, and incite them to violence, and then stops at the point where it could crush them. ${ }^{34}$ (For footnote 4 see page 179r.)
as a whole. The fox may, by his cunning, escape for a certain length of time, but the day may come when the lion will reach him with a well-aimed cuff, and that will be the end of the argument.
Meantinne some of the Socialists, and notably the "Reformists," are still relying on the pity of their mild-spirited adversaries, and plead extenuating circumstances. They say that the disturbances are caused by want, that the rioters are so many good little angels, and that if occasionally they throw a paving-stone it is because they are driven to it, against their will, by provocations on the part of the government, the police, the bourgeoisie. In general the strength of a government or an opposition party corresponds to the derivations it uses; so that the derivations may be taken as a gauge of the strength. The greater the strength, the fewer the appeals to the pity of opponents or neutrals, and vice versa. The Italian Government fled before mob violence and it fled again before the violence of a slender minority in the parliament. Salandra had made the taxation measures proposed by Giolitti his own. By sheer obstructionism some thirty Socialist Deputies held up a majority of many more than four hundred. But the thirty had courage and were inspired by an ideal. The others were chiefly concerned with the interests of their confederates. The government had to come to terms with the handful of filibusters. The treaty of peace was favourable to both parties. The speculators, represented by the government, obtained authorization to impose their taxes for the moment, and that was what they were after-for the rest they cared not a hang. The Socialist minority secured the great advantage of proving their own strength and showing that it had beeome impossible to govern without their fiat:
$2480{ }^{2}$ The weakness of a government that does not dare to keep a "suffragette" on hunger-strike in prison is one of the main causes for the continuance of the "suffragette" rebellion. At the time of the disturbances of June, 1914, in Italy, English newspapers went looking for reasons more or less fantastic to explain them. But they could have found the explanation by just gazing about at home. The main cause of the insurrectionary outbreaks in Italy was the main cause of the "suffragette" outbreaks in England. Such things are not going on in Germany, for where the cause fails to operate the effect fails to appear.
$2480^{3}$ On June 7, 1914, at Ancona in Italy, a handful of individuals were leaving a private meeting that had been held in place of a public meeting which the police had forbidden. The police tried to keep them from proceeding to the Piazza Roma, where a band-concert was in progress. The result was a riot. Three of the rioters were killed and five wounded. Scventeen carabinieri were wounded. That was the signal for a serics of uprisings all over Italy in which several persons were killed and many wounded, and which the government could not and would not suppress. So then: It interfered with a promenade that might have been harmless, or perhaps at the worst have caused some slight disorder, and refused to interfere effectively

And the government follows that course not from ineptitude, but because like all governments in the civilized countries of today, it represents speculators, and can follow no other course. Speculators want quiet above all else, for quiet is what they need to carry on their profitable enterprises, and quiet they are ready to buy at any price. They are interested in the present and worry little about the future, not in the least scrupling to sacrifice their champions to the with acts of open rebellion armata manu. It displayed great force when dealing with defenceless individuals, and great cowardice when dealing with armed mobs.
On June 9 Premier Salandra explained to the Chamber that he had forbidden the meeting at Ancona because "its obvious intent was to incite the military to mutiny and rouse public contempt for the army. The fact that 'Constitution Day' (the anniversary of the Statuto) had been chosen as the date for the meeting revealed an intent to interfere with the civil and military ceremonies that customarily mark that holiday." So then: The Premier offered armed resistance to individuals intending to insult the army by word of mouth, and then, without using sign of force, allowed army officers to be clubbed and disarmed, and a general even to be captured, with absolute impunity. Could the speeches that had been foreseen possibly have been more insulting to the army than the acts that followed? The minister forbade "disturbance of civil and military ceremonies," and allowed public buildings to be sacked and burned. Is "disturbing a ceremony" a more serious crime than robbery or arson?
$2480{ }^{4}$ The Corriere della sera, June 13, 1914, remarked very soundly: "So then we can only wonder whether this cowardice on the part of the bourgeoisie is a means, a system, a device, a manoeuvre, or just a humiliating disposition to leave the destinies of Italy in the hands of an insignificant minority [But not so much smaller than the minority actually governing the country.] that has grown ultrapowerful through its own audacity and the supine bewilderment of its adversaries. [Really one should say, "through the art of governing by manipulation, avoiding the resort to force."] Must we really grant, in order to hush the clamours of the Socialists in the parliament, that the presence of the police in places that are overrun by mobs previously aroused by the utterances of orators in public meetings, is a provocation? That it is a provocation to expose police and soldiers for three or four days running to hisses, insults, paving-stones? [Yes, all that has to be granted by anyone not willing to resort to force, the ultima ratio in settling conflicts.] What evidence is there of that? Public forces in Romagna were very slender. For three days (and it seems that the spectacle has not yet ended) crime has reigned in that province. [The usual exaggeration of calling one's adversaries "criminals." Really, in every revolution, including the revolt of the Italian bourgeoisic against the old governments, "criminals" came forward and tried to fish where the water was muddy.] A police commissioner who was trying to reason, who was pleading for calm, has had his skull fractured. Wounded soldiers have been cruelly mistreated. Fire has been set to historic churches. [In every revolution, as in every war, public monuments suffer.] A general and two officers have been-let us call a spade a spadetaken prisoners. [Things like that do not happen in Prussia. Why not? Because Prussia has a different sort of government from Italy and France. There is no reason why rebels should not make prisoners of their opponents.] Pistols have been
liberally used, not to mention the time-honoured knife. [But how else are wars fought, if not with weapons?] All that will be something to boast of in Socialist war-songs; and from their point of view they are right [A very sound remark, sufficient all by itself to save this whole editorial.]: those who will have the end must have the means. There are no revolutions in Arcady. [In Arcady people write circulars like the circular that Premier Salandra wrote ( $\$ 2480^{1}$ ).] Except that when it is a question of ascertaining, in the particular, who fired the shot, it is never the rioter who did the killing. And that too is natural. The revolutionary hero now makes way for the crooked lawyer. [Whereas the other side always sticks to the crooked lawyer.] But why do we have to build the defences of our very lives in Arcady? Well we know that such words cannot be uttered without our hearing from our adversaries, and especially from that portion of the bourgeoisie which wants to go on with its petty business [And also with its medium-sized, big, and very big business.] even in the country's most serious crises et ultra, cries of reaction, 'gallowsism,' 'a return to '98,' and so on."
It seems that that "portion of the bourgeoisie" must in fact have been heard from, for two days later the same paper changes its editorial line and justifies the government's weakness. Corriere della sera, June 15, 1914: "Premier Salandra did not deny that more energetic measures might have averted some of the violence of the revolutionists. 'What we are trying to do in Romagna,' he explained to the Chamber, 'is to restore order with the greatest caution. My colleagues understand that it would be easy to restore order by force. But if the measures taken by the government have not produced immediate effects, that is due, precisely, to the moderation with which force has been used.' . . . That makes Premier Salandra's line of policy perfectly clear. He tried to avoid bloodshed at all costs." For once it may have been all right, but certain it is that in the long run the "line" in question is a "line" that leads to defeat and destruction. The newspaper goes on to speculate as to what the consequences of vigorous suppression would have been: "Would we have avoided a much longer, more wide-spread and more violent general strike than the one we have gone through? [Exactly what "that portion of the bourgeoisie" which wanted to go on with its petty "business" was interested in avoiding.] Would we have avoided a railway strike more general, more complete, and more disastrous to national prosperity [And for the prosperity of the speculators.] than the one that has occurred?"
Those are the usual arguments of people who want to stop midway, and who dread going to the limit as the greatest of misfortunes. So the fox always reasonsbut not the lion; and that is the chief reason why the lion kills the fox in the end e The newspaper concludes by expressing its full and unqualified approval of Salandra's policy; and such approval is proper enough if one admits that the prime function of government is to safe-guard orderliness in economic production, disregarding evcrything else. But one must not overlook the consequences of that policy in other fields.
They are well set forth in the Giornale d'Italia, June 16, 1914: "The purpose was a political revolution, a real revolution; and what is more serious, a successful revolution, though not for more than twenty-four or forty-eight hours and not without its ridiculous aspects. One may in fact call successful a movement that upsets towns and the country roundabout, that sets out to change forms of government, obliterates, smothers, the authority existing and replaces it with another both in the sem-
blance and in the substance of power. Consider also that the movement was planned and premeditated, and not without a certain technical skill.
"It began with the isolation of every city or town, with the destruction of means of transport for troops by rail, with the cutting of telephone and telegraph wires. That prepared the ground for spreading the most false and absurd rumours. Assaults on armories, seizures of markets, confiscations of automobiles and the gasoline supply, completed the fact of revolution. The maketp of the separate individual committees, each containing simultancously a Rcpublican, a Socialist, a Sydicalist, and an Anarchist, bespeaks premeditated accord between the various insurrectionary groups. The police forces, small in numbers, taken unawares, constrained to let the storm pass, obliged to hand over the breeches of their guns or else to keep to their barracks, were paralyzed. And so the triumphant revolution was immediately able to pull down the royal coats of arms, raise red flags, close the streets to citizens not provided with passports of the revolutionary committees, confiscate food-stuffs, compile lists of persons who were to make contributions in moncy or in kind, close churches, burn railway stations and customs offices, and in some places even recruit a sort of revolutionary national guard, the embryonic militia of a new order of things. [That time it was just an attempted revolution. Some other time it may be a real revolution-and it may be a good thing for the country. Those things, the newspaper continues, were not to be taken as lightly as some people were taking them:] Think of the great loss to our national life that is represented by this red interregnum, this storm of folly which has kept one city or another in Central Italy in a nightmare for some days, cut off entirely from the rest of the world. And what prostration, what bewilderment, what prevarication, all fruits of a long period of compromise, temporization, disorganization, that have humiliated, demoralized, slowed up, all the organs of government! We pant for order, and order is held up to us-and not only by the subversives-as reaction. We desire a reasonable protection of the liberties of all on the part of the police, and the presence of soldiers is represented by a mob of agitators as a provocation! We grope our way hesitant and trembling towards the remedy, while the remedy asserts itself as urgent and clear, so that in the state to which the prestige of the law and the authority of the state have been steadily reduced during these many years, it would seem that what looks like excessive caution had now become unavoidable necessity. The moral harm, therefore, the heavy blow that has been struck at public spirit, the bankruptcy of all confidence in the authority of the state, are not less deadly than the material damage, all traces of which will disappear in the course of these next few days. . . . Things are at such a pass that now we await orders not from the law, but from the committees, leagues, federations, syndicates, labour chambers of the Socialists. In a word, when we hear Deputies expressing their satisfaction in the parliament at the issuance of an order by we forget what exalted Committee of Public Safety, bidding the subversive uprising to come to an end and the country to return to order, the conviction cannot help forcing itself upon one that, owing to some fatal degeneration, today, above the executive power and above the legislative power, we have allowed a higher commanding authority of demagoguery to take root as the supreme arbiter of our national destinies. [Since the world has been the world, the strong and the courageous have been the ones to command, and the weak and cowardly the ones to obey, and it is in general a good thing for a country that that should be so.] What the consequences of this new manner of viewing neo-constitutionality in Italy are can be testified to by the populations of Romagna and the
wrath of the adversary. ${ }^{5}$ The government punishes its officials for no other crime than obeying orders. It sends soldiers to resist rioters, but with orders not to use their weapons, so trying to save the goat of public order along with the cabbages of tolerance from their less virulent enemies. ${ }^{67}$ In that way the speculators have been able to prolong their dominion, and will continue to be. But, as often happens in social history, measures that are useful in a given direction
Marches, who have been the guinea-pigs during these past days for this practical experiment in applying subversive ideals. And if we consider that fiscal and international difficultics will soon be demanding arduous proofs of self-sacrifice and abnegation on the part of the country, we are led to fear that such difficulties will prove insuperable unless meantime the prestige of the state be given a new lease on life by reasserting the principle of authority and preferring to an artificial popularity, which has for so many years been the ministerial porro unum, the restoration of the law-simply of the law." But that is absolutely impossible unless one is willing to use force. To secure respect for the law without using arms upon those who break it is a humanitarian dream corresponding to nothing in the real world. The "fiscal difficulties" alluded to are in great part due to government by speculators, who bleed the country of as much money as they can. They are masters at cunning, but they lack the spirit and the courage to defend themselves by force. [This editorial aroused wide comment at the time in Italy. It was thought to be in part "inspired." And I remember that the allusion to "international" difficulties was taken as a hint that something exciting was in store in the European field. This was twelve days before the affair at Sarajevo. After the fact it was taken as evidence of a démarche by Austria to Italy long in advance of the troubles with Serbia.-A. L.]
$2480^{5}$ If they thought of the future they would easily see from history what lies at the end of such roads. In the long run the agents of gevernment, its troops, become weary of being perpetually sacrificed, and so come to defend it without enthusiasm or even not at all. Occasionally some of them come to see their advantage in turning against it and joining its adversaries. Many revolutions have come about in just such ways, and that may be the way in which the dominion of the governing class at present in power in almost all civilized countries will terminate. However, that certainly is not going to happen very soon. Our speculators, therefore, give little or no thought to it. So people speculating on exchange are keenly interested in the next day's quotations, the quotations of the days after that, but not at all in what prices are to be some years in the future.
$2480{ }^{67}$ To grasp the extent to which humanitarian sentiments and cowardice in responsible rulers may impair the strength of an army, one may consider the following incidents that took place in Italy in June, 1914. Corriere della sera, June 11: "Genoa, June ro. . . . A column of Syndicalists and strikers yesterday disarmed a lieutenant and a captain of infantry." Ibid., June 13: "Parma, June 12. The following is the official version of the incidents that occurred last evening:
"About nine o'clock three second lieutenants from the training-school were returning from a walk home with a comrade. They were made the butt of catcalls, stones, revolver-shots. The three second lieutenants turned to fight back but found themselves followed by a crowd of young men. They deemed it prudent (sic), therefore, to go on to the Piazza Garibaldi, where they told officers they met of what had
for a certain length of time eventually come to work in an opposite direction, and so encompass the ruin of governments that place their reliance on them. That has been the case with many aristocracies. If the day comes when "speculator" governments, instead of being useful, become harmful to society, it will then be possible to say that it was a good thing for society that the speculators should have per-
happened." A number of details follow that are of no great interest here; then ". . . they were greeted with stones and shots, which they answered by firing into the air." Those vollcys naturally were not taken seriously. Soldiers came up and, as usual, fired into the air, with no results: "The soldiers and the police advanced, under a shower of insults and pistol-shots. . . ." Orders were that soldiers and carabinieri must not resort to arms or, when obliged to, should shoot into the air.
In several places in Italy they lost patience, and-since they were forbidden to use their guns, they picked up the paving-stones that had been hurled at them and threw them back at the mobs. It seems that such fighting on equal terms was not forbidden by orders. Senator Garòfalo observed in the Senate that "in Italy the custom of leaving soldiers defenceless against mob violence is now deeply ingrained." Senator Santini remarked that "when an army has to be ordered to submit to abuse and insults . . . it had better be kept in barracks" (Corriere della sera, June if).

No Deputy dared go so far in the Chamber. On the contrary a Conservative Deputy-the stress is on the "Conservative"-recounted a number of episodes where the soldiers had given evidence of truly angelic forbearance, and added: "The officers have been mentioned here. Well, I heard from a lieutenant that he had been spat upon repeatedly and yet had stood there, revolver in hand, though he was boiling inside. (Voices from the Right: "They are heroes!") These poor soldiers have been admirable for their forbearance, unselfishness, and spirit of sacrifice." And all present, ministers included, applauded!

No scene even remotely similar has ever been enacted in the German Reichstag. No Minister of War in Germany would have tolerated suchepraise, which might pass for a saint or a friar, but is grossly insulting to an army officer or a soldier. Such differences between the Italian and German governments arise in the fact that speculators have much greater power in the former than in the latter. Interesting the case of General Agliardi. The story is given in the version of the Minister of War, in answer to an "interpellation" from the floor of the Senate. Giornale d'Italia, June 12, 1914: "On the morning of the eleventh, General Agliardi and his staff were on their way from Ravenna to Cervia for staff manoeuvres (manoeuvres which, in the circumstances, should have been cancelled, the responsibility for that resting upon others). They were held as hostages for five hours, and, what is worse, the General and the other officers surrendered their swords to their captors."

General Agliardi had given plenty of proof of bravery in the Libyan War. He did not hand over his sword for lack of courage. For punishment he was merely placed on the retired list. Had he defended himself with arms against his aggressors, he might easily have killed one or more of them. In that case his punishment would have been more severe. He had therefore no avenue of escape from the misfortune that threatened him. A government that will not have weapons used against assailants, and at the same time will not have them surrendered, would
sisted in measures conducive to their ruin. From that standpoint present-day humanitarianism may, in the last analysis, prove beneficial to society, the way certain diseases that destroy enfeebled and degenerate organisms rid human communities of them, and so prove a blessing.
2481. 3. Exile and ostracism. These are moderately efficient. In modern times exile is about the only penalty for political crimes that nets those who use it in defence of their power greater advantages than disadvantages. Athenian ostracism resulted neither in great benefits nor in great losses. Such measures do little or no harm, as regards the evolution of traits in the élite.
2482. 4. Admission to membership in the governing class of any individual potentially dangerous to it, provided he consents to serve it. The qualification must not be overlooked: "provided he consents to serve it." Take it away and we get a mere description of classcirculation that means nothing else than the admission to the élite of elements extraneous to it, the new members bringing in their opinions, traits, virtues, prejudices. But when such elements change colour and character and turn allies and servants where they had been enemies, we get an entirely different situation in which the essentials of class-circulation are absent.
2483. The device has been resorted to in many countries in many different periods of history. Nowadays it is virtually the only resort of the demagogic plutocracy that controls in our present-day soseem to be inconsistent; for the only way not to surrender them is to use them. But the inconsistency disappears the moment one reflects that the sole purpose of the government is to get along quietly, and that it sacrifices everything to that end. The Minister of War answered the question as to General Agliardi in the Senate, because he knew that in that body there was no danger of any spirited debate. Premier Salandra refused to answer similar questions in the Chamber, because there an uproar would have been certain.
One notes signs already that the defenders of the present régime are to some extent beginning to tire of such annoyances. Missiroli in Giornale d'Italia, June 15, 1914, writes: "The Agliardi incident reminds me of another something like it. A year ago during the strikes in the foundries at Imola, the strikers were replaced by non-union men who had to be protected by troops. The soldiers could think of nothing better in the line of performing their duty than to advise the non-union men to leave town, threatening them, during the night, in cases of refusal. And the free workers left. In cases of general strikes nowadays it is quite the rule for the police to compel merchants to obey the strikers and close their shops."
cieties; and it has demonstrated its effectiveness for maintaining it in power. It is harmful to an ćlite, as tending to intensify traits that already prevail to excess in it. Furthermore, along with the corruption that is inseparable from it, it debases character and provides an opening for those who have both the will and the power to use violence in shaking off the yoke of the ruling class.
2484. Governing classes that are rich in Class II residues but short in combination-instincts (Class I residues) need new elements in which those proportions are reversed. Such elements would ordinarily be supplied by normal circulation. But if, instead, the governing class opens its doors only to individuals who consent to be like it, and are indeed driven by their ardour as neophytes to exaggerate in that direction, the already harmful predominance of certain residues is carried further still and the road to ruin is thrown open. Conversely, a class, such as our plutocracy, that is woefully lacking in Class II residues and overrich in Class I residues would need to acquire new elements that are weak in Class I and strong in Class II residues. Instead, by opening only to those individuals who betray faith and conscience in order to procure the benefits which the plutocracy so lavishly bestows on those who devote themselves to its service, it acquires elements that in no way serve to supply it with the things it most needs. It does, to be sure, deprive the opposition of a few of its leaders, and that is very helpful to it; but it acquires nothing to replenish its own inner strength. So long as cunning and corruption serve, it is likely to keep winning victories, but it falls very readily if violence and force chance to interpose. Something of that sort happened in the declining Roman Empire. ${ }^{1}$
2485. When, in a country, classes that for any reason have long remained separate suddenly mingle or, in more general terms, when a class-circulation that has been sluggish suddenly acquires an intensity at all considerable, almost always observable is an appreciable

[^101]increase in intellectual, economic, and political prosperity in the country in question. And that is why periods of transition from oligarchic to more or less democratic régimes are often periods of .prosperity. Examples would be Athens in the time of Pericles, republican Rome after the victories of the plebs, France after the Revolution of ' 89 . But one could go on. There would be England in the time of Cromwell, Germany during the Reformation, Italy after '59, and Germany after the War of ' 70 .
2486. If the prosperity in question were due to different systems of government, the prosperity should continue as long as the new régime endured. But that is not the case. The florescence lasts for a certain length of time and then comes a decline. The Athens of Pericles declined very soon, while the form of government was becoming more and more democratic. The "boom" in the Rome of the Scipios had a longer life, but the decline is conspicuous towards the end of the Republic. Prosperity returns for a brief space with the Imperial régime, which in its turn is soon in decadence. The France of the First Republic and Napoleon becomes the France of Charles X and Louis Philippe. To picture the situation one might imagine as separated two substances that effervesce when combined. The effervescence takes place as soon as the separation ends, but it does not last indefinitely.
2487. After all we have been say-
 ing, the explanation is not difficult. During the period $a b$ (Figure 46) class-circulation slackens, and prosperity declines from the index am to the index $b n$, because the governing class is declining. In the brief space bc comes a revolution, or some other event that stimulates class-circulation, and the index leaps from $b n$ to $c p$. But the élite again proceeds to decline, and the index drops from $c p$ to $d q$.
2488. Both the slackening and the speeding-up in class-circulation may affect quantities as well as qualities. In Athens the two things went hand in hand, for the Athenian citizenry was a closed or virtually closed caste to which resident aliens had no access, and military merit availed little to elevate individuals to the governing class.

In Rome the freedmen came after a few generations to restore the free-born class, but towards the end of the republic intrigue and corruption were the main sources of power. With the Empire better qualities again became influential on accessions to the governing class, but another and more serious decline again supervened. Our modern plutocracy sets no limit to circulation as regards numbers, and that is why the prosperity which it has brought about has had a longer life; but it banishes force and energy of character from the qualities that give access to the governing class, and that, among other things, will probably cause the present curve of prosperity, $p q r$, which is now rising along the segment $p q$, to decline hereafter along the segment $s$ r.
2489. After these few theoretical remarks, suppose we turn to some concrete examples.


Figure 47

Ancient Sparta and modern Venice are examples of closed or semi-closed aristocracies. They show declines in their respective aristocracies, but on the other hand substantiate the theory that the use of force avails, in spite of the decline, to preserve the dominion of an aristocracy over the lower classes in a population. And so too they refute the claims of moralistic historians that the higher classes keep themselves in power only by realizing the welfare of their subjects. It would be pleasant for the subject classes if matters stood that way. Unfortunately they do not.
2490. In the heyday of Sparta, its population was divided into three classes: the Spartiates, who were the governing class; the perioikoi, tho were a class of freemen, but subordinate to the dominant class; and the helots, who were serfs bound to the soil. The first dates of Spartan chronology cannot be determined exactly, but we should not be going very far wrong, probably, in putting them as far back as 750 b.c. The Spartan oligarchy, with various ups and downs, kept in power from that time down to the year 227 в.c., when Cleomenes III destroyed the Ephors-a dominion, therefore, of about five centuries. The methods that enabled it to do so have their points of resemblance with the methods used by the Venetian oligarchy. An occult and terrifying power anticipated or suppressed
every attempt, or suspicion of attempt, on the part of the subject classes to improve their lot.
2491. Much has been written of the crypteia (secret service). According to Plutarch, Lycurgus, 28 (Perrin, Vol. I, pp. 289-9I), it was a veritable helot-hunt. That opinion seems now to be discredited, though even writers most favourably disposed towards the Spartiates grant that the crypteia was harsh and cruel to the helots. ${ }^{1}$ There are besides undeniable facts that more clearly show Spartiate cruelty-for example the slaughter of helot warriors recounted by Thucydides, as occurring at the time when the Athenians were occupying Pylos. ${ }^{2}$
2492. It cannot be said that the Spartiates maintained their power for lack of resistance. Aristotle well notes, Politica, II, 6, 2-3 (Rackham, p. 133): "The Thessalian penestae (serfs) have often inflicted harm on the Thessalians, as have the helots on the Lacedaemonians; indeed they stand watching for every opportunity to profit by their masters' misfortunes." The Spartan aristocracy remained in the sad-
$2491{ }^{1}$ Schoemann, Griechische Alterthümer, Vol. I, p. 196 (Hardy-Mann, Vol. I, p. 195): "These raids (крviteia) were directed especially against the helots, and more than once, doubtless, individuals whose plots were feared were done away with without a suggestion of legal process. Writers of a later date took occasion from such patrols to say that a helot-hunt took place every year and that it was a butchery. That is an exaggeration too absurd to require contradiction." P. Girard in Daremberg-Saglio, Dictionnaire, s.v. K $\rho v \pi \tau \varepsilon e^{\prime}$ : "Very probably it was a police service designed to preserve order in Laconia. That the young men engaged in it as supervisors and watchmen of the territories often came to blows with helots and showed themselves on occasion very severe and cruel toward them is also very probable."
2491 ${ }^{2}$ Historiae, IV, 80, 3-4: "The Lacedaemonians had already taken many precautions against the helots; and since the helots were many in number, and many of them young and therefore a cause of alarm, the Lacedaemonians resorted to a trick. They had it cried abroad that those among the helots who claimed to have been bravest in war on behalf of the State should stand apart from the others and they would be made free men. But that was just a device to discover who they were, for they thought that those who should presume to be first in obtaining their freedom would also be the bolder in attacking them. So two thousand such were chosen, and they led them, crowned with garlands, from temple to temple, as the custom was with men who were set free from slavery; but soon after they made away with them and no one knew by what death they had perished." Diodorus Siculus, Bibliotheca historica, XII, 67, 4 (Booth, Vol. I, p. 477): "Two thousand having inscribed their names, the most powerful [citizens] were commanded to slay them, each one in his own house." Had the Spartiates been humanitarians, like the French aristocrats towards the end of the eighteenth century, the helots would have killed the Spartiates.
dle only because it was stronger than its menials, and it took war with other states finally to break its power. The Messenians were freed not because they were strong enough to claim their freedom, but because the Thebans won at Leuctra. Aristotle again very soundly notes that the Cretans had no troubles from the hostility of their slaves, because the different states on the island, even when at war with one another, refrained from favouring slave rebellions, since they all had slaves of the same kind.
2493. Wherever, on the other hand, the power of the masters failed, the slaves changed status and replaced their masters. Equilibrium seems to have been specially precarious in the island of Chios, now the ones, now the others, prevailing. About the year 412 b.c., being at war with the aristocracy ruling in Chios, the Athenians invaded the island and were the cause of serious trouble there, "forasmuch as the slaves of Chios, who were many and had been increased in numbers disproportionate to a single city [or: "where there were more slaves than in any other city"], except possibly the capital of the Lacedaemonians, and for that reason were the more difficult to control in their mischief, deserted for the most part as soon as they judged, in view of the strength of its fortifications, that the Athenian army had secured a strong foothold. And since they knew the country well, they inflicted great damage." ${ }^{1}$ The occupation of Pylos by the Athenians had similar effects upon the Spartan helots, as did the Spartan occupation of Decelea upon the slaves of Athens. The Athenians, it should be noted, treated their slaves with a great kindness that was judged excessive by the author of the Anonymous Republic, so called, I, io (Kalinka, p. 69). In the days of a certain Nymphodorus, the slaves on Chios took to the hills and fought with such success on both the offensive and defensive that their masters had to come to terms with them until their leader was treacherously slain. ${ }^{2}$ Later on Mithridates reduced the Chians to slavery and handed them over to their own slaves. The fact gave the moralists their chance to expatiate on the propriety of the punishment, the Chians having been the first to buy slaves. ${ }^{3}$

[^102]2494. The case where aristocracies begin by being open and end by being closed, or trying to be, is fairly general. It is observable also in the Spartans. Aristotle, Politica, II, 6-I2 (Rackham, p. 139), relates, as tradition ( $\lambda \hat{\varepsilon}$ ' $\quad 0 v \sigma \iota$ ), that in order to avoid danger of depopulating the state through long wars, the first kings of Sparta granted rights of citizenship to foreigners. ${ }^{2}$ But Ephorus, as quoted by Strabo, is positive on the point. He says that "all the inhabitants living in the neighbourhood of the Spartans submitted on condition that they be their equals and sharers in the citizenship and in public office." ${ }^{1}$
2495. Access to the privileged class was, however, soon cut off. Herodotus, Historiae, IX, 35, says that only Tisamenus and his brother, Hegias, had received Spartan citizenship. In the Spartan aristocracy we therefore get a type of the closed or, more exactly, the semi-closed class, and it remained such down to the days of Cleomenes III. An attempt at reform had been made about 242 b.c. by Agis IV, but it failed, and the oligarchy still had enough vigour left to cling to its power. ${ }^{1}$
$2494^{\text {a }}$ [Rackham reads, not "in order to," but "with the result that."-A. L.]
$2494{ }^{1}$ Strabo, Geographica, VIII, 5, 4. The passage follows a lacuna. Jones translates, Vol. IV, p. 135: "Though the neighbouring peoples, one and all, were subject to the Spartiatae, still they had equal rights, sharing both in the rights of citizenship and in the offices of state." The explanation of the measures as a provision against the danger of too serious a reduction in the number of Spartiates is suspect. It was probably thought of after the fact; but that does not affect the plausibiliy of the traditions that there were such measures.
$2495{ }^{1}$ According to Plato, De legibus, I, 629A (Bury, Vol. I, p. 57), Tyrtaeus also had Spartan citizenship conferred upon him. It is of little importance whether those were just the facts. Evidently, award of Spartan citizenship was an altogether exceptional thing. Plato and Herodotus were thinking, besides, only of foreigners. No class can succeed in being absolutely closed for any great length of time. Schoemann, Griechische Alterthümer, Vol. I, pp. 209-ro (Hardy-Mann, Vol. I, pp. 208-09), describes the situation excellently: "It is expressly stated, and we are obliged to assume, that at first the Spartiates willingly admitted to their number the nonSpartans whom they met in Laconia-the Achacans, in other words. . . . Not till they had consolidated their rule did they adopt a more exclusive attitude. The right of citizenship, which set up a class apart as compared with the rest of the inhabitants, was so rarely granted from then on that Herodotus mentions as the one known exception the naturalization of two Elians. . . . There is no reason to suppose that the Spartiates were more liberal with it in the period that followed the dcath of Herodotus. Citizenship, as we have seen, was denied to neodamodes [serfs liberated as a reward for services in war]. The mothaques [adopted illegitimates born of helot mothers] sometimes obtained it. They were illegitimate off-
2496. Entrance to the privileged class was barred, but not egress. The best elements in the remainder of the population could not rise to it, but inferior elements were thrown out. To hold a place in the dominant class known as the "peers" (ơ $\mu \circ \iota \iota \iota$ ), it was not enough to be of Spartiate origin. Strict performance of the difficult and rigorous duties of the class was also requisite. Alluding to that law as having been made by Lycurgus, Xenophon says clearly: "He
spring of Spartiates who had been recognized and legitimized by their fathers. They obtained the honour only if, in addition to meritorious conduct, they had ample means. It scems that at a time when education was greatly neglected in other places, non-Spartans had their children reared at Sparta. Some of these young people managed to gain admittance afterwards to the ranks of the citizenry, but they had to have shown themselves worthy of it, and for those who had not succeeded in establishing themselves permanently at Sparta and in acquiring property there, it was a sterile honour that carried none of the essential rights with it." On the other hand, Curtius, Griechische Geschichte, Vol. I, p. 182 (Ward, Vol. I, p. 218), is evidently overstating a little when he writes: "The legislator of Sparta had wisely provided ways for the Spartiate community to replenish itself by recruits of a different blood and untapped energies [That certainly was not the case. There is no question that in historical times the Spartiates dwindled in numbers.] It was possible even for individuals not born of pure Dorian unions, for children of perioikoi (native rural) or helot stock, if they had conscientiously completed their military education, to be admitted into the Dorian community and provided with vacant lands. But the consent of the kings was required for such promotion and the formal adoption of a candidate by a Dorian who had attained his majority took place in their presence. So the state was provided with new citizens. [Very few, at best.] To that institution Sparta owed a goodly number of her best generals. Education, discipline, made the Spartiate, not ancestral blood." For his proof Curtius quotes Plutarch, Instituta Laconica, 22 (Babbitt, Vol. III, p. 439), and Xenophon, Hellenica, V, 3, 9; but really those texts show very little. Plutarch is speaking of legendary times and is not any too positive: "Some say that any foreigner who consented to live according to the customs of the city was, in pursuance of a law of Lycurgus, admitted to a share in the original division of the territory [Babbitt: "might become a member of the division assigned to him at the beginning."]." As for Xenophon, he says that King Agesipolis was sent against Olynthus with thirty Spartans, who were voluntarily joined by resident aliens and bastards (vobou) of high character and some training under Spartan discipline. The fact that Xenophon names them apart from the Spartans is evidence enough that they did not have full status as Spartiates.
Of the abortive revolt of Agis, Droysen, Geschichte des Hellenismus, Vol. III, p. 423, remarks: "Democracy, tyranny, foreign rule, revolution, did not, at Sparta, as it did in most of the other states, sweep away a confused mass of irrational institutions that had no actual value and leave the ground free for a new power." That at bottom nicars-stagnancy in class-circulation. A better fate attended the cout d'état by Cleomenes in 227 b.c., because it was carried out partly with the support of mercenaries. But the new order did not last very long. Six years later Antigone re-established the authority of the oligarchy at Sparta. Cleomenes abolished
[Lycurgus] ordained that if anyone neglected doing well the things prescribed by the law, he should no longer be of the 'peers.'" ${ }^{1}$
2497. Among the things prescribed by the law was participation in the common meals, each paying his own share. Anyone unable to do that because of poverty was dropped from the class. ${ }^{1}$ In like manner individuals deficient in military or civil capacities, or failing to preserve their ancestral fortunes, were dropped-in a word, therefore, most of the decadent elements. That circumstance was most conducive to the maintenance of efficiency in the oligarchy, and was probably one of the main causes of its long life. Unhealthy, instead, was the unwillingness to admit new members. As a result of that the governing class constantly diminished in members, dropping from ten thousand to two thousand, it is said-and still there was no disposition to replenish it with new and better elements.
2498. However-and that was another favourable circumstancethe need of new elements was less urgent than elsewhere, there being no necessity for stimulating Class II residues in the governing class. The Spartan system of education, the maintenance of military discipline in time of peace, hostility to literature, science, philosophy, and the liberal or manual arts, the fact, finally, of continuous war, made the Spartan oligarchy immune from many of the forces that operate in decadent aristocracies to attenuate grouppersistences and intensify instincts of combination.,Humanitarianism, which is the bane of decaying ruling classes, never infected the Spartans, even when they had fallen away from their ancient virtue. One need only think of the custom of flogging young men to the quick at the altar of Artemis Orthia. The origin of the custom has been much debated but, like so many questions of origins, that question is of little if any interest to sociology. There the important thing is to know what sentiments the custom reflected. We have already seen ( $\$ \S$ Ingof.) that a notable part must have been played in it by sentiments of asceticism, which are a hypertrophy of senti-

[^103]ments that spur the individual to self-sacrifice in behalf of the community's interest. The long survival of such a barbarous custom is also an obvious indication of the absence in the Spartans of humanitarian sentiments, let alone sentiments even of merest pity. Otherwise the custom, whatever its origin, could not have held its own for so long a time. In Cicero's day Sparta had lost her independence, yet the custom was still in vogue. And it still flourished in the day of Pausanius, a writer of the second century of our era. It bears witness, further, to the extraordinary strength of group-persistences in the Spartans. ${ }^{1}$
2499. On the other hand the Spartan aristocracy was handicapped by its lack of combination-instincts, even in its one special field of activity, warfare; and to an even greater extent in politics and diplomacy. In that department the nimble frivolousness of the Athenians and the slow-moving conservatism of the Spartans had untoward consequences that were not very different.
2500. In Venice we get another example of the closed aristocracy. Down to the year 1296 access to it was free, and those were days of great prosperity for Venice. Between I296 and I319 comes the change leading up to the Closure of the Grand Council (Serrata del Maggior Consiglio), which barred additions to the governing class; and it remained closed for more than four centuries. ${ }^{1}$ In the year 1775 it
$2498^{1}$ Cicero, Disputationes Tusculanae, II, 14, 34: "At Sparta boys are flogged at the altar so severely that 'from the flesh the blood doth spurt in streams,' and not rarely, as I heard when I was there, they die of it, yet no one of them has ever cried out or uttered a groan." That is testimony of an eyewitness.
$2500{ }^{1}$ Sandi, Principi di storia civile della repubblica di Venezia, Pt. II, Vol. I, Bk. V, pp. r-fo: "The entire century covered by this book is much more significant from the standpoint of domestic reform than of achievement abroad. . . . And, indeed, what matter of government could be more momentous than the establishment of an aristocracy essentially hereditary through the male line, whereby the dominant nobility was perpetuated in time and kept pure in blood? . . . The fact, accordingly, that the Grand Council had changed every year for almost fifty years . . . had called attention to the desirability of reform in it. But the discussion continuing down to about the year 1286 [read: 1296], it was finally conceived that there could be no wiser way of avoiding intrigue, faction, and other civic improprieties than by forming at that time a first fixed Council made up of the best-qualified citizens, and in numbers so comprehensive as, without destroying or transforming the original design of aristocratic government by an excessively large membership, to satisfy the common desires of the people living at the time; which Council so formed would thereafter be definite, stable, and permanent. With that
was decreed that the Book of Gold should be kept open for twenty years and that nobles of the Venetian mainland to the number of forty could inscribe their names in it. But the mainland counts seem not to have taken very enthusiastically to the concession. ${ }^{2}$
2501. The Venetian governing class did not shrink in numbers as the Spartan did, but it declined to extremes in character and vigour. The difference was chiefly due to the different sorts of activities in the two aristocracies, civil for the Venetians, military for the Spartans. In Venice, possession of an aggressive personality was good ground for keeping a man in private life, and the State Inquisitors carefully extirpated any plant that gave promise of too exuberant growth. In Sparta only those individuals remained among the "peers" who had the energy and the physical strength to endure the heavy burdens of military discipline. In Venice noble rank was indelible, and was retained even by the decadent. In Sparta incompetents were extruded by the "peers" by automatic elimination. Of the two obstructions to free class-circulation, the one-the nonadmission of new elements-was common to both Venice and
in view, there could have been no safer and more tranquil procedure than to declare the prerogative of sitting in the Council an original characteristic and essence in the legitimate descendants of the first nobles by the male line, with perpetual succession. . . . Finally on the last day of February of that Venetian year the Doge moved and the Council accepted the famous law of 1296, which has commonly and traditionally been known as the Closure of the Grand Council, to which, in truth, the Republic owes its survival."
$2500^{2}$ [As a matter of fact nine families accepted. The system in Venice was not as rigid as Pareto represents it. The Venetian citizenship at large was at all times liberally extended to foreigners. Furthermore, under the class of patricians registered in the Book of Gold came the order of "originary citizens," which largely monopolized the bureaucracy of the state. The "second nobility" was open to any family that had not practised a manual trade for three generations. The citizens in turn could become patricians on invitation and by money payments. Around 1651, to replenish a treasury greatly depleted by the Turkish wars, the patriciate made an active propaganda to enroll citizen families on payment of 100,000 ducats. Few, if any, accepted, and largely in deference to sentiments of group-persistence: respect for the old traditions of the Republic, good taste. There was, instead, a rush of "speculators" to assume the new privileges: the Naves, rich paper manufacturers, the Benzons, silk merchants, the Griffonis, bakers, the Gallos, tanners, etc. For ample data on this matter see Molmenti, Storia di Venezia nella vita privata, Vol. III, pp. 37-39, and Vol. I, pp. 7r-78. For the strength of prejudices against upstarts in the patriciate see my Vita veneziana nel '600, Venice, Calegari, 1913, pp. 45-47.A. L.]

Sparta. The other-failure to eliminate decadent elements-had more far-reaching effects in Venice than in Sparta. ${ }^{1}$
2502. Common again to both Sparta and Venice was the use of force for maintenance of power, and to that their long survival was mainly due. They both succumbed, not to internal transformations, but to force majeure coming from without. ${ }^{1}$ There were also some differences in their manner of using force. The Venetian governing class grasped the fact that the masses by themselves could do nothing unless they were led by elements from the governing class; and it aimed primarily at preventing such clements from becoming available. How effective that policy was is evidenced by the long survival of the Venetian aristocracy in power, even during times when it had lost all vigour except in the traditional habit of striking in time at every possible leader of a future upset. The Spartan governing class did not, to be sure, neglect that method of governing, and time and again the Ephors showed themselves the equals of the State Inquisitors of Venice. But whether because of Sparta's military activity, or for other reasons, they were much less effective than the Venetian Inquisitors; and that is why Sparta had better captains than Venice. The Spartans were defeated not from any lack of bravery, but by shortcomings in strategic science. In the days of her decline Venice was deficient in both respects.
2503. Sparta would probably have improved her governing class by recruiting individuals distinguished for combination-instincts (Class I residues). Venice, on the other hand, would have fared better had she strengthened her patriciate with individuals distinguished by instincts of group-persistence (Class II residues). There is no way of knowing whether the Spartan population contained the elements required by the governing class. Venice surely
$2501^{1}$ [In Venice, as is well known, the resort for penniless aristocrats was to the dole. The relicf was distributed in the square at San Barnaba, and those who received it came to be known as "Barnabots." A. L.]
$2502^{1}$ That is strictly true in the case of Venice. In the case of Sparta the mercenarics of Cleomenes figure to some extent. Polybius, Historiae, IV, 4I, 12-13, soundly notes: "So, after Lycurgus had established his laws, the Lacedaemonians had an excellent republic and very great power down to the battle of Leuctra. After that, fortune now turning against them, their republic went from bad to worse. In the end, many troubles, many civil seditions, afflicted them. They suffered many new divisions of lands, and many exiles, and they dwelt in direst slavery down to the tvranny of Nabis."
had them. Speaking of the days when the Republic was tottering, Malamani well observes: "However, in the midst of that orgy, that pagan funeral-banquet at which most of the Venetian aristocracy were feasting, the populace, more tenacious of its traditions than any other class, was still clinging almost entirely to the uncompromising purity of its time-honoured customs. . . . Rarely did corruption make its way into the humble homes of the working-people. . . . They lived to themselves, forming a society apart, with their own customs, their own laws. Under crude exteriors they still kept the worship of the family alive." ${ }^{1}$
2504. Venice evinced strong-hearted patience in her misfortunes. She lacked boldness in her day of prosperity. It has been said over and again that Venice was ruined by the discoveries of America and the Cape of Good Hope, which diverted trade that had formerly been conducted through her harbour. But at the time of those discoveries, Venice was the leading maritime power on Earth. Why could she not have made conquests in the Americas, the East Indies, and the Sunda Islands, as did Spaniards, Portuguese, Dutch, French, and even Danes? No reason, except lack of initiative on the part of the Venetian patriciate, which, perchance, had it been reinvigorated by new stock from its people, might have mustered greater daring and greater interest in new ventures.
2505. In the victory at Lepanto a leading rôle was played by the Venetian galleys, which carried guns of a power at the time unequalled. The combination-instinct had not yet deteriorated, therefore, in Venice. ${ }^{1}$ What was lacking was the energy to profit by it.
$2503{ }^{1}$ La satira del costume a Venezia nel secolo XVIII, p. 122. Like almost all present-day historians, Malamani mistakes the morals of a class for energy and, what is worse, sex morality judged according to Christian standards. But aside from that easily removable defect, his book contains much that is sound.
$2505{ }^{1}$ Giustiniano, Dell' historie venetiane, pp. 668-721: "And in the first encounter [at the battle of Lepanto] the heavy galleys of the Venetians attacked the enemy impetuously, and through their valour was the road opened to the victory of the Christians. For as the galleys of the enemy came together in close formation to fall upon ours, they were so battered and discomfited by the artillery fire from the heavy galleys, which delivered terrific broadsides, that the lines of the Barbarians were broken, and on that side took virtually to flight; for seeing the damage that six galleys only were doing, they began to foresee what the others could do, something which the Turks had never imagined. . . . But of the captains of the Venetian flect . . . Francesco Duodo, commander of the heavy galleys, won most special and singular glory. . . . For having broken the Turkish lines with his

After the victory at Salamis the disproportion between the power of Athens and the power of the "Great King" was greater than the inferiority of Venice to the Sultan. But the Athenians were daring. Their fleet swept the seas in pursuit of the Persians. After Lepanto the Venetians cautiously repaired to Corfù, and their inaction cost them all profit from their victory, which remained a sterile gesture. The last years of the Republic were yeas of extreme decay and great poyerty. Not even on the sea did Venice preserve a shadow of her power. ${ }^{2}$
2506. The Spartan aristocracy won a well-merited fame for its fortitude in the face of reverses. In the Venetian aristocracy the underhanded tyranny of the State Inquisitors extinguished even sentiments of personal integrity. When the Venetian aristocracy was still young and could boast greater vigour, it produced a Marin Falier. Had the conspiracy which he attempted, along with an energetic commoner, succeeded, the Venetian aristocracy might have had a less inglorious end. But one cannot say that populace and bourgeoisie would have been happier and not more unfortunate had they been driven out upon the stormy seas of revolution and exposed to the usual evils of political and social unrest. Owing to the different origins of the respective governing classes, religious prejuartillery (as I said above), he was of great assistance in winning the victory, as is witnessed by the patents awarded him by Don Juan of Austria and Marco Antonio Colonna. . . . Many master workmen from the Arscnal were sent from Venice to Pola, where the said heavy galleys had been beached, to repair them, for those galleys have great power at sea. And the old Venetians designed those naval machines, for they were very skilful in maritime matters; and in designing seagoing vessels the Venetians surpass all other nations abroad."
$2505{ }^{2}$ Daru, Histoire de la république de Venise, Vol. V, pp. 216-17: "At that time the forces of the Republic amounted, as regards seaworthy craft, to eight or ten ships of the line, some few frigates, and four galleys. A score of vessels more or less were in process of construction, but the Venetians could not manage to get them finished. When the French entered Venice in 1797, they found thirteen ships and seven frigates on the ways, not enough materials being available to complete them. Of the thirteen ships, two had been laid down in 1752, two in 1743, two in 1732. These last were sixty-five years old before they were ready to enter the water! All that ship-building equipment was a device for keeping up a mere illusion. The vessels were all of light timbering, carrying only twenty-four-pounders in their lower batteries. They could not get out of the harbour with the guns aboard, and had to be armed outside. The officers had long been without any opportunity to acquire experience, and a merchant marine that kept not more than four or five hundred vessels busy could not supply enough sailors to man a formidable fleet."
dice was very strong in Sparta, but it was weaker in Venice, in the various periods of her history, than in other states. In 1309 the Venetians let themselves be excommunicated by the Pope, but snatched Ferrara from him all the same. Later on, on May 25, 1483, Pope Sixtus IV again excommunicated the Venetian Republic. The Council of Ten did not see things that way, and ordered the clergy to continue services as though no excommunication had been heard of, and the Council was scrupulously obeyed. ${ }^{1}$ No better fate awaited the bull issued by Pope Julius II against the Venetians, who were defeated by the temporal arms of the League of Cambrai, not by the spiritual weapons of the Church. ${ }^{2}$ With a monitory of April I7, 1606, Paul V threatened to excommunicate both the Doge and the
$2506{ }^{1}$ Macchi, Storia del Consiglio dei Dieci, Vol. IV, pp. 30-33: "In spite of such great precautions the bull of excommunication reached Venice by way of Mantua. It should be said, however, that in deference to government orders, the patriarch, Maffeo Gerardo, sent the despatch still sealed and unopened to the Council of Ten. Following his example, the majority of the clergy swore obedience to the government, and such few as felt obliged by conscience to submit to the Pope's order were banished. Venice appealed to a General Council, whereupon the Pope replied with another monitory. . . . The Venetians, to tell the truth, took little notice of such excommunications." In a note Macchi paraphrases the Diary of Marin Sanudo: "'The bull was sent by the Pope to Don Maffeo Girardo, patriarch of Venice, that he should publish it, sub poena excommunicationis, maledictionis, suspensionis, et interdicti. Hearing which the Seigniory, together with the leaders of the Council of Ten, auctoritate sua, ordered seizure of the letter of excommunication, and forbade that it be in any way seen or published. And seeing that such an unjust excommunication was not of the kind to be obeyed, the Heads (capi) of the Ten gave orders that sacred offices be celebrated as usual in all churches "under pain of our displeasure." '" Malipiero, Annali veneti, pp. 282-83: "Not many days passed before the Pope sent one of his mace-bearers specially to Don Maffio Ghirardo, patriarch of this city, with a letter of his commanding him to serve the interdict upon the Doge and the Seigniory. . . . The Patriarch feigned illness and informed the Doge and the Heads of the Ten of what had happened, and the Patriarch was ordered to keep the whole thing secret and that it should not be executed in any particular. . . . An appeal was put in official form in three copies, and laid before the Doge and the Seigniory, which sent it to Rome by Traversin Bergamasco, a very trustworthy courier, with orders to post one of the copies on the door of the Church of St. Celsus. The courier went, and diligently executed the commands that had been given him, and by the ninth of July was home again. On the morning of July 3 the Pope was told of the Seigniory's protest, which had been posted the night before, and he was also told that the whole city of Rome was astir with excitement. And for all the diligence that was used, no one found out how the thing had happencd until long after."
$2506^{2}$ Daru, Op. cit., Vol. III, p. 331: "All such threats were nothing but empty formulas, objects of contempt even on the part of the clergy."

Senate unless they satisfied the demands of the Pope within twentyfour days. "And if the Doge and the Senate should persist three more days after the twenty-four, 'he will place the whole dominion under interdict, so that neither masses nor divine offices may be celebrated. . . .' On the publication of the monitory at Rome Venice began by appealing to divine aid. . . . Then all ecclesiastical prelates were commanded not to publish the monitory or allow it to be posted in any place. Anyone possessing a copy of it was bidden to deliver it, under penalty of death, to the magistrates in the city of Venice and to rectors in the Dominion. . . . The monitory so being taken as null and void, it was thought sufficient to 'protest' with printed letters to be posted in public places. . . . Thereupon, of the religious orders, the Jesuits, the Capuchins, the Theatines, the Reformed Franciscans, departed from Venice. . . . But no other orders left. Divine offices were celebrated as usual. The city and the people remained very calm at the will and through the foresight of the Senate, no blood being shed and no life lost." ${ }^{3}$ That was possible only because there was no fanaticism either in clergy or people, a circumstance that assured the government of obedience during its controversy with the Pope. ${ }^{4}$ Venice favoured no schism, no heresy.

[^104]She concerned herself with her temporal interests and gave little or no thought to theology. That may have been shrewd policy on the part of the government as a way of avoiding offence to the Roman Curia, but to no small extent it was also a matter of indifference to religion, of weakness in Class II residues. ${ }^{5}$
2507. The example of Venice is an excellent one for getting a clear picture of the composition ( $\$ \$ 2087$ f.) of social forces, of the necessity of considering them quantitatively and not merely qualiatively, and of the heterogeneous character of the various sorts of utility.
The custom followed by the Venetian Government of entrusting command of forces on the mainland to foreigners to the exclusion of native patricians was a source at once of military weakness for the Republic and of strength in its civil institutions, which were not exposed to the danger of being overthrown by some victorious general. Scarcity of Class II as compared with Class I residues assured the Venetians a happy existence for generation after generation, over many centuries-something altogether contrasting with
people were oppressed under that name by individuals who coveted their goods. . . . But when Nicholas IV was elevated to the pontificate . . . he insisted so urgently that it was resolved to recognize the Office, but under this limitation: that it should cause no disturbance. . . . Here we must stop and observe that the Office of the Inquisition in this Dominion is not dependent upon the Roman Curia, but upon the Most Serene Republic, and that it is independently established and constituted by the same." Carpi goes on to mention several instances in which the Popes abused their spiritual power to attain temporal ends, and concludes: "Which things make it evident that since some individuals maliciously avail themselves of that Office to advance secular and dishonest interests, the manner of its exercise has to be carefully supervised that no pretext be given for abuse of it. . . . For hundreds of years ecclesiastics have had no other purpose than to usurp temporal jurisdiction, much of which they have usurped to the serious disruption of governments."
$2506{ }^{5}$ Daru, Op. cit., Vol. IV, pp. 174-75: "To be perfectly safe from encroachments on the part of the ecclesiastical power, Venice began by being careful to give it no pretext for interfering in state affairs, and remained uniformly faithful to dogma. None of the new opinions ever found the slightest favour in Venice. No heresiarch ever came from Venice. Church Councils, church quarrels, religious wars, took place without her ever participating in the slightest way. Steadfast in her faith, she was not less consistent in her policy of toleration. Not only did her subjects of the Greek faith retain their bishop, their priests, their forms of worship, but Protestants, Armenians, Mohammedans, Jews, all religions, all sects, that had believers in Venice, had their churches also, and burial in the churches was not at all denied to heretics." That was the policy of the Roman People under the Republic; and we must again repeat in this connexion what we have said many
the hardships, disasters, massacres, that fell upon the unlucky inhabitants of countries where Class II residues predominated and fanaticism was a curse upon men. But the same scarcity was also, to an extent at least, a cause of the fall of the Venetian Republic. And the question arises: Is it better, or not better, to purchase a happiness of many centuries, of many many generations of people, with the loss of a country's independence? There would seem to be no answer to such a question, for it implies comparisons between two heterogeneous utilities. The problem is set to almost every country in all periods of history, and is solved now in one sense, now in the other, according to the value sentiment attaches to the present or to the future utility, to the utility of the individuals living or of those who are to come after them, to the utility of individuals or to the utility of the nation.
One might ask: Could both extremes not be avoided and some middle course found that would reconcile the utility of living generations with the utility of generations to come? This second probtimes heretofore, that the art of government lies in using existing residues and not in essaying the difficult and often desperate task of clanging them. Daru adds: "There is a story that once a foreigner in the presence of a Venetian was reproaching the government of the Republic for keeping priests in such an insignificant position, and accusing the nation, or at least the patricians, of unbelief and irreligion. 'Why,' he said, 'they believe in the mystery of the Holy Trinity, at the very most!' 'E ve par poco, signor?' the Venetian interrupted ('Isn't that believing a-plenty, sir?')." Sarpi, Op. cit., Chap. 24: "They shall not allow the Office under any circumstances to take action against Jews, or against any other kind of infidels of whatever sect, on accusation of crimes committed by word of mouth or by deed. . . ." Chap. 25: "Likewise they shall not allow the Office of the Inquisition to take action against any person of a Christian nation that as a whole has its own rites, different from ours, or is ruled by its own prelates, such as the Greeks and other such nations, even though the accusation were against articles held by one party or the other." Sarpi goes on, Chaps. 24-25, to give the reason for these provisions: "Infidelity is not heresy, and of the violations that infidels commit to the offence and in contempt of our Faith no cognizance can be taken by the Church. . . . The Office of the Inquisition outside of this state claims authority to try Oriental Christians on any article whatsoever, even if the nation as a whole dissents from the Roman Curia. In this Most Serene Dominion, having regard to the protection that the Prince accords to the Greek nation, the Inquisitors do not carry their claims so far. They merely say that the Greeks may be tolerated as to those three opinions in which they dissent from the Western Church; but that if any one of them should hold an improper opinion on those articles upon which their nation is in accord with us, that is within the jurisdiction of the Inquisition. That distinction is superfluous, and no less inconsistent with the protection of the Prince than if such persons were tried on the three matters of difference."
lem is no easier to solve than the other. In the first place, the difficulty of comparing the heterogeneous utilities of the present and the future is attenuated, to be sure, but not removed; for to evaluate the middle course it will also be necessary to affect a composition of the two utilities, and according as sentiment prefers the one or the other, the middle course will be bent towards one extreme or the other. Then again, the new problem carries us into the difficult field of virtual movements, and in order to solve it we must first solve another intricate problem as to whether it is possible ( $\$$ I34) to remove certain ties and establish certain others.
Such difficulties are not, in general, perceived by writers on social or political matters, since they solve problems not according to data of experience, but according to their own sentiment and the sentiment of people who agree with them. Their reasonings, therefore, have little if anything in common with logico-experimental science. They are derivations, more or less, of the type of metaphysical and theological theories and little more than mere manifestations of sentiment. As such they are to be classed with the derivations that we have already examined in general; they follow their oscillations and present, from the extrinsic standpoint of social utility, their merits and their defects. Their oscillations, like, in that respect, the fluctuations in ethics, are much less extensive than oscillations in mere theories, since considerations of social utility prevent their straying very far from the extreme where sacrifice of one's own advantage to the advantage of others, of the individual to the community, of the present generation to the future, is preached. They almost always voice sociality sentiments (Class IV residues) that are much more vigorous than anything their authors, or those who approve of them, actually feel. They are, as it were, a vestment that it is decorous to be seen wearing.
2508. In Athens the governing classes may be thought of in two ways. We have, in the first place, the Athenian citizenry, which was a governing class with respect to slaves, aliens, and the inhabitants of territories under Athenian dominion. Then within this class, we get a new division, with an élite that actually governed.
2509. The first class, the class of Athenian citizens, remained as exclusive as possible. That the money which they had extorted from the allies might be enjoyed by as few as possible, the Athenians, at
the instance of Pericles, decreed in the year 45 r b.c. that only individuals both of whose parents had been Athenian-born should be Athenian citizens. ${ }^{1}$ Generally speaking, in the heyday of the Republic, the Athenians awarded the citizenship with very considerable reluctance. Says Beauchet: "In the first half of the fourth century (в.c.), two bankers, Pasio, and his successor, Phormio, famous through their associations with Demosthenes, might be mentioned among freedmen who were made citizens.... However, the rarity of such allusions in Greek texts shows that citizenship must have been accorded quite grudgingly to aliens and freedmen." ${ }^{2}$
2510. The effects of such obstacles to class-circulation were attenuated by the salutary fact that, sporadically, sudden mass-admissions of great numbers of citizens took place, although these can in no wise be taken as corresponding to the selection that results from normal circulation in classes.
2511. After the fall of the Pisistratides, Cleisthenes conferred citizenships in large numbers, probably with the idea of strengthening the plebeian party of which he was leader. ${ }^{1}$ It is not at all clear that these new citizens were selected elements. The inhabitants of Plataea, who had been driven from their own city and, later on, the slaves who fought in the battle of the Arginusae, obtained limited rights of citizenship. In a word, there was never any circulation in the strict sense of the term.
2512. On the other hand, within the body of citizens a governing class with free circulation had been formed as early as the days of Solon. The Areopagus comprised the best elements in the population and, like the Roman Senate at one time or another, and the English House of Lords, it constituted an aristocracy of magistrates. ${ }^{1}$ Aristotle states unequivocally that when the Athenians restored the

[^105]Areopagus to its ancient authority after the battle of Salamis, they enjoyed excellent government. ${ }^{2}$
2513. Even Grote, who is a great admirer of the Athenian democracy, grants that Athens attained her maximum prosperity at the time of the outbreak of the Peloponnesian War; and, without having the remotest inkling of our theory, he notes that before that time literature, the arts, and philosophy had been backward (indicating weakness in Class I residues), while thereafter "although the intellectual manifestations of Athens subsist in full or even increased vigour, the energy of the citizens abated" (prevalence of Class I over Class II residues, which are gradually failing)-a notable instance, therefore, where a maximum of prosperity is yielded by a certain proportion between Class I and Class II residues, an excess in either proving alike harmful. ${ }^{1}$
2514. Another interesting example would be the case of the
$2512{ }^{2}$ Aristotle, De republica Atheniensium, 23 (Kenyon, p. 43): "As a result of that service [the service rendered just before the battle of Salamis] they [the Athenians] deferred to it [the Areopagus] and were governed excellently and to their great advantage."
$2513^{1}$ Grote, History of Greece, Vol. VI, pp. 150-51 (in question the famous oration on the war-dead of Athens that Thucydides, Historiae, I, 140-44; Smith, Vol. I, pp. 238-53, puts into the mouth of Pericles, §54I): "Connected with this reciprocal indulgence of individual diversity, was not only the hospitable reception of all strangers at Athens, which Periklês contrasts with the xenêlasy, or jealous expulsion practised at Sparta-but also the many-sided activity, bodily and mental, visible in the former [Class I residues.], so opposite to that narrow range of thought, exclusive discipline of the body, and never-ending preparation for war [Class II residues.], which formed the system of the latter. . . . So comprehensive an ideal of many-sided social development . . . would be sufficiently remarkable, even if we supposed it only existing in the imagination of a philosopher; but it becomes still more so when we recollect that the main features of it at least were drawn from the fellow-citizens of the speaker. It must be taken, however, as belonging peculiarly to the Athens of Periklês and his contemporaries; nor would it have suited either the period of the Persian war, fifty years before, or that of Demosthenês, seventy years afterwards. At the former period, the art, the letters, and philosophy [adverted to with pride by Periklês], were as yet backward, while even the active energy and democratical stimulus, though very powerful, had not been worked up to the pitch which they afterwards reached: at the latter period, although the intellectual manifestations of Athens subsist in full or even increased vigour, we shall find the personal enterprise and energetic spirit of her citizens materially abated." Grote tries to explain that by the Peloponnesian War, but the main cause, really, was the disappearance of the old aristocracy, which had been replaced by an aristocracy of demagogues and sycophants. No Pcloponnesian War forced the Athenians to bestow the succession of Pericles upon a Cleon!

Albigenses. The cloaking they used for their sentiments, their doctrine, seems to have been an offshoot of Manicheism, and ideas of that sort were current in a number of countries; but the movement thrived primarily in countries that were economically prosperous, in other words, in Italy, where there were not a few heresies (well diluted by the usual Italian scepticism), in Flanders, and most notably, in Southern France. In the twefth century Provence was more flourishing in both material and intellectual domains than other Latin countries. People there had grown rich, and their literature, earlier than the Italian, was the first of our literatures in the vernacular. The contrast with Northern France, a poor, ignorant, uncouth region, is very striking In the South Class I residues predominated, in the North Class II residues held the lead by far (Paris, with its university, was an exception). ${ }^{1}$ As often happens in such cases, one notes in the South, on the one hand an absence of religious sentiments, and on the other, religious fanaticism; on the one hand extremely loose morals, on the other, excessive strictness. In the Courts of Love, matters of sex were treated mirthfully. In the meetings of the heretics licentious gaieties were mercilessly condemned.
2515. Schmidt gives an excellent description of conditions in Southern France in the twelfth century, which, after all, were very much like what was again to be witnessed during the Renaissance in Italy and in other economically prosperous countries. ${ }^{1}$ There is no

[^106]lack of testimony to the shrewdness of the Provençaux of the twelfth century. Raoul de Caen devotes a whole chapter to a description of the capers of the men of the South on Crusade. They had brighter wits than the French of the North, but were also less courageous; whence the saying: "Les Francais pour- Les combats, Les Provencaux pour les vieres." He tells how they would slyly wound a horse or mule in the intestines in such a way that the wound could not be seen, and the animal would die. The French, good souls, would be nonplussed at such a thing and cry: "Let us away! Forsooth, the Devil hath blown upon this animal." Then "like crows the Provençaux would gather about the carcass and cut it in pieces, each of


#### Abstract

emotions no keener but with their fancies stimulated by the splendours of the


 East. . . . The clergy itself had been caught by the light, frivolous spirit of the nobles. . . . In the towns things were very much the same. After a long and spirited fight to rid themselves of feudal domination, the burghers had on the whole triumphed over their sometime oppressors by the end of the twelfth century. Enriched, some by commerce with the East, others by industry, the towns were proud of their prosperity and defended their municipal liberties with everincreasing success. The burghers imitated the manners and morals of the nobles, rivalling them in courtesy and bravura. They too were poets and could become knights and gentlemen if they chose. . . . All that had resulted in an atmosphere of freedom and religious tolerance that had its counterpart in no other country of Christendom at that time. Any opinion could be expressed without untoward consequence. . . . At the close of the twelfth century, the social and political situation in the South of France was still the same as at the time when the Catharist Church threw off all mystery and publicly organized in those territories. . . . Increasing prosperity in the towns had developed an increasing sense of freedom in the inhabitants. Strong in their municipal institutions, they were resolved to defend their independence against anyone who should try to encroach upon it. In the courts of the princes, in the castles of the nobles, in the towns, politeness and good manners had acquired a polish that filled the Southerners with pride, whereas the poorer and cruder barons of the North could look only with envy upon the joyous poetic life of the chevaliers of Provence and upon the opulence of the Southern burghers. The more advanced civilization of the South, combined with an ingrained assuetude to civic and political liberty, had given rise to the spirit of religious toleration that had so extensively favoured in previous generations the propagation of doctrines counter to the dogmas of Rome. That spirit was so much the order of the day that not only was there a Catharist Church quite peaceably existing side by side with the Catholic; but the Waldenses had also succeeded in organizing flourishing communities. There were noble families, such as the Counts of Foix, where members of the two sects met. . . . The gay worldly life of the laity had found its imitators in the clergy. . . . The Pope and the provincial synods continually complained of such decadence, but their protests had no effect. . . . Anarchy had gone so far that on the eves of the saints' festivals, people danced and sang profane songs in the churches. . . . For the greatest scandals prelates themselves were responsible."them carrying a share away, either to eat it themselves or to sell at market." ${ }^{2}$
2516. To see a merely religious war in the Albigensian Crusade would be to stray far from realities. Looking at derivations, one may well point out that the doctrine of the Catharists was a form of Manicheism, admitting two principles, one good and one evil. But in advancing to the conquest of the rich and blossoming lands of the South the Crusaders from the North were not in the least concerned whether there were one, two, or sixteen principles, and most probably they would not have understood head or tail of those complicated and fantastic arguments. They were interested in the booty, the pretty women, and the fertile lands that were soon to be theirs; and, as always happens, those who had wealth, but not the courage to defend it, saw it taken from them by those who were poor but had the energy to fight and win. ${ }^{1}$
$2515{ }^{2}$ Histoire de Tancrède, pp. 129-30: "Just as the hen is in all respects the opposite of the duck, so the Provençaux differ from the French in morals, intelligence, habits, and manner of living. . . . In times of famine they rendered much better service by their activity than men of other stocks who were better fighters. . . . They went much too far, however, in just one thing, and in a way very discreditable to them-their greed; for they would sell dog-flesh as hare and donkeymeat for goat-meat." (Then comes the story of the horse and mule.)
$2516^{1}$ Writers altogether favourable to the Crusaders from the North cannot overlook their greed and their cruelties, though as usual laying the blame on human frailty. Guillaume de Puy-Laurens, Chronique, pp. 264-65: "The following winter, Foucaud de Brigier and John, his brother, with a number of other knights, again ranged the same country they had pillaged once before and made much booty there. . . . This Foucaud was a very cruel man, full of pride. He had made it a rule, it was said, to put to death any prisoner of war who would not pay him a hundred sous in gold, torturing him by starvation in a subterranean dungeon and then when he was brought before him dying or dead, ordering him to be thrown into a cesspool. . . . For that matter, one ought not and could not recount all the infamies that the servants of God committed. Most of them had concubines and kept them publicly. They carried off the wives of other men by brute force and committed such crimes and a thousand others of the same sort with impunity. Now they did not act that way, surely, in the spirit that had brought them thither. The end did not square with the beginning. They did not offer in sacrifice the tail along with the head of the victim. In a word, they were neither hot nor cold, but merely lukewarm. Wherefore the Lord began to vomit them forth from His mouth, and to drive them from the country which they had conquered." Yes, but meantime He had allowed them to conquer it. Martin, Histoire de France, Vol. IV, p. 204: "The pontifical 'pardons' consisted of a remission of all the sins the Crusader had committed since his birth, and further in an authorization to withhold payment of interest on all debts for the duration of the campaign. Hope of escaping their debts
2517. So among the nobles in the South, who were kindly disposed towards the Albigensian heresy, there may have been some few who were prompted by soulful theological conceptions, but the motives of many of them were more material and tangible. ${ }^{1}$ Something very similar was observable during the Reformation, when many German princes were rather more attentive to appropriating Church properties than to interpreting the Scriptures, ever regarding as the soundest text the one that brought the desired goods into their hands with the least trouble.
2518. The masses, as usual, were inspired by envy of the comforts of the higher classes, and that sentiment was much more powerful than any ingenious theological theory. Traces of that fact are discernible in many writers, among others in Etienne de Bourbon, who had judged the Albigensians as an Inquisitor and was thoroughly acquainted therefore with their ways of thinking. Again as usual, a-wave of asceticism and religious ardour was rolling up from the lower social strata and threatening to engulf the whote of society ${ }^{1}$
2519. The prelates of the South were leading luxurious lives. Lovers of culture and of cultivated society, they were gradually divesting themselves of the intolerance of the more barbarous prel-
and especially of pillaging the beautiful manor-houses and the rich towns of the Languedoc was more than enough to set in cry all the adventurous nobles of Christendom. One may judge of the power the lever of fanaticism would have when reinforced by such a cogent motive. All the passions of greed and bloodthirstiness of which the human heart is capable were let loose with terrifying violence."
$2517^{1}$ Guiraud, Cartulaire de Notre-Dâme de Proutille, Vol. I, Preface, p. celxiv: "Antagonism reigned between the ecclesiastical and the lay nobility, the latter trying to rob the former, the former trying to recover at the first opportunity the properties that had been usurped to their loss. The Albigensian heresy profited by that fairly general state of things."
$2518^{1}$ Anecdotes historiques, §251: "I have heard from the friars in Provence that when the heretics in the Albigensian districts are being persuaded by Scripture and reasons, they have no stronger argument for defending their error and misleading the simple-minded than the bad deportment of Catholics and especially of the prelates. At a loss for other arguments, they keep hammering on this point: 'See what these and those are like, and especially the prelates! See how they live! See how they strut! Not as the ancients, not as Pcter, Paul, and the others, do they walk!'" And cf. Ibid., §83. Those good souls who found fault with such of the clergy as enjoyed life were later imprisoned, tortured, and burned by a clergy that better conformed to their ascetic notions. Great was their profit by the change!
ates, who were poor, ignorant, fanatical, and enforced their authority cruelly, as such people always will. ${ }^{1}$ A similar situation arose in the sixteenth century in the conflict between the fanaticism of the Reformation and the sophistication of a Leo X. From the standpoint of a certain ethics, the immorality of the clergy of those days marked a lowering in the level of civilized living; from the standpoint of intellectual freedom, tolerance, comfort, progress in the arts, it marked a rise in that level. ${ }^{2}$ Humanity would have been
$2519{ }^{1}$ Guiraud, Op. cit., Preface, pp. cclviii-ix: "Looseness in the Higher Clergy: To tell the truth the looseness of morals and lack of discipline in the higher clergy favoured the spread of the heresy much more than any more or less hypocritical adherence on their part to its doctrines. The efforts the Councils made to effect reforms show the full extent of the evil that had to be remedied in order to restore to the Church, along with her supernatural powers, the means of resisting the moral ascendancy which the Perfects enjoyed over the masses. . . . Chaplains and Heretics: Another chaplain, the Chaplain of Cadenal, lived with a Perfect, Squire Pons, for two years, taking all his meals with him. He knew very well that he was breaking bread with a full-fledged heretic, but little he cared! A priest serving as boon companion to a Perfect! Interesting indeed!" Had it not been for the Albigenses and the reaction that they provoked, people in Southern Europe at least would probably have been enjoying from those early days a liberty of conscience that has hardly been won in our own.

Whyte, Histoire des langues romanes, Vol. II, p. 193: "The conduct of the prelates was not only a flagrant violation of all principles of morality. It manifestly showed, further, that they regarded Christianity as a simple ritual of ceremonies, as a mask for the vilest hypocrisies, as a store-house of specifics for the execution or absolution of all crimes." Yet under those prelates there was little if any persecution for beliefs, whereas under their ultra-moral successors persecutions went to terrifying extremes of cruelty. As for the crimes, they seem to have been fewer under the old ones than under the new ones. At any rate, there are no signs of any decrease. [Pareto says "increase"-evidently the opposite of what he means.-A. L.]
$2519{ }^{2}$ Daru, Histoire de la république de Venise, Vol. IV, p. 181: "To judge by its policy, the government seemed to believe that if they were to be more manageable, the pcople of the Church had better have some leeway. They were therefore allowed a freedom in morals which all the population of Venice at all times enjoyed." In a note Daru quotes from a relazione by a foreign ambassador: "The clergy indulge in conduct that is quite inconsistent with their status and would not be tolerated in them in any other country. They evade obedience to their superiors, who cannot restrain them, and the authority of the apostolic nuncios over them is brought to nought. . . . If at the time of the interdicts (\$2506) all the clergy in the Republic had been observers of their rules and obedient to their superiors, not only would they [the Ten] have been unable to force them to conduct divine offices, but there would have been hundreds of priests ready to rouse the people with sermons and protests. Yet, with the above-named allegiance null and void, all the friars and priests in the Republic sided with the government."
spared an enormous amount of suffering had such tides of religious feeling not flooded those promised lands ( $\$$ 170I).
2520. We have already learned from facts on facts that derivations are of little importance from the standpoint of the logical consequences that may be drawn from them, but of great importance from the standpoint of the residues of which they are symptoms, the sentiments that they express. The humanitarian and ascetic trends in the Catharists have to be considered from that point of view. As theories they have no importance; as symptoms of manners of feeling in the people who had those humanitarian, those ascetic inclinations, they serve to explain why the doughty warriors of the North defeated the spiritless Southerners. ${ }^{1}$ So the declamations of a Tolstoy, who went about preaching non-resistance to evil and other such insipidities, have not the slightest importance as theories, but great importance as indications of the state of mind of people who admire them, and so they serve to reveal one of the causes of the defeat suffered by the Russians in their war with Japan. Says Tocco: ${ }^{2}$ "And along with riches, he [the Perfect] condemns honours and power, for which mankind in fatuous yearning strives, not sparing bloody wars or the wiles of fraud to attain them. But war is a thing of violence, which followers of the Evil One may desire and require in their fury, but not assuredly meek creatures of the good God, who always condemn war, even when it is provoked by others or waged

[^107]in self-defence. And no lcss than war do they condemn taking human life, going so far as to deny that public authorities have a right to put law-breakers to death. These heretics preached the abolition of capital punishment in the full midst of a violent bloodthirsty society." ${ }^{3}$ And that is why they perished by fire and sword, nor could it have been otherwise.
2521. When a society is weakening through lack of Class II residues, through humanitarianism, as a result of a failing in the energies that encourage the resort to force, a reaction often occurs in a part-it may be a small part-of that society. But it is interestipg to note that instead of tending to stimulate residues that would contribute to reinvigorating the society, as would be the case if it were a logical reaction, the reaction is chiefly manifest in an intensifisation of residues that have no bearing, or very little, on the preservation of the society, and it so betrays its non logieat origins.
Among the residues so stimulated nearly always observable are the residues of the sex religion, which are the ones least beneficial to society and indeed may be called altogether useless. The fact is easily explainable if one but consider that those residues are active in moderate intensities in almost all human beings and that an increase or decrease in them may in many cases serve as a thermometer for gauging intensities in other classes of residues, among which those that are beneficial to society. It then comes about that, in trying to provide a logical vesture for their non-logical impulses, people take the symbol for the thing and imagine that by influencing the sex religion they can influence the residues of which it may be serving as a symptom. That procedure, which is very widespread among human beings and in connexion with other religions besides the sex religion, is like imagining that one could get summer
$2520{ }^{3}$ Tocco annotates the quotation with comments as follows: "Not sparing bloody wars: From Moneta, Adversus Catharos et Valdenses, V, 13, Pt. I, §3 (p. 513): 'Those heretics disapprove of all war as unlawful and say that it is not lawful to defend oneself. . . .' P. 515: 'They also point to Matt. 5:38-39: "Ye have heard that it hath been said, An eye for an eye and a tooth for a tooth. But I say unto you that ye resist not evil.", P. 5I7: 'And Matt. 22:7: "And he destroyed those murderers." "And Matt. 5:44: "Do good to them that hate you.", Abolition of Capital Punishment: From Sacconi's Summa [?], p. 486: 'They say that secular authorities sin in punishing criminals or heretics by death.' And Évrard de Béthune [Adversus Waldensium sectam, XV (Migne, Vol. XXIV, p. 1556Bg)] reports that the heretics commonly quoted the line: 'Dictum est: non occides.'"
heat in winter by adding enough mercury to the tube in a thermometer to make it register the number of degrees desired.
2522. A weakening in those non-logical sentiments that make for the preservation of society provoked in the days of the Perfects a reaction characterized by an extraordinary sex asceticism; then similar reactions during the Renaissance, such as Savonarola's campaigns; and in our own day the stupider reactions to which we have many times alluded. All of them are and have been not only not beneficial, but positively harmful, to society, as affording a certain amount of satisfaction to the instincts of social preservation and thereby preventing them from turning in a direction where alone they could do effective service towards strengthening the residues of group-persistence (Class II), which latter constitute the foundations of society and stimulate the belligerent spirit that preserves it. ${ }^{1}$
$2522{ }^{1}$ Schmidt, Op. cit., Vol. II, pp. 68-69, describes the strange beliefs of the Catharists: "The best-accredited opinion was that the souls of the first men had been angels. The Devil shut them up in material bodies in order to prevent them from returning to Heaven. But a means also had to be found to chain them in perpetuity to the wicked world, and that means the Evil One thought he had found in the propagation of the human species by the sexual union. He conceived the plan of seducing Adam through Eve, and designed to trap them both into sinning in order to make them for ever his slaves and snatch them from the heavenly world. Introducing them therefore into his false Paradise and forbidding them, the better to excite them, to eat of the tree of knowledge, he himself took possession of a serpent and began by misleading the woman-whence the awakening of the will to evil, of carnal concupiscence and all its consequences. According to the system of mitigated dualism, the forbidden fruit was nothing but the commerce of man with woman. . . The sin of the flesh, the fornicatio carnalis, is the truly original sin, and the greatest of sins, for not only was it committed by free-will, thereby constituting a deliberate revolt of the soul against God, but it was also the means Qf perpetuating a wicked and enlarging the kingdon- of Satan. Towards the end of the twelfth century in Italy, some few partisans of mitigated dualism belicved that after creating Eve the Devil had intercourse with her and that Cain was their son. Of the blood of Cain sprang the race of dogs, whose devoted attachment to men proves that they were of human origin." Worthy predecessors, those, of our modern sex-reformers. Moneta, Adversut Catharos et Valdenses, I, i, § 2 (p. III): "Now we are to see what the sin of Adam was (Adae genitive of Adam), according to them. . . . They say that Sathan shut up another angel in a female body made from a rib of Adam while he was asleep. It was with this woman that Adam sinned. The sin of Adam, they assert, was carnal [i.e., actual, not spiritual] fornication. They also say that he [i.e., Sathan] courted Eve et cum cauda corrupit cam, and from his embrace with her Cain was born." Moneta quotes, loc. cit., note 8, Moses Bar-Cepha: "Some of them think that what Adam tasted of was not [the fruit of] a tree, but the amorous embrace he had with his wife." Moneta continucs, loc. cit.: "Dicunt ctiam quod mulicr in luxuria assucfacta ad Adam ivit ot
2523. The Counts of Toulouse were destroyed not because they were immoral, but because they lacked faith and courage. Compare the scepticism of Raymond VI and his son, Raymond VII, with the shrewd fanaticism of Simon de Montfort. In 1213 the Provençaux and the Aragonese were besieging Muret. Simon led his army to the relief of that stronghold. He had many fewer soldiers than the enemy, but faith and courage made up for that. Disdaining all suggestions that he avoid a battle, he attacked, and won; and at last, as befitted the brave man he was, he fell at the siege of Toulouse, struck in the head by a stone and pierced by a number of arrows. ${ }^{1}$
2524. The unlucky Counts of Toulouse could never make up their minds as to the policy to follow. By fits and starts they would try resistance; then they would lose courage and give up the fight, throwing themselves on the mercy of Pope and King, humbly begging forgiveness. ${ }^{1}$ They never grasped the fact that to win a victory qualiter cum ipsa coiret ostendit et suasit, et sicut Eva suasit ei, sic Adam opere complevit, et istud esse esum ligni scientiae boni et mali asserunt." Similar derivations are to be found among Catholic writers as well. Strangest among the strange is the notion that certain sex sins were the cause of the Flood: Sanchez, De sancto matrimonii sacramento disputationes, IX, disp. 16 (p. 215).
$2523{ }^{1}$ Pierre de Vaulx-Cernay, Histoire de la guerre des Albigeois, pp. 269, 341-42: "Now all our men, counting knights and mounted men, did not number more than eight hundred, while it seemed as though the enemy were a hundred thousand. We had besides very few footmen, in fact almost none, and such as we had the Count had forbidden to go out during the battle. [The author's figures are certainly exaggerated. He means simply that there was a great disproportion in numbers between Montfort's army and the Provençaux and Aragonese.] When the enemy began that sortic, a messenger rushed to the Count, who . . . was hearing Mass, and urged him to go at once to the rescue of his men. 'Suffer me,' he replied, 'to attend divine service.' He had barely said the words when another messenger came." But the Count chose to remain till Mass was over. Then he said: "Come now, and if necessary, let us die for Him who deigned to die for us.' "
$2524{ }^{1}$ Guillaume de Puy-Laurens, Chronique, pp. 281-82. In 1229 Count Raymond VII threw himself on the mercy of the Franco-Papal legate, and accepted a treaty of peace which was so humiliating to himself that the writer could only believe it due to God's watchfulness over the Kingdom of France: "I must not fail to say that the kingdom having fallen to a woman with her children, as King Philip, the grandfather, had feared would happen after the death of his son, the surrender of Raymond happened only by will from Above and the goodness of the King of Heaven, protector of the French. [And Guillaume might have added, "of assassins and thieves."] Indeed, as the first auspices for the reign of the young prince, God willed so to honour his childhood on the occasion of such a long war with the said Count, that of the several clauses contained in the treaty each would alone have been sufficient ransom had the King met the said Count on
one must be ready to die weapon in hand, and so became worthy predecessors of the piriable Louis XVI of France, who also, instead of fighting, threw himself upon the mercy of his enemies and delivered his friends to them, the way the Counts of Toulouse delivered their loyal subjects into the hands of the Inquisition. Force of arms is what decides who is to be saved and who to perish, who is to be master and who slave. Tyrtaeus had told them that in verse long long before. ${ }^{2}$ On the terrible trials that the Spartans inflicted upon the Messenians at the end of their first war, he says: "Their backs bending under the loads they bear like beasts of burden, they carry to their masters one-half the crops of their fertile fields. . . . The men and their wives must dress in mourning and weep and wail if baneful Atropos snips the life-thread of any of their conquerors."
2525. The Southerners in France were defeated by the warriors from the North for the same reason that the Athenians were defeated by the Macedonians, and the Carthaginians by the Romans: because their instincts of self-preservation were too weak as compared with their combination-instincts.
2526. The contingency of contact and of the use of force between peoples possessing Class I and Class II residues in differing relative proportions is a factor that must not be overlooked. If for any reason force is not or cannot be used, a people widely varying from the relative proportions that assure the maximum of power in a struggle does not succumb to the people that has proportions more closely approximating that maximum. And the same may be said of the different social classes. The position of equilibrium varies according as force figures to a greater or a lesser extent.
2527. If one compares the French populations in the North and the South as they stand today, the relative proportions of Class II and Class I residues are seen to be not so very different from what they were at the time of the Albigensian Crusade. But since now-

[^108]adays force no longer figures in the relations between the districts, which are now two sections of one same political unit, a safe guess would be that the situation would be the reverse of what was observable in the days of the Albigensian Crusade, and that the South, where Class I residues by far predominate, would be the one to master the North, where Class II residues predominate. That exactly is what we observe. It has been many times remarked that the majority of the ministers and politicians who are at present governing France hail from the South. Where shrewdness is the outstanding requirement in society, Class I residues have a value they do not have, and by far, where force is the primary consideration. And conversely for Class II residues. ${ }^{1}$
2528. China was for long years exempt from pressure emanating from external force and was able to get along with a very exiguous

[^109]proportion of Class I residues. Stimulated now by the example of apan, she is beginning to innovate-to increase her supply of Class L residues ( $\$ 2550^{2}$ ).
2529. Even more remarkable than the case of the Albigenses is that of the Italians during the Renaissance. Towards the end of the Middle Ages Italy was so far superior to the other European countries in every branch of human activity that one can hardly imagine how she should have failed of restoring the Roman Empire and have undergone instead a new era of barbarian invasions. Italy surpassed all other countries in wealth. Her bankers were lending money to individuals and governments the world over, and names such as "Lombard Street" and the "Boulevard des Italiens" survive to our day as fossil witnesses to an age that is past. Literature, science, the arts, were flourishing in Italy while they were still in their infancy in other countries. Italians were scurrying hither and thither over the whole terrestrial globe. A Marco Polo was visiting unknown regions in Asia, a Columbus was discovering America, an Amerigo Vespucci was giving it its name. Venetian diplomacy was the first in the world. Lorenzo de' Medici in practical statecraft, Machiavelli in theoretical statecraft, had no peers.
2530. But was it only in the arts of civic life that Italians were distinguishing themselves? By no means! They were showing their talents in the arts of war as well. Francis I of France and Charles V of Austria both competed for the services of Andrea Doria as commander of their fleets. Piero Strozzi became a marshal of France; Leone and Filippo Strozzi served honourably in the French armies. The condottieri may have had many viees, but great captains were to be counted among them. ${ }^{1}$
2531. Why, then, when circumstances were so favourable, was Italy herself conquered instead of being the conqueror? The answer
$2530^{1}$ Burckhardt, Die Cultur der Renaissance in Italien, p. 91 (MiddJemore, pp. 115-17): "Italy . . . was the first to use the system of mercenaries. . . . She first relied on Germans, but during the period of the Renaissance some good Italian soldiers were trained among the foreign mercenarics. . . . New inventions meantime [firearms] made their way forward, and every advantage was taken of them. The Italians became the teachers of all Europe in matters pertaining to ballistics and military engineering. There were princes such as Federico d'Urbino and Alfonso d'Este of Ferrara who acquired in those special branches a superiority that dimmed even the reputation of Maximilian I. Italy was the first to make warfare a science, and a complete and rational art."
comes at once: Because she was divided. But why was she divided? France and Spain had also been divided, but they had achieved their unity. Why had that not happened in Italy? For the very reasons that had brought her the many blessings of wealth, intellectual prosperity, and a subtle refinement in the arts of war and statesmanship. Because in her case combination-instincts far surpassed group-persistences in importance. Other nations where relative proportions in residues diverged less widely from the combination that assures a maximum of power necessarily had to invade and conquer Italy once they established contact with her. That is exactly the case of Rome and Greece. ${ }^{1}$
2532. The evils that befell Italy as a result of her shortage in the instincts of group-persistence were, to an extent at least, perceived by Machiavelli, who "like an eagle soareth" over the multitude of ethical historians (\$ 1975). He uses, it is true, the term "religion," but as designating any religion, a fact which-along with his considering religions quite apart from any intrinsic truth they may have, quite apart from their theological content, as Polybius, Strabo, and others already had done-clearly shows that Machiavelli was thinking of the instincts that are manifested through religious derivations, in other words, Class II residues. Like all other writers, Machiavelli's manner of expressing himself premises the assumption that the conduct of human beings is entirely logical and a consequence of the residues functioning in them. But that does not affect the substance of the reasoning in his case, for whether the derivations act directly or are mere symptoms of the residues in which they originate, the conclusions remain unaltered. In the same

[^110]way, one cannot blame Machiavelli for accepting the old Roman legends at face value. They were taken as history by everybody in his time. And that again does not detract from the force of his reasonings, for, after all, what he says of Romulus he understands as applying to military institutions in general, and what he says of Numa, as applying to religious, and other kindred institutions.
2533. In the Deca, I, $\mathbf{I I - 1 2 ,}$ he writes: "If one consider the Roman histories attentively, apparent is the great advantage that lay in religion for disciplining the armies, holding the people in hand, keeping men good, and shaming the wicked; so that if one were to debate to which prince Rome owed the greater debt, whether to Romulus or to Numa [If one were to debate whether the greatness of Rome depended on her military institutions or on the sentiments manifested in what the Romans said of religion.], I believe that Numa would obtain the first rank, for where there is religion arms can readily be introduced, but where there are arms but no religion, it is a difficult matter to introduce religion. . . . And if one were to found a commonwealth in these times one would undoubtedly find it easier to do so among people of the hills, who are not civilized [Who are rich in Class II and poor in Class I residues.] than among people who are accustomed to living in cities, where civilization is corrupt." [A lapse into one of the usual moralistic derivations.]
2534. "Those princes," he continues, "or those republics which would endure uncorrupted, must above all keep religious ceremonies intact and hold them always in veneration." Machiavelli, notice, says "ceremonies," not "dogmas," and, nominally a Christian, he is speaking of the religion of the pagans. That is coming very close indeed to a theory of Class II residues.
2535. But Machiavelli states his thought even more clearly: "The leaders of a republic or a kingdom must therefore maintain the foundations of the religion which they profess [Derivations are of little, residues of very great, importance.]; and if they do that it will be an easy matter for them to keep their state religious [With a proper proportion of Class II residues.] and consequently, sound and united. And all things that come up in favour of religion they must second and promote even though they believe them false." In that Machiavelli is talking like a scientist, not like a fanatic.
2536. Of Italy he goes on to say, 1, 12: "And since some are of
opinion that the welfare of Italy depends upon the Church of Rome, I would state against that view such reasons as occur to me, and in particular two very strong ones, which, in my judgment, admit of no rebuttal. The first is that owing to the wicked ensample of the Court of Rome this country (provincia) has lost all devotion and all religion, which thing carries with it no end of disorders. For where there is religion the existence of all that is good may be taken for granted, and so where there is no religion, the contrary may be presumed. We Italians therefore stand in debt to the Church and the priests for this, that we have become without religion and wicked. But we owe them a still greater debt, which is the cause of our ruin -that the Church has kept and is keeping this country of ours divided."
2537. There Machiavelli stops at the surface of things. It may well be that the Papacy was keeping Italy divided; but why did Italians tolerate such a thing? Why did they call the Papacy back, when it had found a home in Avignon? Why did they not allow it to remain there, or object to its coming back to be a nuisance to them again? Certainly not for religious reasons-they had no religion; but because the presence of the Papacy in Rome favoured certain of their combinations; because their Class I residues prevailed over their Class II residues.
2538. The Reformation in Germany was a reaction on the part of people strong in Class II residues against people strong in Class I residues-a reaction of German force and devoutness against Italian intelligence, cunning, rationality. Since the appeal was to force the Germans won. Had there been no resort to force, the Italians might have won. Had the mediaeval German Empire survived to our time and continued to include Italy, the Italians of our day would probably be governing Germany, the way Frenchmen of the South are ruling France.
2539. Rome. The social evolution of Rome has as usual to be sought out behind the derivations that obscure it in the histories. First we must rid ourselves of ethical derivations, which not only appear in the histories of Rome and other countries, but beset us in daily life as well ( $\$ 2161$ f.). Then we must be on our guard against religious derivations. They are conspicuous and explicit in Bossuet, for instance, and figure more or less disguised in many other Chris-
tian writers, who never can speak of Roman history without cluttering their pages with comparisons between Christian manners and morals and pagan manners and morals. Many modern writers are not so concerned with Christian theology; but the gain is small, for they merely replace it with other theologies, democratic, humanitarian, or the like. We may ignore the theology of sex, which we have elsewhere discussed at sufficient length. It may be responsible for a good many absurdities, but has led to no very serious distortions of the history of Rome.
2540. In the particular case of Rome we again meet in their general forms the errors we identified above ( $\$ \$ 233$ f.). All such derivations have a common cause-the fact that we look at events through glasses that have been coloured by our sentiments. A few writers who are at some pains to be impartial, and succeed after a fashion in being so, use lenses of the brighter tints. The majority revel in the stronger colours, and sometimes select their dyes deliberately, more especially dyes of religion and dyes of patriotism. To believe certain German writers and their imitators in other countries, patriotism ought never to be missing. Such writers habitually regard history as a study of the evolution of a very pretty metaphysical entity of their own invention that they have baptized with the name of "State," which, they say, was born and spent its infancy in Rome but did not, needless to say, attain full-grown perfection till the present German Empire came along. Another colouring, imperceptible though rarely absent, arises in the implicit assumption that every "evil" recorded by history could have been avoided had proper measures been taken to deal with it ( $\$ \$ 2334-35$ ). Underlying that assumption is another that, roughly, human society would by nature be prosperous, happy, perfect, were its normal development not disturbed by occasional causes that it would be possible ( $\$$ I34) to remove. That doctrine is very like the doctrine that the cause of human misfortunes lies in original sin, but it is less logical; for the original sin being still operative, it is easy to see why the evils that result from it continue to subsist, whereas if all the evils of society are ascribable to causes which it is possible ( $\$$ I34) to remedy, one cannot understand why not one, at least, of the many societies known to us through history has managed to show a continuous and uninterrupted prosperity. In the same way one
might say that if it is possible to make the human being immortal, it is exceedingly strange that all the human beings of whom we have so far had any knowledge have died. Actually the normal development of prosperity in human societies is along an undulating curve; and abnormal-so abnormal that no example of it has ever been witnessed-would be a line representing a prosperity that is at all times uniform, or uniformly increasing or diminishing (\$2338).
2541. When historians of the school mentioned consider the decline of the Roman Republic, they take it as axiomatic that the decline had a "cause," the problem merely being to find it in the conduct of the Romans living at that time, and that said cause must essentially be something different from the "cause" of the prosperity of the Republic, opposite conditions necessarily having opposite causes. It never occurs to them that successive situations, although opposites to each other, have a common "cause," an identical origin ( $\$ 2338$ ). If one is going to use the term "cause" in that way, one may say, as regards the individual, that ife is the "cause" of death, since life is ceftainly followed by death; and, as regards the species, that death is the "cause" of life, since, so long as the species survives, the deaths of certain individuals are followed by the births of others. And just as birth may be said to be common "cause" and origin both of life and of death, certain facts may be said to be common "cause" and origin first of prosperity and then of decline in a human society, and vice versa. ${ }^{1}$
2542. Another pitfall to be avoided is an oversimplification of extremely complex situations. In its general form, this error is frequently dissembled under derivations involving personifications, whereby we are tempted to consider as a single person presenting uniform interests and sentiments a group of persons presenting diverse and even contrary interests and sentiments ( $\$ \$ 2254,2328^{1}$ ). We may legitimately speak of the things that "Rome" or "Macedonia" did, provided those names are used for the mere resultants of the various forces that were at work in those countries. We begin to go wrong when we forget the great multiplicity of such forces,

[^111]and assume that "Rome" or "Macedonia" had one will or intent much as an individual has one will or intent. We know that in Rome, in the year 200 в.c., a number of Romans wanted war with Macedonia and a number of other Romans did not want any such war ( $\$ 2556$ ). As a way of stating the gross fact we might say that "Rome" did not at that time want war with Macedonia. Roughly to suggest some of the different elements that figured in the resultant, we could specify that the "Senate" proposed the war and that the "People" voted against it. Going on in that fashion, we could specify other elements in the resultant. It would be ridiculous and insufferably pedantic absolutely to avoid all such modes of expression, and we are on safe ground so long as we think of the things those names stand for. The error creeps in with the personification, develops with the development of the personification, and attains its maximum when the personification is complete. "Rome" did not have any single will with regard to war with Macedonia, in the sense in which some individual Roman might have had such a will. Nor did the "Senate" have any such will, nor the "speculators" who favoured the war, nor even various factions that might be mentioned in those groups. If we start with the complex "Rome" and gradually increase the number of elements we consider, we get closer and closer to reality, without, however, being able ever to attain it altogether. We get, in other words, a number of approximations. We cannot dispense with using them, and they cannot lead us astray so long as we take them for what they are and do not go beyond their particular significance.
It is a somewhat similar error to assume, be it implicitly, that the same name indicates the same thing at different moments in history. The names "Senate" and "People" remain all through Roman history. The things they designate change altogether from moment to moment. That was a common mistake with some historians in the past. Others avoided it. On the whole, it is less to be feared, because less insidious, than the error of personification, which continues to flourish in our day in writings too numerous to count that deal with "Italy," "France," "England," as though those countries were individual persons.
2543. But at this point two sand-bars rise in our course, and of them it might well be said: Incidit in Scyllam cupiens vitare

Carybdim. Hardly a century has gone by since people were writing history without caring about details, save for more or less romantic anecdotes that were dwelt on at length. Today the inclination is to gather every minutest detail and argue endlessly over matters of no importance. That is helpful as regards the preparation of materials, but not as regards using them. It is the work of the quarryman who cuts the stone, not of the architect who builds the edifice. When one is looking for uniformities, details big or little are to be thought of as means, not as ends. And one must abandon any hope of at once completing the theory one is in process of building, clearly understanding that only successive approximations can bring one to the desired goal. The main lines of a phenomenon are first drawn, then one goes on to the secondary, and so on, so contributing to the perpetual advancement of knowledge.
2544. All such lines are ideal and are obtained by abstraction; in other words, by looking for certain main elements in the concrete phenomenon that goes under a single name, though it is actually a composite of numerous elements. So we give the name of "clay" to a compound of a number of chemical elements, and the name of "humus" to a compound of a still larger number of chemical elements. That fact was not held in mind by writers who have dwelt at length on the struggle between "republican liberty" and "imperial despotism" in Rome, or by those who saw a struggle between the aristocracy and the masses in the ancient struggles between patriciate and plebs, whereas we now know well that it was a battle between two aristocracies. In times less remote the conflict between Senators and knights was by no means a simple phenomenon, as many have imagined; and adequate proof of that is the fact that Senators and knights stood shoulder to shoulder, in view of common interests, against the agrarian laws.
The lines alluded to are not geometrical, any more than the lines that separate the land from the waters of the ocean are geometrical. Only a presumptuous ignorance can insist on an exactness that the science of the concrete cannot attain. The terms of such a science must correspond to reality, but that is possible only within certain limits. No rigorous definition of "humus" or "clay" can be given, nor can one tell the exact number of years, days, hours, that separate youth from manhood. But that does not prevent experimental
science from using such terms, as qualified by the approximations to which they are subject. One attains the maximum of possible rigour in taking such approximation into account. Mathematicians themselves are obliged to follow that course in order to take advantage of so-called irrational numbers. ${ }^{1}$
2545. Let us try therefore to get a first rough notion of the matter in hand. We have already discovered that in social phenomena the manner in which human beings obtain the things required for living, and also for comfort, wealth, honours, power, is of great importance as regards both interests and sentiments, and we saw that from that standpoint it was helpful to divide people into two categories ( $\$ 2233$ ). Let us now see whether we encounter any uniformities along that route. If we do, we shall go on; if we do not, we shall turn back.
2546. In studying a number of different elements it is best to begin by classifying them. In the matter of class-circulation in Rome we must consider the following elements:
A: Norms regulating movement from one class to another.
A-r: Legal norms regulating movement from one class to another. In times bordering on the prehistoric there were serious legal obstacles to circulation. The early conflicts between patricians and plebeians were fought to remove them. Gradually they were abolished as regarded Roman citizens, and mitigated as regarded freedmen. Towards the end of the Empire, closed or quasi-closed classes reappear.

A-2: Actual movements from class to class. They depend primarily upon the ease with which wealth can be amassed in one way or another. They are very considerable towards the end of the Republic and under the early Empire.

## B: Characteristics of the new élite.

$2544^{1}$ The terms of experimental science correspond to realities within more or less extensive limits. The terms of theology and metaphysics correspond to no realities whatever or, if one prefer, do so within such vast limits that approximation is a matter of illusion. There is no doubt that things corresponding to the term "clay" exist, just as individuals who are "young" or "old" or belong to "social classes" exist. The doubt arises only as to the limits outside of which given things no longer belong to the category "clay," given individuals to the category "young," a given "social class," and so on. But as for "Zeus," "justice," "the good," all correspondence with experimental reality fails, and there is no question of limits.
$B$-I: From the ethnic standpoint. ${ }^{1}$ At first the new elements are Roman, Latin, Italian-the élite is rejuvenated without change in ethnic character. In the end they are predominantly Oriental-the élite changes completely in character. In the same way the relative proportions-differing in the various periods of history-of urban and rural elements in the governing class have to be considered. Belot probably attached too great an importance to such proportions, but there is some truth in what he says. He did, however, mistake the symptom for the thing. The material fact that a person lives in city or country is not the important fact. The important fact is the differences in sentiments and interests that are revealed thereby. With such sentiments and interests, therefore, we shall be concerned here, primarily.
B-2: From the standpoint of Class I and Class II residues. When the élite is in part retimbered from the newly rich, when agricultural occupations give way to financial and commercial enterprise, the governing class increases its stock of Class I residues and there is a falling-off in Class II residues. Towards the end of the Republic, a condition is reached where the ruling class is rich in Class I, poor in Class II, residues, while the subject class, especially in elements living far from the capital, is rich in Class II residues. With the Empire a movement in the opposite direction sets in as regards the ruling class, which increases in Class II residues to such an extent as to end, in that respect, on a level with the subject class.

B-3: From the standpoint of the aptitude for using force and the use actually made of it. In the beginning the citizen is indistinguish-

[^112]able from the soldier. The élite is homogeneous in that respect. It can use force and does so. Gradually the citizen becomes distinct from the soldier. The élite falls into two parts: a minority ruling primarily by force, a majority neither able nor inclined to use force.
2547. Phenomena succeed one another in time with very gradual modifications; but to describe them at all we are obliged to divide them off into groups corresponding to periods, fractioning, disjoining, a unity that is continuous. Yielding to that necessity, we shall consider the following periods of time, to which we set definite boundaries for the mere sake of convenience, much as we speak of youth, manhood, old age, in reference to human life, which passes as a single continuity with very gradual changes: I. From the Second Punic War down to the end of the Republic. II. From the accession of Augustus down to the Antonines. III. From the Antonines down to Gallienus.
We must never lose sight of the interdependence of the various elements in the social state, the elements $a$ (residues), $b$ (interests), $c$ (derivations), $d$ (social heterogeneity), as explained in $\$ 2206$. $^{1}$
2548. I: From the Second Punic War down to the end of the Republic. We may disregard earlier periods. Their history is uncertain and still more so their chronology. In the period indicated, the political, military, and financial power of Rome is on the increase and attains its maximum, and so for the manifestations of Roman intelligence ( $\$ \$ 2354$ f.). Economic freedom is very considerable.
A-I. Class-circulation as law:
Very appreciable at first, legal obstacles to class-circulation disappear as regards citizens. ${ }^{1}$ There is a tendency towards equality between the rural and the urban populations. Descendants of freed-

[^113]men of the second generation, exceptionally even of the first, obtain ingenuitas, or status as "well-born," and are admissible to the élite. A-2. Class-circulation in the fact:
War, commerce, and, in the end, collections of taxes open up many sources of wealth.. ${ }^{2}$ Class-circulation, in the fact, is intense without, however, being too rapid, on the whole, at least. ${ }^{3}$ It is the
$2548^{2}$ Mommsen, Ibid., Vol. III-1, pp. 510-11: "The ordo publicanorum is never identified with the ordo equester and cannot be, but both groups issued from that middle class which was formed by the exclusion of Senators from the public markets and of the equestrian centurias from the Senate. The leaders of both classes were largely the same individuals. In that sense, the politico-commercial leadership of the knights belonged to the publicans, and the unity of the publicans as a class made them specially adaptable to the organization of large business concerns." (Quotation continued in § $2549{ }^{8}$.)
$2548^{3}$ It begins with the slaves, continues with freedmen, travellers from abroad, and residents of foreign birth, goes on through the knights and Senators, then reaches as high as the Emperors. Towards the end of the Republic a slave could acquire his freedom within a few years. Cicero, Philippicae, VIII, 11, 32: "Since, O Conscript Fathers, we have conceived the hope of freedom after six years, after enduring servitude for a longer time than diligent and honest slaves usually serve . . ." We must not take this six-year term literally. Cicero merely found it a convenient simile for the theme of that oration. All the same, he would not have used it had the length of time in which a sober and industrious slave could win his freedom been a very long instead of a short one. Another passage in Cicero shows the rapidity of circulation in general: Pro Lucio Cornelio Balbo, 7, 18: "Before I come to the claims of Lucius Cornelius from the legal standpoint, it seems advisable for me, in order to eliminate all ill will from this case, to advert briefly to the common condition of us all. If, O judges, each of us had to remain from birth to old age in the station in which he was born or was placed by fortune, and if all those whom fortune has raised or who have distinguished themselves by their efforts and achievements were to be punished, it would not seem a more grievous rule or condition for Lucius Cornelius than for many another sagacious and energetic man. But if, instead, many men have risen by virtue, intelligence, and competence from the lowest levels of birth and fortune and acquired not only friendships and wealth, but honours, glory, public respect, the highest praise, I do not see why envy should offend the worth of Lucius Cornelius rather than that your fairness should manifest itself in behalf of his modesty." Mommsen excellently explains the character of Roman nobility: Römisches Staatsrecht, Vol. III-1, pp. 462-65: "The nobilitas is not, to be sure, a right of birth, as the patriciate is, but it too is hereditary. It is an acquisition of the person but it is passed on to the agnatic descent of the first acquirer, or rather it begins with his descendants. The person who does not enter the circle by right of inheritance, the 'new man' (homo novus), is not himself nobilis, but he ennobles his descendants. . . . When the ordinary curule magistracies in the city . . . became open to plebeians . . . the magistrate acquired with his office for himself and his agnatic descent . . . the body of rights designated by the term nobilitas. The 'new man' made of his posterity a new family of the Roman nobility. The most important advantage the nobilitas procured was also one that was least suscep-
norm-with, to be sure, various exceptions according to the times -and it will remain the norm down to the fall of the Empire, that a family can rise but gradually in social station. A slave may become a freedman. His grandchildren are free born-ingenui. If they attain public office they can enter the equestrian order, and their descendants can acquire nobilitas. The same individual-providing always the norm be observed-can obtain public offices only in a prescribed order. The general movement, slow at first, is accelerated towards the end of the Republic. Then we get a period of anarchy in which rules are not at all strictly observed.
$B$-I. Ethnic character of the élite:
The whole or virtually the whole élite is made up of native elements. Towards the end of the republic, however, come great and sudden changes in the citizenry and in the élite.4 The Social War
tible of being legally determined. It lay in the fact that descendants of the 'new man,' as belonging to the hereditary nobility, could compete on a footing of equality with the nobles for appointments in the various magistracies and pontificates."
$2548{ }^{4}$ Records of only a few cases have come down to us, but the probability is that there were many such. Plutarch says of Sulpicius, Sutla, 8, 2 (Perrin, Vol. IV, p. 349), that "he sold the Roman citizenship to freedmen and foreigners, openly counting the money on a table that stood in the Forum." Marius conferred citizenship upon a thousand of the inhabitants at Camerinum at one time. Reproved for that, he said that "he could not hear the voice of the law for the rattling of so many swords" (Plutarch, Marius, 28, 2; Perrin, Vol. IX, p. 541). Sulla and Pompey conferred citizenship upon anybody they chose. Appian, De bellis civilibus, I, ıоо: "He [Sulla] added to the People more than ten thousand slaves belonging to individuals whom he had proscribed, selecting them from among the youngest and most promising. In giving them their freedom he made them Roman citizens, and they were called 'Cornelii' after himself"-he being their patron, they his clients. A law decreed (Cicero, Pro Lucio Cornelio Balbo, 8, 19) "that those who had individually been made citizens by Pompey, on recommendation of his Council, should be Roman citizens." In that connexion Cicero stresses the advantage to the Roman People of conferring citizenship upon men who showed themselves worthy of it. He was met with the objection that allies could not be made citizens except with the consent of their nation. Replying, he says, among other things, that it was a pity that allies could not be rewarded in that way, while the citizenship was being conferred upon so many others: "For we see the citizenship being conferred on many tributaries from Africa, Sicily, Sardinia, and other provinces, and we know that deserters from the enemy to our generals have been given the citizenship if they have performed great service to the state, and even slaves, who are of the lowcst order as regards social station and before the law, have been in many cases rewarded with freedom, and therewith citizenship, for distinguished scrvice to the country." Specifying many instances where Roman citizenship had been awarded, he incidentally drops the remark: "Many of those who have been admitted to citizenship from free and allied peoples have been freedmen." In the Pro Archia, io,
finally ended in the issuance of Roman citizenship to certain numbers of citizens in the Italic cities.

## B-2. Proportions of Class I and Class II residues:

Some of the new citizens were doubtless rurals and may have contributed a certain dosage of Class II residues to the Roman People; but the majority, we may be sure, were of the shrewd type, rich in combination-instincts, since only such had the talent for manocuvring in the stormy waters of those days and procuring the rights of citizenship from the powerful. The same may be said of the slaves who won their freedom. A comparison drawn by Dionysius of Halicarnassus between the freedmen of the old days and those of his time indicates that the latter teemed with Class I

25-26, he says: "If Archias had not been a Roman citizen by law, could he not, I wonder, have arranged to be made one by some general? When Sulla was bestowing the citizenship on Spaniards and Gauls, could he have rejected a petition from this man? . . . Could he not have obtained it for himself or for the Luculli from Quintus Metellus Pius, an intimate friend, who bestowed citizenship on many people?" Appian, Op. cit., I, 53, notes that at the end of the Social War all allies obtained citizenship except the Lucanians and the Samnites, and they got it later on. He also states that new citizens were more numerous than the old. Florus, Epitoma de Tito Livio, II, 6, I-3 (III, 18, I, Forster, p. 233), very soundly remarks that the allies and the Romans by that time constituted one people: "Since the Roman People has mixed Etruscans, Latins, and Sabines together and made one blood of them all, it has made one body of those members and is a unit made up of them all." Not all the cities, however, accepted rights of citizenship; and there were others where only a few individuals complied with the formalities required for securing them. Brundisium, for instance, must have been left out, for on his return from the war with Mithridates, Sulla exempted that city from paying taxes (Appian, Op. cit., I, 79). Carbo also created new citizens: Livy, Ab urbe condita, LXXXIV (Epitome): "The right to vote extended to the new citizens by a decree of the Senate." Throughout all this period, probably, citizenship was obtained for the most part by intriguers, "speculators," and their henchmen. The quiet, industrious elements, the small property-owners, probably did not go to the trouble required for obtaining it. Caesar dispensed citizenships and honours very freely: Suetonius, Divus julius, 76, 3: "He admitted to the Curia men on whom he had conferred citizenship, and some of them were semi-barbarian Gauls." The triumvirate of Octavius, Anthony, and Lepidus elevated many allies, soldiers, descendants of freedmen, and even slaves to the Senate (Dio Cassius, Historia Romana, XLVIII, 34, 4). Later on, becoming sole master under title of Augustus, Octavius decided to limit the number of slaves to whom liberty could be granted, that being an item in his program for reviving ancient customs in Rome (Dio Cassius, Ibid., LV, 13, 7; Suetonius, Divus Augustus, 40). In his will he advised Tiberius not to be too lavish in liberating slaves, nor in granting citizenships (Dio Cassius, Ibid., LVI, 33, 3). Such counsel, however, did not prevent the movement from continuing under his successors.
residues much more conspicuously than the former. ${ }^{5}$ They were also increasing, as compared with residues of group-persistence, in the governing element, which was taking in speculators in greater and greater numbers. The movement towards creating new citizens has to be kept distinct from the movement modifying the élite; and in this latter movement we have to distinguish a number of different aspects. There is, as yet, no shortage in warriors. After a few abortive attempts soldiers, in fact, are to seize power and establish the Empire. Speculators represent the majority in the élite. They may be seen forever shifting in the direction from which the wind seems likely to blow most favourably, now intriguing in the Forum, buying votes in the comitia as long as they find it profitable to do so, now switching with the greatest ease to the warriors if they see a chance of deriving some advantage from them. They are most conspicuous among the equestrians, but they are far from wanting in the other classes. Finally comes a class of timid and often honest souls who believe in the efficacy of the law against force of arms. They are constantly declining in vigour, and are busy digging their own graves. In written history such people appear chiefly among the Senators, among whom, however, not a few speculators are to be counted ( $\$ 2542$ ). ${ }^{6}$
We have already observed, for the general case ( $\$ 2338$ ), that causes which produce first prosperity and then decline are the same.
$2548{ }^{5}$ Antiquitates Romanae, IV, 24 (Spelman, pp. 193-94): "In the old days the slave most often secured his freedom gratuitously by reason of his courage and probity, and that was the best way of escaping from the control of the master. Some few paid their own ransoms, earning the money by lawful and honest toil. Not so in our day. Now everything is so confused and the morals of the Roman Republic have become so shameless and debased that some get the money required for purchasing their freedom (and straightway becoming Roman citizens) by thieving, pilfering, prostitution, and other crimes. Others become the accomplices and witnesses of their masters in poisonings, murders, and crimes against the gods and the Republic, and so [by blackmail] are rewarded by their owners with freedom."
$2548{ }^{6}$ Worthy predecessor of the Imperial Senate was that Republican Senate of which Marcius Philippus said that with such a body no government was possible. Ciccro, De oratore, III, I: "When Lucius Crassus returned to Rome on the last day of the public games, he was decply impressed by a speech that Philippus was reported to have delivered before the People, and in which he had said that he [Crassus] would have to see about getting some other counsel, since he could never run a government with that Senatc." Speculators and regular routineers who are satisfied with their present state are alike in the one respect that they both shrink from the use of force.

When an infant is born one may foresee approximately what he will be like when he has reached old age. So when circumstances are known, one may foresee the general lines of development that will be followed by aristocracies such as the Spartan or the Venetian, by peoples that hold apart from others, such as the Athenians or the Chinese, and by peoples whose ruling classes will be replenished with new elements, by military conquests and speculations, such as the Romans. A few brief words of Florus give the synthesis of the situation at the end of the Republic. He is impressed by the evils in which plutocracy had resulted.' But at first plutocracy had been a blessing, not a curse, for Rome. Polybius saw the good side. He knew Rome at a time when the causes that were later to bring on the collapse of the state were still contributing to its power and prosperity. He was struck with the fact that the whole population seemed engrossed in economic and financial activities. Substantially, under the somewhat different forms, the situation was in great part similar to what is observable in our day in our modern civilized countries. Polybius, Historiae, VI, 17, I-4 (Paton, Vol. III, pp. 30709), notes, in particular, manipulations of public contracts by the censors, especially the farming of taxes, and he remarks that virtually everybody was engaged in it. "Some," he says, "get the contracts from the censors themselves, others are in partnership with them, others are bondsmen, others mortgage their properties as bonds." There, in its cradle, is the creature that will one day be
$2548^{7}$ Towards the end of the Republic the equestrian order was for the most part made up of "speculators." Its power and its robberies in the provinces are familiar themes. Says Florus, Epitoma de Tito Livio, II, 5, 3 (III, 17, 3, Forster, p. 229): "The Roman knights had such great power that by embezzling the taxes they despoiled the state in their own right, as though they possessed the rank and station of emperors." And $c f . \S 2354^{1}$. Cicero, In Caium Verrem, III, 72, 168: "Certainly there would have been no escape for this man had the publicans, in other words the knights, been his judges." And Ibid., 41, 94: "In former days, when the equestrian order was a judicial body, even dishonest and rapacious magistrates in the provinces respected the publicans and paid honour to all who worked with them. Any Roman knight whom they met in a province they showered with favours and liberalities. . . . The knights thought at that time, I know not how, as it were by common consent, that anyone who had ventured to affront a Roman knight should be judged by the whole order as worthy of an evil fate." That is very much the situation with the plutocrats of our time, who are coddled and abetted by the parliaments, governments, and courts that depend on them (§2262 ${ }^{1}$ ).
named Plutocracy. An infant weakling, it remains subordinate. Once it gets its growth and its muscle, it will claim dominion. In the transition from the one situation to the other, it will bring power and prosperity to Rome. The people whom Polybius saw about him were busy exploiting the conquests of Rome, and their successors were to exploit them still more busily; and all the countries of the Mediterranean basin, even countries over which Roman rule did not as yet extend. ${ }^{89}$ To all of them might more or less be applied what
$2548^{89}$ Sallust, Bellum Jugurthinum, 4I, 7: "In military and domestic matters decision was taken at the arbitrary will of the few. The treasury, the provinces, public offices, the glories and triumphs, were in their hands. The people [Those who were neither speculators nor accomplices of speculators.] were burdened with military service and poverty. The generals, with a few others, laid hold on all the booty of war, and meantime the relatives and children of the soldiers were turned out of their homes if they chanced to be neighbours to someone more powerful. So with power came greed [Mere ethical declamation. Where did they get that power? They bought it in the comitia!] without bound or limit to usurp, despoil, pillage everything and to stop at nothing [More ethical declamation.] till at last it wrought its own undoing." At last a fact. According to Diodorus Siculus, Bibliotheca historica, XXXVI, 3, I (Booth, Vol. II, p. 55I), when Marius applied to Nicomedes, King of Bithynia, for auxiliaries to be used in the expedition against the Cimbri, he was told that the majority of the subjects of that king had been bonded in slavery to publicans. Cicero, Pro lege Manilia, 22, 65: "It is difficult, fellow-citizens, to describe in words how hated we are of the nations abroad because of the abuses and the greed of the men we have sent with plenary powers to rule them during these past years. What shrine in those lands do you think has been inviolate in the eyes of our officials, what citizenship sacred, what private house adequately locked and fortified? There is a search for rich and prosperous cities against which some pretext for war can be found in order to sate their thirst for plunder." In that oration Cicero is flattering Pompey. In another, De provinciis consularibus, he is trying to win the good graces of Caesar and defends the publicans who, he says, are being abused by Gabinius. But in so doing, he himself indirectly testifies, 5, 10, to the power of such speculators: "The poor publicans (and poor me-so deeply do I feel the hardships and tribulations of those deserving men) he (Gabinius) has reduced to servitude to Jews and Syrians, races born to servitude. [In Cicero's time evidently the Jews and Syrians were commonly regarded as born to be slaves and therefore proper subjects for exploitation at the hands of the publicans. Nowadays civilized nations feel the same way about the so-called backward countries, and hand them over to our modern speculators.] He began by deciding every case that came before him against the publicans and he held to that policy. He cancelled contracts that contained nothing abusive. He abolished their body-guards. He exempted many people who were paying taxes in money or in kind. He forbade any publican or publican's agent to stay in a town where he was or which he intended to visit." Ciccro concludes that the Senate ought to go to the rescue of such estimable public scrvants, in spite of the poverty of the Treasury-"in his angustiis aerarii." For the rest, Ciccro was well acquainted with the character of his good friends the publicans;

Cicero says of Gaul, Pro Marco Fonteio, V, ir: "Gaul is crowded with merchants, crowded with Roman citizens. No Gaul transacts any business save under the eye of a Roman citizen, nor does a piece of money circulate in Gaul without being entered in the ledger of some Roman citizen." And great in very truth was the economic and financial prosperity of those days, something similar, making the due allowances, to the prosperity of the modern civilized countries in the early years of the twentieth century. Then as now prices
and in a letter to Quintus he says that if the thing could be done without stirring up a hornet's nest, he would like to see a limit set to their rapacity-the letter, for all the world, is one that a gentleman of our time might write to some public official of his intimacy, advising him to "clean up"-but for Heaven's sake, no scandal! Ad Quintum fratrem, I, 1, 2: "As I think of the welfare of our allies, as I do my best to resist the shamelessness of many of our traders. . . ." Ibid., I, II, 32 (Williams, Vol. III, pp. 421-23) : "Your good intentions and your devotion meet a serious obstacle in the publicans. If we go against them we alienate both from ourselves and from the state an order that deserves well at our hands and which through us is bound to the state. On the other hand if we yield to them in everything, we allow those whom it is our duty to help and protect to be utterly ruined." (\$\$2300, 2268, $1713^{4}, 2178$ ). Loc. cit., 33: "I have heard from many citizens of the bitterness our allies are feeling on account of the publicans." Livy, Ab urbe condita, XLV, 18, 7, alludes to the difficulties involved in collecting taxes in Macedonia and specifically the tax on mines: "For they cannot be collected without the publican, yet if the publican is there, that is the end either of the public's due or of the liberty of our allies." Money was needed to buy votes in the comitia, and it had somehow to be procured whether by "voluntary" gifts on the part of the provincials or through robbery, cunning, force, usury, and so on. Not to buy votes at Rome was a strange exception. Cicero approves of certain liberalities, and if he condemns others, he seems to do so the better to stress such exceptions, among them his own case. In De officiis, II, 17, 58-59, he begins by saying that any suspicion of stinginess of character must be avoided: "Vitanda tamen est sutspicio avaritiae." The ideal of the time in fact was the speculator who earned much and spent freely-the plutocrat of our day. Cicero mentions the case of one Mamercus, who was rejected for the consulate because he had not first stood for the aedileship, an office that called for far greater expenditures. He concedes that one may even venture on liberalities that are not approved of by the best opinion: "If a thing is demanded by the people, it is the part of wisdom to do it, even if it be a thing of which honest men do not approve but which they nevertheless condone-always, however, within one's means, as we [I] did ourselves [myself]; and so likewise if some greater and more useful advantage is to be acquired by popular largess, as was the case with Gnaeus Orestes, recently, who won great honours by giving dinners in the streets on pretext of paying a religious tithe." Lucius Philippus, he says, and Cotta, and Curio, used to boast that they had obtained their first honours without money. "And I too," he concludes, "might in some degree make the same boast, for considering the amplitude of the honours that I attained with unanimous votes . . . the expense of my aedileship was trifling."
were rising and luxury was on the increase. ${ }^{10}$ Evidently such numerous and important interests on the part of the populous class of speculators represented a power that would be strong enough to gain the upper hand in public affairs, unless it were offset by another force of equal or almost equal weight ( $\$ \$ 2087 \mathrm{f}$.). In the day of Polybius shrewd politics were still adequate for that purpose. Polybius notes, Historiae, VI, 17, 5, 6, that all the contracts handled by the censors depended upon the Senate: "and there are many cases indeed where the Senate can greatly damage or, on the other hand, bencfit farmers of taxes or managers of public enterprise." ${ }^{11}$ And lo, in that, a force which, whether as help or hindrance, has to be reckoned with by the plutocrats, whose activities consequently will be more beneficial, indeed far more beneficial, than harmful to the Republic, and at the same time an obstacle, surmounting which corruption and violence will have a free hand until a greater force, the force of arms, supervenes to check them! A person so placed as to be able to be of help or hindrance to other people is the target of either corruption or violence. That is observable in all periods of history ( $\$ 226 \mathrm{I}^{1}$ ), present and past explaining each other mutually. A political body endowed with such powers is also a target for the rivalries of people who aim at overthrowing it and getting its power into their own hands. Furthermore, people who depend on such a body, or on its rivals, sooner or later perceive that it would be better not to depend on anyone; and then the plutocracy begins to take over power. It might have been foreseen that the Senate would not be left in peaceful possession of its prerogatives; that corruption and violence would change in forms according to the body in power,
$2548{ }^{10}$ Plutarch, Marius, 34 (Perrin, Vol. XI, pp. 555-57), relates an incident that is altogether parallel to things that go on in our day and which shows the great rise in values of real estate, an ever infallible symptom of mounting economic prosperity. The dictator owned a beautiful house near Misenum. It had been bought from one Cornelia for 75,000 drachmas and was resold soon afterwards to Lucius Lucullus for $2,500,000$ drachmas. "So suddenly did sumptuousness increase and to such degree did prosperity tempt to extravagancc."
$2548{ }^{11}$ Cato the Censor (Plutarch, Cato Major, 18-19; Perrin, Vol. II, pp. 355-57) picked his quarrel with the speculators on ethical grounds, and as usually happens in such cases, got nowhere. The Senate stood by the speculators, just as parliaments and legislatures do in our time. Cato lowered prices paid on contracts for public works and raised percentages on the tax-farmers. The Senate annulled his contracts, and the tribuncs imposed a fine on Cato!
and meantime grow gradually more obstreperous with the increase in the rewards expected and realized from them. It also fell to Polybius to observe one of the ways in which the Senate managed to cling to power-its prerogative of sitting in judgment in cases arising under both private and public law. And it might therefore readily have been foreseen that the battle would be joined about that privilege, as was in fact the case, as everybody knows.
B-3. Use of force:
The élite is still in great part a military class, but a growing distinction between military and civil functions is already manifest. ${ }^{12}$ The army, furthermore, which had at first been largely made up of property-owning citizens, rich, therefore, in Class II residues, tends to become in part a collection of paid soldiers, of men therefore who are the tools and the supporters of leaders rich in Class I residues. ${ }^{13}$
$2548{ }^{12}$ Mommsen, Römisches Statsrecht, Vol. I, pp. 505-06: "In the day of Polybius, early in the first century b.c., the law required at least five years of service of an applicant for the military tribuneship (cadetship), and at least ten for a civil magistracy, the quaestorship in particular. Since that was the general length of obligatory service in the cavalry and the people who aspired to those offices served without exception in the cavalry, one may say that no one could begin a political career till he had completed his military service." The ten years did not have to be spent all in actual service. According to Mommsen, p. 508, "Since the age of fortysix marked, in principle, the limit for obligatory military service, proof of completion of service was not demanded of a man above that age, and consequently anyone who had not completed the ten years, or even who had not served at all, was eligible from then on." Military service ceased to be required by law towards the end of the Republic, though, p. 509, "it was still customary . . . for aspirants to a political career not to shirk military service altogether." For a comparison of this state of things with the situation under the Empire, see § $2549^{9}$.
$2548^{13}$ The trend sets in under Marius, who recruited his legions in large part from proletarians. Sallust, Bellum Jugurthinum, 86, 2-3: "He enrolled his soldiers not according to ancient custom nor from the registered citizens (ex classibus) but taking anyone who chose to join him and many men without property or civil status (capite censos). He did that, some say, because of a lack of reputable men, according to others from motives of ambition, for he gained in fame and power from that sort of people; and surely to the man who is seeking power the pauper will prove most useful, for the pauper has nothing to lose and so has no worries about property, and everything that promises gain to him seems honeurable." That seed was to sprout and yield the Empire as its crop. Stopping at the fact that Marius, as a proletarian leader, opened the army to proletarians and in that was the predecessor of Caesar, one readily gets the impression, which at one time generally prevailed, that the Empire represented the triumph of the Roman masses in their war on the aristocracy. And if, in the same way, one stops at the fact that Augustus stripped
2549. II: From the accession of Augustus down to the Antonines. We are still close to the maximum observable in the previous period, but a decline is setting in. Government by manipulation has given way to government by force. It is no longer necessary to bribe the comitia, for they have been stripped of their power and will soon be disappearing. Violence in the comitia will soon give way to the violence of the praetorians. But under Augustus and Tiberius the praetorians are still under the control of the Emperor; they are tools of government, not themselves government. Speculators are held in leash-they can still do a great deal of good and not so very much harm. We get a period very like the days when they were checked by the prestige of the Senate and the weight of the rural citizenry. But just as the old form of government produced a period of prosperity and then a period of decline, so the new form of government is to show a similar evolution; and just as the earlier period had revealed first the good points and then the bad points of a government depending primarily on cunning (Class I residues), the new period is to show first the good points and then the bad points of a government resting primarily on force (Class II residues).

## A-I. Class-circulation and the law:

As regards the legal norms bearing on class-circulation a tendency towards crystallization sets in in this period. ${ }^{1}$ We find a no-
the comitia of all power and set out to revive ancient customs, one gets the impression that the Empire represented a reaction against popular liberties. But if one refuses to stop at surfaces and looks a little more deeply into those very complex developments ( $\$ 2542$ ), it is readily apparent that the showering of rewards on the proletarians were means, not ends, with the military leaders, and that such means were used by a democrat, Marius, an aristocrat, Sulla, and by a Caesar and an Octavius, who were neither democrats nor aristocrats. The military leaders used for their purposes mercenaries, proletarians, the Senate, the knights-in short anybody and everybody who could be of any help to them and would consent to be used. If in so great a flux of changing fact we would fix on something that is at all constant, we have to find it in the conflict between speculators on the one hand and, on the other, individuals both able and willing to use force. The speculators triumphed in the days when Cicero suppressed the revolt of Catiline. The strong arm triumphed first in Caesar and then in Augustus.
$2549{ }^{1}$ Mommsen, Römisches Staatsrecht, Vol. III-1, p. 459: "The old system, where all public offices were open to all citizens, was overthrown. The magistracies and pontificatcs were completely closed to individuals not belonging to onc of the two nobilitics [The nobilitas, which was hereditary, and the equestrian order, which was personal, in other words, the ordo senatorius and the ordo equester, which together constituted the uterque ordo.]; and as between the two nobilities,
bility that is showing an inclination to be more and more exclu-sive-an ordo senatorius and an ordo equester." These phenomena are correlated interdependently with the intensification in Class II residues. The number of citizens is increasing-sons of freedmen obtain the ingennitas, or status as "well-born." Naturally, as the value of citizenship diminishes it is granted more and more liberally.
A-2. Class-circulation in the fact:
Commerce and industry continue to enjoy under the High Empire the freedom that had been theirs under the Republic and still provide many persons with opportunities for accumulating wealth-in fact they are utilizing some of the energies that were formerly wasted in the political intrigues of the Forum. ${ }^{34}$ (For footnote 4 see page 1850.) So in our day economic enterprise in Germany
only half the magistracies and pontificates were open to each. . . ." P. 466: "The nobilitas [under Augustus] became a hereditary peerage, a senatorial order that was closed by law. . . ." P. 467: "Under the Julian-Claudian dynasty the old nobilitas of the Republic lived on in the fact beside the senatorial order. But the old families rapidly died out or else were destroyed. . . . Beginning with the Flavians the republican nobilitas has a place in the Roman state that was even more limited than the one the old patriciate had occupied under the late Republic. . . ." P. 487: "Former military tribunes were still playing an important rôle in the class of knights in the last years of the Republic before the reform of Augustus." Waltzing, Études historiques sur les corporations professionelles chez les Romains, Vol. II, p. 7: "The Roman bureaucracy was almost entirely a creation of the Empire. Even in the days when the Republic was in control of the Roman world, it had no administration. Its officials or financial agents were few in number. . . . Under the Empire bureaucracy took a rapid and vast development."
$2549{ }^{2}$ Charles Lécrivain in Daremberg-Saglio, Dictionnaire, s.v. Senatus: "Augustus permanently and officially founds a senatorial order, a sort of hereditary peerage which has a monopoly of the ancient magistracies and is opened only through award of the laticlave, by allectio. The new nobilitas acquires a special title probably toward the middle of the first century, and officially at any rate in the period of Marcus Aurelius and Verus. It is the title clarissimus . . . that is applied to men, women, and children. This nobility comprises Senators and their wives and agnatic relatives down to three degrees."
$2549{ }^{3}$ Waltzing, Op. cit., Vol. II, pp. 255-58: "For a long time [between the first and the third centuries] the gilds (collegia) were formed exclusively on private initiative, even gilds of public officials. The state came to interfere gradually, first to encourage, then itself to establish corporations. [Much the same thing is observable in our civilized societies in the nineteenth century and the early years of the twentieth.] . . . Two periods are to be distinguished: a period of freedom lasting about two centuries, another period of servitude that begins in the course of the third. [Ascending and descending arcs in a wave-movement, such as are observable
is utilizing a small part at least of the energies that other countries are wasting on parliamentary intrigues. Class-circulation de facto is still fairly active. ${ }^{5}$
B-I. Ethnic character of the élite:
The invasion of foreign elements, which had set in as early as the end of the Republic, and affected the élite as well as the citizenry, increases in intensity and further and further impoverishes, in respect of ancient Roman or even Italic stock ( $\$ 2546^{1}$ ), a people that still continues to call itself Roman, and its leaders. ${ }^{6}$ These for-
in our time.] . . . For two or three centuries the state used no constraint: the gild was primarily a private institution, organizing in virtually complete freedom. . . . In a word, the distinctive trait of the period is a service that is freely accepted, the absence of any sort of force."
$2549{ }^{4}$ Marquardt, Das Privatleben der Römer, pp. 171-72: "Senators were forbidden to engage in commerce under ancient law and money-lending was in ill repute, but Cato the Elder had interests in shipping and anyone who had money lent it at interest. By this time earnings even of the basest sorts had ceased to involve loss of esteem. However, they were managed through commission agents (farmers), freedmen, or slaves, and thanks to those intermediaries, the capital of the rich was finding profitable outlets hitherto unknown. That may be one among other reasons . . . why industrial and commercial activity was concentrated almost wholly in the hands of slaves and freedmen under the Empire. . . . Greeks and Orientals had a very special aptitude for business activities. The 'fortune of a freedman,' the patrimonium libertini (Seneca, Epistulae, XXVII, 5), became proverbial" (§ $2597^{2}$ ).
$2549{ }^{5}$ Duruy, Histoire des Romains, Vol. V, pp. 329, 636-37 (Mahaffy, Vol. V, pp. 317, 602-03): "In the social hierarchy many free-born inhabitants are going down, many slaves are rising, and they meet half-way between servitude and freedom: decline for the ones, progress for the others. . . . Inscriptions, signs over shops, sometimes formless débris, bear witness to the transformations of the farming society of Cato the Elder into the industrial society of the Empire. [Duruy is forgetting the knights and negotiatores, who were already flourishing towards the end of the Republic.] It was nothing less than an economic and therefore a social revolution [Not a revolution-just a gradual evolution.] and it occasioned profound modifications in civil law. The same revolution was going on in the provinces. The Saint-Germain Museum harbours a multitude of funerary monuments of artisans, which excavations in Gaul alone have so far yielded. Those relics attest two things: the fact that mere working-men were able to afford costly tombs, and the pride of those representatives of free labour." Dio Cassius, Historia Romana, LII, 37, 8, imagines Maecenas as saying to Augustus: "Pay honour to craftsmen and those who do useful work."
$2549{ }^{6}$ Friedländer, Sittengeschichte Roms, Vol. I, pp. 77-79, 89, 91 (English, Vol. I, pp. $34-36,43,45$ ) : "Down to the time of Vitellius the freedmen had more or less of a monopoly of the offices at court, and since the time of Caligula that monopoly had transferred almost all power into their hands. Vitellius was the first to bestow some of those perquisites on knights. . . . The corps of servants at the Imperial
eigners are bringing in Class II residues in great abundance. A little tree is sprouting. Some day it will bear fruit in an incursion of Oriental religions, in the growth of Mithraism, and in the triumph of Christianity.

## B-2. Proportions of Class I and Class II residues:

There is no great change in the ways in which slaves win their freedom. The selection of individuals rich in Class I residues continues, therefore, but it is now being made in an environment strong in Class II residues. If one picks the tallest individuals in a population of dwarfs, one gets men of smaller stature than would be the case if the selection were made from a population of normal people, and very much smaller than if it were made from a race of giants. So with the Roman ellite. It is attained during this period by individuals who are skilful in the arts of the speculator and through the Emperor's favour. ${ }^{7}$ That tends to expand its stock of Class I residues. But ethnic origins are contributing many Class II residues. On the whole, therefore, there is at first little change in relative proportions-there is a certain parity between present and past. Then gradually Class II residues gain the upper hand. The govern-
palace, as well as in the great mansions in Rome, were almost exclusively recruited during that period in the Eastern countries-Greece, Syria, Asia Minor, Egypt. While the Emperors entrusted their personal protection to body-guards made up of men of the North and West, they preferred Greeks and Orientals for their personal service and for the management of their affairs. Continually appearing, in consequence, at the summits of power were individuals hailing from the stocks that Roman pride had most sincerely despised. The reason was, as one of their race, Herodian, Historiae, III, 8, II, saw fit to proclaim, that they were cleverer. . . . The wealth that flowed into the hands of freedmen as a result of their privileged positions was one of the main sources of their power. Certainly, at that time, when the opulence of the freedmen had passed into proverb, few private individuals could rival, as regards power and wealth, the servants of the Imperial house as a class. . . Quite aside from what lucrative posts brought in, the freedmen in the provinces as well as in Rome, in the fiscal departments as well as in the private service of the Emperors, had a thousand opportunities to swell their fortunes by taking shrewd advantage of circumstances without resorting to measures that could be bluntly called plunder or extortion. . . . Owning such enormous wealth, the freedmen of the Imperial house eclipsed all the grandees of Rome in display and magnificence."
$2549{ }^{7}$ Mommsen, Römisches Staatsrecht, Vol. III-I, p. 504: "In order to participate in the profitable service of the legionaries under the Empire the holder of the equestrian horse had to surrender it. That often took place under the form of an immediate award of the legionary centurionate to individuals who resigned from the privileged class in order to obtain it."
ing class becomes a class of government office-holders with all the narrow-mindedness peculiar to people of that type. ${ }^{8}$
B-3. Use of force:
The gap between civil and military functions widens, though they are not as yet distinct. ${ }^{910}$ The military class rules through the Emperor. It represents a brute force-it is not an élite. The élite is increasingly civilian. It has neither the will nor the brains to use force, nor the force to use.
2550. III: From the Antonines to Gallienus. The great predomi-
$2549{ }^{8}$ Mommsen, Ibid., Vol. III-I, p. 51 ( (continuing the quotation in $\$ 2548^{2}$ ): "Under the principate, the legal status of the publicans remained on the whole the same, but their practical situation underwent a complete change. The monarchical reorganization of the state made an office-holding class out of the leaders of the order of knights, and its financial reorganization enabled the state, in principle, to dispense with intermediaries in collecting revenues as well as in making disbursements, and cut the ground from under the large-scale speculation that the equestrians had practised under the Republic."
$2549{ }^{9}{ }^{10}$ Mommsen, Ibid., Vol. III-r, p. 553: "The jealous exclusion of the senatorial order from military service that is characteristic of the Empire under the Severuses, and after, is something foreign to the system of Augustus." Ibid., loc. cit., pp. 542, 560-62: "Augustus very probably stripped the contubernales (cadets), 'companions' [Cf. medieval comes, count.], who were still in evidence under the late Republic, of such military status as they still had. . . . We have shown that, as regards the requirement of military service in the theory of eligibility for service as a magistrate, service as a 'cadet' (contubernales) held on as late as Caesar's time. But it must have lost more and more of its military character, not only because the service of a knight who never entered the ranks could hardly be taken seriously, but because the 'cohort of friends' (cohors amicorum) was more and more largely made up of individuals who were not even nominally soldiers. . . . For a long time under the principate, service as an army officer was the only road leading to equestrian office . . . but in course of time a civil road was opened alongside the military. There is no proof of any such thing in the first century, but after Hadrian's time, administrative service from the bottom of the ladder up may lead to the higher offices without military service. . . . The objections that were still made under Antoninus Pius to the appointments of scribes and lawyers gradually die away. The day when a preliminary course in military training was required of office-holders in the bureaucracy was no more." Ibid., Vol. I, p. 513: "The military tribunate had effectively lost its military importance under the Empire, and . . . if it is not a purely nominal title, it designates a bureaucratic function rather than any real command. . . . The language used in framing the Lex Iulia Municipalis . . . shows that residence in the provinces with a governor fulfilled the requirements of service. . . . The strict association of the political career with military scrvice as an officer is more apparent than real under the Empire. Military service and the exercise of command were much more essential elements in the political career under the Rcpublic, cven under the late Republic, than under the Empire." Marquardt, Römische Staatsverwaltung: Militärwesen, pp. 356-57: "The military
nance of Class II residues is showing its effects more and more positively. The political, military, financial, and intellectual decline of Rome is becoming more marked, economic and social institutions more and more rigid. The Barbarians are invading the Empire.
A-I. Class-circulation as law:
The crystallization of society increases to totality. Alexander Severus closes the corporations of crafts and trades. The decurionate becomes an onerous obligation $\left(\$ 2607^{\circ}\right)$. Roman society is getting to be a society of castes. ${ }^{1}$
tribunate [under the Empire] was a sort of honorary office that carried equestrian rank with it. The Emperors very understandably conferred that dignity on persons who had no intention of devoting themselves to a military career. They contented themselves with six months of service--the tribunatus semestris-and then returned to private life with the title they had earned in that manner." [So Brissaud, whose French version Pareto had before him. Marquardt's German: "Diese Standesbezeichnung wurde die Veranlassung, dass die Kaiser den Tribunat auch an Personen verliehen, welche gar nicht beabsichtigten, sich dem Militärstande zu widmen, sondern nach einer halbjährigen Dienstzeit (tribunatus semestris) sich im Genusse des erworbenen Titels in den Privatstand zuriickzogen."-A. L.]
$2550^{1}$ From some of them, such as the gild of the decurions and the corporations, withdrawals are prohibited, since they carry very heavy burdens in the state. The decurions enjoy judiciary privileges and honours, but towards the end of the Empire they shun the Curia so far as they can. The movement begins early, with the crystallization of society. Ulpian, Digesta, L, 2, 1, and Paulus, Ibid., L, 2, 7, §2 (Corpus iurris civilis, Vol. I, p. 948; Scott, Vol. XI, pp. 214, 217): "When decurions are found to have left their seats in the cities to which they belong and moved elsewhere, governors of provinces shall see to it that they are sent home to attend to their proper duties." "A man who is not a decurion cannot function as a duumvir or in other offices [of that class], for plebeians are not allowed to exercise the prerogatives of decurions." Waltzing, Études sur les corporations professionelles chez les Romains, Vol. II, p. 7: "If the Emperors broke with the traditions of the Republic, they did so because they were obliged to. Administration depends on political constitution. [Relations of interdependence represented as relations of cause and effect.] Now the revolution that was present in germ in the reforms of Augustus, though it took three centuries to reach its full development, or rather to free itself of its semirepublican semblances, may be summarized in two words: All powers are concentrated in the hands of the Emperor." P. 260: "The absence of economic freedom in Rome was a consequence of the absence of political freedom. Despotism and overcentralization killed freedom of labour." It by no means follows that absence of economic freedom results from absence of political freedom, as witness the civilized countries of our day, where political freedom is increasing, while economic liberty is on the decrease ( $\$ 2553^{1}$ ). Our demagogic plutocracy has learned how to turn political "freedom," and for that matter anarchy, into profits. Many writers of our time are inclined to lay the responsibility for the decline of the Roman Empire on imperial "despotism," for that distracts attention from a similar decline to which our demagogico-plutocratic system may easily lead. The closed corporations

## A-2. Class-circulation in the fact:

De facto circulation becomes less and less extensive. Closure of the corporations and the growth of poverty throughout the Empire are drying up the sources of energy that produce new elements for the élite, so that it is now taking in only a few speculators and a few favourites of Emperors. The division into castes is even more a matter of fact than of law.
$B-\mathrm{I}$. Ethnic character of the élite:
The élite is by this time made up in great majority of foreign elements. The Emperors themselves are foreigners.
and the state monopolies of the Roman Empire were an evil! The obligatory unionizing that is being forced upon labour nowadays, and the state monopolies that are becoming more and more numerous, are a blessing! The difference lies in Imperial "despotism"! The scapegoat has been found!

Waltzing, p. 17, refutes his own theory that the system was forced on the Empire by Imperial despotism: "Are we to say that service in these gilds (collegia) was a labour forced by law, required much as taxes are required? No! The system developed gradually. [Rome was moving along the downward segment of one of the waves we describe in §2553.] In the early centuries municipal dignities were not compulsory either: they were sought because the honours that went with them made up for the trouble and money they cost $\left(\$ 2607^{3}\right)$. In the case of the gilds too, advantages at first overbalanced burdens, and their members willingly accepted service for the state or for their cities either as groups or as individuals, and they consented to fulfil special functions that the state could have exacted of all taxpayers." If they "accepted" that order of things, if they gave it their "assent," it cannot be said that it was forced upon them by Imperial "despotism." In our day too citizens "accept," in fact seek, ties that the demagogic plutocracy uses to its own advantage. What Waltzing says, p. 26I, of the Empire during its decline may be repeated word for word of the situation towards which our civilized countries are at present headed: "Gradually that powerfully organized administration which had its agents everywhere [Compare that with the enormous growth of the number of office-holders in our modern governments.] and had its finger in everything [However, it never tried to tell citizens what they should eat and drink. Prohibitionism is an altogether modern malady.] covered the whole Empire. The whole population became subject to officials who had no very serious responsibilities. Interfering in everything itself, the Imperial bureaucracy began by killing the little private initiative that the social state of the Romans still made possible, for where the public power does everything the citizen does nothing and washes his hands of everything. . . . Then it annihilated all freedom, because persons and property were at its mercy. [Just as they are at the mercy of present-day parliamentary majorities manipulated by demagogic plutocrats.], and it facilitated that terrific financial depression which has remained famous." And which may be outstripped by the depression in store for our present-day societies. But Waltzing is in error in one respect. It was not imperial burcaucracy that deprived the citizens of liberty; it was because liberty had disappeared that such a burcaucracy could go on existing. Tiberius had an inkling of what was in the offing, when, if we are to believe

## B-2. Proportions of Class I and Class II residues:

As the supply of speculators and other similar elements for replenishing the élite gives out, the stock of Class I residues in the élite diminishes, while Class II residues increase inordinately, the new elements being for the most part superstitious Orientals and Barbarians.

## $B-3$. Use of force:

The severance of the civilian élite from military activities is absolute. By this time the élite is a herd of weaklings, fit subjects for conquest by the Barbarians. ${ }^{2}$

Tacitus, Annales, III, 65, he "made it his habit to exclaim in Greck as he left the Curia: 'O what men! How ready for slavery!'" Liberty dies on the day when citizens accept chains or ask for them, not when what they have asked for is thrust upon them or when at last they suffer its consequences. Among the forces that play upon the human being there is one that impels him to preserve his freedom of action, and then many others that impel him to shackle himself with ties for one reason or another-considerations of interest, asceticism, desire for uniformity in laws, customs, and so on. Nations enjoy more or less freedom according to the greater or lesser intensity of such forces. If ascetics and jurists have been and still remain among the greatest destroyers of freedom, that is because citizens allow themselves to be led astray by a hankering to force a uniform type of life upon everybody, at the cost of any amount of physical and moral pain. They do not know, or at least refuse to see, that the oppressors of today are the oppressed of tomorrow.
$2550^{2}$ Striking the similarities between the social situation in the Roman Empire at this time and the situation in China at the time of the Tatar conquest. But the Tatars were assimilated by the people to a far greater extent than the Barbarians who invaded the Roman Empire. They adopted Chinese institutions instead of destroying them and putting an end to the senile ossification of the nation. That is why China continued to be a pacific country, and it in part explains the present lot of China, which is so different from that of Japan. Europeans of our time who go about dreaming of "peace through law" and imagining a social condition in which "civilization, justice, and law" will make nations secure against oppression by other nations, without their being called upon to defend their independence by force of arms, may find in the histories of the decline of the Roman Empire, and especially of the Eastern Empire and China, not a few indications of the real character of the situation towards which they are trying to lead their countries. The Chinese, like our pacifists, thought a nation should be proud rather of its civilization than of its military prowess. So their legendary history tells of nations that were submissive to China not by constraint of arms but out of respect for the virtues of the Chinese government. Moyriac de Mailla, Histoire générale de la Chine, Vol. I, pp. 49, 221, 274, 316: "In the fifth year of the reign of Yao, Yuei-chang-chi, ruler of a country in the south of China, solely at the reputation of the Emperor and fascinated by the great things he heard said of him, deemed it a glory to come and offer submission to him and recognize him as his sovereign. . . . In the sixth ycar of the reign of CaoTsong, six foreign kingdoms of a language unknown to China sent ambassadors, cach
2551. All these traits grow more and more accentuated down to the fall of the Western Empire. ${ }^{1}$ At that time the Barbarians shatter a crystallized Roman society. That is their chief contribution to the new order of things. Even more superstitious than the peoples they are conquering, they add a stock of Class II residues that is already overwhelming and so contribute to the ruin of civilization. In their ignorance they smash the mechanism of Imperial institutions, which for that matter they are eager enough to preserve but are incompetent to manage, so sowing the seed of a new civilization. In fact, as time goes on, points are here and there discernible where Class I
with an interpreter, to pay homage to Cao-Tsong and submit to his rule." Legend would also have it, p. 105, that there were bandits who surrendered in deference to ungarnished virtue. A certain Yeou-miao rose in revolt against the Emperor, who sent Yu against him with an army: "Yu set out at the head of his troops, and thinking to avoid bloodshed by avoiding combat, went no farther than to besiege Yeou-miao in his government. More than a month passed without any signs of Yeou-miao or of any disposition on the part of the rebels to surrender, and that was a source of great pain to Yu , noticing which, $\mathrm{Pe}-\mathrm{y}$, who was attending Yu on this expedition, addressed him as follows: 'Virtue alone can move Heaven, for there is no place however distant that it reacheth not!' [Our humanitarians today use identical language except that they mention "law," "justice," or "democracy" instead of "Heaven."] Touched by the nobility of the words, and to show Pe-y the impression they had made upon him, Yu straightway ordered his troops to withdraw and encamped them in a place at some distance from Yeou-miao. [That is what our humanitarians do in cases of industrial strikes today, but reality usually treats them less kindly than the legend treated Yu.] In seventy days' time Yeou-miao and the other rebels came and surrendered." In times more historical-in the year 731 of our era-King Tsan-pu sent an embassy to the Emperor Hiuen-Tsong to ask for the sacred books of China. Ibid., Vol. VI, p. 220: "Yu-hiou-liei, custodian of the books, observed in reply on that occasion that though the Prince of Tongping was a close blood relative of the Hans, they had refused him the histories that he asked for. With all the more reason, therefore, should they refuse them to the Prince of Tou-san, who was an enemy of China; for to do so would be to supply him with the means of learning the art of good government and put weapons into his hand against the Empire. Halted by that objection, Hiuen-Tsong brought the matter before his Council, which advised him to give the books to the king, Tsan-pu, that he might profit by the words of wisdom which they contained, and opined that not only did nothing stand in the way of giving the books, but that it was the thing to do, to the end that that prince might imbibe from them the great principles of uprightness, good faith, and virtue, which it is one's duty to impart to everybody. And the Emperor followed the advice of his Council." This controversy as to the capacities of books of ethics to guarantee prestige and power to a nation is worthy of our "intellectuals," who merely replace the books of the Chincse with the rules of their "international law," or others such.

2551 ${ }^{1}$ Waltzing, Op. cit., Vol. II, pp. 263, 303, 318: "The upward thrust that meant renewal and maintenance of the middle and upper classes had spent it-
residues and commercial activities increase, the ones stimulating the others back and forth ( $\$ 2609$ ). In just such ways Athens, Rome, and other ancient Greek and Italian cities had originated in their time. Different circumstances lead to differences in forms of development but, underneath, substances are the same. In districts such as Provence or Italy, where commerce, the crafts, industry, give speculators opportunities to accumulate wealth and rise to the élite, bringing with them a supply of Class I residues that are so lamentably deficient, political, military, financial, and intellectual prosperity returns-we have reached the age of the Communes.
2552. The general movement in all this has been in the form of an undulating curve, of which we have already seen many examples, and we might at this point repeat all that we have said in \$§ 2330-39. ${ }^{1}$ As usual we have to consider theories, or derivations, $c$ ( $\$ 2205$ ), and the facts corresponding, $a, b, d$. Suppose, for purposes of convenience, we call the sum of such facts $s$. We have already examined ( $\$ \$ 2203 \mathrm{f}$.) the general case of interdependence between the elements $a, b, c, d \ldots$ and the cycles observable in them. Now we come to the particular case of their fluctuations in time and to the relations of interdependence that obtain between the fluctuations.
self. . . . Soon [after Constantine] men will everywhere be bound to the status in society they occupy with their property and their families. The curials, we may guess, were the first to become subject to that law, but gradually it was extended to all callings. [So in our day, the start has been made by exploiting the wealthy and the well-to-do. Other classes will be brought under exploitation as time goes on.] A man was now a curial, a member of a gild, an office clerk, a private in a cohort, a tiller of a field, by birth. He was obliged to succeed to the functions his father had filled. Almost everybody in the Empire was subject by birth to a specified status: obnoxii condicioni, condicionales originarii. [That was the law but not the fact. Imperial favouritism made a certain amount of circulation possible.] . . . Imperial favours could not have been of rare occurrence, as proved by the numerous edicts in which the Emperors forbade applications for such rescripts [which granted exemption from compliance with the law]. They were obtained from the Emperor through 'influence' [Today through the influence of politicians.], the Emperor yielding to the urging of individuals of high place, or allowing himself to be deceived by the intrigues of the gild members or their patrons."
$2552^{1}$ After trying to account for the development of extravagance in Rome by reflections on morals $\left(\$ 2585^{3}\right.$ ), Tacitus voices a doubt which brings him very close to realities, Annales, III, 55: "Nisi forte rebus cunctis inest quidam velut orbis, ut quemadmodum temporum vices ita morum vertantur. Nec ommia apud priores meliora." ("Unless perchance it be that all things move in cycles, so that manners change like the seasons. Not all things were better among our predecessors!")

Study of successive states in the economic and social order leads to a consideration of the successive undulations in the categories $b$ (interests) and $d$ (circulation), to which, if we so desire, we may add undulations in sentiments, $a$, which for that matter, as we know, assume proportions at all considerable only over fairly extensive periods of time. With that qualification we may say that we are considering undulations in the complex $s$. Conceptions of the states of $s$ and of the theories, $c$, corresponding to them appear more or less vaguely in the terms "free trade" or "protectionism," "individualism" or "collectivism" (statismo), as used in ordinary language. The first two terms have more or less exact meanings and may be used after a fashion in a scientific reasoning. The latter two are altogether indefinite, like the terms "religion," "morality," and so on, and cannot be used unless their vagueness is at least to some extent remedied.
In the first place theories have to be distinguished from facts. If a person assumes that all conduct is logical and, inventing his own history, imagines that theories and derivations determine human conduct, he may, with no great harm, keep theories and facts mixed and dispense with distinguishing the theories, $c$, of "individualism" and "collectivism" (statismo) from the facts, $a, b, d$, to which they correspond. Not so the person who appreciates the importance of the part played in social phenomena by non-logical conduct. He cannot, if he would reason with any experimental exactness at all, confuse $c$ with the sum of $a, b, d$ (which we also designate by $s$ ).
So we distinguish $c$ from $s$. But that is not enough. Roughly speaking, we can tell whether a theory, $c$, is "individualistic" or "collectivistic" (statista), just as we can tell whether a given theory stands closer to Nominalism or to Realism. But it is much more difficult to specify to just what facts, $s$, the facts designated as "individualism" or "collectivism" (statismo) correspond. To achieve precision in such terms is as desperate an enterprise as to try to get definitions of the terms "religion," "morality," "law," and so on. If we are to classify the states $s$ it is better therefore to follow some other method. We can get a certain amount of definiteness by considering the strength of the ties that regulate the conduct of the individual. If ties are weak, we get something more or less like the state de-
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scribed as "individualism." If ties are strong we approximate the condition described as "collectivism" (statismo).

In the second place economic ties, which belong to $b$ (interests), have to be distinguished from ties of class-circulation, $d$. Ties of both those types may be weak, as was the case towards the end of the Roman Republic and in the early years of the Empire; or they may be strong, as they were when the Empire turned definitely towards decline. Ties of the first type may be weak and ties of the second strong, as was the case in the days following the Barbarian invasions. Finally, ties of the first type may be strong and ties of the second exceedingly weak, as is more or less the case with our present-day societies. Proceeding as we did in $\$ 2339$, we get an intrinsic and an extrinsic aspect both for undulations in the derivations, $c$, and for undulations in the social facts, $s$. Working from the first standpoint, we keep $c$ and $s$ distinct and consider first for $c$ and then for $s$ an ascending period as influencing a subsequent descending period, then an influence of the latter upon a following ascending period, and so on. Working from the second standpoint we take $c$ and $s$ together and consider the influence of the undulations in one of the two categories upon undulations in the other.

We have, therefore, to consider the following aspects:
I. Intrinsic aspect:
$\mathrm{I}-\alpha$. Derivations, $c$
I- $\beta$. Sum of the social facts, $s$
II. Extrinsic aspect:

II- $\alpha$. Influence of $c$ upon $s$
II- $\beta$. Influence of $s$ upon $c$
$\mathrm{II}-\gamma$. Influence of the various elements in $c$
II- $\delta$. Influence of the various elements in $s$
We need give no special attention to this last problem here, since it is a part of our general investigation of the forms of society. Let us look at the others.
2553. I- $\alpha$ : Intrinsic aspect of derivations. In the social "sciences" almost all authors of theories have hitherto been primarily inspired by faith in some ideal; so they have considered only such facts as seemed to accord with that ideal, disregarding contrary facts almost
entirely. Even when such theories ape experimental forms, they tend to be metaphysical in character. The derivations of "individualism" and "collectivism" may be put on a par with Nominalism and Realism; and, though the analogies are not so striking, even the derivations of "free trade" and "protectionism" are not so very different from metaphysical theories. In this respect, therefore, the case that we are now studying is very like the case we analyzed in $\$ \$ 2340$ f. (alternations of "faith" and "reason"). But between the two there is also a considerable difference, in that in the present case the dissonance between theory and fact has little or no influence; and hence there is no temptation to combine successive periods, as was the case in $\S 2340$. That comes about because, though in matters pertaining to the natural sciences it is difficult, in fact almost impossible, to side-step conflicts between derivations and experimental realities, that is as easy as can be in matters pertaining to the social "sciences." In these latter, theories are judged by their accord with sentiments and interests rather than by their accord with experimental realities. We may therefore conclude that, in the present case, the intrinsic aspect of $c$ is of little importance.
I- $\beta$ : Intrinsic aspect of the sum of the social facts. Here, on the other hand, the intrinsic aspect is of great importance. A period of "individualism" (when ties are weak) paves the way for a period of "collectivism" (when ties are strong), and vice versa. In the first stage private initiative assembles the materials that the rigidified institutions of the state will utilize in the second; and in this latter condition the increasing damage resulting from the crystallization of society paves the way for decadence ( $\$ \$ 2607 \mathrm{f}$.), which only a revival of flexibility and freedom of private enterprise can change into progress (\$2551). Experience shows that undulations may be of different magnitudes, different durations; but it does not show civilized countries where such oscillations do not occur at all. For the time being at least, we must consider it hardly probable that social states free from fluctuations can exist. A society in which individuals rich in Class I residues move about as they please gives an impression of disorganization. What is more, a certain amount of wealth is undoubtedly wasted in sterile enterprise, so that when crystallization sets in, society seems not only better organized, but also more prosperous. The stiffening in Roman society under the Low

Empire was not only forced by the government; it was desired by the population itself, which saw in it an amelioration in living-conditions. To bind the husbandman irrevocably to the soil, the craftsman to his trade, the decurion to his bench, not only helped the government, which was so enabled to get a better-organized society and one more advantageous to itself, but also pleased the lawyers and the "intellectuals," who could only admire such attractive symmetry. And it was desired and demanded by the landowners, who could keep a hold on their farm labour; by the corporations, which could be sure of the services of such workers as were shrewder and abler and could otherwise have taken the wealth they created to other places; and by people in towns who were exploiting their decurions.

The situation can be better grasped if we look at certain aspects of our own times that are to some extent similar. The prosperity of our modern countries is due to the freedom-be it only a limited freedom-of economic and social activity that was enjoyed by the various elements in our populations during a portion of the nineteenth century. Now crystallization is setting in, precisely as happened in the case of Rome. It is desired by the public and in many cases seems to increase prosperity. ${ }^{1}$ To be sure, we are still far dis-
$2553{ }^{1}$ As we have frequently pointed out, the present helps to understand the past, and vice versa. For that reason the current example of Switzerland is interesting. The remarkable thing about that federalized country is the way it has succeeded in making three races elsewhere hostile, the German, the French, and the Italian, live together in perfect peace and concord. That has been due not only to the morals of the people, which are the soundest in Europe, but primarily to the independence of the Cantons, which has obviated the friction that arises between different nationalities in other countries, allowing each to live according to its own tastes, without being shocked by the preferences of the others. But for some years past a movement has been in progress, with ever increasing acceleration, towards political and administrative centralization. The liberties of the Cantons and of individuals are being curtailed. The federal government is erecting monopolies and entering business. Judicial, economic, and social institutions are becoming less flexible. This movement is in some ways similar to the movement that is going on in France, England, and Italy, under the auspices of and in favour of the demagogic plutocracy. As yet only its first cffects are visible in an increasing prosperity for those countries, since it is drawing on the wealth of social and economic energies that were accumulated during the era of freedom by the efforts of private individuals. In virtue of those effects, the movement is welcomed gladly and favoured by the majority of people, upon whom meantime it is imposing new ties.

Looking back upon the Roman Empire in the days of its decline, we may have some doubt as to whether the same were the case, and we may wonder whether the
tant from the state in which the working-man is definitely bound to his craft; but labour-unions and passport restrictions upon movements from one country to another are leading in that direction. The United States of America, which has grown up on immigration and owes its present prosperity to immigration, is now trying in many ways to keep immigrants out, and other countries, Australia among them, are doing the same. Labour-unions are tending to keep non-union labour from working, and on the other hand, are far from willing to admit everybody who applies for membership to the unions. Governments and municipalities are every day extending their interference in economic matters, driven to that by the public will and often to the apparent public advantage. In Italy the municipalization of public utilities was so eagerly desired by the public that the government granted it and used the measure as an election "issue." Already other analogies are emerging that may be more strikingly apparent as time goes on. ${ }^{3}$ The Imperial authority in the days of the decline gave chase to the curials to force them back to their burdensome offices ( $\$ 2607$ ). The democratic plutocracy ruling in our societies gives chase, if not to the well-to-do, at least to their purses. To escape unbearable burdens, taxpayers are
ties were not imposed by the Emperors governing by force of the legions. Looking about at France, England, or Italy, the doubt is dispelled in part, though not altogether; for one may make the point that our parliaments do not represent public inclinations exactly. In the case of Switzerland no doubt whatever is possible. In Switzerland no change can be made in the federal constitution unless it is approved by the majority of voting citizens and by a majority of the Cantons. It is therefore with full consent of Cantons and citizenry that the old order, which brought so much prosperity, so much peace, such great harmony, to the country, is being demolished and a new order instituted, which, if the movement holds in the same direction in which it is headed-as it still may not-would end in a centralized state governed by a majority, in other words, by the German element, and a governmental system modelled on the pattern of the present German Empire, and in the end, perhaps, creating an irredentist myth, which so far has been altogether stranger to the country.

Such things, which are going on under our very eyes, strengthen us in the conclusion to which we are led by a direct examination of the history of the Roman Empire in decline, namely, that the movement towards rigidified institutions was desired, or at least assented to, by the public at large, rather than imposed from above by the Imperial government.
$2553{ }^{2}$ Remote but not to be overlooked is the analogy between the way in which certain Roman Emperors bought power from the praetorians and legions and the ways in which politicians buy power of the voters in our contemporary demagogic
sending their funds to other countries, and the governments under which they live grow indignant and try to reach them in various ways. And so agreements of mutual aid have been reached-and they may well be called conspiracies between exploiters-between the governments of the democratic plutocracies in France and England; and the French Government has tried, though in vain, to enlist the aid of the Swiss Government in running down such taxevaders. There is a tendency in our societies to have taxes voted by the great majority that does not pay them, and to lay the burden on a small minority. As regards the exploiters there is, to be sure, a great difference between our present condition and the situation under the Roman Empire, where the Imperial authority fixed the tax to be paid by the well-to-do. But the difference is much smaller as regards the victims, for after all it matters little to them whether their money goes to fatten the henchmen of an Emperor or the henchmen of a demagogic plutocrat. In point of fact, the legions of an Alexander Severus, who was so liberal in paying his soldiers, cost much less money than it costs to buy votes for the party of a Lloyd George. Moreover the legions at least defended the country, whereas these "Liberals" defend nothing but their present comforts and pleasures. ${ }^{3}$ In a word, we are very apparently moving along a plutocracy. In our day, of course, such operations are at least draped with a veil. In Rome all reticences were brutally brushed aside, as when, on the assassination of Pertinax, the pratorians put the Empire up at auction. Dio Cassius, Historia Romana, LXXIV, 3: "Then happened a shameful thing, disgraceful to Rome. The city was put up at auction, along with the whole Empire, as in a market in a public square." The highest bidder on the occasion was one Didius Julianus, who, Dio says, loc. cit., 2, "was always busy with some new thing." A speculator, in other words. (Cary, Vol. IX, p. I43: Julianus "was always eager for revolution": vewtepov

$2553{ }^{3}$ Liberal spending was characteristic of the whole Lloyd George administration. Luzzatti, Corriere della sera, Sept. 3, 1915: ". . . When Lloyd George was Chancellor of the Exchequer he made no economies. He taxed readily, but at the same time inordinately expanded administration and the civil service. It was he who ruled that of the $\mathcal{£} 400$ received as salary by members of the House of Commons froo should be exempted from the income-tax, a measure that was defeated in Italy. Then expenditures for ministers were also increased considerably: instead of one, two ministerial posts were created at salaries of $£ 5,000$. . . Curious cases are mentioned, things somewhat similar to the expenditures made for equalizing land-taxes in Italy. The commission which is estimating incomes from property for the purpose of taxing incomes derived not from labour or capital but from favouring circumstance has so far cost $\mathcal{L} 676,000$, and it has collected an amount of
curve such as Roman society traversed in its day after the founding of the Empire and showing first a period of prosperity and then, as it was prolonged, a period of decline. History does not repeat itself. Unless one chooses to believe in some "yellow peril" there is little likelihood that the next period of prosperity that is to come will originate in another Barbarian invasion. There would be more plausibility in the guess that it will come from some internal revolution which will transfer power to individuals who are strong in Class II residues and are able and willing to use force. But predictions as to such remote and uncertain contingencies belong rather to the realm of fancy than to experimental science.
II- $\alpha$ : Extrinsic aspect: Influence of $c$ (derivations) on $s$ (social complex). Such influence is not out of the question, but it is usually of scant importance. The more significant thing to notice is that after originating in the social complex, $s, c$ (derivations) reacts upon $s$ and strengthens it. Expressing a state of mind, $c$ intensifies it and invigorates it. Expressing sentiments of integrity (Class V residues) to some extent, $c$ reconciles them with sentiments of sociality (Class IV residues). As disguising interests, $c$ serves to conceal and shelter them from those who do not share them. Dissembling brute facts, $c$ "justifies" them and reconciles them with the prevailing "morality" and, in general, with group-persistences (Class II residues). In addition $c$ satisfies the need human beings feel for "explaining" things (residues $\mathrm{I}-\varepsilon$ ), and so distracts them from experimental investigations that might result in some modification, however slight, in $s$. As a sum of pleasing fictions, $c$ satisfies the desires, quiets the longings, of people who are eager to forget the misery and the ugliness of the real world and take refuge in the realms of the fanciful and the ideal, so disarming active enemies of existing conditions and
£ 50,000 ! [The purposes of such commissions is to give friends an opportunity for making money and to provide some satisfaction for demagogic instincts. From those points of view the commission in question accomplished its purpose to the full.] On June 29 that scandal was brought up before the House of Commons and debated, but to no conclusion. [Because wolf does not eat wolf.] Local governments are imitating the national government. For example-an excellent thing in itself, but not for war-times such as these-whole networks of independent automobile roads are being built, and the sum paid by the state into this budget is almost $£ 1,500,000$ a year."
§2553 "individualism" and "collectivism"
maintaining the social complex, $s$, intact or without too great change. ${ }^{4}$
II- $\beta$ : Extrinsic aspect: Influence of son $c$. Evidently, undulations in derivations, $c$, that make up the theories of "free trade" or "protectionism," "individualism" or "collectivism," follow undulations in the complex $s$ very closely; and that leads to the conclusion that undulations in $c$ correspond to undulations in $s$ rather as results than as causes. Theories favourable to free trade are developed and come into vogue when interests and class-circulation are favoured by free trade, and so for theories of protection and for theories of "individualism" and "collectivism" (\$\$2208 f.). The fluctuations in $s$ are therefore the main thing, and the importance, after all, of the undulations in $c$ lies almost entirely in the picture they give of the undulations in $s$.
II- $\gamma$ : Extrinsic aspect: Influence of the various elements in $c$. The logico-experimental thinking that is done in empiricism, practice, and science has, if not a great, at least some little, influence on the derivations that are used in social connexions, whether by individuals or by communities. Aristotle, the naturalist, gets closer to realities in his utterances on social matters than does Plato, the metaphysicist. Machiavelli had long experience with the reasonings of empirical statesmanship. He comes very very close to things as they are. Bismarck goes not very far wrong for the same reason, and for opposite reasons the humanitarian dreamer known to history as Napoleon III went very far wrong indeed. As regards communities, the economic theories of Adam Smith and Jean Baptiste Say, which more closely coincide with experimental reality than anything that had been written before their day, appeared at a time when prog-
$2553{ }^{4}$ Foscolo may have had some such idea in appraising the work of Machiavelli in his Sepolcri:
> "Io quando il monumento
> vidi ove posa il corpo di quel grande
> che temperando lo scettro a regnatori
> gli allor ne sfronda ed alle genti svela
> di che lagrime grondi e di che sangue."

("Then saw I the tomb that holds the body of that great man, who stayed the upraised sceptre of those who rule, stripped it of its laurels and revealed to the peoples with what tears and blood it drips.") The same may be said of other experimental researches of the Machiavellian type.
ress in the natural sciences was rapid and far-reaching; and, conversely, the vagaries of the historical school, with its childish denials of the uniformities (laws) of social science, come on the scene at a time when a State-worshipping mysticism and a morbid patriotism are severing all contacts between the far-advanced natural sciences and a literature that is usurping the name of social science.
2554. What we have done is to sketch, in the case of Rome, the main outlines of the evolution of the complex $s$ as regards sentiments, interests, and class-circulation, disregarding many details that might have obscured our synthetic view of the whole. We had now better consider at least a few of such minor details in order to get a closer and more adequate picture of what actually occurred.
The origins of the Roman Senate are obscure, nor are we required in any event to dwell on the question here. It may be that, as tradition says, Senators were first appointed by the king and at a later date by the consuls. In historical times (about the Roman year 442), Senators were appointed by the censors, who confirmed the status of Senators already enrolled and designated new ones when they took the census. There was little choice, in the fact; for certain magistrates were regularly enrolled as members of the Senate in the census next following the expiration of their terms in office. The numbers of such officials kept increasing during the whole period of the Republic. So long as the Senate continued to play an important part in the government, in other words, down to about the time of Marius and Sulla, the governing class was, more or less roughly speaking, the senatorial class. Down to that time military and civil functions, prominent among which latter the judiciary, went hand in hand; and that fact, along with the fact that public offices were obtained by popular election and that no salaries went with them-in short, the manners and customs of the time-tended to keep the class filled with individuals possessing some military aptitude, some little native intelligence, some experience in public administration, some knowledge of the law, some familiarity with the combinations whereby popular favour is secured and held, and finally, some wealth. The class, therefore, must have had a certain balance in the relative proportions of Class I and Class II residues. It was something very similar to the Areopagus in Athens, or the House of Lords, or the House of Commons, in England at the time
of the wars against Napoleon I. Considering, then, that below was a subject class strong in Class II residues, but still with enough com-bination-instincts to execute the combinations devised by the governing class, one readily understands how a maximum prosperity came to be attained during the period extending from the Second Punic War down to the conquests of Greece and Asia.
2555. Wealth and speculation seem never to have been wanting in Rome from the very dawn of historical times, and they must have served indirectly to provide access to the governing class for at least the descendants of the newly rich. In spite of that they had no direct power until the conquest of Greece and Asia.
2556. In the year 200 b.c. the Roman People rejected a proposal to declare war on the King of Macedonia. Livy, Ab urbe condita, XXXI, 6 , says that "the citizens were tired of a long and hardfought war and voted that way of their own accord in a spirit of surfeit with fatigues and dangers. Quintus Bebius, furthermore, as tribune of the people, taking advantage of the time-honoured privilege of calling the Conscript Fathers to account, accused them of evolving one war from another so that the people could never enjoy a moment's peace." Easily to be read between those lines is the eternal conflict between the two classes of people, the $R$ 's and the $S^{\prime}$ 's, described in $\S 2235$; in other words, between people who live on virtually fixed incomes and people with whom fortune has its ups and downs. Small property-owners in Rome were ruined by wars unless they participated in the "booms" that followed them. People who plundered the conquered provinces and otherwise speculated grew rich. Such the conflict that Livy describes as a conflict between Senate and People ( $\$ 2542$ ). He himself furnishes the proof. When the Third Macedonian War was being worked up in the year ${ }_{171}$ b.c., reasons for rejecting it were far more weighty than had been the case thirty years before; yet the People voted for it without opposition, and volunteers were available in plenty for the campaign, "for they saw that those who had participated in the previous Macedonian war, or in the war against Antiochus in Asia, were now wealthy men." ${ }^{1}$

[^114]2557. So the balance in the population of Rome kept gradually shifting. The numbers and the influence of individuals of variable income deriving from plunder and speculation was increasing by leaps and bounds. Such people were at first abetted (in view of a common interest in preserving that order of things) and later on opposed (when the time came for dividing the spoils) by the urban plebs, which shared in such enterprises either directly, or by selling their votes, or otherwise, and by those elements in the rural plebs which were abandoning the plough to find lucrative employment in the army; nor could the increasing multitude of clients have been without influence in the same direction. ${ }^{1}$ Meantime that portion of the rural population which lived by tilling the soil was growing smaller and smaller. Not the latifundia caused Italy's ruin, but that complex of facts in which the latifundia themselves, in part, originated ( $\$ 2355$ ). The Roman wars of conquest had the same effects in those days as, in our day, the expansion of industry and the open-ing-up of new territories in Asia, Africa, and the Americas. In our modern countries speculators have greatly increased and are still increasing in numbers and power, and they are now supported (in view of a common interest in preserving the present demagogicoplutocratic order), and now sometimes opposed, as in strikes or

[^115]otherwise, by the urban population that participates in their enterprises either directly or else indirectly through political intrigues, and by that portion of the rural population which deserts the farm for the city at the lure of higher wages and pleasanter work. And they are supported also by many elements in the bourgeoisie itselflawyers, accountants, engineers, physicians, and so on-who are munificently paid for their services by the speculators, who make moncy easily and are as generous towards their henchmen as the padroons of old were to their clients. Meantime lamentation over the deserted farms grows shriller and shriller, and small-property acreage shrinks smaller and smaller. If slavery or serfdom prevailed today, the latifundia would again become the rule. It is a most significant fact that far from resisting this tendency, the Socialist populace in Europe is praying for it and in various ways manifesting its hostility to small property and even more so to tenant systems. As regards Italy, Romagna has been the scene not only of strikes, but of armed conflicts, aiming at effecting a change in the existing property system so that there would be nothing but property-owners on the one hand and hired labour on the other, and that system would bear every resemblance to the Roman latifundia of old. The speculators who are governing today in modern Rome are doing nothing, just as their predecessors who ruled in the Rome of the dying Republic did nothing, to resist this trend, and in fact they aid and abet it as they aided and abetted it of yore whenever they needed the votes of the masses. What is going on in our time gives a clearer understanding of what went on in ancient Rome, and shows that the latifundia were in many cases effects of conditions of which they have been taken as causes, or better yet, that they stood in a relationship of interdependence with those conditions.
2558. Moralists have expatiated at length on the "corruption" that was the "consequence" of the increase of wealth in Rome, repeating with numberless variations a motif that was expanded in his day by Diodorus Siculus. ${ }^{1}$ Some picked their quarrel with wealth in gen-
$2558^{1}$ Bibliotheca historica, XXXVII, 2, I (Booth, Vol. II, p. 558). Diodorus is speaking of the Marsic War: "Prime cause of the war was the fact that the Romans had abandoned the orderly, frugal, continent lives, by which they had so greatly prospered, for a disastrous luxury and a habit of insolent self-assertion." That is the refrain in every age when a people has grown wealthy. Dante harps on it in the Paradiso, XV, vv. 97 f., and says Boccaccio, Decameron, VI, 10: ". . . for
eral, some just with the wealth born of the "crime" of war and the extortions resulting from war. In general declamations on the virtuous poverty of the past, as contrasted with the debilitating wealth of the present, hide the fact of a change in the relative proportions of individuals living on virtually fixed incomes and rich in grouppersistences, and individuals of variable incomes rich in the com-bination-instincts.
2559. Some have blamed the concentration of wealth ( $\$ 2355$ ), others, the latifundia ( $\$ 2557$ ), others, capitalism ( $\$ 1890$ ), others, the wickedness of the Roman "aristocracy" in oppressing and bleeding the virtuous masses, others, slavery, which, they say, was the "disgrace" of those times; still others, defects in the political organization of Rome, which-had it been, according to some, more "democratic"; had it provided, according to others, for a parliament with representation of subject peoples; had it, according to still others, more nearly approximated the perfect organization of the present German Empire-would have assured Roman power a long, a very long, perhaps an eternal, prosperity. Such writings may make as pleasant reading as the historical novels of Dumas; but they go very wide of realities.
2560. So cogent are the facts that they force their way through the very derivations in which such writers would bury them ( $\$ 2356$ ). Says Duruy: "A century of wars, plunder, and corruption [Merely the transformation resulting from new sources of wealth-a segment of our cycle $b d-d b$ ( $\$ 2321$ ).] had devoured the class of small landowners [Why devoured? Those people had simply changed occupations! From living on virtually fixed incomes they had become speculators, or henchmen of speculators.] to whom Rome had owed her strength and her liberties." ${ }^{1}$ Duruy should have said that the prosperity had been due to a favourable balance between that class and the other class in which Class I residues prevailed; and that the

[^116]prosperity failed when the relative proportions of residues became unfavourable. It is interesting that, without our looking very far, as much may be gathered from what Duruy himself says just previously, p. 282 (Mahaffy, p. 291): "Prodigies were still as numerous as ever, still as fantastic; in other words, the people and the soldiers were still as uncouth, as credulous. [Predominance of Class II residues.] Generals still vowed temples-but, like Sempronius Gracchus, adorned them with tablets recounting their exploits, or with paintings depicting their triumphs. They still sacrificed great flocks of victims before battle, but only, as Paulus Aemilius did, to curb the impatience of their soldiers and bide the propitious moment. Gravely they studied the heavens before and during a vote at election-times, but only to have an excuse for dissolving the assembly, for evoking the obnuntiatio, if the voting seemed to be going against the Senate."
2561. Then he observes very soundly, p. 293 (Mahaffy, p. 298): "So needs were increasing daily, and daily also, at least for the poor man who faced the perils but had no share in the lasting benefits of conquest, the means of satisfying them were diminishing." So the people whom Duruy calls "the poor," and who really were people living on virtually fixed incomes, were forced to become speculators or henchmen of speculators. The same thing is observable in our own time. The "upstarts and sudden gains" that Dante speaks of had the same effects in Rome that they have had everywhere and in all periods of history. ${ }^{1}$ Deloume comes very close to the truth as

2561 ${ }^{1}$ Marquardt, Das Privatleben der Römer, pp. 382-83: "While the acquisition of new territories was causing this agricultural crisis in Italy, it was giving a new and extraordinary impetus to the money business and speculation. The Romans had always had a fondness for profits of that sort. Judge them odious and disgraceful as they might, they could not help finding them attractive. . . . With all the more reason were such scruples quieted when the provinces were opened to that type of exploitation. The moment a new territory was conquered, Roman speculators would alight upon it in clouds. . . . The nobility made fortunes by governing provinces, the knights by contracting for tax-collections and then collecting them by atrocious extortions. Big and little, they bled the conquered countries white. Speculation was further encouraged by contracts and concessions that were opened by the censors in the name of the state or even by local governments or private individuals. Collections of revenue, construction of temples, roads, bridges, sewers, aqueducts, repairs on public buildings, supplies for public worship and public games, then private enterprises of all sorts-construction of houses, harvestings of crops, settlements of estates, bankruptcy sales and adjustments,
regards the situation that prevailed after the conquest of the Mediterranean basin and shortly before the fall of the Republic. ${ }^{2}$ That period bears not a few resemblances to the present time. Guizot's comparison with England, which Deloume adopts, is altogether in accord with the facts, and it is interesting that it carries over to our time. It was the "country squires," the small landowners, who saved the country at the time of the Napoleonic wars. Afterwards their share in running the country progressively declined, while the speculators came into their own. Well known the fact that at the present time [1913] Asquith has many such millionaire speculators in his majority, and they are among those who most loudly applaud the invectives his party hurls at "the rich." Their battle with the Lords corresponds exactly to the struggles that went on in Rome in the last years of the Republic between knights and Senators.
funerals-all such things were awarded on contract and spelled rich profit for the speculator who undertook them."
In that Marquardt falls into the common mistake moralists make in imagining that the hated "speculator" always makes his profit. Such enterprises do, it is true, bring profits and prosperity to the skilful speculator, to the adept at combinations; but they spell loss and ruin for the unskilled speculator, the man who cannot learn to devise and utilize combinations. So a process of selection goes on. Individuals rich in Class I residues, individuals of talent and ingenuity, rise in the social scale. Others are eliminated.
$2561^{2}$ Les manieurs d'argent à Rome, pp. 45-46: "Knights, especially, who had some capital and were not halted by aristocratic prejudices, got rich on state enterprise or tax-collecting, which they took on contract. The gold of the vanquished poured in unending streams into the coffers of the publicans and negotiatores. Patricians of breeding who stood loyal to the old customs and were becoming fewer and fewer every day, were reduced to the bare income from their lands, and they were everywhere outstripped. Day by day, after heroic resistance and prodigies of skill, they surrendered some new privilege to the plebs. [Really, to the "gangs" captained by "speculators."] Their inheritances lost all value, relatively, and the rights that had belonged to birth now went to wealth in the fact of everyday custom as well as in law. So the location of prestige and influence shifted from the patricians to the newly rich, the homines novi. The ethics of interest was in danger of being no longer tempered by traditions of family and race. [Change in relative proportions of Class I and Class II residues.] So to the political assemblies in Rome one might have applied what M. Guizot wrote of the English Houses: 'In one of the first Parliaments of the reign of Charles I it was noted with surprise that the House of Commons was three times richer than the House of Lords. Plain gentlemen, frecholders, merchants, men who were exclusively busied with utilizing their lands or their capital to the full, were growing in wealth and in influence, combining more closely from day to day, and bringing the whole people under their sway.' In Rome the revolution was more far-reaching than in England."
2562. The conquest of the Mediterranean basin opened up sources of great profits for the victors-for any of them who had a knack for combinations. By a wise spending of money in Rome, one could get the right to exploit a province and cover one's expenses, with plenty to spare. It was a type of speculation that exactly parallels the protectionist lobbying that goes on today with the purchasing of votes and legislators. ${ }^{1}$
$2562{ }^{1}$ Marcus Aemilius Scaurus would be the type of the Roman speculator. Mutatis mutandis, he is the exact counterpart of the speculator of our day. He was Sulla's stepson and seems not to have abused that relationship in amassing his fortune. Asconius, Enarratio in Scaurianam, Argumentum (Cicero, Pro Marco Scauro), p. 18: "Marcus Scaurus, son of that Marcus Scaurus who had been president of the Senate, was stepson to Sulla. When Sulla triumphed and was showing himself most lavish towards his comrades in victory, Scaurus very laudably asked nothing for himself, nor did he buy any confiscated property at the auctions." So it is with some of our speculators who are honest enough in private matters. When he came to be aedile he behaved like other Roman speculators, and like our own: he sowed in order to reap. "He administered his aedileship with consummate brilliancy, spending a vast fortune he already had and contracting heavy debts." Roman speculators spent their own money, ours spend the money of the taxpayer; but in that they had a predecessor in Pericles: Aristotle, De Republica Atheniensium, 27 (Kenyon, p. 51), says that since Pericles was not rich enough to compete in liberality with Cimon (the usual conflict between the upstart and people with ancestral fortunes), he found a way to shower the citizens with gifts which they paid for with their own money. Pliny, Historia naturalis, XXXVI, 24 (BostockRiley, Vol. VI, pp. 349-5i), describes the magnificence of a temporary theatre that Scaurus built while he was aedile. Contrarily to Cicero's account, he seems to think that Scaurus got his start from his relationship to Sulla: "I shall not allow those two Neros to enjoy even that glory, for I can show that their extravagant madness was surpassed by the private enterprises of Marcus Scaurus. I could not say whether the term he served as aedile was not more destructive to Roman morals than anything else ever was [Again the particular fact for the general, the anecdote for the uniformity, the cause-and-effect relation instead of interdependence.], nor whether Sulla did not do more harm through the great power he gave to his stepson than he did through the proscription of so many thousands. During his aedileship Scaurus executed [for a temporary purpose] the greatest building that was ever reared by human hand even as a bid for eternity. It was a theatre." And sowing one reaps: Asconius (Argumentum cit.): "As propraetor he obtained the province of Sardinia [There the reaping begins.], a post in which he was thought to have deported himself with too little restraint and very tyrannically. That trait he seems to have imitated from his father, though his industry in other directions was in no sense on the same level." Indicted on that account in Rome, he was defended by Cicero, who knew he was guilty and, while preparing the defence, wrote to Atticus, IV, 15 (Winstedt, L. C. L., pp. 308, 311), that if Scaurus failed of election as consul he would be in a pickle. The trial took place, and Scaurus was acquitted by a large majority [ 65 votes to 8] (Asconius, Ibid., p. 28). Remembering his past liberalitics and perhaps hoping for
2563. The situations, then and now, are alike in many ways-yet there is also a difference, and a very important one, which determined the form of organization the Roman state was to take under the Empire. The henchmen of the Roman speculators were in part civilians and in part soldiers, and the soldiers in the end turned on the speculators. The henchmen of our present-day speculators are nearly all civilians.
2564. Many individuals had no access to the characteristic sources of wealth under the Republic and no aptitude for the combinations required to exploit them; but they were not short in energy and courage-Class II residues. Such people enrolled for longer or shorter periods of time under leaders who were ingenious, daring, and especially fortunate, and made up the armies of Marius, Sulla, Caesar, Antony, Octavius. If one counts only the tillers of the soil, the Roman middle class was decreasing at that time; but the farmers were replaced by professional soldiers, and later on, the Italic races by Greeks and Orientals.
2565. As we have several times indicated, the weak point in speculator rule is in the speculator's lack of courage and his scant aptitude for using force. Speculator governments therefore are usually destroyed by people who do know how to use force, whether they come from the same country or are foreigners. They succumb, that is, now through civil, now through foreign wars. As regards internal revolutions, the final catastrophe is often preceded by attempts at revolt that are successfully suppressed.
2566. Those who think of human conduct as exclusively logical are inclined to judge such abortive attempts as separate incidents and look for the causes and effects of each. Ordinarily the cause is found in the sufferings of the subject class, and since such sufferings are never wanting and differ from time to time only in intensities, the cause is always readily found. If it were possible to establish the theory that attempts at revolution are the more frequent and have greater chances of success in proportion to the amount of suffering,
future ones, the Pcople were all for him. Asconius, Ibid., p. 29: "Ciccro made the usual motion to prosecute the accusers of Scaurus, and since many from among the People were pointing to them, Cato, the practor, yielded to the ignorant mob and the following day opened prosecutions against the plaintiffs on charges of slander." So nowadays do voters pamper our plutocrats, in gratitude for past favours and in hopes of favours to come ( $\$ 2262$ ).
the force of the cause could be estimated by measuring the intensity of the suffering. But things do not stand that way. Experience from most ancient times shows that revolts often take place when conditions among the masses are very good, and it was actually a maxim of government in a day gone by that nations were the less docile in proportion to the ease of their circumstances-a dictum sound up to a certain point, but not beyond. ${ }^{12}$ There is the opposite theory
$2566^{12}$ The pamphlet known as The Political Testament of Cardinal de Richelieu contends, $1,4,5$ (p. 179), that "All masters of statecraft are agreed that if peoples were too prosperous, it would be impossible to hold them to the observance of their duties." Comparing the revolt, known as the Jacquerie, of 1358, with the French Revolution of 1789 , one cannot believe that the sufferings of the people were greater in the latter case than in the former. That does not prove that general misery was not one of the forces determining revolt. It does show that it was not the sole, nor the most cogent, cause. Another point of difference between the two revolts was in the use of force on the part of the governing class. Force was applied lavishly and in all self-confidence in the Jacquerie, feebly and hesitatingly in the Revolution. And that again does not mean that force alone is enough to suppress a revolt; it does mean that force is one of the most effective means for suppressing one. What would have happened had the ruling class of 1789 fought with the vim of the ruling class of 1358? We cannot say with certainty (§ 139), but we can say that their chances of winning would have been better than they were in view of the supine and cowardly resignation which they actually manifested. All history goes to show that those who put up a good fight may win or lose, but that those who lie down are certain to lose, and ever and anon verified is the proverb: Be a sheep and you will meet a butcher. As regards the Jacquerie, see Luce, Histoire de la Jacquerie, p. 141. Luce gives a description of the truly incredible sufferings of the subject class and the unspeakable cruelties of the rulers. Of the battle for Meaux he writes: "If we are to believe Froissart [Chronique, Euures, Vol. VI, pp. 54-59], from the beginning to the end of the conflict, the one thought of the nobles was to slaughter without running the least danger themselves. Never did soldiers strike to kill with greater desperation and greater contempt of human flesh. One has to read the Chronicles oneself to get the full vividness of the picture Froissart draws of that frightful butchery. . . . However, the victory would seem to have been more dearly bought than Froissart indicates, for the attack reached the barricade [of the market-place], and beyond that, and not a few nobles were slain. [Luce gives a list of names.] . . . Furthermore, a goodly number of the footmen from Paris as well as of the burghers of Meaux managed to escape, as is attested by the many pardons that were issued to them later on for their part in the battle for the market-place at Meaux. In any event, after the struggle was over, the nobles were not less blood-thirsty in their vengeance than they had been in the battle itself. The whole town was sacked, and not only private dwellings but the very churches were pillaged. Nothing of any conceivable value was left in them. Many of the inhabitants of Meaux were massacred, and those who were not slain were shut up as prisoners in the citadel. Soulas, the mayor, was hanged, and then the town was set on fire. The burning lasted for two weeks. The royal château was burned and many houses, among them
that a governing class can safe-guard its power only by assuring the welfare of its subject class. That theory too contains an element of truth-no more than that-and those who adopt it are probably led to do so, unconsciously it may be, by their preference for one of the affirmative solutions noted in $\$ \$ 1902 \mathrm{f}$.-by a desire to show that a person who does good is necessarily rewarded, or that that, at least, is to be the rule of the future if it has not been true of the past. ${ }^{3}$
the canonry. All the serfs found in the houses were locked in and they perished in the flames. . . . Such barbarities might, it would seem, have sated the wrath of the nobles. But they were far from appeased. They rode madly about the neighbouring country, killing every serf on whom they could lay hands and burning all their villages. To believe one chronicler, the nobles caused more ruin in the kingdom on that occasion than the English, born enemies of France, could ever have inflicted." This slaughter of the peasantry by the nobles can be matched with the "September massacres" of the nobles by the revolutionaries in the French Revolution. We must, to be sure, refrain from reasoning post hoc, propter hoc, but such associations and contrasts in events must not be disregarded, especially since history records them in goodly numbers.
$2566{ }^{3}$ Tocqueville and Taine try to show that the French governing class brought on its own ruin in the Revolution by clinging to its privileges and neglecting its "duties." The thesis contains a modicum of truth, but it is none the less at variance with another thing that is shown by experience: that ruling classes maintain their power by oppressing their subjects. Tocqueville supplies plenty of arguments against his own thesis: L'Ancien Régime et la Révolution, p. 33: "One thing surprises at the very outset. The main object of the Revolution was everywhere to abolish remnants of the Middle Ages, but it did not break out in countries where those institutions were best preserved and therefore made their severities and annoyances most conspicuous, but in countries where they were doing least harm. The mediaeval yoke therefore was found least endurable in places where really it was least heavy. Hardly anywhere in Germany at the end of the eighteenth century had serfdom been altogether abolished, and almost everywhere the people were positively bound to the soil, as had been the case in the Middle Ages." Taine correlates good works and rewards very definitely: L'Ancien Régime, Bk. I, Chap. IV, sec. 6 (Vol. I, p. 13I): "An effect as proper as it is fatal [Ethical derivation.] of the privilege that one exploits for one's own profit instead of using it to the advantage of others! To say 'sire' or 'lord' is to say 'the patron who feeds,' 'the elder who advises and guides.' [Verbal derivation.] On that basis, and in return for that service, one cannot [Who cannot?] give him too much, for no function is more exalted or more difficult to fulfil. But he has to fulfil it, otherwise in the hour of danger he is deserted. [As a matter of plain fact, the armies of Sulla, Marius, Caesar, Octavius, and others too numerous to mention, wanted money and land more than anything else.] Indeed, long before the hour of danger, his people are not really his. If they march, they do so as a mere matter of routine. They are just a mass of individuals, not a disciplined force. [Taine forgets that that very "mass of individuals" can be governed by the person who has a few men at his disposal, for they stand loyal to him because they are well paid with the money he and they can take from the mass of individuals.] Even before the final crash France
2567. As regards the effects of attemped revolts, many people consider every revolt that is defeated and suppressed harmful, or at least useless, to the subject class; and in that they would be right if that fact could be taken apart from other facts and regarded as a logical act, since undeniably it is harmful, or at least not to one's best advantage, to expose oneself to a defeat. But in reality matters stand otherwise. Such unlucky attempts at revolt have to be re-

## was a disorganized country, and the disorganization was due to the fact that those

 who enjoyed privileges had forgotten their status as public servants." If what Taine says were an experimental uniformity, the Jacquerie should have won; for the nobles of that time were far more neglectful of their "duties" towards their subjects than the nobles of pre-Revolutionary days. Luce, Histoire de la Jacqueric, pp. 33-39: "Whatever their causes these repeated defeats [at Poitiers, Courtrai, and Crécy] had disastrous consequences for the French nobles. In the first place they stripped them of a prestige that represented a large part of their powerprestige in arms. [A sound remark, according with the experience of all countries at all times.] In the second place, captured in large numbers in the various battles, the lords had been obliged to resort to heavy levies on their vassals to provide the large sums required for their ransoms, and that had exasperated their subjects. [Another experimentally sound remark.] Already disesteemed, they now became objects of hatred. [The force that was holding the vassals to obedience had weakened, the force impelling them to revolt intensified.] The nobility furthermore was not even able to pretend unselfish sacrifice in behalf of the country. Now beginning to live far from their castles in attendance on the king, the knights were acquiring the servile mercenary attitude of courtiers. They were now refusing to serve without pay. . . . By a strange coincidence, the nobles chose a moment for exacting a payment that was out of the ordinary when they least deserved help in view of their military blunders and failures. . . . 'After the battle of Poitiers,' says the second continuator of Nangis, 'affairs in the realm took a turn for the worse. The state fell prey to anarchy, banditry became rife on all hands. The nobles redoubled in their hatred and contempt for the serfs [A fine way to fulfil their duties! In 1789 there was neither hatred nor contempt. It was an era of humanitarianism.], and made short shrift of the interests of the Crown and of those of their vassals. They robbed and oppressed the men in their homage and country-dwellers generally.' . . . Oftentimes, without coming into too intimate relations, gentlemen and brigands went into partnership and divided their booty half and half. . . . 'At that time,' says the chronicler, Guillaume de Nangis, 'those who should have been protecting the people inflicted no less vexatious wrongs upon it than open enemies.'" And those responsible for such rascalities won the war! They saved themselves and destroyed their enemies! Their successors in 1789, who deported themselves humanely, honestly, kind-heartedly, were defeated, overthrown, destroyed. From the standpoint of social utility, probably it is wiser not to stress the contrast; but experimentally it cannot be denied.Ideas of the sort espouscd by Taine are to be noted in large numbers of contemporary writers. Just one example: Missiroli, Satrapia, pp. 13-14: "To reassert, even at the cost of sacrifice-especially by sacrifice-the claims of duty and moral freedom [Metaphysical derivation.] is to solve the economic problem to the extent
garded as manifestations of a force that, at first inferior to the forces that stand against it, in the end may triumph over them in the final reckoning. It may well be that the abortive attempt weakens the force it expresses, or at the best has no considerable effect upon it; but it may also enhance its intensity. Which of those two possibilities is actually verified depends upon circumstances. Finally, the attempted revolt may, and in fact very often does, reflect the maximum intensity of the force it manifests. In that case it is idle to expect any increase in the intensity of that force before the final catastrophe occurs and to expect that ineffectual revolts will not go on recurring.
2568. The catastrophe occurs oftentimes not so much because the force expressed in the abortive revolt has increased to the point of overcoming the counter-forces that serve to maintain the social equilibrium, but because, in increasing, it has modified the action of other forces and especially of the military power, which itself comes to overthrow the established order, now by ceasing to resist revolutionary elements, now by joining hands with them, or, still again, by replacing them, stealing their thunder. In such cases the overthrow is due, not directly but indirectly, to the operation of the force manifested in the abortive revolt; but the latter does not, for that reason, cease to be dependent on it.
2569. Even worse than the method of viewing human conduct as strictly logical is the temptation to judge abortive revolts by norms of legality, law, equity, ethics, religion. ${ }^{1}$

[^117]2570. As regards legality, it is evidently violated not only by any act of revolution-by any coup d'ctat-but also by any act preparatory to an overturn of the existing order. Argument on that point is therefore altogether idle. Yet that is the point which is most hotly debated both by those who are defending, and by those who are trying to subvert, a given social order. The defenders are trying to take advantage of sentiments of disapproval for any act contrary to legality, and therefore fail to see, or at least pretend not to see, that the legality is the very thing the revolution is trying to change. Assailants of the social order, the better to destroy it, try to take advantage of the forces engendered by that order and therefore make every effort to show, in the face of all evidence, that acts which are undoubtedly acts of revolt are "legal" and that they therefore ought not be and "cannot" be punished by defenders of the order. ${ }^{1}$
2571. As for the principles of law, equity, ethics, and religion, they are appealed to because there is nothing else to appeal to, once one has deserted the logico-experimental field, and because they have the great merit of proving anything one desires to prove. Religious principles, except of course the principles of the now dominant religion of democracy, have lapsed into desuetude. Still vigorous and fresh are the principles of law, equity, and ethics; and they are used to judge not only domestic but international conflicts.
2572. Juridical principles may be more or less exact and therefore yield (provided they are used in conflicts between private citizens in societies in which they are generally accepted and in which they therefore reflect common sentiments) conclusions that more or less accord with reality ( $\$ \$ 1772$ f.). But such provisos fail when one portion of a population rises against another. In that case the accord of the principles with reality also fails in consequence; and the principles can no longer be used unless they are viewed as having an absolute value that oversteps the experimental field. The same is to be said of their application to international conflicts. They may yield

[^118]conclusions that are not greatly at variance with realities provided they are used between nations that assent to them as expressing common sentiments; but again the proviso fails if such common assent and sentiments are lacking. Ethical principles also are devoid of any definiteness, and those who use them in the cases here in question are merely investigating the bearing of the facts on their own sentiments, not the relationship of fact to fact, not experimental uniformities. But sentimental research is the more easily carried out, and the literary lucubrations it produces are more readily grasped by the masses at large. That is why it is the one more generally resorted to.
2573. The history of the decline of the Roman Republic yields several instances of attempts to overthrow legal institutions either from below or from above. Suppose we consider one of those attempts in some detail, in view of its resemblances to revolutionary, anarchistic, and other such disturbances that are going on in our time.
Famous in history is the conspiracy of Catiline. The description that Sallust gives of it in his Bellum Catilinae, is so ridiculously rhetorical as hardly to pass as a cheap melodrama. He begins, I-XIII, by declaiming against greed and the lust for gold. Then he picks a quarrel with ambition and explains how it comes more nearly to being a virtue than greed. Then he sheds a tear over the grave of virtue and waxes wroth at immorality. Finally in sheer goodness of heart he remembers that he is supposed to be telling about Catiline's conspiracy, and after his beautiful prologue states clearly what its causes were, XIV, I: "Catiline gathered about him as it were for a body-guard, a thing easy to do in a city so great and so corrupt, a conglomeration of all conceivable infamies and crimes." ${ }^{1}$
$2573{ }^{1}$ [Rolfe: "troops of criminals and reprobates."] Sallust goes on, XV, 3-4, to accuse Catiline of killing his own son and suspects that remorse must have hastened his attempt: "And that [the murder of his son], it seems to me, must have been the original cause of his conceiving such a plot; for the guilty soul that is harassed by thought of gods and men alike can find no peace either when awake or in slumber. So did conscience devastate the terrified soul of this murderer. That explains his pale face, his shifting gaze, his walking by fits and starts, for madness was written patently on every lineament of his features." Sallust says nothing of Ciccro's Fourth Oration against Catiline and slides over Cato's attacks on Caesar. Appian also, De bellis civilibus, II, 2, mentions the charge that Catiline had killed a son. And co. Valerius Maximus, De dictis factisque
2574. Fortunately we have other accounts of the conspiracy. The story by Appian (loc. cit.), being the soberest of all, would seem to come closest to facts as they were. That Catiline was a bit of a rascal is averred by all authorities in unison, and that seems plausible enough. But it is also apparent that that not very honest man was not an adept at the astute ingenuities that raised men no more honest than he was to power and wealth, while he, on the other hand, had the courage that disinclines people to resigned acceptance of oppression. Around him gathered individuals of identical temperaments. If, with what would probably be excessive severity, one chooses to regard them all as criminals, we may say that their conflict with the governing class was a battle between thieves by violence and thieves by adroitness; and that may explain why Caesar had for them the benevolence people commonly feel for men who are fighting those whom one despises even more; or, rather, that may explain why Caesar, who cared little about honesty of means so only they attained his ends, conceived then and there the scheme of using the thieves by violence to undo the thieves by adroitness, and so to be left with the wealth of the whole Roman Empire in his own hands.
2575. Appian records the fact that Catiline stood for the consulate and failed of election-essayed, in other words, the battle of wits and lost because he had no aptitude for that type of game: "Whereafter he refused to take any part in public affairs [As uncompromising anti-parliamentarians do in our day, and for identical reasons.] because politics led neither promptly nor surely to absolute power but was full of brawls and hatreds." ${ }^{1}$ By no means the idiot that Sallust would expose to our gaze! Cicero himself relates that Cati-

[^119]line's grave was decorated with flowers and that funeral honours were celebrated upon it. ${ }^{2}$
2576. Moralists who like to make a novel of history consider it their duty either to condemn or absolve Catiline. Those who condemn him see in him an enemy of his country; those who absolve him make him out a friend of "the People" in its effort to shake off the yoke of an "oligarchy." Others in plenty follow a middle course and rule Catiline's purpose just, but his means mistaken and reprehensible. ${ }^{1}$
The facts are much more complex than any such poetic fancies. Catiline seems to have been an ambitious man without trace of scruple, and altogether similar in that respect to Marius, Sulla, Crassus, Pompey, Caesar, Octavius, and others too numerous to count, who had no scruples to speak of. He was looking for his own road and found it, as usually happens, in the direction of least resistance. Had he been more skilled at political intrigue he would have used political intrigue. He tried to do so, in fact; he failed, and he was shrewd enough to see that that was not crust for teeth such as his. A man of intrepid spirit, fiery, ever ready to use force, he sensed, perhaps without clear inner perception of what he was doing, that his course lay in the direction of force, and he followed it.
2577. He might have been one of the many obscure rebels of whom history makes bare mention; but, as fate decreed, many other individuals happened to find themselves in his own situation, and in that situation, rather than in some other, because the speculators held the upper hand in the governing class in Rome. As a result of that, the episode assumed more considerable proportions and has
$2575{ }^{2}$ Pro Lucio Flacco, 38, 95: "Caius Antony was convicted . . . and on his condemnation the grave of Catiline was strewn with flowers and there was a celebration with funeral banquets attended by a general gathering of desperadoes and public enemies, and funeral rites were performed for Catiline."
$2576{ }^{1}$ [Napoleon III], Histoire de Jules César, Vol. I, pp. 338-39: "Certainly Catiline was guilty in trying to overthrow the laws of his country by violence, but in that he was only following the examples of Marius and Sulla. He dreamed of a revolutionary dictatorship, the downfall of the oligarchy, and, as Dio Cassius says, Historia Romana, XXXVII, 30, 3, a change in the constitution of the Republic and an uprising of the allies. It would have been unfortunate had he succeeded. No abiding good ever comes from impure hands." How pure were the hands of Octavius, who founded the Roman Empire? How pure the hands of Caesar, who preceded him? It is beyond belief that sentiment could so befog human eyesight!
received more attention from history. Catiline attracted former veterans of Sulla, men accustomed to violence because of their background, and with no skill in the subtle arts of the politician. ${ }^{1}$ To him came other men of faction, individuals who had lost their money, were burdened with debts, and desired to improve their status by resort to violence. Among them there may well have been some few specimens of the social refuse that floats on the surface of every revolution. But the fact that men like Caesar were suspected of being with them shows that the movement included people of quite another sort-people who had been beaten at the political game and panted for another test of strength where the victory would go to the man of brawn rather than to the trickster, to the man of fearless courage rather than to the man of versatile wits. ${ }^{23}$

[^120]2578. How firm their resolve, how great their might, transpires from the fact that when the Senate promised immunity from prosecution and a reward of two hundred sesterces to anyone supplying information with regard to the conspiracy, not one traitor appeared; and more clearly still from the manner of their dying at the battle at Fiesole. All their wounds were in front and most of them covered in death the spots of ground on which they had fought alive. ${ }^{1}$
2579. Sallust, Op. cit., XXXIII, I, had them say that they had taken up arms not against their country but to defend themselves against the money-lenders, who had deprived many men of their country and all men of honour and wealth. On the other hand it was the speculators, in other words the knights, who defended Cicero, stood guard about the Senate, and threatened armed violence upon Caesar, who was suspected of being one of Catiline's accomplices. ${ }^{1}$
2580. In those days in Rome, as in all Europe in our day, the increase in wealth had raised the cost of living, so that people disposed to rest on their ancestral fortunes were soon overreached, forced into debt, ruined. Those only saved themselves (or in fact often accumulated great wealth) who sought new earnings in politics and speculation. More cowardly than the Romans, our modern losers for the most part sit resigned. The more impetuous Roman the defeats, the exiles, the poverty. How long will you endure such things, O men of heart? Is it not better to die bravely than to lose a wretched and contemptible life in ignominy, after making sport for the insolence of others? Of course it is, by the faith of gods and men! Victory is within our grasp. Youth is our strength, courage our watchword. And they? They are weaklings and dotards, sapped by age and high living."
$2578^{1}$ Sallust, Op. cit., XXXVI, 5: "Not one among the hosts of conspirators was induced by the reward offered by the Senate in two decrees to make any revelations as to the plot, nor was one deserter to be counted from Catiline's camp." And LXI, I: "What courage and what spirit prevailed in Catiline's army one could see after the battle was over. For almost every man covered with his dead body the spot he had elected to defend while alive. Some few in the centre had been driven back a little by the praetorian cohort [that is, the gencral's personal command], but all of them had fallen with their wounds in front."
$2579{ }^{1}$ Sallust, Op. cit., XLIX, 4: "A number (nonnulli) of Roman knights stood guard with drawn swords about the Temple of Concord [the Senate building], inspired whether by the magnitude of the peril or by noble ideals. That their loyalty to the state might shine the clearer they threatened Caesar with their swords as he issucd from the Senate." Suetonius, Divis Julius, I4, adds other details, among them that Cacsar bad voted against the death-sentence that had been passed upon
losers elected to make the test of arms before resigning. Force not seldom avails to break the flimsy, however flexible, meshes of shrewdness and cunning.
2581. Says Plutarch, Cicero, 10, 4 (Perrin, Vol. VII, pp. 107-09): "All Etruria was rising in rebellion, and likewise a large part of Cisalpine Gaul. Rome stood in gravest danger of a total overturn because of the inequalities in wealth [The usual error, repeated by many moderns, of assigning to inequalities in wealth effects that are due to other causes.], since men who were most eminent for their achievements and character had ruined themselves in lavishing money on theatres, banquets, election campaigns, and public buildings [They were the muddlers at the political game. The clever ones more than made up for costs by exploiting provinces or in speculations, as Crassus did.]; so that wealth had passed into the hands of the low-born and the worthless [Able politicians, rather, men endowed with combination-residues to the exclusion virtually of all other residues.] and anyone who had dared might have overthrown a state that was in itself already tottering." In other words, anyone venturing to meet cunning with force would have had a good chance of winning. Catiline failed of victory. Success smiled for a time on Caesar, and rested permanently with Augustus.

Catiline's accomplices. Then he adds: "And he did not cease his opposition till an armed band of Roman knights, who were standing about the Senate as a guard, threatened him with death . . . striking at him with their drawn swords, so that those seated about him ran from him with one accord, while a mere handful strove to protect him by throwing their arms about him and covering him with their togas. He was so thoroughly frightened that he not only left the Senate but did not return thither for the remainder of that year." Had the knights continued to use force in that manner, they and not their enemies would have been the victors. But they were against that by temperament, having fundamentally the temperament of all speculators. And cf. Plutarch, Caesar, VIII (Perrin, Vol. VII, pp. 459-61). In his oration In toga candida (Opera, Vol. VII, pp. 376-77), of which a few fragments have been preserved by Asconius, Cicero declares that Catiline could ask the consulate neither of the leading citizens, who would have none of his candidacy, nor of the Senate, which had condemned him, nor of the equestrian order, which he had tried to slaughter: "Ab equestri ordine, quem trucidasti?'' On that point Asconius remarks, Enarratio in orationem 'In toga candida,' p. 89: "The equestrian order had stood with Cinna's faction against Sulla and had stolen much money, because of which they were known as saccularii (pickpockets). Many of them were slain after Sulla's victory, in view of their unpopularity on that account." That gives a clear picture of the speculators who filled their pockets and could be checked only by force. Cf. Quintus Cicero, De petitione constulatus, II (pp. 527-28).
2582. Says Napoleon III: ${ }^{1}$ "Cicero thought he had destroyed a whole party. He was mistaken. He had but foiled a conspiracy and rescued a cause [For Louis Napoleon, bless his heart, the "cause" was the cause of democracy versus oligarchy.] from the hands of irresponsible individuals who were compromising it. The unlawful execution of the conspirators rehabilitated their memory." And with that we go back to the moralistic romance! Cicero's "mistake," according to Napoleon III, lay in his not having stuck to the law! How faithfully Caesar and Augustus stuck to the law! ${ }^{2}$ If one must say that Cicero made a "mistake" it would be the rather stupid mistake of believing that eloquence, or if one prefer, reason and righteousness, can serve as substitutes for force.
2583. Catiline's conspiracy was just one of the many attempted rebellions that preceded the final catastrophe. It was an episode in the civil wars that marked the end of the Republic and they were all, to some extent at least, struggles between people who were rich in Class I residues and people who were rich in residues of grouppersistence (Class II). The latter finally won out with Octavius and he, as Augustus, tried, though in vain, to restore the religion, the morality, the manners, the customs of the days of old. That, with the support of the military, gave stability to the Roman Empire for a short time at least.
2584. The victory on which the Empire was founded was not, however, a victory of force exclusively; for Caesar and Augustus used a lavish supplement of cunning, and Caesar further enjoyed extensive support from the plutocracy. Then, as is the case in our day, the plutocracy turned in the direction where it saw the greater probabilities of profit. In France it burned incense to Napoleon III, author of a coup d'état; then, after 1870, it idolized Thiers; today it makes prostrate obeisance to the Radical-Socialists. As long as the

[^121]profits are there it little cares what flag covers the goods. Towards the end of the Republic speculation in provincial taxes was the prevalent type; but there was also a speculation of the modern type that was applied to economic production, with an adjunct of political manipulation. The Empire weakened that tie, and to its good fortune got a type of speculation that was in the main economic. ${ }^{1}$
$2584^{1}$ Crassus was the type of the plutocrat-politician of the last years of the Republic, very much like the plutocrat-politician of our day. He differs from the modern type in that he was a man of senatorial origins, whereas our plutocratpoliticians generally emanate from the middle or lower classes. Conspicuous in him as in the moderns is the overwhelming abundance of Class I residues and a virtually total absence of Class II residues. Crassus came of a line of speculators, as do numbers of our plutocrats today. Pliny, Historia naturalis, XXXIII, 47(10) (Bostock-Riley, Vol. VI, p. 129): "Later on they [the Crassi] acquired the epithet of 'Rich' (Dives) as a family name, though it is notorious that the first of that name got his money by defaulting his debts. Marcus Crassus, who was of that line, denied that anyone was a rich man unless he could maintain a legion on his annual income." Mommsen draws a magnificent portrait of Crassus, Römische Geschichte, Vol. III, pp. 14-16 (Dixon, Vol. IV, pp. 13-15): "As regards mental endowments, literary culture, military talent, he was far in the rear of many men of his class, but he surpassed them all in tireless activity and in his stubborn resolve to own everything and be in the forefront in everything. [Traits of the modern plutocrat as well.] He threw himself headlong into speculation. [That is the way plutocrats get to be plutocrats.] Purchases of real estate during the revolution lay at the base of his enormous fortune [The wealth of our modern plutocrats generally originates, when not in protective tariffs, in government supplies, government contracts, and other favours that are bought of politicians.], though he did not neglect other forms of money-making. He built houses in Rome that were as shrewdly situated as they were pretentious. With his freedmen [They correspond to the modern plutocratic clique.] he acquired interests in commercial firms and enterprises. He had banks in Rome and other places, with or without partners or agents. He lent his money to his colleagues in the Senate [As Berteaux did to Deputies in the French parliament.], acting as their 'dummy,' as occasion offered, in obtaining public contracts and buying support for them in trials before the collegia. [In our time, the plutocrat buys the politician who in turn influences court decisions.] . . . Carefully judging his conduct in such way as to avoid open conflict with the criminal judge, he knew the art of living simply, unostentatiously, like the true man of wealth he was. Starting with an ordinary senatorial inheritance, he was known within a very few years to have amassed an enormous treasure. Just before his death, in spite of unprecedented and unexpected outlays, his fortune was still estimated at $170,000,000$ sesterces ( $\$ 10,000,000$ ). . . . He spared no pains to extend his influence. . . . Most of the Senators were in his debt. [In France many deputies owed Berteaux money. In Italy the bank investigations showed that many members of the parliament were in debt to members of the plutocracy.] He had hosts of prominent men dependent on him. . . . A business man above all else, he lent money without regard to political affiliations, and had interests in all parties. [Exactly as our plutocrats do. They lend even to the most
2585. This economic activity enabled men who got rich to rise to higher classes. ${ }^{1}$ So elements from below attained the governing class, enriching it in combination-instincts; but they rose slowly, so that the combination-instincts had time to strike a balance with group-persistences. The Empire was organized in distinct and separate social classes, which were reached by hereditary right but also by class-circulation, some individuals mounting on the social ladder, others dropping to lower rungs, but, with some few exceptions due largely to Imperial favour, the advance in station was not sud-
blood-thirsty enemies of financiers, capitalists, the bourgeoisie.] His purse was open to anyone who was solvent or who could be useful to him. As for leaders of parties and factions, whose attacks spared no one, they were very careful to keep hands off when it came to Crassus. . . . Ever since Rome had been Rome, money had played a powerful rôle in the state, but by this time gold was the road to everything, along with the sword. [To make that fit our day the word "sword" has to be deleted.] Then it was that a Crassus-a symptom characteristic, alas, of the time-who was a very ordinary orator and a worse general, a politician full of activity but short on energy [A good description of the plutocrats who govern our modern civilized countries.], a man of boundless greed but of no great ambition, getting along on nothing save his colossal fortune and his skill in finance, could be seen extending his influence everywhere, acquiring full control of the allpowerful influence of the cliques of intriguers [For our plutocrats one has to add the newspapers.], considering himself the equal of the greatest generals and statesmen of his age, and vying with them for the possession of the highest palms to which the greed of the climber can aspire." Plutarch, Crassus, 2, 27: "At the outset he possessed not more than 300 talents [A talent was $\$ 10,000$. .] Later on, when he came into power, he contributed the tenth part of his fortune to the Temple of Hercules, gave the people a banquet, and provided grain for three months for each citizen. Nevertheless, before starting out on his expedition against the Parthians, he made an inventory of his fortune and found that it amounted to 7, roo talents." He bought houses that were in need of repairs at low prices and rebuilt them. He owned silver mines and agricultural properties yielding large revenues, "yet all such would seem little as compared with the sums of money that he derived from the labour of slaves, of whom he had huge numbers and of every sort: readers, copyists, metal-workers, stewards, table-servants." Crassus posed as a democrat, much as our own plutocrats pose as Socialists. Like our plutocrats, further, he knew the road to the good graces of the powerful. When Caesar was about to start for Spain, he freed him from his creditors, standing bail for him in the amount of 830 talents. Noting that there were three factions in Rome following Pompey, Caesar, and Crassus respectively, Plutarch continucs: "Crassus steered a middle course [between the other two factions], making use of them both. Changing political
$2585^{1}$ Marcus Scneca, Colltroversiac, II-2, I (Bouillet, pp. 171-72): "Property evaluation climbs the stairs to the Senate, distinguishes the Roman knight from the plebeian, assures promotion in the army, selects the judges in the law-courts." And c\%.§2548 ${ }^{3}$.
den, but gradual, so that several generations were required for climbing at all high. ${ }^{2}$ So long as it was the fact as well as the law that wealth gave entrée to the class next above, and so long as the class that was so entered actually had some share, however small, in public affairs and was not merely honorific, the Empire was economically prosperous, even though military virtues in the dominant class were languishing. The maximum of prosperity was realized in the early days when the civilian element was producing wealth and a military class was maintaining order at home and abroad. ${ }^{3}$
colour according to the ebb and flow of fortune in Rome, he was neither a faithful friend nor an implacable enemy, putting away his benevolence or his wrath as best suited his convenience. [Exactly as our plutocrats do.] He was often to be seen, in short spaces of time, now defending, now opposing the same men or the same laws." So Caillaux manoeuvred with regard to the income-tax, and Giolitti with regard to universal suffrage. And the Italian Chamber, immediately after rejecting as exaggerated the modest extension of suffrage proposed by Luzzatti, approved the far greater extension proposed by Gioliti. Plutocrats and their representatives are interested in money. For other things they care not a hang.
$2585^{2}$ Fustel de Coulanges, L'Empire romain, pp. 279-80: "All these social distinctions were hereditary. Each individual was fully entitled to the rank in which birth had placed him. However, he could sink in station if he lost his money, or rise higher step by step as his wealth increased. To climb in that social hierarchy was the ambition of everybody who could boast activity and energy. The Imperial government offered no resistance to that continuous ascent which was the objective of all efforts. Its main concern was that it should not be too rapid. It fixed the conditions and the rules under which it could be allowed. It sought especially to prevent, so far as possible, a family's advancing more than two stages in one lifetime. Buying his complete freedom the slave could become a plebeian, but he was forbidden to rise as high as a curial. The plebeian could take his place in the Forum if he came to own twenty-five acres of land and was able to pay his quota of municipal taxes. The curial could in his turn become a principalis [entitled to hold public office], if he was rich enough to bear the burdens of a magistracy and if he could get his fellow-citizens to vote for him. However, the Imperial government insisted that he should fill all the lower offices before he could stand for the higher, and that was a first obstacle and spelled long delay for the upstart." Fustel bases this analysis on the Theodosian Code. That may well have been the law of the matter. In the fact there were many exceptions. Cf. § $255 \mathrm{I}^{1}$, and Tacitus, Annales, XIII, 27. Fustel continues: "When the municipal career had been entirely traversed, then, and not till then, could a family aspire to senatorial rank. There too wealth was necessary, but it was not enough. The rule required that a Roman magistracy should be awarded by the Emperor."
$2585{ }^{3}$ Extravagant living was still astounding in Rome in the day of Tiberius. Tacitus, Annales, II, 38. In III, 52, he says: "Caius Sulpicius and Decimus Haterius followed as consuls. It was a year of quiet abroad. At home it was foreseen that measures would be taken against extravagant living, which had gone out of bounds in regard to everything on which money could be squandered." The aediles were

The Empire drooped towards decline because beyond the frontiers no wealthy people were left to be exploited by conquest, and because at home the crystallization in economic institutions, the progress in "organization," after producing a brief period of prosperity led to the usual economic depression. Production held its own for the reason stated in $\$ 2553$, that it tends to show improvement as society begins to rigidify after a period of flexible initiative-in this case the costs of maintaining stability at home and defending the frontiers of the Empire being reduced to a minimum, or being, at any rate, insignificant as compared with the squanderings of the demagogic plutocracy during the last years of the Republic. The wages of the praetorians, who upheld the government and assured quiet under Tiberius, were a pittance as compared with the fortunes spent by politicians towards the end of the Republic in purchasing votes from the people ( $\$ 2562$ ). ${ }^{4}$ But such a state of things had to
minded to prohibit such wastage and the Senate asked Tiberius to decide what was to be done. Tiberius pointed to the difficulty of doing anything, Ibid., 53: " 'What indeed should first be forbidden? What shall we try to bring back to olden customs? The great villas? Shall we prescribe the number and nationality of slaves? The weight of silver and gold that may be used on our tables? What about the wonders in bronze, and the pictures? Shall we fix the styles of dress for men and women, and especially for women, since they are transferring our substance to foreigners and enemies to buy gems?' " Disregarding the usual crusting of derivations, one must say that, substantially, Tiberius was right. Ibid., 54: "From victories abroad we learned to squander the properties of others, from our victories at home we have learned to squander our own." "Tiberius was for letting things take their course, and Tacitus remarks, Ibid., 55, that in spite of that there was a diminution in extravagance, and he assigns the credit to a new élite that was coming Romeward from the provinces, and to the good example set by Vespasian. He then ventures his theory of the cycle to which we alluded in $\$ 2552^{1}$. The causes he mentions may be reckoned among the secondary, certainly not among the primary, causes, for after Vespasian's time the Romeward movement of population had produced every possible effect and the second was entirely missing, for, to say nothing of others, Commodus, Caracalla, and Elagabalus, among Vespasian's successors, were not just the ones to set examples of parsimonious living. Yet moneyspending by private citizens and economic prosperity continued to fall off.
$2585^{4}$ Marquardt, Römische Staatsverwaltung: Das Finanzwesen, Pt. II, Bk. II, p. 96: "The praetorians, who were organized in nine cohorts of 1,000 men, were paid, at the time of Tiberius, 720 denarii, but without supplies. These were added to their pay beginning with Nero." The total cost of twenty-five legions, the practorians, and the urban cohorts was, according to Marquardt, $46,710,000$ denarii or $\$ 10,105,000$. But there were other expenses, not least among them the donativa, which cannot be estimated and which increased as time went on. [The donativa were "tips" paid by the Emperor to soldiers on festive occasions of importance, especially his birth-day.-A. L.]
change, by normal evolution, into decline for the Empire ( $\$ 2541$ ): the ascending period was closely knit to the descending period ( $\$ 2338$ ); the youthful prosperity of the organism gradually changed to the hardships of old age. As society progressively crystallized production gradually diminished ( $\$ 2607 \mathrm{f}$.), while wastage of wealth increased. Imposing more and more upon the civil authority and changing in character and methods, the military power became a source of weakness to the government to which it had formerly lent stability, substituting intimidation for the obedience it had once paid its generals, so exploiting the social system for its own profit, causing wastage of wealth ( $\$ 2608$ ), and finally weakening and destroying the military power of the army itself ( $\$ 2606$ ).
2586. The Empire's main reliance had been the army, but it was not in the army that the major portion of the governing class originated. The legions could easily make an Emperor, but they did not develop any great number of administrators, very few in fact, and so were not a rich source of new materials for replenishing the élite. The governing class became more and more a class of office-holders, with all the merits and shortcomings peculiar to that sort of people, and military capacity gradually vanished from it.
2587. Most illuminating from that standpoint are the events following the death of the Emperor Aurelian. The legions asked the Senate for an Emperor. The Senate refused to name one. But the legions held out, and as a result the Empire was left without a head for six months. Finally the Senators were virtually forced to designate one of their number. And whom did they elect? A general, perchance, or at least a man of energy? Not at all! An old man of seventy-five! The incident shows the dearth of combination-instincts in the legions, and in the Senate the dearth of military vigour. The first defect might have been remedied had the choice of the legions chanced to fall on an individual rich in instincts for political combinations. For the second defect there was no remedy, and to it were in great part due first the ruin of the élite and then the fall of the Empire. ${ }^{1}$

[^122]2588. What we are told of the election of Tacitus shows that the disease of humanitarianism that is at present raging in our modern countries was spreading wreckage far and wide in that early day.
2589. Inspired as they are by ethical prejudices against wealth, luxury, "capital," most writers centre on those circumstances alone in the history of Rome, whereas more illuminating in their bearing on the social equilibrium would be the modifications in the sentiments (residues) prevailing in the governing class.
2590. Traces of class-circulation in the early days of the Empire are abundant; and if they are not as abundant as one might wish, the fact is due to the feeling that such details were hardly worthy of mention in dignified history, so that we are left with merely incidental allusions. What we have is adequate, however, to show what was going on. ${ }^{1}$ The parvenu Rufus, of whom Tacitus, Annales, (41, $13-15$ ): "I think this matter of choosing an Emperor should be referred to the army itself. For in making a choice of this kind, unless the action of the Senate is ratified it will be dangerous for the man chosen and a source of unpopularity for those who choose him.' " The Senate adopted that view but, both sides holding firm, the Senate finally yielded, nominating Tacitus himself: "'Probata est sententia Taciti: attamen cum iterum atque iterum mitterent, ex S. C., quod in Taciti vita dicemus, Tacitus factus est imperator.'" In his Tacitus, 2, 1, Vopiscus says: "There-fore-a thing most strange and embarrassing-the Senate and Roman People had to put up with the fact that for six months the state should be without an Emperor while a good one was being sought." But the army had to have a commander, and the Consul, Gordianus, remarked before the Senate, Ibid., 3, 4: "'An Emperor has to be elected. The army cannot go on any longer without a commander and the necessity is urgent, for the Germans are said to have broken the frontier across the Rhine.' "Rome found no demagogue along the lines of Jaurès, Caillaux, or Lord Grey, to assure her that she need have no fear of the attacking Germans; but that was little gained, for the Conscript Fathers, good humanitarians that they were, thought that the invaders could be held off by private and public virtues. And yet poor Tacitus, declining the honour they were forcing upon him, observed with much wisdom, Ibid., 4, 5-6: "II am surprised, O Conscript Fathers,

[^123]XI, 2I, draws a portrait, manifests all the traits of the ingenious baseness that were characteristic of the new élite and which were conspicuous in other individuals. Says Tacitus: "Of the origins of Rufus, who some say was the son of a gladiator, I would not speak falsehood, and yet I am loth to speak the truth. . . . Become a man, he scraped an acquaintance with the quaestor in Africa. Being at Adrumentum and walking alone in the porticos one day at noon, he had a vision. A woman of supernatural semblance appeared to him and said: 'Rufus, thou shalt come here one day as proconsul!' Taking heart from the prodigy, he hastened to Rome, and thanks to an alert mind and loans from friends, he became quaestor and later on, by favour of the Emperor Tiberius, practor, a post that belonged to men of noble birth. Tiberius said, in excuse of the man's low birth: 'I am sure Rufus was his own father.' He lived a long life. With the great he was a craven flatterer, with inferiors an arrogant bully, with equals merely a disagreeable bore. He obtained consular authority, the honours of a triumph, and finally Africa, where he died, the prophecy so being fulfilled."
2591. The Trimalchio of Petronius, Satyricon, 76-77 (Mitchell, pp. 139-40), though he may have been a character of fiction, undoubtedly was drawn from real life. Eliminating the pornography and replacing the gluttony with other forms of indulgence, the man is quite the counterpart of certain exotic millionaires of our day. How does Trimalchio acquire his huge fortune? He loads five ships with wine and despatches them to Rome. They founder at sea, but he does not lose heart on that account. He outfits a new fleet with ships
that you could think of choosing an aged man as Emperor in the place of Aurelian who was a commander of great merit.'" A Senator of consular rank suavely breathed the humanitarian poetry that counselled choice of a Tacitus, Ibid., 6, 2: "'We have elected Emperor a man who is our elder and who can counsel us all as a father would. [Clemenceau would have said: "a man who is a 'pure' republican."] Nothing rash, nothing impulsive, nothing harsh is to be feared from such a man. . . . He knows the sort of Emperor he has always desired for himself, nor can he exhibit to us anything that he does not desire and approve of." " It all sounds like an idyll. Nothing is missing save the shepherdess and a flock of lambs with ribbons around their necks. The good soul warmed the throne for half a year. Ibid., 13, 5: "He achieved nothing of importance because of the briefness of his reign; for after six months he was murdered, according to one story, by a group of conspirators among the soldiers. According to another he died a natural death. One thing is certain, that he had neither intelligence nor courage, and succumbed to the many factions."
bigger, better, and luckier than the first, and cargoes this time of wine, pork, beans, perfumes from Capua, slaves. That makes him ro,000,000 sesterces- $\$ 250,000-\mathrm{at} \mathrm{one} \mathrm{scoop} .\mathrm{He} \mathrm{continues} \mathrm{trading}$, always luckily, and then quietly settles down to the business of lending money to freedmen. His real inclination would have been to retire from business altogether; but he was dissuaded from that by a fortune-teller. Could a modern parvenu do better than Trimalchio when he turns to one of his guests and exclaims: "Take my word for it: if you have a penny, you are worth a penny; if you have a million, it is hail! hail! That friend of yours-he was once a bullfrog! Look at him now! He's a king!" ${ }^{1}$ Trimalchio will have his say on matters of philosophy and literature, ${ }^{2}$ and he knows as much about them as one of our moderns, who thinks that now that he has made his money he is an authority in every field. Trimalchio (Satyricon, ${ }^{67}$ ) parades his wife's jewels before his guests and will have them know their precise weight. Not a few modern parvenus could do as well.
2592. But from the economic standpoint of the husband, Trimalchio's wife is far superior to the women of our plutocracy. Our modern wives, when they get rich or even reach moderately easy circumstances, disdain the cares of the home and become mere luxuries, devourers of wealth and savings. The good Fortunata devotes herself in all earnestness to domestic economy, and once when her husband had been ruined (Ibid., 76) she gave him her jewels-in that too differing, quite, from many women in our plutocracy, who make haste to divorce men who cease to be able to keep them in luxury. ${ }^{1}$

[^124]2593. Petronius has other parvenus besides Trimalchio. He mentions the sexvir, Habinna, a sculptor or at least a stone-carver, who also gives his wife costly jewels, and a barrister, Phileron, who has risen to great wealth. ${ }^{1}$ A number of freedmen who had been Trimalchio's comrades in servitude are also now rich. ${ }^{2}$ So commerce, in person of Trimalchio, industry in Habinna, learning in Phileron, produce the new-comers. They are laughed at, but the laugh proves that they are there. Martial chafes a cobbler who had given a gladia-
$2593{ }^{1}$ Satyricon, 65 (Mitchell, p. 123): "Meantime a lictor banged on the doors of the dining-room and a new guest entered, clad in a white toga and attended by a huge retinue. Abashed at such an impressive sight, I thought that at the very least a practor had come, and made an effort to rise from my couch and get my bare feet on the floor. Agamemnon laughed at my fright. 'Stay where you are, idiot! That is just Habinna, the sexvir. He is only a stone-cutter, but, they tell me, a good one-for gravestones!'" The sexvirs were the presidents of the six guilds of knights. They were drawn largely from the class of freedmen. They had to be men of some means, since their posts called for heavy expenditures in connexion chiefly with public games and anniversary celebrations, the anniversary in particular of the march of Octavius on Rome. Marquardt, Organisation des römischen Reichs, pp. 206-07: "It was the duty of the sexvirs (or sevirs) to see that ordinary sacrifices were provided for and to look after holiday celebrations, the expenses being covered by the money the sexvirs had paid in, when the decurions had not already spent it on public buildings of one sort or another." The sexvirs at Narbonne (Orelli, Inscriptionum . . . collectio, no. 2489), celebrated sacrifices twice a year, and four times a year supplied all colonists and residents with incense and wine. De Ruggiero, Dizionario epigrafico, s.v. Augustalis, quotes an inscription from Panormus, Corpus inscriptionum Latinarum, Vol. X, no. 7269 (p. 753): "Aram Victoriae Sex. Pompeius Mercator VI vir Aug. praeter summm pro honore d.d.p.s.p. [pro honore decurionum decreto pecunia sua posuit]" ("This altar to Victory Sextus Pompeius, merchant, Augustal sexvir, erected by decree, and with money paid in addition to his decurion's honorarium.") The allusion is to the honorarium dectrionatus, which the sexvir paid on assuming office. By a chance that is strange indeed in its bearing on the passage in Petronius, an inscription has survived mentioning a stone-cutter (marmorius) who was a sexvir. Other trades too are mentioned in such inscriptions, a broker (negotiator), a pork-merchant, a silver-worker, a haberdasher (vestiarius tenuiarius), a manufacturer of purple dyes, a miller. They all indicate wealth on its way upward from the lower classes. [This note has been rewritten.-A. L.]

As for the lawyer, Petronius says, Satyricon, 46 (Mitchell, p. 98): "And there you see Phileron, the lawyer. Had he not studied law, he would not know where his next meal is coming from. A short time ago he was peddling in the streets with a pack on his back. Now there he is stretching in the face of Norbanus! He is a treasure-store of learning and there is no end to his craft."
$2593{ }^{2}$ Satyricon, 38 (Mitchell, p. 86): "But don't underestimate his other excomrades in servitude. They all have their piles today. Do you see that fellow at the end of the table? 'Today he has his million-and he started with nothing."
torial show at Bologna, and a fuller who had done the same at Modena. ${ }^{3}$
2594. Juvenal too aims the lash of his satire at the newly rich. Making lavish allowances for poetic exaggeration on his part, one still cannot believe that his anecdotes are altogether in contradiction with what everyone knew and could see in Rome. Twice he speaks of a barber he had patronized as a very rich man. The particular fact may not be history. The type surely was true to life. ${ }^{1}$
2595. The invasion of Rome by foreigners is also well remarked by Juvenal. He shows, on the one hand, I, vv. ro2-II, the "descendants of the Trojans" fallen on evil days and begging dole, and, on the other, a rich freedman who wants a place in the line ahead of the Romans. "Let him who recently came to this city with whitened
$2593{ }^{3}$ Epigrammata, III, 59, vv. 16-17:
"Sutor cerdo dedit tibi, culta Bononia, munus. Fullo dedit Mutinae. Nunc ubi caupo dabit?"
("A cobbler, Bologna the learned, hath given thee a show, and a fuller one at Modena? Where, next, a brothel-keeper?")

> "Das gladiatores, sutorum regule cerdo, quodque tibi tribuit subula, sica rapit. Ebrius es: nec enim faceres id sobrius unquam, ut velles corio ludere cerdo tuo."
("So you are giving us gladiators, O kinglet of cobblers? What an awl earned, a dagger takes away! You are drunk, surely, for who ever heard of a sober cobbler having fun at the expense of his own hide?") Tacitus, Annales, IV, 62, 2, also speaks of a freedman named Atilius who had given a gladiatorial spectacle: "Atilius quidam libertini generis . . . quo spectaculum gladiatorum celebraret . . ."
$2594{ }^{1}$ Saturae, X, vv. 225-26:
"Percurran citius quot villas possideat nunc,
quo tondente gravis iuveni mihi barba sonabat."
("Rapidly must I trip over the many villas now possessed by a man who, when I was young, heard my heavy beard sing under his razor.") The scholiast notes: "Quo tondente gravis: 'Licinius the barber got to be a Senator.'" And again: "Percurram citius, the many villas the barber who used to shave me has, now that he has become a Senator." And cf., Ibid., I, vv. 24-25:

> "Patricios omnes opibus quum provocet unus quo tondente gravis iuveni mihi barba sonabat."
("All patrician wealth is challenged by a man who, when I was young, heard my heavy beard sing under his razor.")
feet not yield precedence to consecrated office." ${ }^{1}$ Of the Greeks who had come to Rome, Juvenal says, III, vv. 92-93: "We too can praise as they do-but they persuade." And farther along, vv. 119-20: "There is room for no Roman where a Protogenes, a Diphilus, or a Hermarchus rules." Then, vv. I3r-32: "The youth free-born must yield the sidewalk to some rich man's slave." And earlier he had said, vv. 6o-66: "I cannot endure, Quirites, a Rome that is Greek, though, after all, how small a part of it this refuse of Achaea makes! For a long time now has the Syrian Orontes been pouring its language and its customs into the Tiber." ${ }^{2}$ And he might have added: its religion. He no doubt is exaggerating, though none the less with a kernel of fact, when he says of the seats for the equestrian order at the theatre, III, vv. 153-58: "He whose property sufficeth not the law will depart, if he hath not lost all shame, from these equestrian cushions; they are for the haunches of sons of panderers, born of this or that brothel, who sit applauding between the scions of

> ". . . Prior, inquit, ego adsum: Cur timeam, dubitemve locum defendere, quamvis natus ad Euphraten, molles quod in aure fenestrae arguerint, licet ipse negem? sed quinque tabernae quadringenta parant: quid confert purpura maior optandum, si Laurenti custodit in agro conductas Corvinus oves? ego possideo plus Pallante et Licinis! Exspectent ergo tribuni, vincant divitiae, sacro nec cedat honori nuper in hanc urbem pedibus qui venerat albis."

(" 'I was here first,' he said. 'Why should I fear or hesitate to hold my place just because I was born on the Euphrates (as the holes in the lobes of my ears would show, even though I tried to deny it)? My five brothels bring me in their forty thousand. What profits a higher purple, if Corvinus, the patrician, tends hired sheep on a Laurentian farm? Am I not richer than a Pallas and a Licinus? So let the tribunes wait! Gangway for wealth, say I. Let him who came to this city with whitened feet not yield precedence to consecrated office.' ") [Pallas was a rich freedman, favourite to the Emperor Claudius. Licinus was imperial barber to Augustus. -A. L.] "Five brothels," "Five taverns," has been interpreted, on no very good grounds, as a place-name. When a recently imported slave was for sale his feet were kept whitened with chalk.
". . . Non possum ferre, Quirites,
Graecam urbem: quamvis quota portio faecis Achaei?
Iam pridem Syrus in Tiberim defluxit Orontes
et linguam et mores."
some trim auctioneer, or the polished cubs of some gladiator, or trainer of gladiators." ${ }^{3}$
2596. Many upstarts there must have been in a society that did not brand as stupid and absurd a satire that ran, Ibid., III, vv. 29-39: "We had better withdraw from this country of ours and leave it to these sly individuals who make contracts for building temples, cleaning rivers, harbours, sewers, carrying corpses to the pyre, selling slaves at auction. People who once blew the horn in rural arenas and have made reputations for bugling as criers, today are giving shows of their own and so only they win popularity, will kill anyone desired at the turning-down of thumbs. Then once out of there, back they go to the latrines they keep for the public. And why not? Are they not they whom Fortune in sarcastic mood is raising from low to high estate?"
2597. Imperial favour picked certain freedmen and lifted them from nothing to the highest honours. Claudius was completely under the control of such people; but they were still few in number and most of them advanced by merit in administrative offices imperial and private. ${ }^{1}$ Dio Cassius, Historia Romana, LXXIX, I3, 2, shows
> $2595^{3}$
> ". . . Exeat, inquit,
> si pudor est, ct de pulvino surgat equestri cuius res legi non sufficit, et sedeant hic lenonum pueri quocunque in fornice nati. His plaudat nitidi praeconis filius inter pinnirapi cultos iuvenes iuvenesque lanistae."

A scholiast note on pinnirapi: "Gladiators were plumed with peacock feathers when they paraded in the opening procession."
$2597{ }^{1}$ Belot, Histoire des chevaliers romains, Vol. II, pp. 385-87: "The Emperor Claudius went farthest in raising his freedmen to power under guise of fiscal agents. Plaything in the hands of a clique, he issued orders that the decisions of his freedmen should be respected as though they emanated from his person. That meant putting into their hands that personal and extra-legal justice which he saw fit to set up in place of the courts. Charges of peculation and embezzlement (de repetundis), which had occasioned so many party conflicts in the days of the Republic, were now settled behind closed doors by the comptroller, Pallas, who had succeeded another freedman, Menander. The armies and the provinces felt the effects of this new importance that had come to freedmen. A freedman, Felix, was named cohorttribune and wing-prefect in the cavalry, and on resigning those military commands he went as governor to Judea, a province that Claudius ruled with procurators who were now knights, now freedmen, without distinction. . . . Tacitus mentions other provinces that were in the hands of procurators at the time of Nero's death: the two Maurctanias, Rhaetia, Noricum, and Thrace. Shortly after that, the Maritime Alps and Cappadocia came under the pacific rule of procurators."

Macrinus sending Agrippa as his lieutenant to Dacia, and Decius Triccianus to Pannonia. The former had been a slave; the latter an ordinary soldier, footman to the governor of Pannonia. Seneca dwells on the wealth of freedmen, and Tacitus shows them permeating the whole governing class despite the resistance of frceborn citizens. ${ }^{2}$ During Nero's reign the Senate debated the frauds of freedmen, who "were dealing as equals with their masters," and required putting in their places. "It was said in rebuttal that the guilt of the few should fall upon the few, and not upon a body which, taken as a whole, was so large that in the majority the gentes, the decuriae, the assistants to the magistrates and priests, the urban cohorts, to say nothing of countless knights and Senators, came from no other source, for, leaving out descendants of freedmen, the number of other free-born citizens would be scant indeed. . . . And Nero directed, in a rescript to the Senate, 'that individual complaints against freedmen be given satisfaction, but that there be no measure taken against them in general.' " And not long afterwards Paris, entertainer to Nero's aunt, Domitia, was taken from her by virtually civil process, not without discredit to the Emperor at whose instance he had been declared free-born. ${ }^{3}$ Nero gave his patronage to the newly rich and Suetonius represents him as preferring to get the personnel for his government exclusively from such men. ${ }^{4}$

2597 ² Seneca, Epistulae, 27: "Calvisius Sabinus was a rich man, within the memory of those now living. He had the wealth of a freedman and the talents." Ibid., 86: "So far I have been speaking of the water-systems of ordinary people. What would I have to say of the baths of freedmen?" De beneficiis, II, 27: "Gnaeus Lentulus, the augur, was the outstanding example of wealth before the freedmen made him look like a pauper." [Lodge: "before his franklins waxing wealthie and great made him seem poor."] Naturales quaestiones, I, i7: "These débutante daughters (virgunculis) of freedmen spend more for a looking-glass than the Roman people gave Scipio as a dowry for his daughters (dos . . quam dedit Scipioni: better reading: quam dedit pro Scipione)." Tacitus, Annales, II, 48, 1, tells of a rich freedwoman, Aemilia Musa, who died intestate. Tiberius directed that her fortune be given to Aemilius Lepidus, to whom she seemed to have belonged as a slave.
$2597{ }^{3}$ Tacitus, Annales, XIII, 27.
$2597^{4}$ Nero, 37, 3. Nero, according to Suetonius, said that he intended to abolish the senatorial order "and hand over the armies and provinces to freedmen and Roman knights." Of Vitellius, Tacitus, Historiae, I, 58, observes that he "bestowed on Roman knights imperial services which had been commonly exercised by freedmen." Pliny the Younger praises Trajan for not emulating a number of his predecessors in kotowing to freedmen, Panegyricus, 88: "Not a few Emperors, though
2598. On the other hand, war and impoverishment were extinguishing the patriciate. Dio Cassius notes, Historia Romana, LII, 42, that in order to keep up the sacrifices, Augustus had to create new patricians to replace the many who had perished in the civil wars. ${ }^{1}$ Tacitus, Annales, III, 55, 4, also speaks of the many upstarts from the municipia, the colonies, and even from the conquered provinces, who had entered the Senate, and tells how Claudius admitted Gauls to the Senate over the vain protests of the Senators. ${ }^{2}$ And Vespasian,
masters of the citizens, were slaves to their freedmen, acting at the beck and call of such men, hearing with their ears, speaking with their tongues. The praetorships, the priestly offices, the consulates, were sought by them and through them. You hold your freedmen in highest honour, but for what they are, and you think that it is enough for them if they be honest and useful as men." Capitolinus, Antoninus Pius, II, I (Magie, Vol. I, p. 127), says that Antoninus "as Emperor, used his friends not otherwise than he had done as a private citizen, for not even his $f_{1}$ iends could influence him in any respect through his freedmen, with whom, indeed, he was very severe." And of Pertinax the same Capitolinus notes, Helvius Pertinax, 7, 8-9 (Magie, Vol. I, p. 33I), "that he had the freedmen who had belonged to Commodus resold as slaves, and afterwards many of those whom he had ordered sold he took into his personal service as menials, and that amused him as an old man, since under other Emperors they had been reaching even senatorial rank."
$2598^{1}$ Dio adds, loc. cit., 5 , that "civil wars are to nothing more fatal than to nobility." The War of the Roses had just that effect in England.
$2598^{2}$ Annales, XI, 23, 2-6. It was objected that "Italy was not so sick that she would be unable to supply a Senate for her capital; that in olden times natives had sufficed for our kindred peoples, that there was no occasion to be ashamed of the old Republic and that still remembered were the examples of virtue which Roman character had handed down to glory through its ancient morals. Did the fact that Venetians and North Italians (Insubrians) had broken into the Curia mean so little that a conglomeration of foreigners should be inflicted upon it as a form of bondage? What further respect would there be for the remnants of the nobility, if indeed some poor man from Latium might be left in the Senate? For the rich were overrunning everything, men whose grandfathers or great-grandfathers had been leaders of hostile nations and had destroyed Roman armies in war." But Claudius was obdurate and concluded his rescript with the words (Ibid., XI, 24, п1): "Omnia, patres conscripti, quae nunc vetustissima creduntur, nova fuere; plebei magistratus post patricios, Latini post plebcios, ceterarum Italiae gentium post Latinos. Inveterascet hoc quoque, et quod hodie exemplis tuemur inter exempla erit."- ("All things that are now supposed to be very ancient were once, O Conscript Fathers, new. Plebeians succecded patricians in the magistracies, Latians the plebcians, pcople of Italic race the Latians. The things of our time will also be some day old, and what we are testing today on precedent will itself some day be precedent.") The Emperor's rejoinder is an excellent description of class-circulation in Rome.
again, is called upon to restore a senatorial order deficient in both numbers and quality. ${ }^{3}$
2599. Circulation, therefore, is very clearly apparent, and not only in Rome as between the lower and the higher classes. Slaves were herded to the city from all parts of the Empire and even from countries beyond the frontiers. Those among them who were the richest in Class I residues, Greeks and Orientals especially, easily won their freedom. Still in virtue of a predominance of Class I residues, their descendants accumulated wealth, climbed the social ladder, and became knights and Senators. So Latin and Italic blood was eliminated from the governing class, and the new élite, for many reasons, not least among them its origins in slavery and in Asiatic cowardice, became more and more alien to the military spirit.
2600. It was encouraged in that direction by the emperors themselves, who feared it. Dio Cassius, Historia Romana, LII, 14-40, alludes to that attitude in his time in a discourse, altogether unhistorical probably, which he has Maecenas deliver to Augustus advising him as to his manner of government. ${ }^{1}$ The principle was faithfully adhered to by the successors of Augustus, until finally Gallienus went so far as to forbid Senators to enter any army camp; and Severus in his time had discontinued the custom of recruiting praetorians from Italy, Spain, Macedonia, and Noricum, and brought them on from all other sections of the Empire, even from the most barbarous countries. ${ }^{2}$
$2598{ }^{3}$ Suetonius, Divus V'espasianus, 9: "The two highest orders, which had been exhausted by a varied slaughter and contaminated by long-standing negligence, he purged and recruited anew by a revision of the census of Senators and knights, removing unworthy members of those classes and making new elections of Italians and provincials of reputable character." Aurelius Victor, De Caesaribus, 9: "At the same time, taking a census in the old-fashioned way, he removed all discreditable characters from the Senate, and by an election of distinguished men from hither and thither, he scraped together a thousand patrician families (gentes-Causabon) where he had found a bare two hundred, so many having perished in the cruel persecutions of the tyrants."
$2600^{1}$ Dio is simply stating, as through Maecenas, the ideals of the Empire as conceived in his time. He also stresses the advantages of complete separation between civil and military functions, Ibid., LII, 27, 4-5.
$2600{ }^{2}$ Dio Cassius, Historia Romana, LXXIV, 2. Dio adds that that spelled ruin for young men in Italy, in that they turned to brigandage and the gladiatorial profession as a result. And cf. Marquardt, Organisation des römischen Reichs, p. 557.
2601. The development may be pictured roughly in these terms: under the Republic obligation of actual military service on the part of members of the élite; in the early years of the Empire, a merely formal obligation, actual service not being forbidden; in the latter periods, complete legal disqualification from actual military service.
2602. The case of Pliny the Younger illustrates what military service was like for young knights in the transition period. He spent his term of service in the commissary. On the other hand he praises Trajan for having seen actual service. ${ }^{1}$ According to Suetonius, Divus Claudius, 25, 1 , Claudius "instituted a sort of nominal military service, which he called 'supernumerary' and which was designed to provide military credit for men who had seen no service."
2603. Augustus forbade Senators to leave Italy without his permission, exception made for Sicily and the Narbonese, "the people in those parts being unarmed and peacefully inclined." ${ }^{1}$ Senators were not allowed to set foot in Egypt on any condition, ${ }^{2}$ and that prohi-
$2602{ }^{1}$ Epistulae, VII, 31. He is speaking of his acquaintance with one Claudius Pollio, whom he had met while in the service: "I came to know this man very well while we were in the service together, and not merely as a fellow-soldier. He was in command of a wing-division [cavalry and allies]. I was ordered by the consular legate to examine the supplies accounts of the wing-forces and cohorts." He also seems to have found time to devote to philosophy and literature. In Ibid., I, io, he alludes to the philosopher Euphrates: "I met him first in Syria when I was a mere boy doing my term of service. I got to know him intimately and thoroughly. I did my best to win his close acquaintance, though that was no great task [with such an affable person]." Of another philosopher he says, Ibid., III, in: "I made a close acquaintance with Artemidorus at the time when I was serving as tribune in Syria." Those who chose, however, were at liberty to do otherwise, and, like Trajan, actually serve in the army: Panegyricus, 15: "You were not content merely to have seen a camp and rushed, so to say, through a brief service. You took your cadetship so seriously that you could have been a general at once." Tacitus, Agricola, 5, praises Agricola for not emulating young men who spent their terms of military service in riotous living: "Nor did Agricola apply his title and inexperience as a tribune [cadet] licentiously, after the manner of young men who turn their periods of service to lustful indulgences, nor did he idle his time away in pleasures and furloughs (commeatus)."
$2603{ }^{1}$ Dio Cassius, Historia Romana, LII, 42, 6. According to Dio, Ibid., LIII, 12, 4, the real consideration underlying the distribution of the provinces between Au gustus and the Senate was the Emperor's concern to be the only one to have soldiers at his command. Senators sent to govern provinces, furthermore, were forbidden (LIII, 13, 3) to wear swords and military uniform, though he granted that privilege to his own governors.
$2603{ }^{2}$ Tacitus, Annales, II, 59: "Among the other secrets of his scheme for holding power (inter alia dominationis arcana) Augustus segregated Egypt, forbidding
bition was regarded as so important that it was reinforced with religious sanctions. ${ }^{3}$ Under Alexander Sevcrus, according to Borghesi, under Aurelian, according to Kuhn, the provincial governments were divided into two branches, with a praeses for the civil branch, and a $d u x$ for the military.
2604. The constantly widening gap between the soldier and the civilian progressively crippled the military spirit in the latter and made him more and more helpless and more and more incapable of defending himself armata manu. When Septimius Severus marched through Italy with his legions, the cities were terrorstricken, "for the Italians had long since left all use of arms and military discipline, devoting themselves to agriculture and a peaceable course of life." ${ }^{1}$ That was a good indication of the supineness with which they would deal with the Barbarian invasions.
2605. Nevertheless in the days of Gallienus, the grave and imminent peril of such a catastrophe seemed to bring the Romans back to some signs of life, though for a brief moment. "The Emperor Gallienus was engaged beyond the Alps with the Germans. Perceiving the dire peril, the Roman Senate armed all soldiers in the city and supplied weapons to the most able-bodied men among the people, so raising a force that was larger than the army of the Barbarians; and they, fearing the outcome of a battle, withdrew from the neighbourhood of Rome." ${ }^{1}$ But the military oligarchy that was exploiting the Empire soon come to the rescue. Fearing that the optimates might seize power, Gallienus ordered the Senate
Senators or Roman knights of any consequence to enter that country without his permission. That was to prevent anybody who might chance to establish himself in that province and get possession of the key-points by land or sea, even be it with a small garrison as compared with great armies, from cutting off the food supply of Italy" (ne fame urgeret Italian-fama misprint for fame).
$2603^{3}$ Trebellius Pollio, Tyranmi triginta, 22, 10-14: "When he [Lucius Mussius Aemilianus] decided to confer the proconsulate [of Egypt] upon Theodotus he was forbidden to do so by the pontiffs, who declared that it was unlawful for consular fasces to enter Alexandria. . . . It is said that a gilded column at Memphis bore an inscription in Egyptian characters to the effect that Egypt would be free when once Roman fasces and the bordered toga of a Roman Senator (praetexta) should enter it."
$2604{ }^{1}$ Herodian, Historiae, II, II. Herodian further notes the contrast between the Italians of the Republic and the Italians of the days of Septimius Severus, remarking that Augustus had been responsible for disarming them.
$2605{ }^{1}$ Zosimus, Historia nova, I, 37-38 (Reitemeier, pp. 49-50; Davis, pp. 20-21).
to disband its militia and prohibited Senators from entering any army camp. ${ }^{2}$ Alexander Severus used to say that "soldiers had their proper trade, exactly as literary men had theirs," and that it was "the duty of every man to do the thing he was fitted for." ${ }^{3}$ Arrius Menander says bluntly, Digesta, XLIX, 16, 2, §r (Corpus iuris civilis, Vol. I, p. 940; Scott, Vol. XI, p. 188): "For a man to join the army when he has no right to do so is a serious crime; and, like other crimes, it becomes the more serious in view of the importance and dignity of the army."
2606. So the army of the Empire ended by being an agglomeration of the worst elements, and it became necessary to find soldiers among the Barbarians-a way of inviting the enemy into the house. Vegetius, De re militari, I, 7 (Clarke, p. 15), gives a vivid picture of the situation: "Never has time served to improve an army that has been careless in its choice of recruits, and that we have learned
$2605{ }^{2}$ Aurelius Victor, De Caesaribus, 33: "Quia primus ipse metu socordiae suae [alarmed at the consequences of his own mistake], ne imperium ad optimos nobilium transferretur, senatum militia vetuit etiam adire exercitum." The severance of optimates and army became increasingly strict thereafter. Codex Iustiniani, X, 3I (32), 55 (Corpus iuris civilis, Vol. II, p. 652; Scott, Vol. XV, p. 123): "The August Emperors Theodosius and Valentinian to their provost Isidorus: If any decurion or any subject of the curia has presumed to undertake any military service, let him not be provided with a regular enlistment but be returned at once to his proper status, lest he or any children born to him after such service be enabled to shirk the duty he owes to his country." The order was issued in Constantinople, April 8, anno 436 a.d. And cf. Ibid., XII, 34(33), 2 (Corpus iuris civilis, Vol. II, p. 749; Scott, Vol. XV, p. 277), and the Codex Theodosianus, VIII, 4, 28 (Haenel, p. 7II). Other classes of the population were also barred from military service. Codex Iustiniani, XII, 34(33), i (anno 528-29) (Corpus iuris civilis, Vol. II, p. 571; Scott, Vol. XV, pp. 279-80): "The Emperor Justinian to his provost Mena: Superintendents of workshops in this mother-city or in the provinces we prohibit from undertaking any military service from this date forward." However, he excepts business men, barring them only from the armed militia, and also armourers, because of their usefulness to the army: "Merchants shall be ineligible for service of this kind from the date of this edict. Those who ply their trade for the production of arms shall not be denied admittance to service compatible with their trades, meanwhile continuing to practise the latter." Rural farmers could not be accepted for the army. Ibid., XII, 34(33), 31 (Corpus iuris civilis, Vol. II, p. 749; Scott, Vol. XV, p. 277): "The August Emperors Arcadius and Honorius to Pulcher, commander of both services: Your Highness (sublimitas tua) will observe with watchful care that neither farmers nor foresters shall be accepted for military service either as volunteers or as conscripts." [In other texts this edict is attributed to the Emperors Diocletian and Maximian.-A. L.]
$2605{ }^{3}$ Aclius Lampridius, Alexander Scverus, 46, I (Magie, Vol. II, p. 271).
from our own practice and experience. To that have been due all the defeats which our cnemies have inflicted upon us at one place or another, since they can be attributed only to the great negligence and indifference with which our soldiers have been selected in view of a long peace and the rush for civilian offices on the part of our better citizens (honestiores), and the fact that, by favour or fraud of recruiting officials, the army accepts from the owners whose duty it is to supply them only men for whom their masters can have no possible use." ${ }^{1}$
2607. Roman society was stiffening and class-circulation, whether legal or actual, began meeting all sorts of obstacles. If now and again imperial favour would overleap them in the case of some individual, that only meant that the governing class was being peopled to that extent with individuals not very worthy of places in it. Alexander Severus organized into gilds all the crafts and trades, so giving legal status to a system that most probably already existed in the fact. ${ }^{1}$ That system grew and prospered thereafter, approximating a
$2606{ }^{1}$ Farther along, Ibid., I, 28 (Clarke, p. 44), Vegetius returns to the attack: "The security of a long peace has inclined men partly to the enjoyments of leisure and partly to civilian occupations. So we see that interest in military training first declines into carelessness, then into mere pretense, and finally into oblivion." Conditions to an extent similar have been observed in China, and are observable today, in this year 1913, in a number of our modern countries ( $\$ 2423^{1}$ ) that are manifesting their real temperaments through the symptoms of democratic humanitarianism.
$2607{ }^{1}$ Lampridius, Alexander Severus, 33, 2 (Magie, Vol. II, pp. 241-43): "He organized wine-sellers, greengrocers (lupinarii), shoemakers, and all the other trades, into gilds, and gave them defenders from their own numbers and specified the judges before whom each should come." See Pareto, Cours, § 803: "In general terms and without attaching too much importance to dates that are not very certain, one may distinguish one period that runs from Augustus to Alexander Severus. During that period the gilds are authorized by the government but membership is free. The Emperors now and again interpose to encourage certain gilds that are organized for purposes of public utility. A second period begins with Alexander Severus, who organized or perhaps reorganized the gilds. . . . In a third period that extends from Constantine to Theodosius, the element of constraint in gild organization is more conspicuous. Equilibrium has broken down. Privileges no longer compensate for burdens. Finally between Theodosius and Honorius, the gilds represent a form of slavery, and people do their utmost to escape from them. Membership in them is now compulsory. As Serrigny well says, Droit publique et administratif romain, Vol. I, p. 17o: 'The interdiction laid on change of occupation is one of the most distinctive features of imperial legislation. It was applied to a large number of trades or professions and may be taken as a general rule for the bulk of the inhabitants of the Roman Empire.' "
social organization such as is proposed today in the obligatory labour-union. ${ }^{2}$ Gradually the craftsman is bound to his trade, the farmer to the soil, the "Augustal" to his gild, the decurion to the Curia. They all tried to wriggle free and escape, but the government gave chase to shirkers and unless they were saved by grace of the Emperor or some powerful influence, they were returned to their posts, to which they and their descendants were to remain bound forever. ${ }^{3}$
2608. Production of wealth diminished and wastage increased, owing to the many burdens laid upon the rich. On the other hand the wealthier classes had ceased to be the governing classes, and membership in them entailed more honour than power. The Emperors were named by an uncouth and corrupt army blessed with no remotest conception of statesmanship. There were no revolutions on the part of the non-military, civilian element that would have
$2607^{2}$ That from the standpoint of production, which is the matter here in question. As regards distribution of wealth the comparison would not hold. A system in which the corporations are exploited is altogether different from a system in which the gilds hold the power and do the exploiting.
$2607^{3}$ The Augustales were just below the order of the decurions in the social scale. De Ruggiero, Dizionario epigrafico, s.v. Augustalis: "From the third decade of the second century on, a radical transformation takes place in the institution of the Augustales, extending especially to those communities which theretofore had had annual 'colleges' of the sexviri Augustales. . . . But even in such communitics as had as yet known only Augustales . . . a goodly number of sexviri Augustales organized in corporations now appear in their stead. . . . Even in places where the cult of Augustus had not at first been accepted by the people at large . . . there now arises a corporation organized as a gild, and designated as the 'college of the sexviri Augustales.'" In the prosperous days of the Empire, it had been a muchprized honour to belong to the sexvirs. In the days of the decline it became an unbearable burden which people tried in every way to avoid. Bouché-Leclercq, Manuel des institutions romaines, p. $55^{8}$ (quoted by Brissaud in an appendix to his translation of Marquardt, Le culte chez les romains, Vol. II, pp. 233-34): "Like all honours under the Empire, the office of sexvir was burdensome and came to be nothing more than a tax added to other taxes. . . . The gild was reinvested with certain rights that it had lost in losing its status as a private association, notably civil rights, the right, that is, to receive legacies and gifts, the right to manage its own funds and to choose its own treasurers. . . . That was a way of giving a little vitality to an institution that was menaced with atrophy. And yet, towards the end of the third century, it became necessary to apply to that priesthood the system of compulsory investiture by which the municipal councils and municipal corporations were kept full (Corpus inscriptionum Latinarum, Vol. X, no. 114, p. 16; and Vol. II, no. 4514, p. 604). So the decurions who appointed the sexvirs came to excrecise upon others the same compulsion to which they were themsclves subject."
mixed classes, started class-circulation afresh, and brought individuals distinguished by Class I residues to posts of leadership. Montesquieu very aptly compares the Roman Empire in decline with the regency in Algiers in his own time. ${ }^{1}$ But Algiers did not have a bureaucracy, like the Roman bureaucracy of the decline, to sap every source of individual activity and initiative. Roman society declined economically and intellectually under the curse of a stupid military caste and a cowardly and superstitious bureaucracy.
2609. In the West this ossified social order was shattered by the Barbarian invasions (\$§255 f.). They brought anarchy, but they also brought a certain amount of flexibility and freedom. To proceed directly along a line $a c$ (Figure 48) from the corporations of the dying Empire-in other words, from a situation, $m a$, where ties are very strong,


Figure 48 to the gilds of the Middle Ages, or, in other words, a situation, pc, where ties are also strong, is to miss the real line, $a b c$, and disregard the situation $n b$-the anarchy resulting from the Barbarian invasions, in which ties were few and weak. That error has been to an extent perpetuated by the common failure to distinguish between the state of fact in a country and the state of law. Where liberty is not explicitly granted by law it is assumed that freedom does not and cannot exist; whereas freedom may very well result from the absence of laws or-as is the more frequent case-from failure to enforce, or efficiently to enforce, existing laws. So the crystallization in a country is often less complete than would appear from its law, the law picturing the factual situation very loosely. Corruption of public officials also serves in many cases as an effective remedy for the oppressiveness of a legislation that otherwise would be unbearable. ${ }^{1}$
$2608{ }^{1}$ Considerations sur les causes de la grandeur des Romains et de leur décadence, Chap. XVI (Euvures, p. 287; Baker, p. 329).
$2609{ }^{1}$ Guizot gives a terse but excellent description of the state of society in the days of Gregory of Tours: Grégoire de Tours, Vol. II, p. 265: "The condition of administration in those days of confusion might be imagined even if one knew nothing of the documents. The institutions emanating from the central power have lapsed. Municipal institutions have in part been preserved by the cities, which could
2610. In the Western Empire the crystallization in society was broken by the Barbarian invasions. In the Eastern Empire it held on intact and all the effects of "planning" ("organization") carried to an extreme became manifest. ${ }^{1}$ An anecdote that has come down to us from the Byzantium of those days serves to give a vivid picture of the conditions that prevailed in Attila's time. The historian Priscus Panites, author of a Historia Byzantina, in large part lost, was on the staff of Maximinus, who had been sent by Theodosius on an embassy to Attila. In the Hun camp he happened on a Greek who was living at the time among the Scythians and had acquired great wealth. The man told him his story, De legationibus ad Attilam, pp. $86-87,77,97$. He had been taken prisoner in a battle and given as part of the booty to Onegisius, next to Attila the greatest man among the Scythians. "He fought valiantly against the Romans and the tribe of the Acatzires and, giving his Barbarian master the booty which he had won in the field, he obtained freedom according to the law of the Scythians. He married a woman of the Barbarians, raised a family, and having obtained a seat at the table of Onegisius, he thought that he was enjoying a better living than he had ever had. For those who live among the Scythians lead quiet lives after a war, each enjoying his own goods unmolested by anyone. Those,
not exist without them, and tolerated by the new masters. These latter have gathered up a few scattered fragments of the great administrative machine which the Romans had created, and used them, but with modifications necessarily resulting from contact with Germanic habits. Disorder has spread from administrative institutions to the geographical units which correspond to them."
$2610{ }^{1}$ Pareto, Cours, §802: "The bad economic organization of the Roman Empire, the systematic destruction of liquid capital, further and further affected production. Instead of trying to make head against the current that was leading to such deadly results, there was an ever growing trend towards greater protection, and the government tried to 'plan' economic production. The first step was to give privileges to the arts and trades gilds. The last step was to reduce them to virtual slavery." One has only to read The Book of the Prefect or the Edict of Emperor Leo the Wise on the Gilds of Constantinople (Le livre du préfet, etc.), edited by Nicole, to see the limits to which "planning" (organization), in other words, social crystallization, could be carried in those days, and so to get some distant conception of the similar limits towards which our present-day societies are advancing. [It should not be forgotten that these lines were written in the year 1914.-A. L.]

The description of the economic evolution of the Roman Empire given in the Cours is not exempt from the errors pointed out in $\$ \S 2334-35$. That is an interesting fact, because my theory of economic crises not only avoids those errors, but reveals them. That fact stands in some relation, perhaps, to the following ( $\$ 2547^{1}$ ) : i. I succumbed, to some extent at least, to a common preconception among economists
however, who live among the Romans run ready risk of destruction in war, for they must repose their hopes of personal safety in others, their tyrants not allowing them to bear arms; and to those who do, the ineptitude of their generals proves fatal, for they mismanage everything. And the burdens they bear in times of peace are harder to endure than the evils of war, owing to harsh taxes and abuses from the wicked, for the laws are not the same for all. If the law-breaker is a man of wealth, his crime goes unpunished; if he is a poor man, inexperienced in intrigue, he is given the penalty sanctioned by the law, provided he does not lose his life before sentence is passed, because of the long protraction of processes at law and the great costs in money. There is indeed a most iniquitous manner of obtaining by bribery what should be adjudicated by law; and it is the fact that no tribunal will give redress for the injustices one has suffered unless money is lavished on judges and officials." In rebuttal Priscus sings the praises of Roman administration; but it is noteworthy that the very embassy on which he was serving illustrates the cowardice and corruption of that government. Maximinus was an honest man, one of those individuals whom governments in every age use to mask corrupt and dishonest practices (one of our $A$ 's: $\$ \$ 2268,2300$ ); but with him went Edecon and Vigilias that the economic factor can be isolated from other social factors. Not till I had completed the investigation presented in these volumes did I become altogether aware of that error, which meantime kept me from taking the short step that leads from the particular theory of economic crises to the general theory of social phenomena indicated in §§2330 f. 2. I also succumbed, without any very clear perception of doing so, to a common inclination of economists and sociologists not to confine themselves to a quest for the uniformities (laws) that obtain in the relationships between facts, but, though equipped with a very limited and imperfect knowledge of the facts, to imagine that they know the goal towards which society "ought" and can advance; and that their thinking has some mysterious power to change the facts and make that goal attainable. Not yet having managed to give a moderately passable statement to the problem of real movements (§129), they imagine they can handle the much more difficult problem of virtual movements (\$§130, 2552-II-a). Not content with attending to the business of science, they have the further hankering to counsel and preach. Striving to substitute scientific experience for faith in every department of my work, I did not perceive that I was still infected with one shred of faith that finds its expression in a certain sentimental lcaning in favour of freedom. That leaning is not consistent with pure experience, which is interested in the relationship between facts altogether apart from any preconceptions.

This little incident is noted here as supplying an example of the obstacles that are for ever interposing to hinder the search for experimental truth in the social sciences.
with orders to devise ways and means for assassinating Attila. The Imperial government could "plan" anything, even assassination! On that occasion, things did not turn out well. Attila got wind of the plot, and sent ambassadors to upbraid the Emperor with words that cut to the bone, reminding Theodosius that in paying tribute to him, Theodosius had made himself his slave, and he added: "Improperly therefore doth he conduct himself who plotteth like a faithless slave against his better and one whom Fortune hath made his master." ${ }^{2}$
2611. One among countless anecdotes might be mentioned to show how people climbed to the governing class under Byzantine "planning." Synesius was an individual who lived about a century before Priscus's Greek. He writes to his brother: ${ }^{1}$ "It is hardly likely that Chilas the panderer can be unknown to very many people in view of the fame he won at his trade; for Andromache the mime, the most beautiful woman living in our time, was of his troop. After spending his youth in that handsome profession, and getting on toward middle age, he thought it altogether consistent with his
$2610{ }^{2}$ If the current period of our demagogic plutocracy continues to hold on the ascent for some time longer and comes to give greater scope to a movement that we are now witnessing in its early beginnings, one may readily imagine some individual who has managed to escape from the oppression of that future time and taken refuge with a certain people, $X$, repeating with few changes the words of the Greek with whom Priscus talked: "People who live among the $X$ 's lead quiet lives after they have worked and put aside a few savings, each enjoying his own goods unmolested by anyone; whereas in his former country he was robbed and oppressed, now by fair means, now by foul. There he had to pay heavy taxes, which were imposed by the votes of a majority that did not pay them and were paid by fewer and fewer people, so mounting beyond all limits in order to meet the enormous costs of government by a demagogic plutocracy. And he had further to suffer annoyances from those who run such government, or their accomplices. There the laws are not the same for all. If a law-breaker is in some way connected with the ruling element, his crime goes unpunished; if he is someone, such as the humble smuggler, who flouts the fiscal privileges of that class, he suffers the penalty sanctioned by the law. No better fate awaits the innocent man falsely accused, who wrongs no one and would suffer no wrong himself; for litigations are long-drawn-out and cost fortunes owing to the whims of 'kind-hearted judges' and the intrigues of others who curry favour with the politicians and with 'outstanding members of the bar.' There is indeed a most iniquitous manner of obtaining by 'influence' what ought to be adjudicated by law-by placing oneself at the disposal of those in power and helping them in the elections, from which they derive their power."
$2611^{1}$ Epistulac, CX (Opera, pp. 252-53; Fitzgerald, p. 205). And cf. Ibid., CXXVII (Opera, pp. 262-63; Fitzgerald, pp. 216-17), for an account of a certain Euctalius, prefect of Egypt, and a first-rate thief.
former estate that he should win renown in arms. He has been here now for some time, on his appointment by the Emperor to the command of our brave Marcomanni. The Marcomanni have always been a doughty lot, but now that they have a general so illustrious, one may guess that they will provide us with miracles." And how did this Chilas the panderer win Imperial favour? Through the good offices of two individuals, one named John, the other Antiochus, who seem to have had antecedents as creditable as his own. With a governing class being built up in such a manner, one readily understands how the provinces of the Empire were one by one lost, and in the end the capital itself. But such things are nothing peculiar to the Byzantine bureaucracy; they are general, and nearly always feature the senile period of bureaucracies. They have been and are still observable in China, Russia, and other countries. So social "planning" begins with a "boom," and ends in disaster ( $\$ 2585$ )."
$2611^{2}$ In the European War of 1914 the Russian bureaucracy made the same identical blunders it had made in the Russo-Japanese War. It seemed to have learned nothing from experience. A speech delivered in the Duma on Aug. 14, 1915, by M. Maklakov, brother to a former Minister of the Interior, gives in a particular form a general view of the social state in question: Journal de Genève, Sept. 3, 1915: "That brings us to the thorniest question in our political life. It is no secret to anyone that Russia, alas, is the classic model of a state where many people are not where they belong (Approval from Left and Centre). [The senile stage of a bureaucracy that was a good one in its time.] It is a country where there is general complaint about the lack of good men but where no attention is paid to the good ones there are. We know only too well, unfortunately, that in Russia the man who succeeds is the pleasant fellow, the amiable nobody (Voices of approval), the agreeable conversationalist, the man who knows how to drift with the current or guess the direction of the next puff of wind, while the man who does not succeed is the man of character, of purpose, of real competence. [A description by a practical man of a problem in class-circulation.] Things have come to such a pass, gentlemen, that a rapid and sometimes brilliant career is a discredit to a man. We know that such a career means not talent, merit, achievement, but accommodation, complicity, favouritism, patronage. (Approval from Left and Centre.) Appointment after appointment constitutes a public scandal, a challenge to public opinion, and when the mistake is discovered it is too late to remove the appointee, the prestige of power forbidding. This new government has the task of beating Germany. It will soon see that the harder task will be to vanquish the resistance of its subordinates. The great sand-bar on which all initiative runs aground in Russia is the make-up of the bureaucracy." A Socialist orator had laid the blame for Russia's unpreparedness on the "despotic" régime. M. Markov replied very appositely: "M. Adjemov has very soundly remarked that in this terrible conflict Germany was ready. He has also said in a tone of reproach that France was too. The French, really, were worse prepared than we, and the war has shown that the strongest of the Allies is Russia. We hear
2612. As we have said many times and again repeated just above ( $\$ 2553$ ), undulations in derivations follow undulations in social facts. That is why, about a century ago during an ascending period of freedom, it was fashionable to condemn the rigid and restrictive institutions of the Byzantine Empire. Now that we are in a descending period of freedom and an ascending period of "planning," the same institutions are admired and praised, and it is proclaimed that the European countries owe a great debt to the Byzantine Empire for having saved them from the Moslem invasion, forgetting that brave warriors of Western Europe succeeded time and again in defeating and repelling the Arabs and the Turks and that they very easily occupied Constantinople before any Asiatic peoples conquered that city. Byzantium shows how far the curve along which our societies are now moving may lead. Anyone who admires that future is necessarily led to admire that past, and anyone who admires that past will in all consistency admire that future.
from the Left that we were not ready because freedom has been in chains. But the French, English, and Belgian governments were not in chains, and yet they were not ready-they were less ready than Russia." And it should not be forgotten that the government of Catherine the Great was more rather than less autocratic than the Russian régime under Nicholas, yet it was victorious in a number of wars.

## APPENDIX

Index-Summary of Theorems

## Index-Summary of Theorems ${ }^{2}$

## I. GENERALSUBJECTS

## I-a

There is nothing absolute about the norms that are followed in a scientific work (see II-l, below); they arc determined with reference to the purposes of that work itself. Statement of the norms that are followed here (Chap. I, 4, 5, 6, 70, 71; and see Sociology [in Index-Bibliography following]).

## I- $b$

For mere convenience in studying them, we divide the facts that are observable in human societies into two categories:
M. Manifestations, verbal or through conduct, of instincts, sentiments, inclinations, appetites, interests, etc., and the logical or pseudo-logical inferences that are drawn from such manifestations. This category therefore comprises both logical and non-logical conduct (Chap. II). The part that is made up of non-logical conduct may be further subdivided into two categories:

1. A part, $d$, that does not give rise to verbal manifestations
2. A part, $c$, that does give rise to verbal manifestations ( $851-54,1690$, 2083).
$N$. All other facts that are observable in the world in which human societies appear.
This classification of facts is strictly experimental. The two categories $M$ and $N$ have nothing to do with the "inner" and "outer" worlds of the metaphysicists ( 95 , and see Concepts). They are just groups of facts. Animals do not have any part $c$; they have only the part $d$ (see Actions, non-logical). Human beings often fail to realize, they do not know, they disregard, the fact that many of the verbal manifestations that go to make up $c$ are mere manifestations of instincts, inclinations, etc. (see Actions, non-logical, Derivations). One of the purposes of this work is to strip realities of such veilings of sentiment (Chaps. II-V).
[^125]
## I-c

The element $c$ is outstanding in human beings, for they are wont to express their instincts, sentiments, etc. in verbal form, and they are prone to embellish them with logical or pseudo-logical developments. The element $c$ readily and spontaneously detaches itself from the facts of which it is a mere manifestation and seems to possess an existence of its own ( 1690 , and see III, below: Language). The element $c$ is divisible into two further parts:
a. A part that varies but slightly (residues)
b. A part that is much more variable (derivations) (798-84I, Chaps. V, VII-X).

## I-d

We have to consider the following relations between the categories of facts designated as $M$ and $N$ :
a. Mutual relations between $M$ and $N$
$\beta$. Relations of $M$ and $N$ to theories, doctrines, propositions
$\gamma$. Relations of $M$ and $N$ to the make-up of human societies.
As a first approximation, the $M$ group may in many cases be taken simply as $c$, especially in an examination of theories (Chaps. II-V).

## I-e

a. Mutual relations between M and N : There is a certain relation, which is not a relation of exact correspondence, between $M$ and $N$, and likewise between the various groups in $M$ and $N$, or, in other words, between various groups of facts (see Interdependence). Every living being adapts itself in some way or other to the world in which it lives, and therefore depends in some way or other on that world, both as regards material forms and in respect of instincts, sentiments, and so on. Instinct, for example, in predacious animals is correlated with the existence of the prey on which they feed ( $1768-70$ ). More briefly one might say that there may be certain correspondences between the groups of facts in $M$ and the groups of facts in $N$. Here we are to concern ourselves more especially with correspondences between $c$ and $N$. The groups designated as $c$ may be thought of as nebulous masses made up of a nucleus surrounded by a halo of fog. In the case of some such nebulae there may be a rough correspondence between the nucleus and the facts $N$, but there is no such correspondence as regards the fog. Sometimes there is no correspondence either for nucleus or fog (1767). In other words, a
$c$ group is sometimes a bad photograph of $N\left(177^{8}\right.$, and see below, III-f); then again it has no bearing on $N$ at all (Chaps. XI-XII).

$$
\text { I- } f
$$

Among $c$ groups that have no bearing on $N$ at all are such as wholly pertain to a supernatural or metaphysical-in short a non-experimentalworld. With them are also to be classified such as show a merely partial correspondence. The logico-experimental sciences are not concerned with such relations (see below, II-g, II-h, II-i).

$$
\mathrm{I}-\mathrm{g}
$$

$\beta$. Relations of M and N to theories. Suppose we consider $c$ instead of $M$, in a first approximation. From the standpoint just indicated [I-f], the group of facts $c$ [i.e., facts giving rise to verbal manifestations], may be subdivided into two other groups:
cr. Facts pertaining to the author of the theory
c2. Facts pertaining to the human beings with whom he is connected.
These sub-groups, $c 1$ and $c 2$, will be found to have elements in common. Any theory, evidently, depends on cr. Differences between theories arise from differences in the character of that dependence and from the manners in which account is taken of $c_{2}$ and of $N$ (see Objectivesubjective, Derivations, Residues; Chaps. I, III-V).

## I-h

The fact that among the facts present in the author of a theory (ci) are facts that are present also in other individuals in the group to which he belongs (c2) is the source of the illusion that in arguing from cr , one argues impersonally and, overreaching the relative and contingent, attains the absolute (see Derivations, Mind, Consensus).

## I-i

$\gamma$. Relations of M and N to the make-up of human societies. From this point of view, $M$ may be subdivided into two elements:
Ms. Instincts, sentiments, etc. (see Residues)
Mr. Reasonings (see Derivations).
In theory, at one extreme one would get societies determined exclusively by $M s$ and $N$. Animal societies, probably, are of that type. At the other extreme one would get societies determined exclusively by Mr and N , but such societies do not exist in the concrete (2143). Belief that they can exist is one of the dogmas of the religion that makes a deity of Reason or of "Science" (see Science, Reason, Theology of Science).

Actual human societies fall into intermediary stages (2146). So far as we can know, $M$ and $N$ together seem to determine their make-up (Chap. XII).

## I-l

Prominent among the relations of $M$ and $N$ to the forms of human societies is their relation to utilities of one sort or another, utilities of individuals, of groups and societies, of all humanity, and so on (see Utility). Of such relations logico-experimental science can take account only through examination of the facts (see below, II-b). Non-logicoexperimental sciences usually establish such relations a priori, in whole or in part. Very often they reduce them to an identity between certain utilities and something that they call "Truth" (Chaps. XI-XIII, and see Utility-truth, Metaphysics, Theology).

## I- $m$

Human society is heterogeneous. The theology of equality denies that fact, much as Christian theology in a day gone by denied the existence of antipodes. Logico-experimental science ignores all such theologies when it is looking for uniformities in the facts which they disguise. It is interested, however, in knowing how they arose and to just what facts they correspond (see Derivations, Residues). In a first approximation one may consider certain average phenomena for a given society, but in a second and finer approximation some account almost inevitably has to be taken of social heterogeneity; and if we would not stray too far from realities, certain phenomena must from the outset be considered in their bearing on social heterogeneity. As a step in that direction we may divide society into various classes or strata, now from one point of view, now from another. Such classes or strata have to be considered not only as in a static condition but as in a dynamic condition and that requires a study of class-circulation, the circulation, that is, within élites of people who have fixed, or virtually fixed, incomes, as compared with people who have variable incomes (and other sorts of people have to be considered too). In a word, the peculiar characteristics of the various classes have to be taken into account if one would understand the forms that society as a whole assumes, and its evolution in history (see below I-r; then: Classes [social], Democracy, Movements [rhythmical], Residues [proportions of], Utility-Truth, Speculators, Rentiers).

## I-n

Human society is viewed as a system of molecules (2066), which, in space and in time, possess certain properties, are subject to certain ties,
subsist in certain relationships. The reasonings (derivations), theories, beliefs that are current in the mass of such molecules are taken as manifestations of the [psychic] state of that mass and are studied as facts on a par with the other facts that society presents to view (below, II-e). We look for uniformities among them, and try to get back to the facts in which they in turn originate. We are in no wise engaged in setting up one derivation against another derivation, meeting one faith with another faith. We are concerned to discover in just what relations, in time and in space, derivations and beliefs stand towards each other and towards all other facts (see Apostolates, Applications [practical], Actions, Society as a whole, Economics, Elements, Equilibrium [social, economic], Experience, Uniformities, Maximum of Utility, Method, Ethics, Objec-tive-subjective, Residues, Derivations, Sentiments, Sociology, History, Theories, Speculators).

## I-o

Social phenomena as a rule develop in waves. Waves are of various types and of varying intensities. They may therefore be classified into groups which mark periods in given phenomena (Movements [rhythmical], Periodicity).

## I-p

Interdependence. The molecules in the social system are interdependent in space and in time. Their interdependence in space becomes apparent in the mutual relations that subsist between social phenomena. Let the letters $A, B, C \ldots$ stand for the various parts into which we decide to divide the social mass as a whole for mere convenience in studying it. The logico-experimental science that deals with $A$ (economics, for instance) takes direct account of the interdependence of the molecules in $A$. So for the logico-experimental sciences that deal with $B, C \ldots$ (see Interdependence). Then the logico-experimental science that studies $A$ and $B$ together, or $A, B, C$ together, or $A, B, C, D$, has to take account of interdependences between $A$ and $B$, or $A, B$ and $C$, and so on. That situation may be described by saying that logico-experimental science distinguishes between analysis and synthesis and supplements analysis by synthesis (see below, II-q); or again by saying that the science that deals with $A$ cannot by itself yield an exhaustive theory of the concrete phenomena of which apparently $A$ is made up (see below II- $r$ ). Really $A$ is made up of mere abstractions that have been drawn from the phenomena in question, by eliminating from them all parts depending on $B, C, D \ldots$ The synthesis that follows on the analysis aims at restoring such parts to their original situations. Those who follow the methods of the non-logico-experimental sciences in the field of the social
sciences, do not grasp that fact, for they deal with concepts $(94,95)$ rather than with facts, and concepts are not only simpler than facts, but also seem to be much more independent (see Just-unjust, Moralityimmorality, Theory and practice, Precepts). From this limitation on the part of such writers it results that when they become aware that the logico-experimental theory that deals with $A$ fails to explain a concrete phenomenon that apparently belongs in $A$, they conclude that that science should be abandoned, whereas all that it requires is filling out with the results of other sciences (II-s, below). Or perhaps they do worse still and put forward a verbal derivation that betrays a gross ignorance of realities on their part. They assert that economic and social laws have exceptions and fail to perceive the ridiculousness of asserting that there can be uniformities that are not uniform ( $109,1689^{1}, 1792$ ).

## $\mathrm{I}-q$

Interdependence. As we consider the phenomena in question in point of time, the above remarks have to be supplemented with still others. Social phenomena assume essentially undulatory forms (I-o). A given phenomenon, $A$, presents a sequence of waves, and so do the phenomena $B, C, D \ldots$ Account therefore has to be taken: i. Of the interdependences of the undulations in $A$, and so for the undulations in $B$, $C, D$, each phenomenon being taken by itself. 2. Of the interdependence of the undulations in the various phenomena (2552). This latter research stands closer in character than the first to the study of interdependences considered from the standpoint of space ( $\mathrm{I}-\mathrm{p}$ ). The influence of earlier upon succeeding waves might become apparent in the course of a study of the whole movement, if such a study were conducted by a method that posited an undulatory form in phenomena (2585). Many writers are deterred from doing that because they are looking for a cause for the maladies of society, with the idea of removing that cause (2541); or because they are less interested in studying facts as they are than in preaching in order to change them; or because they are writing ethical, theological or some other sort of history instead of logico-experimental history (see History). Really, in many departments of social life, waves follow one on the other very much as the various ages succeed each other in the individual life (2541). Just as birth may roughly be taken as the origin of boyhood, and boyhood of manhood and then of old age and death, so the earlier periods in social phenomena may in a sense be regarded as the origin of the periods that follow, and certain given facts may at first stimulate prosperity and then decadence (2541, 2585). All the above runs counter to the results that are yielded by non-logico-
experimental histories and theories that pretend to arrive at absolute judgments (II-m) as to the values of facts on the basis of some ethical, metaphysical or theological principle (sec Theories, Religion, Metaphysics, Sociology).

## I-r

Proportions of residutes in the various social strata. Among the many, many elements that have a bearing on social forms and on the development of those forms in history, evidently outstanding are the relative proportions in which residues are to be found functioning in the various social strata and especially the proportions of Class I to Class II residues in the ruling and subject classes respectively. History shows that a first rough outline of developments may be obtained by certering the main attention on those proportions, other circumstances of importance being considered in subordination to them (Chaps. XII-XIII).

## II. LOGICO-EXPERIMENTALANDNON-LOGICOEXPERIMENTAL THEORIES

(Saving specification to the contrary, "experience" means "experience and observation.")

## II- $a$

If a dispute is to be decided, there has to be a judge ( $17,27,28,961$ ). In the logico-experimental sciences, that judge is objective experience, which alone has the prerogative of supplying proofs ( $16,17,42,69-7$, 475). In the non-logico-experimental sciences, any number of other judges may be available, such as sacred books, in the case of believers in this or that religion, "conscience" in the case of some metaphysicists, "introspection" in the case of others, "necessary principles" for still others, and so on (see Truth, Introspection, Liberal Christianity, Natural Law, Right Reason, Nature, Good [the], Metaphysics). Very frequently the non-logico-experimental sciences use a mere accord of sentiments as their judge (42, 49, 58r; see Logic of Sentiments, Persuasion). Often considerations of utility are brought in, a doctrine finding its "truth" in the fact that it is considered "beneficial" (see Truth-423, 473, 474, 475, 581, 593, 594, 961; see Sociology).

## II-b

Logico-experimental theories accept guidance only from the facts. They are made up of descriptive propositions that assert experimental uniformities and of the consequences that follow from those propositions (see Theories). Non-logico-experimental theories strive to exercise control
over the facts, and they contain propositions that overstep experimental uniformities in one direction or another ( $55,56,521,524$; see Uniformities, Principles, Metaphysics).

## II-c

The logico-experimental sciences derive principles from the facts ( $2078^{1}$ ) and such principles are at all times subordinate to those facts. The non-logico-experimental sciences posit certain principles a priori and the facts depend on those principles ( $10,11,22,23,24,54-56,57,63$, $90-93,343,514,521,638,642-43,665,976,1532,2397,2398)$.

## II- $d$

Logico-experimental theories argue from facts, that is to say, from the categories $c 2$ and $N$, as defined in I-g above. They take account of $c 1$ merely as so many facts, never as sentiments that have to be deferred to. Their exclusive concern is with putting facts in relation with other facts (see Explanation). Everything that lies beyond experience is foreign to them (Chaps. IV, V). Abstractions are nothing but elements common to certain numbers of facts. Non-logico-experimental theories argue from sentiments (cr) that their authors have ( $\mathrm{I}-\mathrm{g}$ ), and more particularly, indeed, from the impressions that certain words make on them (see Language). They are concerned not only with facts but with certain entities that lie beyond experience (Chaps. IV, V) and they try to bring facts into some sort of relation with those entities. For them, abstractions are not mere compendia of certain definite groups of facts, but have an independent existence all their own. The difference between logicoexperimental theories and theories that are not such, lies mainly in the fact that logico-experimental theories try to reduce the exclusive dominion of $c I$ as nearly as possible to zero (24II, Chap. I), whereas non-logicoexperimental theories, often implicitly, and sometimes explicitly, ascribe a more or less preponderant rôle to cı (see Classification, Theories). At one extreme one finds theories that strive to do away with the influence of the $c_{1}$ group, and to keep strictly to $c_{2}$ and $N$-at least as far as possible, for it is exceedingly difficult to keep clear of $c$ entirely. At the other extreme stand theories that give full rein to the sentiments expressed by $c 1$-again as far as possible, for it is just as difficult to ignore $c 2$ and $N$ completely ( $142,143,170$, and see $9,16,69,75,76,108,170,514^{2}, 521$, 803, 977-979, 24II, Chaps. I, III-V; and see Objective-subjective, Hypotheses, Economics, Sociology).

## II-e

The logico-experimental sciences examine the theories, doctrines, propositions, etc., that are observable in society as mere social facts (I-n), even if they are not logico-experimental, even if they are altogether fantastic or absurd ( $7,12,69-6,8 \mathrm{I}, 145,466,514^{2}, 838,843,845$ ). Analogies with philological studies ( $346,468,469,659,879-883$; see Derivations).

## II- $f$

Speaking from a chronological standpoint, the non-logico-experimental sciences as a rule precede the logico-experimental (57).

## II-g

The domain of logico-experimental theories is entirely distinct from the domain of non-logico-experimental theories, and has no points of contact with it. Study of the experimental world has nothing to do with study of the non-experimental world ( $16,43,69-2,70,97,474,477,48 \mathrm{I}$, 973). Each of the two researches is sovereign in its own domain and neither can be granted the right to invade the domain of the other ( $16,43,69-3,70,477$ ).

## II-h

Gods and deified entities dwell beyond the boundaries of experimental reality, as do metaphysical (see Metaphysics, Theology) and pseudoexperimental abstractions (see Theories, Liberal Christianity). From the standpoint of logico-experimental science a metaphysical abstraction is neither better nor worse than a deified abstraction (1667; see Gnosis). As regards proximity to experimental reality, the entities and principles of metaphysical systems, the entities and principles of the theologies, in fact, non-experimental entities and principles in general, all stand on a par ( $67,616,928,1667,1767$; see Entities, Metaphysics, Religion). One religion cannot be more or less scientific than another ( $16^{2}, 43,309,377$, 569, 570, 616, 630, 765, 928, 1533, 1767; see Liberal Christianity, Modernism). Metaphysics is not more "scientific" than theology, nor does it come any closer to reality ( $67,378,928,1533,1538$; see Imperatives [categorical], Right Reason, Nature).

## II-i

Logico-experimental science cannot accept theorems that establish relations between things that lie in whole or in part outside the experimental world $(479,1667)$. Neither can it accept, short of experimental verification, theorems that relate things that do belong to the experimental
world, but where the correlation is established by the elimination of non-experimental entities ( $479,480-482,1540,1607,1608$ ). In the same way it rejects any conclusion that might be drawn from the fact that such theorems are or are not verifiable by experience as to the existence or non-existence outside the experimental world of the entity so eliminated (48I, 487, 516; see Religion, Prophecy, Miracles, Entities, Elimination of non-experimental $X$ ). All the theorems just stated are implications of II-g above.

## II-l

Since there is no basis of comparison between logico-experimental studies and non-logico-experimental studies, one cannot say in any absolute way that one is better or worse than the other. One can make such a statement in a relative sense by designating the objective that one is trying to attain ( $70,7 \mathrm{I}$; see Casuistry, Truth, Ideals).

## II-m

The logico-experimental sciences are in all respects relative, contingent. The non-logico-experimental sciences envisage the absolute (see Absolute). The former offer no conclusions as "certain," "necessary" (1531), "absolute." They halt at probabilities, perhaps very great probabilities (see Certainty-probability). Their conclusions are put forward under the qualification "within the limits of time and space that are known to us" ( $69-5$ ). The non-logico-experimental sciences offer conclusions as "certain," "necessary," "absolute," and without qualifications of any kind (47, 69-5, 97, 408, $529^{2}, 976$, 1068, 153I, 1532, and above, I-r).

## II-n

The logico-experimental sciences do not possess principles that are "certain." The non-logico-experimental sciences do, and they call them "natural" or "necessary" principles, or else "laws" (which are different in their eyes from experimental uniformities), or axioms, metaphysical or theological (55,56, 90, 91, 642, 1068; see Uniformities, Metaphysics, Religion).

## II-o

Practitioners of the non-logico-experimental sciences do not as a rule grasp the relative, the contingent character of the logico-experimental sciences and speak of them as though they did envisage some "absolute" or other which would be merely a different absolute from the absolute that is envisaged by the non-experimental sciences (973). They therefore imagine that the logico-experimental sciences have dogmas, such as, for instance, the dogma that the "truth" can be known only through
experience ( 16 ); the dogma that experimental "truth" is of a higher quality than other sorts of "truth" $(26,46,69)$; the dogma that the theorems of the logico-experimental sciences yield a "certainty" that gives us knowledge of "laws" and not mere experimental uniformities; or the dogma that "everything" can be explained by experience (deter-minism)-and try if you please to get it into their heads that the very form of such a theorem shows that it cannot be of a logico-experimental character, since a logico-experimental theorem can never recognize the absolute that is implied in the word "everything" (88, 528-532, 976, 1531; and see Uniformities, Derivations, Truth, Determinism).

## II-p

Logico-experimental theories are in a state of continuous development and they advance by successive approximations. Non-logico-experimental theories usually arrive in one bound at a state which those who accept them believe must obviously be immutable, though as a matter of fact it varies from writer to writer, from believer to believer ( $69-9,91,92$, 106, 107, 144, 826, 1531, 2410; see Approximations [successive], Facts, Movements [rhythmical]).

## II-q

The logico-experimental sciences distinguish analysis from synthesis ( $\mathrm{I}-\mathrm{p}$ ). Each of such sciences is essentially analytical, breaking the concrete phenomenon up into various parts and studying those parts one by one. A synthesis is then made by bringing certain of the conclusions together ( $\mathrm{I}-\mathrm{p}$ ). Real movements are always considered independently of virtual movements-the study of what is is kept distinct from the study of what ought to be (ought to be, if a given purpose is to be realized). The non-logico-experimental sciences tend to combine analysis and synthesis, to blend them one with the other, the writers themselves not always being aware that they are two different things. They fail to keep real and virtual movements distinct, or at least fail adequately to distinguish them (see Movements). All such sciences claim to know directly and completely all about this or that thing, and when that claim is shown by experience to be unfounded, they resort to devices that are often childish, such as quibbling over the meanings that should be given to certain words (see Value); or they declare, or at least imply, that if a thing does not exist, it at least ought to exist; or indeed they openly boast that they are interested only in what ought to be. The non-experimental element, in such cases, lies in the term ought, which is used in an absolute sense, without specification as to any experimental purpose ( $10,28-32$, $33-40,69,253,265,277,279,297-299,346,483,518,605,613,701,711$, So4,

817, 818, 845, 966-75, 1459, 1687, 1689, 2016, 2017, 2147, 2214, 2219, 2411; see Duty, Empiricism, Theory and practice, Applications [practical], Absolute).

II-s
Since, in the logico-experimental sciences, synthesis has to follow on analysis if the concrete phenomenon is to be known, it follows that when it is found that one of the logico-experimental sciences fails to give an exhaustive explanation of a given phenomenon, it has to be filled out with other theories, and not thrown away; nor should one try to save its face by a surreptitious synthesis such as changing meanings in the terms it uses or straying away into some non-experimental field. That, however, is the usual recourse, with people who are not versed in thinking with the methods of the logico-experimental sciences, and even with people who are, but who succumb to sentiments or to interests the moment they enter economic or sociological spheres (33-39, 2017-2024; see Derivations).

## II- $t$

Logico-experimenta, theories strive to attain the perfection of the quantitative method, of measurement. Non-logico-experimental theories are as a rule qualitative (108, 144, 2091-2104, 2107, 2122, 2155, 2175, 2467 f.; see Quantitative-qualitative).

## II- $u$

Experimental reality and social utility are entirely different and sometimes flatly contradictory things. The theorems of the logico-experimental sciences harmonize with the former, but may not harmonize with the latter. The theorems of the non-logico-experimental sciences usually do not harmonize with the former, but they may harmonize with the latter. In a word, a theory may be in accord with experience and yet be harmful to society, or in disaccord with experience and yet beneficial to society (see Utility-truth, Religion, Metaphysics, Reason, Ethics, Ideals).

## III. I ANGUAGE AND DEFINITIONS

## A. LANGUAGE

## III- $a$

Scientific language and ordinary parlance ( $108,109,113-\mathrm{II} 8,245,266$, 331, 366, 396, 408, 815, 960, 1545, 2240).

## III-b

In the logico-experimental sciences the aim is to make language as exact as possible. Terms are the better the more definite they are in meaning. In the non-logico-experimental sciences the aim is to leave language vague and indefinite in order to profit by those traits in it, and terms are the better in proportion to their vagueness ( $9,18,21,26$, $69-6,108,171,408,499-506,507,508,515,586,595,596,640,965,1546,1552-$ 1554, 1686; see Derivations [contradictory], Persuasion, Logic).

## III-c

From the logico-experimental standpoint, any discussion is futile if nobody knows to what things the terms that are used in it actually correspond ( $27,69,108,119,380,442,490,965$, and see II- $i$ above).

## III-d

The logico-experimental sciences never quarrel about names. They quarrel about the things that the names stand for. A logico-experimental argument retains its full value if the names it uses are replaced by letters of the alphabet or by numbers. If things are designated beyond possibility of doubt or misunderstanding, the names that are given to them matter hardly at all. The non-logico-experimental sciences quarrel over names, and it is better for them that they should, for the terms they use, when they do not stand for altogether fanciful things, at least add a non-experimental something to the things they are trying to designate. That adjunct is very frequently an adjunct of sentiments deriving either from the writer or from somebody else (II-d). The conflicts of the non-logico-experimental sciences tend therefore to become battles of words. They lose value and sense if the ordinary words they use for things are replaced with numbers or with letters of the alphabet, since such symbols do not make the appeal to sentiments that ordinary words make (16, 2I, 113, 114, 115, II6, 119, 124, 128, 380, 514, 580, 642, 2002).

## III-e

Since language, in the logico-experimental sciences, is altogether arbitrary, it does not have the slightest influence upon things. In the non-logico-experimental sciences language, seeming to exist independently of things, may seem to have a greater or lesser influence upon them, and it certainly does have an influence on the theories that are devised to explain them. Both influences may be now slight, now great, and they may even be carried to an extreme where words seem to acquire some oc-
cult power over things (magic), or where, at least, they serve for the construction of theories that have no bearing whatever on realities (metaphysics, theology) (see Concepts, Derivations, Religion-182, 183, 227, 514, 958-65; Words-things, 658, 660, 691, 698, 1548, 1686).

## III- $f$

Language, at best, reflects facts of the outer world much as a bad photograph reflects them-and in the worst case, a very bad photograph, or a photograph that is a complete botch. To argue from words therefore is like pretending to derive from a botched photograph accurate knowledge of the things it was intended to picture ( $108^{1}, 118,690,691$, 69495, $1767,1769,1772$ ).

## III-g

Ordinary language may permit one to construct a very rough theory, just as the bad photographs mentioned may give some very vague hint as to the things they were supposed to picture. Ordinary language, for one thing, is usually synthetic, so that in using it one does take account, roughly and inadequately to be sure, of certain interdependencies in phenomena. That may be very helpful in cases where no better instru-


## III-h

Ordinary language is much more serviceable in practical everyday life than in the elaboration of theories, for the reason that the adjunct of sentiment that it appends to things (III-d) is a very important element in practical decisions ( $113,815,817$; see Empiricism, Theory and practice, Derivations).

## III- $i$

The consequences that follow from the vagueness of ordinary parlance (266-67, 365-66, 376, 1545, 1546, 1552, 1556, 1797, 1857, 1904-12, 1937, 2240).

## III-l

Language as a manifestation of non-logical impulses (158; see III-h above).

## III-m

Since the logico-experimental sciences use a language that is objective and exact, one must never take it to mean more than it actually states. One must reject every extension in its meaning that sentiment would incline us to make. Since the non-logico-experimental sciences use a language that is in part subjective and indefinite one may take it as meaning something more than what it literally states, or something
different. The additions and modifications that are thus introduced in the light of sentiment often fit in exactly with the modifications and extensions that the writer was concerned to make in things themselves. In such cases, therefore, the loose interpretation comes closer than the exact interpretation to what the author may have had in mind (41, 74-75, 171, 311, 1678 f.; see Theory and practice).

## B. DEFINITIONS

## III-n

In the logico-experimental sciences, given the thing one may select the name for it quite arbitrarily (III-r below). In the non-logico-experimental sciences, the name is usually given and one goes looking for a thing to which the sentiments that the name arouses will correspond. If no such thing can be found among real things, one resorts to imaginary things (26, 109, 118 , $119,150,371,578,638-39,686-91,960-63,965$ ).

## III-o

It follows from all the above that, barring involuntary slips and mistakes, the logico-experimental sciences use terms that correspond to real things, while the non-logico-experimental sciences use terms that, now by deliberate choice of the writer, now as a result of the principles he is applying, fail to correspond to anything that is real, or else correspond to things that are altogether fanciful (i08-09, $17 \mathrm{I}, 37 \mathrm{I}, 408,442,509-\mathrm{II}$, 515, 579-640).

## III-p

In the logico-experimental sciences definitions are mere labels that help us to keep track of things. In the non-logico-experimental sciences, definitions contain a non-logico-experimental element that very often has its basis in sentiment ( $119,150,236,245,577-78,638,642,798,868,960$, 965; see Definitions).

## III- $q$

In the logico-experimental sciences, definitions are arbitrary, barring certain considerations of convenience (III-r). They must not contain anything that should be stated in the form of a theorem [that has to be proved] (381, 382-88, 442, 963).

## III-r

Requisites for logico-experimental definitions ( $387,3^{88)}$ ).

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## ADDENDA

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Tho Huntsmons Wife

She sweeps down to seize him
Round about his stirruped thigh end shank,
Laying her face alongside his
As the staghongs limply on the horse's flank.
He lIfts her up and behind lime o there Pressing her breasts against his wearied back. She remembans such a rite, to where The first of her doughumse was engendered.

At home, the expected scone with siblings And Doz comes to pass in fruitful season:

The in me honored ynastings and questionings Return like the flocks of summering birds.

She bids the eldest daughter a hand the game, Sensing without showing, patiently k nowimg The young thing's overzent in har-Cather'scaresses for what she reserves for hear own pas and disses,

At evening, dispensing round a poring anplesine,
She analyze shares by her huntsmanis
Then slippers off to bed with nipissing time, when, ha drowsing, folk agio his torippoice smiles.
The daughter slips around with blanket, and puts up the fine for therguessits. She cares hoot watch her daughter's huambo o yes, even that wall drunken Beside

The hands that brought thowe antis den, Are the hones that cloth he: thine.

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[^0]:    $2062{ }^{1}$ Still left would be the practical difficulty of solving the equations, a difficulty so great that it may well be called insuperable if one is to consider the social problem in all its ramifications. In my Manuale, Chap. III, §§217-18, I noted that fact as regards the economic system, which is only a small fraction of the social system as a whole. From the standpoint, therefore, of a complete general solution of a position of equilibrium, or some other such problem, knowledge of the equations would be of no help. But it would be of great help in solving particular problems, as has proved to be the case in pure economics. Even imperfect knowledge of the equations would give at least some hint as to solutions for the problems: (I) of determining certain properties of the social system (it has already enabled us to determine certain properties of the economic system); and (2) of determining the variations of certain elements in close proximity to a real point for which the equations are more or less approximately known. Those, at bottom, are the problems which we are setting out to solve in this chapter. Our lack of any exact knowledge of the equations we make up for by such knowledge as we can have of their nature and of the relationships that they establish among the various elements in the social system.

[^1]:    $2068{ }^{1}$ Somewhat similar to the artificial changes mentioned are those occasional changes which result from some element that suddenly appears, has its influence for a brief period upon a system, occasioning some slight disturbance in the state of equilibrium, and then passes away. Short wars waged by rich countries, epidemics, floods, earthquakes, and similar calamities would be examples. Statisticians long ago observed that such incidents interrupt the course of economic or social life but briefly; yct many scientists, who have worked without the concept of equilibrium, have kept meandering about in search of imaginary causes. Mill, for one, wondered why a country afflicted for a short time by the curse of war soon returned to its normal statc; while other economists, such as Levasseur, came out with . a mysterious "law of compensation" (see Pareto, Manuale, Chap. VII, § 79). The equilibrium of a social system is like the equilibrium of a living organism, and of the latter it was noticed in very early times that an equilibrium that has been accidentally and not seriously disturbed is soon restored. In those days the phenomenon was, as usual, given a metaphysical colouring by reference to a certain vis medicatrix naturac.

[^2]:    $2079{ }^{1}$ It was to show that very thing that we have had to make our long study of residues and derivations. Some of my readers may have judged it superfluous. And yet it was not, because the conclusion to which it led is an indispensable groundwork for the theory that we are about to set forth with regard to the general form of society. Furthermore, since our conclusions deviated in many respects from views that are generally held, it seemed better to buttress them with facts in very great abundance.
    $2080{ }^{1}$ We shall be meeting other forms of dependence presently (\$2088).
    $2082^{1}$ [So Pareto. Apparently a slip, for manifestation-derivations, i.e., theories.A. L.]

[^3]:    $2082^{2}$ [Croce expresses this idea in the form: to be effective "thought has to be warmed by love." Two poles of the Italian temperament!-A. L.]

[^4]:    $2103{ }^{1}$ Neither this latter proposition nor the two preceding square with the facts -but we do not care to go into that just here.
    $2105^{1}$ What we are about to do is something like what the physicists did when the ordinary vague notions of "heat" and "cold" were replaced by the exact concept of "temperature."

[^5]:    $2115^{1}$ Of such situations we have already seen many examples (\$§ 1975 f.).

[^6]:    $2119^{1}$ [Another striking example from the animal world would be the sea-gull. A sea-gull always screams at sight of game. If he could control himself, he could enjoy the prey all to himself and derive a very considerable individual advantage, especially when food is scarce. Instead his cry attracts all the gulls in his flock, and nine times out of ten the discoverer of the game is not the one who eats it. The utility of this instinct to the flock is obvious, though it violates every commonsense principle of "rugged individualism."-A. L.]
    $2120{ }^{1}$ [The sea-gull derives a very considerable net utility from his instinct. If he usually loses the fish he discovers himself, he is often able to steal the fish some

[^7]:    comrade discovers. This instinct functions in the sea-gull, be it noted, with an ideally Paretan indifference to ethics, for the tie of good manners is normally absent among sea-gulls.-A. L.]

[^8]:    $2129{ }^{1}$ Failure to distinguish between the maximum of ophelimity for the community and the maximum of ophelimity of each individual in the community has led certain writers to regard my demonstrations of my theories concerning the maximum of ophelimity for the community as reasonings in a circle. As a matter of fact, in the case of free competition, the equations of economic equilibrium are obtained by positing the condition that each individual attains the maximum of ophelimity; so that if one were to infer from those equations that every individual achieves the maximum of ophelimity, one would obviously be reasoning in a circle. But if, instead, one asserts that the equilibrium determined by the equations has the peculiarity of corresponding to a point of equilibrium for the community, that is to say, to one of the points that we have just designated as $P$, one is stating a theorem that has to be demonstrated. The demonstration I gave first in my Cours and then in my Manuale.

    The error of regarding my argument as a reasoning in a circle has its foundation, really, in the work of Walras, who, in fact, never dealt with a maximum of ophelimity for a community, but always exclusively considered a maximum of ophelimity for each individual. Boven, Les applications mathématiques à l'économie politique, pp. 1if-12: "Walras develops [Éléments d"économie politique pure, pp. 77-87] what he calls the Theorem of Maximum Utility of Commodities. That so-called proof is a splendid example of the vicious circle. One has only to judge for oneself. The problem is to determine under just what conditions the two individuals exchanging will obtain the maximum satisfaction of their needs. The premise with which we start is as follows: (Walras, Ibid., p. 77): 'Assuming that he effects the exchange in such a way as to satisfy the greatest possible total of needs, it is certain that $p_{a}$ being given, $d_{a}$ is determined by the proviso that the sum of the two surfaces shall be the maximum. And that condition is that the relation of the intensities $r_{a_{1}}, r_{b_{1}}$, of the last needs satisfied by the quantities $d_{a}$ and $y$, or of the rarities after

[^9]:    to assign a coefficient of zero, or almost zero, to his discomforts. Conversely, to tip the scales in favour of the criminal, it will be said that "to understand all is to forgive all," that "society is more responsible for the crime than the criminal is," so disregarding the sufferings of honest people, which are given coefficients approximating zero, while the discomforts of the criminal take the foreground through high coefficients. Many derivations that are habitually used in discussions on social subjects can be translated into just such terms.

[^10]:    $2138^{1}$ When the ethical norms are violated by a government, the locations of the points $q$ and $t$ are in many cases very much as pictured in Figure 36. When the norms are violated by members of the subject class, the relative location of points $q$ and $t$ will be inverted, the point $q$ standing closer than $t$ to $B$.
    $2140^{1} \mathrm{We}$ were dealing with a similar subject when we asked in $\S \$ 1825 \mathrm{f}$. what measures were suitable for achieving a given objective. At that time we were con-

[^11]:    numberless states $X(\$ 211$ ) one elects to consider. The ambiguity in the term is a favourite one with reformers and the many other people of their kind. It arises in the mistaken notion that there is one state $X$ only. As a matter of fact there are an infinite number of states $X$.

[^12]:    $2147{ }^{1}$ Eruvres complètes, Vol. V, pp. 43-63: "Le rabot" ["The Plane"].
    $2147^{2}$ Ibid., Vol. V, pp. 119-20. "There you have a man who wants to make boards, but he will not make one in a year's time, for he has nothing but his ten fingers to work with. I lend him a saw and a plane, two tools, remember, that are products of my labour and which I could use to advantage myself. Instead of one board he makes a hundred and gives me five. So I have enabled him, by depriving myself of property belonging to me, to get ninety-five boards instead of one-and you come and tell me that I am robbing and abusing him! Thanks to a saw and a plane that I have made with the sweat of my brow a hundredfold product has issued, so to say, from void, society enters into possession of a centupled enjoyment, a working-man who could not make a board makes a hundred, and now, sir, when, voluntarily, of his own free-will, he gives me a twentieth part of his surplus (excédent), you picture me as a tyrant and a thief!"
    $2147^{3}$ Bastiat to Proudhon, Ibid., Vol. V, p. 133: "You are asking me seven questions, sir. Kindly remember that we are concerned just here with only one: 'Is interest on capital legitimate?" " Proudhon to Bastiat, loc. cit., p. 148: "You press me then: 'Is interest on capital legitimate-yes or no? And answer please without paradox, without quibbling!' So I answer: 'Let us, if you please, distinguish cases. Yes-interest on capital may have been considered legitimate at one time. No, it cannot be legitimate at another time.' "

[^13]:    $2147^{8} \mathrm{Op}$. cit., Vol. V, p. 46: "I claim in the first place that the bag for the wheat [Another of his examples.] and the plane are types, models, symbols, of all capital and faithfully represent it, just as the board and the five measures of wheat are types, models, symbols, faithful representations, of all interest."

[^14]:    jection to so-called revenue taxes, which in their effects amount to the very same thing. The prevalence of such derivations is due to an inclination on the part of many economists not to become involved in political quarrels of too great bitterness. So they reverently accept the fiscal and political policies of the governments that happen to be in power, and ask only that they be let alone to argue about their theorics in the abstract. In view of their hostility to bourgeois governments, Socialists are usually immune to that particular cause of error. Therefore they scornfully refuse to sever the economic aspects of a situation from its social, political, and fiscal aspects, and so manage to kecp closer to realities than the economists mentioned.

[^15]:    $2147^{10}$ It is in point to recall here a remark we made above in § 75 . In a work in which derivations are used, it is all very well to leave implicit propositions that are ordinarily left implicit; and so if a writer shows that it is absurd to draw a certain conclusion, $Q$, from the premises $P$, it is justifiable in a great many cases to assume that he considers the conclusion $Q$ itself absurd. Not so in a work that pretends to be strictly scientific. In a scientific argument nothing is to be assumed. There is no going beyond the assertion that the argument connecting $P$ to $Q$ is unsound, since $Q$ may stand independently of any such connexion. Take the proposition: "The circumference of a circle cannot be commensurate with its diameter because it has no angles." Now if someone should say that that demonstration is unsound, one would have no right to assume that in so saying he was holding that the circumference is commensurate with its diameter. It is easily possible to offer a demonstration that is false of a theorem that is true.
    $2147^{11}$ In the Dreyfus affair, besides, Semitism and anti-Scmitism certainly played a considerable rôle, though not so great a rôle as would appear at first glance and as many still believe; for in not a few cases the pro- and anti-Semitism were merely masks for other sentiments and interests. In the Zabern incident Semitism and anti-Semitism did not figure at all-they were absolutely foreign to it; yet all the Dreyfusard newspapers in France came forward with one voice to manifest

[^16]:    $2147^{15}$ That fact transpires in the derivations that turn up on the floors of the Latin parliaments every time a conflict occurs between the police and strikers or rioters ( $\$ 2147^{18}$ ); and it is the characteristic manner of people who would do the act but not say the word. The Syndicalists, instead, make word and deed consistent and so come much closer to realities. They say that they intend to use force because they are at war with the bourgeoisie. Now that use of force can be met only with the use of force in the counter-direction, not with the fatuous and inconclusive reasonings of our "speculators," who are tireless in their efforts to lure the Syndicalists from the field where force is used, and where they know, or fear, they will not prove the equals of their adversarics, into the field where chicancry and intrigue are the main reliance, and where they are certain that they can have no competitors.

[^17]:    paid for in the end. A long series of political blunders has caused financial difficulties that can be surmounted only if all Republicans return to discipline and selfsacrifice.'" As a result the direction of the French army and navy again fell to ministers who were more concerned with satisfying cliques and political followings than with preparations for national defence.

[^18]:    army and navy over to ministers like André and Pelletan in France, who would make a shambles of their organization, and as a result Germany would be exposed to defeat and destruction in a war with her enemies. To such a tremendous misfortune we prefer the relatively slight evil of allowing a few acts of insolence on the part of the military to go unpunished. We do not care to take a course that leads over the precipice: principiis obstat."
    The weak point in this argument can lie only in the terms "inevitably" and "very probably." In other words, those who would refute it must show with convincing evidence that the analogy between a possible movement in Germany and the movements actually observable in England and France does not hold, and that once on the road to an omnipotent Reichstag, Germany would not go on to the Latin condition, but would stop at some point intermediate between the Latin condition and the prevailing Germanic condition. But to meet such an argument with the abstract principles of some faith or other is as fatuous, from the scientific standpoint, as going to consult the oracle at Delphi.

[^19]:    $2153^{1}$ [All the evils of alcoholism could be corrected by absolute prohibition (B), but prohibition has to operate subject to ties-among them, the desire of many people to drink, the fact that other people can make money by selling them drinks, the fact that public officials can make money by selling the right to sell drinks. Prohibition, therefore, does not correct all the evils of alcoholism, but produces new evils, bootlegging, graft. The application therefore of the principle that may be logically sound may produce, in view of the ties, not an enhanced but a diminished utility.-A. L.]

[^20]:    $2154^{1}$ Physicians are inclined to think of society as a flock of sheep of which they are the well-paid and devoutly esteemed shepherds. Reasoned opposition to such oppression and exploitation often comes to naught because people are frightened by the fairy-tales of the medical fraternity, just as Molière's imaginary invalid trembled in his boots at the threats of Dr. Cathartic. Sometimes, on the other hand, their prattle may be effectively met with other prattle of the same variety, such as "Christian Science," or "Natural Medicine." In the year 1913, in order to reduce recalcitrant Swiss cantons to obedience, the doctors and their allies proposed an amendment to the federal constitution that would have authorized the federal government to dictate legislation affecting large numbers of diseases, certain noncontagious diseases included. When the measure was put to popular vote, the only effective opposition, virtually, came from the devotees of "Natural Medicine." Journal de Genève, May 8, 1913: "As was the case in the eastern cantons, the constitutional amendment on 'federal discases,' so called, has encountered a silent but determined opposition. Two or threc districts in the Canton of Zurich have rejected

[^21]:    $2160{ }^{1}$ Fustel de Coulanges, Questions historiques, p. 8. "If you look for the principle that gives that unity and that life to German scholarship, you will notice that it is love for Germany. We claim here in France that science knows no country. [That is too high a tribute to France.] The Germans frankly hold the opposite view. 'It is a false doctrine,' says Herr Giesebrecht [Making the usual abuse of the terms "false" and "true," nobody knowing just what they mean.], 'that science knows no country, that it overleaps frontiers. Science ought not to be cosmopolitan.

[^22]:    [The usual abuse of the term "ought"-what does it mean? And what if someone were to snap his fingers at the "duty" laid upon him by the never-sufficiently-praised Lord Almighty Giesebrecht?] It ought to be national! It ought to be German! Germans all worship their country, and they take the word "country" in its true meaning [Twenty-one guns for our old friend True!] as the fatherland, the land of our forefathers, the terra patrum, our country such as our ancestors knew it and made it. They never speak of it save as a sacred thing.' " Not otherwise did the Athenians speak of the Sun and wroth were they at the impiety of Anaxagoras who said that it was just a red-hot stone. P. 9: "Scholarship in France is liberal. In Germany it is patriotic." Liberal scholarships and patriotic scholarships may both be beneficial or harmful to a country, but they are both different from the scholarship that aims to be strictly experimental. Fustel de Coulanges was writing under the impression of the War of 1870 , p. 16: "But we are living today in wartime. It is almost impossible for science to preserve its old serenity. [Fortunately for scientific history, Fustel de Coulanges possessed just that sereneness in many of his writings, whicl, for that reason, come very close to experimental history; and despite the emotions that were stirring within him, he had the strength of character to write:] In spite of the Germans, we continue to claim that scholarship knows no country." To be strictly exact, however, he should have said "scientific scholarship," to emphasize the difference between the experimental attitude and the scholarship that aims at some social utility.

[^23]:    $2163{ }^{1}$ Waliszewski, Le roman d'une imperatrice, Cathérine II, p. 190. There is still some doubt as to whether the Emperor Peter was assassinated by Orlov or by Tieplov: "Orlov or Tieplov? The question may seem incidental and of scant importance. But it is not. If Tieplov instigated the crime, it means that Catherine was ultimately responsible for it, for how conceive that he could have acted without her consent? The case is different as regards Orlov. He and his brother Gregory were, and for some time still were to remain, to a certain extent masters of a situation that they had created. . . . They had not taken Catherine's advice in beginning the coup d'état. They may well not have consulted her on a hundred other occasions." It is very essential to solve that problem if an ethical judgment is to be passed on Catherine, but in no way important if one is estimating the social effects of the incident. It is not apparent how answering the question in one sense or the other could have the slightest bearing on the prosperity of Russia.

[^24]:    $2169^{1}$ Many people have perceived and stated a fact which Barras well describes in his Mémoires, Vol. II, p. 446: "So great is the deceptive power of the passions that when they are most concerned with a private interest, they often imagine that they envisage only the public interest."

[^25]:    $2174{ }^{1}$ In the Zabern incident the same newspapers evinced the greatest indignation at the "browbeating" by the military authorities (\$2147) but were very lenient towards the "browbeating" and the acts of "sabotage" for which the strikers were responsible at the same time. Conversely, newspapers that approved the use of force by the military waxed indignant at acts of violence on the part of their adversaries.

[^26]:    $2176^{1}$ It would be hardly in point here to review the whole history of the use of force from ancient down to modern times, or to go into too many details. We shall confine ourselves to the present, and try to find a formula that will give a rough and general picture of the facts observable. If we were dealing with a recent past, we should have to regard violations of the norms of intellectual uniformity as on a par with violations of a material order. Not so long ago they were actually so regarded, and often indeed the former were regarded as more serious than the latter. But in our day, barring some few exceptions, proportions have been inverted, and the norms of intellectual uniformity that public authority sets out to enforce are relatively few. They may therefore be better considered apart from norms of a material order. We shall deal with material uniformities first, coming to violations of an intellectual order farther along ( $\$ \$ 2196$ f.).

[^27]:    $2177{ }^{1}$ This formula states in the abstract what is actually happening in the concrete. It is met with a number of theories that state what, according to their authors, "ought" to happen. With those theories we shall deal farther along (§§ 2181 f.).

[^28]:    $2187^{1}$ In Italy it is a recognized practice for the government to pay to the manufacturers who supply railroad equipment a price equal to production-costs plus a reasonable profit. If, therefore, costs rise as the result of a strike, the taxpayer pays the difference and the manufacturer sits back and takes his profit. Time and again not only railway-supply companies but others, and notably ship-building concerns, have been known to provoke strikes or threats of strikes in their factories as a means of exerting pressure upon a ministry and so securing new orders at suitable prices. The Socialist cooperatives that contract for public works do the very same thing, dispensing with the mediation of "capitalists."

[^29]:    $2190^{1}$ Almost always writers study such incidents from the ethical standpoint and so are blinded to uniformities that nevertheless stand out as plain as day. When a historian is writing the history of a revolution, his chief concern is to decide whether it was "just" or "unjust"; and since those terms are not definable, the inquiry turns into a mere question as to the impression that the facts make upon him. In the best case, if a writer chances to have no particular bias to which he deliberately subordinates history, he lets himself be guided by some metaphysical conception as to what is "just" and "unjust" and bases his appraisals on that. More frequently he has a faith that he is at no pains to conceal. If he is favourable to monarchy or oligarchy, he will say that the rebels are in the "wrong"; and, conversely, if he is a "democrat," that the rebels are in the "right." When it occurs to him-a thing that does not always happen-to look into the causes of an uprising, he will halt, one may be sure, at a set of ethical causes. If he is against the masses, he will say that they have been roused to insurrection by the misleading wiles of demagogues. Favourable to them, he will say that they were oppressed by intolerably abusive laws that were

[^30]:    forced upon them by the governing class. How much paper and ink have been wasted in repeating such brainless clatter over and over and over again!

    2191 ${ }^{1}$ [Reading, in Pareto's Italian, persistenze for persistenza.-A. L.]
    $2191{ }^{2}$ [I take "essi" in Pareto's Italian as referring to "aggregati." The passage can also be rendered with "essi" referring to the B's.-A. L.]

[^31]:    $219{ }^{3}$ Critics of the French Revolution accuse it of making extensive use of force. Its admirers try to excuse it on that same score. Both are right if the purpose is to find derivations to influence people who feel an instinctive and unreasoned repugnance to the infliction of suffering (residues IV- $\boldsymbol{\gamma}^{2}$ ). They are wrong if they are objectively considering the conditions determining social utility. From that standpoint it has to be admitted that the use of force was one of the chief merits of the French Revolution, not a fault.

[^32]:    $2201{ }^{1}$ Ollivier, L'Empire libéral, Vol. XVI, p. I: "Study of the facts in history has led me to this experimental conclusion: that no government was ever overthrown by its enemies. Enemies are like the buttresses in a Gothic church: they hold up the edifice. There is only one way for a government to die: suicide. [That is a little too swecping. A government can succumb to superior force, as happened to Pompey, Charles I of England, and many others whom it would be superfluous to mention.] Since 1789 all the governments in France have destroyed themselves: the Constituents bar themselves from their own work; the Girondins surrender; the Jacobins slaughter each other; the leading Directors put their republic up at auction; Napolcon I abdicates twice; Charles X abdicates and goes abroad; Louis Philippe abdicates and takes to his heels."

[^33]:    $2207{ }^{1}$ Many literary economists are inclined to consider the cycle $b c-c b$ exclusively: from study of the interests, $b$, with which their science pre-eminently deals, they draw certain conclusions, $c$, and then go on to imagine that the economic activity, $b$, can be modified by disseminating the doctrines $c$. A most striking cxample would be free trade. Studying the economic situation, $b$, one derives the demonstration, $c$, of the desirability of free trade. When, then, the doctrine, $c$, becomes widely accepted it is taken for granted that it cannot fail to modify the economic situation,

[^34]:    $2218{ }^{1}$ Prussia has a populous small-propertied nobility. Government officials and army officers are recruited in large part from that class, and that accounts in the main for the high honesty of the Prussian bureaucracy and the soundness of the Prussian army. Somewhat the same situation prevailed in Piedmont before the foundation of the Kingdom of Italy, and similar effects were observable. These at the very least declined with the gradual decline of the cause, under the new kingdom. From that it would follow that agricultural protection, which is favourable to proprietary classes, had far different effects in Germany and in Italy, Italy having no proprietary class corresponding to the Junkers of Prussia.

[^35]:    2231 ${ }^{1}$ The "capitalists" and "entreprencurs" of ordinary language are not the capitalists and "entrepreneurs" considered by pure economics (sce Parcto, Cours, §87 and passim) or, in general, by scientific economics. Scientific analysis separates the compounds that are observable in the concrete.

[^36]:    $2231{ }^{2}$ That fact was sensed by economists in setting "consumers" over against "producers"; but it was soundly objected that in reality those two classes oftentimes merge, and that the majority of individuals are at once consumers and producers. The difference that was sensed in those terms is really the difference between the person who passively experiences the effects of the economic, political, and social movement and the person who uses his wits to take advantage of it.
    $2232^{1}$ If that fact has not been perceived by numbers of economists, the failure is due to their being led astray by their eagerness to find a principle from which a theory of savings could be logically derived, and also, once they were on that road, to their deserting the field of experimental observation for excursions into the realm of theoretical speculation. It would be helpful to theory if the quantity of savings accumulated in a given unit of time were exclusively, or at least chiefly, a function of the interest obtainable on savings. But unfortunately that is not the case, and one cannot, out of sheer love of theory, shut one's eyes to the plain facts, nor replace what anyone with eyes may see with theoretical juggling of statistics. Statistics as to savings are woefully incomplete. They not only cannot keep track of the amounts, to a very considerable total, that small manufacturers, merchants, and farmers use in their private enterprises; they cannot even give anywhere near the exact figures for the surplus savings that are invested in government or other securities. Finallyand this is the chief reason why they mislead in the matter here in point-they

[^37]:    $2234{ }^{1}$ Monographs along the lines of Le Play's would be of great use in determining the character of the persons belonging in our $S$ group, and those belonging to our $R$ group. Here is one such, contributed by Prezzolini: La Francia e ifrancesi del secolo XX osservati da un italiano. I know it as quoted by E. Cesari in the Vita italiana, Oct. 15, 1917, pp. 367-70. The person in question is a well-known member of the French parliament-we suppress the proper name: for us here, he is not a person, but just a type. The figures given by Prezzolini are those publicly declared by the member himself, Monsicur X. X's fixed income yields a total of 17,500 francs, of which 15,000 are salary as a member of the parliament and 2,500 interest on his wife's dowry. Only the latter sum belongs in category $R$-the salary belongs rather in category $S$, because to get such a thing one must have the ability and the good

[^38]:    $2236^{1}$ As usual, one may raise the query: "If this social phenomenon is of such great moment, how comes it that people have not remarked it hitherto?" The answer, again as usual, is that people have indeed noticed it, but have proceeded to cover it over again with a cloak of derivations. The substratum underlying antiSemitism is a movement against speculators. It is said that the Semite is more of a speculator than the "Aryan" and the Jew is therefore taken as representing the whole class. Consider the case of department-stores and bazaars in Europe. They are the targets, especially in Germany, of the anti-Semites. It is true that many such stores are owned by Jews, but plenty of others are owned by Christians, and in either event are equally harmful to the small retailer, whom the anti-Semites would protect-anti-Semite in this case meaning "anti-speculator" and nothing more. The same may be said of financial syndicates and other characteristic forms of speculation. Socialists pick their quarrel with "capitalists," and theoretically it is a good thing that for once the "capitalist" is not confused with the "speculator"; but practically, the mobs that follow Socialist leadership have never grasped head or tail of Marx's pretty theories as to "surplus value"; they are inspired solely by an instinctive impulse to take for themselves at least a part of the money that is going to "speculators." Theorists, too, when dealing with "capitalism" in history, confuse it, to some cxtent at least, with "speculator" rule. Finally, if anyone is inclined to go farther back in history, he may find ample traces of remarks and doctrines that reflect the conflict between speculators and the rest of the public. In the case of Athens the people in the Piraeus are at outs with the farmers, and Plato (De legibus, IV, 705 ) would place his republic far from the sea to kecp it safe from the influence of speculators. In that he is a predecessor of the anti-Scmites of our time. Speculators may be found at work in all periods of history. Various the ways in which their influcnce manifests itself, various the names that are applied to it, various the derivations that it provokes; but the substance is ever the same.

[^39]:    $2239{ }^{1}$ The study of forms of government belongs to special sociology. Here we are concerned with them only incidentally in connexion with our quest for the substance underlying derivations and for the relationship between types of rulingclass composition and other social phenomena.
    $2240^{1}$ The best government now in existence, and also better than countless others that have so far been observable in history, is the government of Switzerland, especially in the forms it takes on in the small cantons-forms of direct democracy. It is a democratic government, but it has nothing but the name in common with the governments, also called democratic, of other countries such as France or the United States.

[^40]:    $2247{ }^{1}$ Practical men often sense this fact, but are kept from acting on it by pscudo-theoretical considerations or by obstacles they chance to meet in doing so. Busch, Tagebuchblätter, Vol. I, p. 103 (English, Vol. I, p. 80), Aug. 24, 1870 (in question, just what territories Germany might find it advisable to take away from France): "Von Alvensleben, for his part, was for taking everything as far as the Marne. Bismarck said that he had another idea but that unfortunately it could not be carricd out. 'My idcal,' said he, 'would be a sort of German colony, a neutral state of eight or ten million people exempted from all military service but paying

[^41]:    $2253^{1}$ Jouvenel, La république des camarades, pp. 57-60: "Of course, people insist on having platforms and programs, in deference probably to a long-ingrained habit of mind; but it is rare for anyone to care very much about carrying them out. . . . That is because platforms are rarely written with the idea that they are to be carried out. The principles of the republican bourgeoisie go back to ' 89 , of Marxian Socialism to '48. The Radical platform dates from 1869 . Rest assured that they will wear for a long time still! Struggle between these various stationary conceptions nevertheless gocs to make up what is called 'modern politics.' . . . A program that chanced to be carried out would cease by that fact to exist. . . . Almost all our important laws have been submitted for debate to the parliament by ministers who did not believe in them, or who were already on record as uncompromising oppo-

[^42]:    Carbonneau and His Friends the Politicians: Every time the police manage to collar some financier of dubious status, they cause a great pain to a certain deputy in the Bloc, who, as it inevitably turns out, is friend and legal adviser to all promoters of blue-sky enterprise. There are, to be sure, a number of specialists of that type; but there is one in particular whose name comes to mind every time a Carbonneau goes to the lock-up. When the Duezes, the Martin-Gauthiers, the Rochettes, the Carbonneaus need a good legal adviser they turn instinctively to the Hon. M. X-- because they know in advance that as legal adviser he will not prevent them from fleecing investors, and that as a Deputy enjoying far-reaching influence in the Chamber and in the Chamber galleries (lobbies), he will screen the boat and its pilots behind his flag." And see $\$ 2256^{1}$.

[^43]:    $2255{ }^{1}$ Pantaleoni, Cronaca (on the news), pp. 260-64: "The monopoly guaranteed the Institute [of Life Insurance] has a double purpose. On the one hand, the state is given control of the life-insurance industry; on the other, the state is provided with an instrument for having considerable financial resources at its disposal for many years to come-the premiums that will be paid in by the insured, and which will not have to be paid back till many years hence when the policies mature. [And then the state will or will not pay them back according to the way the people then in power happen to feel, and according to the surplus available in the budget.] That aspect of the situation has not been advertised before the parliament and the taxpayers, and with good reason, for it is unwise to divulge the creation of a debt not accounted for in the budget. [Even if it had been divulged, things would have been the same: a demagogic plutocracy worries little about the future.] . . . Parliamentary government has countless virtues, but also not a few defects; among which, three in particular: For one thing, the rank and file of Deputies in the parliament are woefully deficient in political education. . . . Then again that the Chambers should split up into parties of a very low moral stature is a rule without exception. In view of that division, every proposal of a ministry that is calculated to surmount some serious political difficulty is not discussed from the general and comprehensive standpoint of national interest . . . but is studied as a propitious and far-reaching opportunity for overthrowing or blackmailing that ministry. Finally, publicity of debate is a rule of parliamentary procedure. . . . Those traits in the parliamentary

[^44]:    system occasioned no great inconveniences so long as the Chambers exercised mere financial supervision. . . . But now they necessarily make ministries either unwilling or unable to declare frankly what their purposes are, forcing them to conceal the instrumentalities they are using and to pay toll now to this, now to that, parliamentary group or, to speak even more frankly, to pay blackmail."

    However, Pantaleoni approved of the insurance measure on the ground that it might serve to provide funds for a future war. But if it might have served that purpose, it did not actually do so, for the insurance premiums went into the pockets of the cliques that were then ruling in Italy, while the army and the navy continued in a state of utter unpreparedness.

[^45]:    $2257{ }^{1}$ A study of such procedures technically, from the standpoint of efficiency and costs and containing no ethical ramblings, no quest for "remedies," and no sermons-which are about as productive of results as a sermon that might be preached to the Phylloxera exhorting them to stop devastating our vineyards-is still a desideratum. We cannot occupy ourselves with it here. The reader will find valuable information as to Anglo-Saxon ways in Ostrogorski's classical work, La démocratie et les partis politiques; and on the same thing in Italy in Giretti's cxcellent study: I trivellatori della nazione ("The art of scuttling the country").

[^46]:    $2262{ }^{4}$ In just that way the French Socialist Sembat saved his Radical friends who were compromised in the Rochette affair. Gazette de Lausanne, Apr. 6, 1914 (reporting the session of the Chamber where the resolution on the Rochette affair was adopted): "The findings of the Investigating Commission were replaced by a fairly anodyne text which stopped at 'taking cognizance' of those findings and denouncing the interference of politics with the courts, such interference having been one of the principal industries of the Majority that felt called upon to denounce it before adjourning for the day. The text of the resolution had the advantage of ignoring MM. Briand and Barthou and of dealing with MM. Monis and Caillaux in the most impersonal and general terms. That was where M. Sembat interfered with an altogether superior dexterity. He clearly perceived the discredit that the Socialist party might incur by supporting the 'whitewashing' policy of M. Jaurès. He therefore demanded criminal prosecutions-only, he named four defendants: MM. Caillaux, Monis, Briand, and Barthou. That was a sure device for getting nobody into trouble and also for saying afterwards that the Socialist party had held out for punishment. M. Sembat is an ingenious, clever fellow." In England Lloyd George and Lord Murray were saved by charitableness on the part of the leaders of the opposing party, who counted naturally on similar indulgence being shown to their friends.

[^47]:    'give the names-since they are well known to everybody in parliamentary circles of electoral districts that have sent delegations to Rome to look for some candidate who would be equipped not with a political faith or program, but with an entrée that would assure them district influence with the administration. Other districts in the South have actually requested candidates of the ministry, requests that, it seems, were granted on a number of occasions by the famous Commendatore Peano, the alter ego of the Honourable Giovanni Giolitti, who rightly considered that a small price to pay for abject consciences. It is only natural that the political deputation of a region that recruits many of its representatives in just such a spirit should contain a number of unscrupulous men and now and then a plain ordinary rascal. But one has no right to be amazed at or to find fault with such a thing, especially if one has done nothing to put an end to such a lamentable situation, but has rather made one's own deliberate contribution towards bringing it on and perpetuating it.' " [The Commendatore Peano mentioned above is the original in life of the inimitable portrait of "the Commendatore" which Guglielmo Ferrero drew in the first two volumes of his Terza Roma, which appeared in English as The Seven Vices.-A. L.]

[^48]:    $2267^{1}$ The corruption of the New York police department is partly the result of foolish efforts to enforce virtue by law. Without the purchased goodwill of a police that knows how to keep one eye shut, life in New York would become impossible. The famous Mayor Gaynor, at one time so much talked about and in no favourable sense, certainly, did not want to allow New Yorkers even to dance. Liberté, Apr. 6, 1913: "An orgy of vulgarity: Such the description, according to Mayor Gaynor of New York, that fits the disease that is afflicting high society in America at the present time. The engrossing tango, the despotic turkey-trot, are so furiously rampant this season in the land of the Transatlantics that public orderliness in the metropolis has been seriously compromised, and the evil, in an epidemic form, weighs on the mind of his Honour the Mayor like a veritable nightmare. The fad of 'tango suppers'-suppers that were usually protracted till dawn-had become so rapidly dangerous to the maintenance of good morals that Mr. Gaynor recently felt called upon to resort to Draconian measures to deal with the scourge. He ordered midnight closing for all-night restaurants and applied the decree with pitiless rigour. Some days ago a number of the more notorious feasters who had set out to flout the law were expelled manu militari on the dot of closing-time. The police, hard-hearted fellows, refused to allow them even to get their hats and coats, which were delivered to them on the sidewalk. Night suppers being now

[^49]:    $2268{ }^{1}$ Jouvenel, La république des camarades, pp. 135-36: "There are long-faced ministers who consider themselves honest men because they have never turned a sou for themselves, but who have literally pillaged the budget to the profit of their families and intimates. [And add: their constituents, the press, and their friends in finance.] For a touching circumstance, public sympathies are often with them. They win almost equal gratitude for never having stolen anything for themselves and for spreading joy all about them. That kindly disposition towards them has most unfortunate consequences, for, in spite of everything, the needs of a politician have their limits, and there are families we know in Gascony that have needs with no limits at all. A law that would result in quite regularly substituting prevarication for nepotism would be a very good law."

[^50]:    $2268{ }^{2}$ Session of the Italian Chamber, Mar. 8, 1915, verbatim report in the Giornale d'Italia: The Honourable Bevione speaking on Tripoli: "The Arab population is ruled in an oligarchical, in fact a patriarchal, fashion. It obeys certain chiefs devotedly, almost superstitiously. . . The chiefs back their dependents, help them in their dealings with the authorities, accord them hospitality, give them

[^51]:    even the press is very largely under the influence of the Banca Commerciale. A goodly number of Italian newspaper-writers are dependents of the bank and its subsidiaries. The fact is too generally known to require any great amount of proof. Who is not aware that that organ [At that time, the Tribuna.-A. L.] which is so constantly faithful to all ministries of whatever colour as they succeed each other in power is largely inspired by a well-known corporation lawyer connected with the Banca Commerciale, the shipping-companies, and the steel trust of Terni? Ab uno disce omnes! The system that the bank follows is always the same. Each of the subsidiaries must underwrite a part of the capital of a given newspaper or periodical, which in consequence finds itself with its hands tied as regards both the firm that is one of its coproprictors and other firms allied with it. In addition newspapers receive subsidics in one form or another, most often in the form of advertising accounts, with the industrics that are located in the regions where they are published and read. . . . Some industries own thcir own newspapers besides." And see § 1755.

[^52]:    $2270{ }^{1}$ [The use of the term "derivative" in this paragraph is so exceptional, and in fact so unique, that one may almost regard it as a lapsus for "derivation."A. L.]

[^53]:    $2282{ }^{1}$ An excellent study on the subject is available in Bachi's "Metodi di previsioni economiche," Rivista delle scienze commerciali, Nos. 8-9.

[^54]:    $2282{ }^{2}$ The same thing is observable in many technical calculations. Engineers know that it is uscless to have a merely formal approximation. Suppose we are trying to determine the diameter of a trec-trunk and so take its circumference, which we assume to be a perfect circle, with a piece of string. In making our calculation it would be the height of absurdity to use a $\pi$ carried to ten decimals. We might just as well take $\pi$ as $22 / 7$, offhand, and in fact do even better by dividing the circumference, as obtained with the piece of string, by three.

[^55]:    $2293{ }^{2}$ That method of viewing things is not a little crude, and ways must be found for attaining greater exactness. That may be secured by interpolating the curve obtained, by determining, that is, the line around which it fluctuates. The results of these calculations are also to be found in Appendix II to the article mentioned in § $2292^{1}$.
    $2294^{1}$ Since that time many new verifications have been obtained. See my "Forme di fenomeni economici e previsioni," Rivista di scienza bancaria, Rome, AugustSeptember, 1917.

[^56]:    $2301{ }^{1}$ We are not called upon to determine here whether that result might not have been attained just as well without wasting so much money on financial, political, and other parasites, for we are considering real, not virtual, movements. We are describing things that have happened and are happening and choose not to go beyond that. That caution has to be kept in mind in all that hereafter follows in this volume.

[^57]:    $2306{ }^{1}$ Secreting debts was a trick extensively used in Italy under Magliani's ministry [years 1879-88]; then the practice declined, though it was never altogether abandoned. It came into great vogue again during the Libyan War. The Honourable Edoardo Giretti exposed the trick of transforming debits into credits by manipulations in accounting. Luigi Einaudi showed how an artificial budget surplus can be manufactured from an actual deficit. Finally, Feb. 14, 1914, the Honourable Sidney Sonnino exposed all the tricks of budget-making with admirable clarity in a speech before the Italian Chamber. The speech would deserve quotation in its entirety, because it goes far beyond the particular case and deals with the general methods of budget manipulation. However, just a few very significant passages here: "Let me state my position clearly. I am not raising questions of legality or illegality, nor inquiring whether at this moment we are facing a surplus or a deficit, and how large. I am exclusively concerned with a question of clarity and frankness in our national finance. Today on the strength of a series of enactments that have been slipped as riders into no end of nondescript special bills and on the strength of interpretations more and more far-fetched of such enactments, we have reached a point where the Minister of the Treasury has de facto absolute discretion over the allotment of large numbers of appropriations, accounting for them under any department of state he chooses, and frequently under whatever classification he chooses, and indeed without reference to them in the general accountings, as presented to the Chamber, of the services for which they were appropriated. In his

[^58]:    $2310^{1}$ That is to be taken as holding true only in a rough and very general way. In not a few individual cases the course of events may be different.

    231 I ${ }^{3}$ These effects on the constitution of the governing class are not the only ones observable in the respective periods of prosperity and depression. We shall meet others further along in $\$ \$ 2343 \mathrm{f}$.

[^59]:    § $2316^{\text {a }}$ [Agricoltori, misprint for apicoltori.-A. L.]

[^60]:    $2316^{6}$ Sce Pareto, Cours, $\$ \$ 344-63$, barring, however, a few ethical considerations that creep in by implication here and there.

[^61]:    "System," see Ferrara, Della moneta e dei suoi surrogati (Money and Its Substitutes), p. 499. Admirers of the "ethical state" and more or less gratuitous defenders of the speculators have tried to defend the system of Law and the Regent. The derivations they put forward are the ones usual in such cases. On Jan. 26, 1721, all holdings of properties connected with the "system," including annuity contracts purchased with notes, were made subjects to visa. Contemporaries of the defaults and visaings of 1716 and 1721 were well aware of the character of those confiscations. Buvat, Journal de la Régence, Vol. I, p. 201: "On the tenth [of December, 1716] a medal began going the rounds. It had been struck on the occasion of the prosecution of merchants and speculators by the Chamber of Justice. On one side was a portrait of King Louis XIV, with, underneath, the legend: Estrientes implevit bonis; and on the other was a portrait of King Louis XV, with the words: Divites dimisit inanes." And farther along, speaking of the visas of 1721, Vol. II, p. 273: "'Don't talk to me of a tax,' the Prince [the Duc de Bourbon] resumed. 'Everyone is only too well aware of the misapplication of funds that took place during the last Chamber of Justice; and there will be the same trouble with the Chamber there is now talk of holding. The most insignificant woman will get anything she wishes from Monsieur the Duke of Orleans in procuring the exoneration of those from whom she will expect some recompense for doing them a favour. Do not imagine I am saying that because the Duke is not here. I will maintain it to his face." "Martin, Histoire de France, Vol. XVII, pp. 228-29: "Various categories were established, the losses being graduated from $1 / 6$ to $19 / 20$ [A system somewhat like the progressive taxes of today.], an enormous task, designed, as had been the case in 1716, to achieve a certain relative justice in the betrayal of the public trust. Five hundred and eleven thousand persons deposited to the amount of $2,521,000,000$ papers, which were forthwith reduced by $521,000,000$. Left were about $1,700,000,000$ that were recognized as capital for life or perpetual annuities. . . . A very small part of the debt, $82,500,000$, was settled in cash." Before that procedure in bankruptcy, there had been another in 1715, as to which Martin notes, Vol. XVII, p. 16I: "The financial history of the Old Régime is just one alternation of depredations by the financiers upon the people and of governmental abuses of power upon the financiers. There was no escaping from that circle."

    It is strange that a historian of Martin's ability should not have seen that it was a

[^62]:    $2316^{8} \mathrm{We}$ use the term "necessary" in this sentence in its experimental sense, without any further implication of metaphysical absoluteness or anything of the kind. We mean by it simply that within the limits of space and time known to us, one development is observed as invariably conjoined with another.
    $2316{ }^{9}$ The passage in quotes is from Parcto, Cours, $\$ \$ 469-72$.

[^63]:    $2316{ }^{11}$ See Pareto, Courrs, $\S \$ 466,471^{1}$. The description there given is such as was possible without, as yet, the assistance of a general theory positing an undulatory form for social phenomena ( $\$ \$ 1718,2293,2330$ ). All the same, it had the merit of disputing the optimistic theory of a diminishing interest-rate, which prevailed at the time of the Cours, though facts subsequently materializing took it upon themselves to refute it.
    $2316{ }^{12}$ One such fluctuation, in the case of England, is analyzed in Pareto, Courrs, §47I ${ }^{1}$.

[^64]:    $2320^{1}$ The thing is notorious and has been described times without end; but it must not be considered apart from other aspects of the present system of government. For a century or more past little else has been heard but complaints about the increase in the numbers and in the power of bureaucracy, yet with ever accelerated rapidity it continues to increase, and it is now invading countries, such as England, where it used to be unknown. Evidently, therefore, forces of great power are at work in that direction and are strong enough to overcome all counter-forces. The fault lies partly in a habit the various political parties have of condemning increase in the numbers and power of office-holders in general, but of approving and promoting partial increases in such departments of public service as serve certain political or personal ends of their own, reserving their condemnation for departments where their interests are not involved. In any event, in one way or another modern governments are irresistibly driven to increase the amounts they spend on service, in order to win the support of the people who profit thereby and of the backers of those people. Says Treves in Avanti, Mar. 29, 1915: "The Colonial budget for 1915-16 sets aside 7,577,900 lire for salaries. Bureaucratic elephantiasis finds its Elysium in the colonies. That explains many things, among others, our 'democratic' tolerance of imperialism as the saviour-redeemer of the poverty-stricken elements in the intellectual petty bourgeoisie that revolves in the orbit of high finance. It is providing such people with a dignified means of livelihood and keeping them from joining hands with the industrial proletariat." Generalize these remarks, which Treves shapes to the interests of a party, and one gets a description of the situation that is at present observable in almost all civilized countries.

[^65]:    $2326{ }^{2}$ See Pareto, "Rentiers et spéculateurs," Indépendance, May i, igir: "The 'Progressives' in France are opposed to the progressive income-tax because they know that the proceeds from it will not go to them. The 'Liberals' of Milan are in favour of it because they are in power and will spend the proceeds, the money going to them and their henchmen. The general staff of the Milanese Liberals is largely made up of speculators. The French 'Radicals' depend largely on the votes of rentiers. In those circumstances therefore it is only natural that the 'Liberals' should be favourable and the 'Radicals' opposed to the progressive incometax. Under other conditions, in the case of a state or poll tax, for instance, their respective attitudes might be different."

[^66]:    $2328^{1}$ One might at this point recall what we said in §2254, namely, that "speculators" must not be thought of as a single person performing logical actions with a pre-established purpose in view ( $\$ 2542$ ). What happens happens as a result of the system rather than of any deliberate intent. The Balkan War of 1912 was not wanted by the majority of European financiers, yet their policies made it inevitable. They sapped the strength of Turkcy, so that that country became ready prey for any nation disposed to attack it. First among such financiers at that time were the

[^67]:    Italian bankers who instigated the Libyan War, and so prepared directly for the Balkan Wars, the ground for which had been indirectly prepared by European financiers and speculators at large. Thereupon they proceeded and are at present [1913] still proceeding to the economic partitioning of Asiatic Turkey, and in thatindirectly and unintentionally, it may be-they are preparing the ground for a new war that will have to be fought to transform the economic apportionment into a political apportionment. Such a war may not come; but if it does, the responsibility for it will rest with the speculators, even though at the time of its outbreak a few or many of them will be against it.

[^68]:    the form of our experience-and rhythm is an inevitable corollary from the persistence of force."

[^69]:    $2330{ }^{4}$ Respublica, VIII, 546A: "It is difficult for the city [his ideal city] so constituted to change. But since all things that are born decay, that constitution cannot abide forever: it will dissolve; and the dissolution will occur in the following manner. Not only the plants that are born of the earth, but the souls and bodies of animals that inhabit the earth, have periods of fertility and sterility, as the revolutions of each cycle are completed. Such periods are brief for short-lived species, long for long-lived species." A few lines farther on comes the sentence quoted above in the text.
    2330. ${ }^{5}$ Aristotle, Politica, V, 10, 1-2 (Rackham, pp. 477-79), quotes Plato's sentence and seems to have grasped its meaning. He criticizes Plato for having all things change simultaneously, even though they do not originate simultaneously. That, however, is a purely formal criticism that can readily be raised against all theorics of that kind by setting up the continuous variations that are actual against the discontinuous variations which the authors of such theories envisage in order to facilitate the exposition of their doctrines. One must bear that fact in mind, and not take the exposition literally. Paulhan, Le nouveau mysticisme, pp. 51-52: "This latter spirit will none the less be a combination of the last beliefs prevailing and of old beliefs more or less exploded but still holding their own: it is this synthesis that gives the new spirit its newness. . . . The old state of mind does not recur; there is never any complete return to an anterior state in the intellectual life of societies,

[^70]:    ginnings of Nations." The metaphysicist thinks he has also demolished all doctrines different from his own, p. 1049: "So therefore we have refuted Epicurus, who believes in chance, and his followers Obbes [Hobbes] and Machiavello. And confirmed on the contrary are those political philosophers, prince among them the divine Plato, who prove that Providence rules human affairs." Such ramblings soar so far far above the clouds that facts have become altogether invisible. They have nothing to do with the humble realities of Earth, or with any experimental fact such as the undulatory forms assumed by certain phenomena.

[^71]:    $2333{ }^{1}$ We shall consider a particular case of these errors farther along (§§ 239 If .).

[^72]:    $2340{ }^{1} \mathrm{We}$ began this investigation above in $\$ \$ 616 \mathrm{f}$., where it came up in the course of our induction. We touched on it again in $\S \S 1678 \mathrm{f}$. [in a general consideration of theories]. We are now concluding it here.

[^73]:    $2345{ }^{1}$ As late as the war with the Medes the Athenians were still believing, as more than one passage in Greek literature proves, in direct interventions by gods.
    $2345{ }^{2}$ The Etumenides especially seems to have been written to defend the Areopagus and old tradition against innovations.

[^74]:    $2345{ }^{3}$ Justin, Historiae Philippicae, II, 14 (Clarke, p. 34): "The vanquished Mardonius [generalissimo of the Persians] escaped as from a shipwreck with a handful of men. The camps overflowing with royal wealth were captured. The Greeks divided the Persian gold among themselves, and that was the first time that the extravagance which goes with wealth laid hold on them."
    $2345{ }^{4}$ Plutarch, Pericles, 6, 1 (Perrin, Vol. III, p. 15). Plutarch says that from his contacts with Anaxagoras Pericles derived, among other advantages, "the further one, that he seemed to have grown superior to superstition." Thucydides, Historiae, II, 53, 4, seems inclined to lay the blame for the progress of unbelief in Athens on the plague, but that is one of the usual errors of ethical reasoning (residues I- $\beta_{4}$ ): unbelief was rife in Athens before the plague, and continued to increase after all the effects of the plague had vanished.
    $2345{ }^{5}$ The law of Diapeithes against impiety (Plutarch, Pericles, 32, 1; Perrin, Vol. IV, p. 93) belongs to that time. It bore upon "those who do not recognize the gods or who speculate on celestial things," and is to be regarded as an expression of popular sentiment hostile to the prevalence of the combination-instincts, which were encouraging naturalistic studies.
    $2345{ }^{6}$ The political conflict also ended very shortly. It no longer figures in the middle comedy, much less in the new. But already Aristophanes had been obliged to let politics alone, in deference, it has been said, to legislation forbidding attacks on magistrates or citizens on the stage. But that explanation can be only partially truc. Aristophanes could very well have touched on politics without mentioning names of living people. Instead, in the Ecclesiazusae, mere fun-making takes the place of the fierce invectives in the Acharnians, the Knights, and the Clouds. We

[^75]:    $2348^{1}$ We have gone into that subject deeply enough in § 2196 , and passim. Nothing more need be added here.

[^76]:    $2356{ }^{1}$ Histoire des Romains, Vol. II, pp. 224-25 (Mahaffy, Vol. II, pp. 228-29).
    $2356^{2}$ Duruy is excusable in his notions as to the economists. "Economists"
    a-plenty deliver themselves of balderdash such as Duruy describes. Political economy,

[^77]:    $2361^{1}$ Friedländer, Op. cit., Vol. III, p. 430 (English, Vol. III, p. 90) : "Not even in the first century had people of a philosophical education assumed attitudes of actual hostility to the state religion. In the literature of that time, to be sure, as was the case in France in the eighteenth century, inclinations and tendencies hostile to faith predominate; but in no case did they enjoy that pre-eminence later than the end of the first century of our era. The tide of anti-Christian sentiment in France during the past century rapidly dropped once it had attained its high mark, and the ebb was of such violence that it swept the majority of educated classes along with it. So it was with the Graeco-Roman world. The outstanding tendencies in the literature of the first century gave ground before a strong reaction towards positive faith that laid hold on those same circles and conquered them; and under a multiplicity of pressures, faith degenerated into a crude superstition made up of miracles, pictism, and mysticism." That is an excellent description. One slight emendation is required: the gencral movement developed not along a uniform line but along a wavy line.

[^78]:    $2368^{1}$ De fide Trinitatis et de incarnatione Verbi, II (Opera, Vol. I, p. 265) : "Illi utique nostri temporis dialectici, imo dialectice haeretici, qui non nisi flatum vocis putant esse universales substantias."

[^79]:    237 I $^{1}$ Ouvrages inédits d'Abélard, Pref., p. clxxx.

[^80]:    $2372{ }^{1}$ To look at a thermometer immersed in a liquid gives the "temperature," the thermic state, of a liquid, one of its characteristics: it classifies it with other liquids that are like it from that point of view. To hear "universals" or some abstract entity mentioned by certain human beings gives us knowledge of "concepts," of a psychic state, of a characteristic of those human beings-it classifies them with other human beings who are like them in that respect. One may say, if one chooses, that the expression "twenty degrees Centigrade" is, like the expression "justice," a mere flatus vocis; but they are both indices of states: the former an index of a thermic state in a liquid, the latter of a psychic state in a human being. The indices differ in that the former is exact, like a sharply defined nucleus, the latter is more or less vague, like a fog. The former can serve as a premise in a strict reasoning; the latter does not lend itself to that sort of thing. If instead of the temperature registered by a thermometer we were to take the abstract entity "heat," as ancient philosophers did, that entity would be altogether similar to the entity called "justice." Both are partially indeterminate, like a fog, and cannot serve as premises in strict reasonings.

[^81]:    $2377{ }^{1}$ St. Bernard was sent by Pope Innocent to correct the waywardness of the burghers in Milan, Pavia, and Cremona. Accomplishing little or nothing, he wrote

[^82]:    $2386{ }^{1}$ Porret, Op. cit., pp. 18-20: "About 1790 Edmund Burke cried: 'Not one of the men born among us within the past forty years has read a word of Collins, of Toland (author of a Christianity Not Mysterious, who died in 1722), of Tyndal (apostle of natural religion, hailed by Voltaire, who died in 1733), or of any of that flock of so-called free-thinkers. Atheism is not only against our reason, it is against our instincts.' What a change in outlook! Fifty years had been enough to encompass such an incredible reversal! How account for it? . . . I do not deny that Addison, the founder of the Spectator, which reached a circulation of 3,000 copies a week, may have exercised a salutary influence at the beginning of the century. Berkeley was a vigorous thinker and his profession of idealism was effective enough to ruin a materialism that had been just previously triumphant. Samuel Johnson must not be forgotten, later on. But it would be fantastic to ascribe a decisive influence to any one of them or to all three of them together. The religious and moral awakening in England between 1735 and 1775 is not to be explained by a few nobly inspired books. It presupposes some fact, or better some body of fact, some powerful movement [Very true.], that lays hold on souls in large numbers, tears them as it were from themselves and gives them birth to a new life [An ethico-theological derivation.], forcing those that prove refractory, if not to show love, at least to show respect. Such a change can be explained only by the influence of the moral and religious conscience as the centre of human personality. [Another ethico-theological derivation.] It can be explained only as the work of a powerful and merciful God"a purely theological derivation. It is interesting that this writer should have seen so clearly, through the fog of his ethical and theological derivations, the power of the non-logical impulses that were responsible for the undulating movements we have been describing.

[^83]:    $2389{ }^{1}$ Bismarck afterwards changed his mind on the matter of suffrage too: Gedanken und Erinnerungen, p. 645 (Butler, Vol. II, p. 338): "Around ' 78 or '79, the persuasion that I had been mistaken, that I had not appraised the national spirit of dynasties at its true value, that I had overestimated the value of patriotism in German voters or at least in the Reichstag, had not absolutely come over me, in spitc of the bad will with which I had had to deal in the Reichstag, at Court, and in the Conservative party and its spokesmen (Deklaranten). Today I must offer my apologies to dynastics."

[^84]:    $2394^{1}$ In general at least, such imaginary segments are largely determined by the segments, strv . . . , to which they correspond-and that is the relation we examined in considering what we called the extrinsic aspect (\$§ 2343 f.). But the theories represented by such imaginary segments also act and react upon one another, and to that also we adverted in considering what we called the intrinsic aspect ( $\$ \$ 2340$ f.).

[^85]:    $2400{ }^{1}$ Perrin, Les atomes, p. 73. Alluding to a theory that was at first considered false and was subsequently recognized as true, Perrin remarks: "That experience emphasized to me how little stock, really, we take in theories, how true it is that we think of them as mere tools for discovering things, rather than as actual demonstrations." That is just our attitude towards the theories that are set forth in this treatise. Ostwald, Der Werdegang einer Wissenschaft, p. 150: "Following the lot of the various theories in chemistry down to our own time, what one notes very regularly is that a theory is developed in the first place in order to picture by modifications in a certain scheme the variedness of existing combinations. Naturally one scheme that is chosen harmonizes with known facts, so that all theories more or less adequately reflect the state of knowledge at their time. [That is true of sciences that are cultivated experimentally. The social sciences, however, have so far been studied in the light of sentiments, more than anything else. For them, therefore, one would more accurately say rather: "reflect the state of sentiments and interests, at their time, with larger or smaller admixtures of experimental elements."] But science is constantly adding to its fund of facts [For the social sciences: "Experience is always gaining more or less ground."'], so that sooner or later a lack of accord develops between the actual multiplicity of facts and the arbitrary multiplicity of the theory. [In the social sciences the disaccord is chiefly apparent between facts and inferences from sentiments.] Most often there is a first effort to squeeze the facts into the theory, if all its possibilities can be seen at a glance and it cannot yield anything more. But in the long run, facts are tougher and more durable than theories, or at least than the men who fight for them. So it eventually becomes necessary to broaden the old doctrine so far as is required, or to replace it with new conceptions that are better adapted to requirements."
    There are several types of persons who cannot understand such things, among them persons who devise, or adopt, theories in defence of their own interests (auro suadente, nil potest oratio!); those countless individuals who follow the lead of sentiments, faiths, beliefs; finally our "intellectuals" who disseminate "social science" without even knowing what an experimental science is. All such, and others still, may be socially useful, but they do not count when discovering experimental realities is the one concern $\left(\$ 2113^{1}\right)$.

[^86]:    $2400{ }^{3} \mathrm{Had}$ we followed the deductive method, the things we are now saying would have come at the beginning of our first volume; but in that case, without the help of the exposition that has gradually been unfolding our theory might have been misunderstood, or even not grasped at all. The inductive approach has enabled us to establish our meaning clearly and make it readily intelligible; and the general theory, coming as it does after an examination of particular cases, is adequately explained by them.

[^87]:    from what it is seen to have been, and the gencral remarks of historians would have to take on a new and different form, in which, among the elements determining social phenomena, demonstrations would take the place now held by sentiments and interests. Just such a form of historical writing that strays from realities, and sometimes very far, is represented by writers who consider logical conduct exclusively or primarily, and by those who view their facts through the lens of this or that system of absolute ethics. Indeed the ethics and the logic remaining constant, the derivations to which they give rise also have to be considered constant; and the variability in phenomena becomes wholly or almost wholly dependent on an assumed variability in residues and on the experimentally verifiable variability of the arts and sciences ( $\$ 356$ ), which, for that matter, is usually made dependent on residues, including sentiments that prevent human beings from making adequate use of reason.

[^88]:    $2414^{1}$ We have all too frequently warned the reader against the error of mistaking relationships of interdependence for relationships of cause and effect. We need not expatiate further on the matter here.

[^89]:    $2415{ }^{1}$ Paul Bosc, Souvenirs de l'Assemblée nationale, p. 339, note: "On the train that was taking the members of the National Assembly back to Paris for the last time, M. Laurier . . . delivered the funeral oration of the Majority. 'We are done for,' he said. 'Those rascals the Republicans are going to get our places. That's what we get for asking at every crucial moment when a decision has to be made, "But what will Duchess So-and-So say?"-and then doing something foolish. We should have said, "Never mind the Duchess," and then followed sound policy. We would not be where we are today if we had paid less attention to ball-room opinion.'" It is a notorious fact that the old French aristocracy prepared the ground for the first Revolution that was to destroy them in their drawing-rooms.

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    $2421{ }^{3}$ Curtius, Griechische Geschichte, Vol. II, p. 676 (Ward, Vol. III, p. 410): "The Athenians threw themselves into a hazardous enterprise which called for a determined, skilful, unscrupulous leader, and then of the one man who possessed those qualities they procceded to make an enemy of the city, bent upon the ruin of his own work, entrusting the task of carrying on the war to a god-fearing general [Such as Napoleon III at Sedan.] sick of body and not believing in the expedition, and setting out to meet a more dangerous enemy than they had ever met before."
    $2422{ }^{1}$ In December, 1908, Admiral Germinet declared in a public statement: "Most of the ships in the fleet have not enough munitions to sustain a battle three hours long." The government of plutocratic demagogues that had reduced the navy to that state took steps, not to fill the magazines on the ships with ammunition, but to relicve Admiral Germinet of his command.

[^91]:    $2429{ }^{1}$ It seems that in the battle of Cannae Hannibal anticipated modern German tacticians (see Schlieffen, Cannae, pp. 1-4). The Romans were not inventive, but they knew how to take advantage of the experience of others. So also they profited by the naval skill of the Carthaginians.

[^92]:    $2436^{1}$ Diodorus Siculus, Ibid., XV, 52, 3 (Booth, Vol. II, p. 41).
    $2436^{2}$ Diodorus Siculus, Ibid., XV, 52, 7 (Booth, Vol. II, p. 41), notes that for doing that "Epaminondas, who had been instructed in philosophy and was putting into practice the wise teachings he had received in his youth, incurred reproach from many." That goes to show that prejudices were active in the masses at large, but gave ground before the prestige of Epaminondas. And cf. Plutarch, Pelopidas, 3-4. Frontinus says, Strategematon, I, 12, 5 (Bennett, p. 83): "The soldiers being depressed because the wind had torn off an ornament on his lance [A slightly different circumstance from the one mentioned by Diodorus.] that was the ensign of his office and blown it upon the tomb of a certain Spartan, Epaminondas, the Theban, cried: 'Have no fear, soldiers. That means ruin for the Spartans. Their tombs are being decorated for their funerals.'" And Frontinus goes on to relate two other incidents of the same sort.

[^93]:    $2437{ }^{2}$ Pelopidas, 20-22 (Perrin", Vol. V, pp. 391-95): "Situated on the plain of Leuctra are the tombs of the daughters of Scedasus, who are called Leuctridae after the place. [A slight alteration of the story as told by Diodorus, but it agrees with the account of Pausanias.] . . . It was therefore continually predicted to the Spartans in oracles and prophecies that they should beware of the 'Leuctrian wrath,' a prediction that was not at all understood by the Spartan multitudes, who were not even certain of the place so designated, there being in Laconia also a small city by the sea called Leuctris and, further, in Arcadia, near Megalopolis, a place of the same name. So Pelopidas, while asleep there in the camp, dreamed that he saw the young maids weeping about their graves, cursing the Spartans, and that he saw Scedasus himself, who bade him sacrifice a maid with auburn hair to his daughters if he would vanquish the enemy." He communicated his dream to the soothsayers and the captains, some of whom would have had the command executed to the letter; and they mentioned many examples of that kind of sacrifice. "But others were of opposite opinion, that not one of the beings so superior to us and of a nature so much better than our own could take pleasure in a sacrifice so barbarous and cruel. . . . While the principal leaders were disputing on these matters and Pelopidas was more than any other uncertain and perplexed, a mare colt that had escaped from her herd came galloping through the camp and halted before them. The others all marvelled at the flame-red colour of her mane . . . but Theocritus, the soothsayer, clearly understanding, raised his voice before Pelopidas and cricd: 'Behold, O happy man, the victim! Let us await no other virgin, but do thou receive and sacrifice this, which hath even now been offered thee of the god!' They therefore took the mare and led her to the graves of the maids; and having made the supplications, and crowned the mare, they sac-

[^94]:    $2442^{1}$ Though he is an undiscourageable panegyrist of Athenian democracy, Grote cannot refrain from deploring the loss of the best generals in Athens, who were stupidly discarded by the Athenian public, Op. cit., Vol. XI, p. 230: "The loss of such a citizen as Timotheus [He went into exile.] was a fresh misfortune to her [Athens]. He had conducted her armies with signal success, maintained the honour of her name throughout the Eastern and Western seas, and greatly extended the list of her foreign allies. She had recently lost Chabrias in battle; a second general, Timotheus, was now taken from her; and the third, Iphikrates, though acquitted at the last trial, seems, as far as we can make out, never to have been subsequently employed on military command. These three were the last eminent military citizens at Athens; for Phokion, though brave and deserving, was not to be compared with either of them. On the other hand, Chares, a man of great personal courage, but of no merit, was now in the full swing of reputation. The recent judicial feud between the three Athenian admirals had been doubly injurious to Athens, first as discrediting Iphikrates and Timotheus, next as exalting Chares, to whom the sole command was now confided."

[^95]:    $2444^{1}$ [Coronea misprint for Cheronea.-A. L.]

[^96]:    $2450{ }^{1}$ Sorel, La révolution dreyfusienne, pp. 72, 41, 42: "In order to keep afloat until election-time, Waldeck-Rousseau was obliged to accept a number of compromises that must have seemed very painful to the sometime partner of Jules Ferry. It cost him some effort to allow the gendarmes who had had a collision with strikers at Chalon to be tried by a court-martial. Yet he had to give that satisfaction to the Socialists in the parliament, for they were afraid of being accused of treason by their district committees and their votes were necessary to hold a governmental majority during those trying days. After Gallifet's resignation, Waldeck-Rousseau was willing enough to retire, and he may have stayed only in the hope of getting more than

[^97]:    $2455{ }^{1}$ Gedanken und Erinnerungen, pp. 266-67 (Butler, Vol. I, p. 315).

[^98]:    $2467{ }^{1}$ Ausgewählte Reden, Vol. I, pp. 385-86 (Feb. 4, 1868).
    $2469{ }^{1}$ Von Rossbach bis Jena und Auerstadt, pp. 378, 395-96.

[^99]:    $2469{ }^{2}$ So say the French pacifist-Socialists of 1913: "We cannot prepare for war without abandoning outlays for 'social' improvements. That we do not care to do. Let us therefore make an alliance with Germany, putting aside all grudges as to the loss of Alsace-Lorraine." Those estimable individuals forget that every so often history shows a verification of the proverb, "Play the sheep and you will be eaten by a wolf." The self-abasement of Carthage before the Romans did not save her from utter ruin. The remissiveness of Venice before Napoleon had its epilogue in the Treaty of Campo Formio. English radicals of the Lloyd George type say that war expenses should be paid by the rich, because they alone derive profit by it through the defence of their properties. As though the plain people in territories occupied by an enemy were not exposed to losing their lives as well as thcir wages, not having the money required for taking to their heels! But such utterances are mere derivations, designed to hide an eagerness to have the enjoyments of life at someone else's expense.

[^100]:    $2475{ }^{1}$ From Mincrva, Vol. I, 1807, p. 554:
    > "Sonst freilich war, fürs Land und fïr die Majestät In deren Dienst man focht, das Leben zu verlieren Des Helden höchster Ruhm; doch seit Humanität, Philosophie, die Welt, die Menschen kultivieren,

[^101]:    $2484^{1}$ For a significant symptom consider the ease with which threats of violence in Ulster checkmated the English demagogic plutocracy in 1914; and for another of less significance, but by no means negligible, how violence on the part of the "suffragettes" earned them impunity in setting fire to buildings and so inflicting damage to an amount of millions of pounds. In Italy the violence of farmlaborers in Romagna overawed the government and enabled them to set up a state within the state, with laws of its own that were better obeyed than the laws of the Italian state. Another example would be, again, the uprisings in Romagna in June, 1914 (§2480).

[^102]:    $2493{ }^{1}$ Thucydides, Historiae, VIII, 40, 2.
    $2493{ }^{2}$ Athenaeus, Deipnosophistae, VI, 88-91.
    $2493{ }^{3}$ And that, says Athenaeus, was the source of the proverb: "Chios bought its master": Xios deбтótqv $\dot{\nu \imath \eta ́ \sigma a т o . ~}$

[^103]:    four of the five ephorates, keeping one for himself (Plutarch, Agis et Cleomenes, ${ }_{10}$; Perrin, Vol. X, p. 69). That reminds one of the Roman Emperors who kept the tribunicia potestas for themsclves, account being taken in both cases of the intensity of group-persistences in the masses at large.
    
    
    $2497^{1}$ Aristotle, Politica, 11, 7,4 (Rackham, p. 151).

[^104]:    $2506{ }^{3}$ Sandi, Op. cit., Pt. III, Vol. II, Bk. XX, Chap. VII, §3.
    $2506{ }^{4}$ Daru, Op. cit., Vol. IV, pp. 216-19: "Only one man in the whole Republic, the Grand Vicar of Padua, ventured to reply to the Podestà, who called on him to serve the orders, that 'he would do as the Holy Spirit should inspire him'; to which the Podestà replied with a warning that 'the Holy Spirit had already inspired the Ten to have anyone disobeying the order hanged.'" The Venetian Senate did not disdain derivations suitable for refuting the Pope, and to be sure that plenty were available it created the office of Consulting Theologian, naming Fra Paolo Sarpi as the first incumbent. Even the powers of the Inquisition were confined within strict limits by the Venetian government. On that subject Sarpi wrote, by order of the Doge, his "Discourse on the Origin, Form, Laws and Practice of the Office of the Inquisition within the City and Dominion of Venice" (Discorso, etc.). He speaks very freely (pp. 34, 35, 47, 55) of the Roman Curia: "The most Serene Republic of Venice could not (puote, misprint for potè) be induced by the requests made by Popes Innocent, Alexander, Urban, and Clement, and the seven succeeding other Popes, to recognize the Office of the Friars Inquisitors, instituted by the Pope. She rested satisfied with the secular inquisition established by herself and with good outcome in the service of God. They [the Venetians] had before their eyes the frequent disorders that arose because of the new Office in the other cities where it was, because the Friars Inquisitors roused the people by their sermons, turning them into Crusaders, so that they rioted with great disturbances; for many of the Crusaders took their vengeance upon their enemies as heretics, and other innocent

[^105]:    $2509{ }^{1}$ Aristotle, De republica Atheniensium, 26 (Kenyon, p. 49).
    $2509{ }^{2}$ Histoire du droit privé de la république athénienne, Vol. I, p. 488.
    $2511^{1}$ Aristotle, Politica, III, I, io (Rackham, p. 181): "He enrolled many foreigners, resident aliens, and slaves among the citizens." And cf. Id., De republica Atheniensium, 26 (Kenyon, p. 35).
    $2552{ }^{1}$ Daremberg-Saglio, Dictionnaire, s.v. Areopagus: "The Areopagites transmitted rules of honour and uprightness to one another and to them new-comers hastened to conform. Aeschylus was not exaggerating when he described that august Senate [Eumenides, vv. $700-06$ ] as 'envied of the Scythes and Pelopides, a true bulwark of the land, which it protects from anarchy and despotism, an assemblage of unselfish, austere men, dignified, respected.'"

[^106]:    $2514{ }^{1}$ Guillaume de Puy-Laurens, Chronique, pp. 206-07: "Now some of the heretics were Arians, others Manicheans, others Waldenses or of the heresy of Lyons. Though they were not at one among themselves, they were nevertheless all agreed in conspiring against the Catholic faith for the damnation of souls. The Waldenses argued very shrewdly with the others, whence it comes that these were tolerated by a few stupid priests out of hatred for the Waldenses. [The combinationinstinct applying itself to theology. The Crusaders, who came from the North, did not dream of arguing about such matters.] Moreover priests were so roundly despised by the laity that their name was used in oaths as though they were Jews. So, when one says: 'I would rather be a Jew than do such a thing,' they say: 'I had rather be a priest.' "
    $2515{ }^{1}$ Histoire et doctrine de la secte des Cathares ou Albigeois, Vol. I, pp. 66-68, 188-90: "The higher classes in society had attained a degree of cultivation that was without parallel in all Europe. Chivalry was flourishing as nowhere else. Many powerful lords were spending their days amid the risks of combat and the most frivolous gaieties of genteel flirtation. At the urge rather of an overpowering hunger for unusual adventures than of any deep religious enthusiasm, they not seldom took the Cross for the Holy Land and came home again with religious

[^107]:    $2520{ }^{1}$ Pierre de Vaulx-Cernay, Histoire de la guerre des Albigeois, pp. 8-11: "Of the Roman Church almost as a whole they said that it was a den of thieves and the prostitute mentioned in the Apocalypse. . . . Confirmation and confession, they said, were two silly things and altogether fatuous, and the sacrament of marriage a prostitution, no one who begat sons or daughters in marriage being able to be saved. . . . Certain of the heretics were called 'Perfects' or 'Good Men,' others 'Believers.' The Perfects dressed in black, falsely pretended to be observers of chastity [The "falsely" seems to be a mere slander on the writer's part.], spurned the use of meats, eggs, and cheese, and pretended never to lie. . . . Those who were called 'Believers' lived in the world, and although they did not strive to imitate the Perfects, they hoped to be saved by the faith of those saints. . . . There were other heretics called 'Waldenses' (Vaudois), from a certain Waldo (Valdo), a man from Lyons. . . . Not to enter into the detail of their many errors, one may say that these lay chiefly in four points-wearing sandals after the manner of the Apostles; saying that under no circumstances was it lawful to take an oath or to kill; and, especially, affirming that the first comer among them could, in case of need and for urgency, consecrate the body of Christ without having received orders from the hand of the bishop-provided, always, one wore sandals."
    $2520^{2}$ L'eresia nel medio evo, pp. 88-89.

[^108]:    the field of battle and made him prisoner. [Nor was that all:] The Count was reconciled with the Church on Easter Eve [April 12, 1229] and at the same time those who were with him were relieved of excommunication. And it was a pity to see such a great man, who had managed to hold out against so many great nations for so long a time, led to the altar in his shirt-tail and with arms and legs bare."
    $2524{ }^{2}$ Pausanias, Periegesis, IV, Messenia, 14, 5 [and see Edmonds, Elegy and Iambus, Vol. I, p. 67.-A. L.]

[^109]:    $2527^{1}$ Journal de Genève, July 17, 1911 (a review of a study of the birth-rate in Gascony by Emmanuel Labat, with quotations): "There is less interest in getting on in the world than in enjoying life. There is very little worry about the destiny of the family property, about the future of the next generation. [Class II residues.] People think very much about themselves. The woman, even the peasant woman, dreads the restraints, the fatigues, the dangers, of motherhood. [Because those things have remained much the same, while the sentiments that used to offset them have lessened in intensity.] The man shuns worries and burdens. Each person is inclined to live for himself, to utilize for his own advantage the time and resources he has at his disposal. [Once Class II residues have lapsed, those are the only interests that are left.] If one's life is on a modest plane, or even cramped, one can still manage. The life that is easy, full, devoid of risks, is the life that seems desirable." And now Labat: "It is difficult to see nothing more than a coincidence in the weakening of morality and the simultaneous falling-off in the religious sentiment [The ordinary way of bringing in Class II residues.] unless one puts facts aside or distorts them in some way or other. The different centres of the psychic life, the various modes of the soul's activity, are too closely correlated for such important changes to take place simultaneously in them apart from some mutual dependence. People in Gascony have never been very pious. But in spite oi everything [down to very recent years] religious permeation was general, deep, decisive. A life that was poor and rough was embellished, inspired, illumined, by an ideal that betrayed its religious origin and character not only at the solemn moments, such as death, marriage, birth, but also in the conception of the family and the general conception of duty, in fidelity to contract, respect for the sworn oath, deference to the aged, hospitality to the poor. [A literary description of Class II residues.] . . . The lack of moral cultivation in the young is a disquieting thing. . . . Particularly unexpected and distressing is the contrast between intellectual advance [Class I residues.] and moral retrogression. [Class II residues.] The soul of the humble peasant presents the spectacle of a field half of which is under cultivation while the other half is virtually fallow soil." [Disproportion between Class II and Class I residues.]

[^110]:    253 I $^{1}$ Burckhardt, Op. cit., p. 89 (Middlemore, p. II3): "There is no feudal system in Italy such as there is in the North, with rights founded on theories that are respected. [Derivations from Class II residues.] The power an individual possesses, he possesses as a rule in the fact and entire. There is no domestic nobility working to maintain in the prince's mind the concept of an abstract point of honour with all its strange implications. [More Class II residues and their derivations.] The princes and their counsellors are agreed that one is to act strictly according to circumstances and with reference to the objective that is to be attained. [Class I residues and their derivations.] As regards one's subordinates or allies, whatever their origin, there is none of that pride of caste that intimidates and holds aloof. The fact that there is a class of condottieri, where the question of origin is a matter of supreme indifference [Absence of group-persistences.], itself makes clear that power is something concrete, something real."

[^111]:    $254{ }^{1}$ We are not saying that that is the case in all situations. We mean merely that it may be the case in some situations and that any axiomatic solution of the problem of historical causes must be avoided, and the solution sought in a strictly experimental investigation of the facts ( $\$ \$ 233 \mathrm{I}$ f.).

[^112]:    $2546{ }^{1}$ The term "ethnic" is one of the vaguest known to sociology. We use it here merely to designate a state of fact, going in no sense into the question of explaining the fact. We are not concerned with determining whether or no there are different human races, and if so, how many, nor with ascertaining how they are made up, how they combine, how they disappear. In ancient times there were human beings who called themselves Romans, Samnites, Italians, Hellenes, Carthaginians, Gauls, and so on, and were so called by others. In our day there are people who call themselves, and are generally called, Italians, Frenchmen, Germans, Slavs, Greeks. That and no other is the fact we mean to designate when we speak of ethnic differences. Each one of those names indicates a certain number of individuals who usually, and to a greater or lesser extent, share certain sentiments, certain ideas, a certain language, sometimes a certain religion. Here we accept the fact as it is, altogether disregarding causes and origins. We repeat the caution, because the reader must bear it constantly in mind, so as not to ascribe to the term "ethnic" a different meaning from the one in which we use it.

[^113]:    $2547{ }^{1}$ The evolution of economic institutions in Rome I have discussed at length in my Cours, §§ 802-08, so that I need touch upon it but briefly here, devoting the main attention to other elements. At the time that chapter in the Cours was written I was as yet unequipped with the theory of the interdependence of waves in social phenomena that is set forth in the present volume ( $\$ \$ 2552-53$ ). The development of the Roman corporations has to take account of that theory.
    $2548^{1}$ Mommsen, Römisches Statsrecht, Vol. III-I, pp. 500-0I: "[Under the Republic] any individual, whatever his birth, might, as a matter of law, aspire to status as a knight. As a matter of custom, the equestrian horse was preferably bestowed on children of the old families. . . . The law and the fact subsist unchanged under the Empire."

[^114]:    $2556^{1}$ Livy, Ibid., XLII, 32, 8: ". . . et multi voluntate nomina dabant, quia locupletes videbant qui priore Macedonico bello, aut adversus Antiochum in Asia, stipendia fecerant."

[^115]:    $2557{ }^{1}$ Cicero, Epistulae, Ad Atticum, IV, 15, mentions an instance in which the competition in vote-buying caused a rise in interest-rates: "Follow me now to the battle-field [i.e., the Forum]. Bribery is going on apace! To give you some idea, I will say that by the middle of July interest on money had doubled from 4 to 8 per cent. 'I can make it at that,' you may be saying, and 'Oh, what a man I am! Oh, what a self-sacrificing citizen!'" ( $\$ \$ 2256^{2}, 2257^{2}$.) Plutarch, Sulla, 5, 2 (Perrin, Vol. IV, p. 335): "On one occasion when he [Sulla] was practor, he had a quarrel with Caesar and angrily averred that he would use the power of his office against him. Caesar answered smiling: 'Your office? Well said, for truly, you bought it!' " [No one, so far as I know, has ever pointed out that the famous Roman pasquinade on the simony of Rodrigo Borgia in selling his seat as Cardinal when he became Pope Alexander VI may be a rephrasing of this retort of Caesar to Sulla in Plutarch: "Alexander is selling the keys, the altars, Christ! Well, why not? He bought them!":

    > "Vendit Alcxander claves, altaria, Christum: cmerat ille prius, venderc iure potest."

    Sce Morandi's introduction to Belli, Sonnetti romaneschi, Vol. I, p. clxiv.-A. L.] Marius too was accused of buying votes to obtain the praetorship: Plutarch, Marius, 5, 2 (Pcrrin, Vol. IX, p. 473). Appian, Dc bellis civilibus, II, 19: ". . . and the voters appeared in the Forum as a sort of goods for sale on the market." And $c f$. § $2548^{8}$.

[^116]:    as yet only a few of the refinements of Egypt had come overseas into Tuscany, just as later on they came in great numbers, to the ruin of all Italy."
    $2560{ }^{1}$ Histoire des Romains, Vol. II, pp. 283-84 (Mahaffy, Vol. II, p. 291). Duruy continues: "There you have the basic fact in this period and the cause of the great overturn that is to follow [All right, provided by "overturn" one means a change in the relative proportions of $S$ 's and $R$ 's.], for with that class patriotism died, and the orderliness and austerity of the old customs passed away." An ethical derivation hiding a grain of truth-a hint at a predominance of Class I residues.

[^117]:    that economic goods depreciate in value when they are considered as means and not as ends. [Derivation: a golden age located in the future.] As long as all life is made to unfold within the economic category and the category of personal interest [The auri sacra fames rebaptized as "the economic category."], the economic problem will be the main problem and an unsolvable one. [It has been that from the earliest times of which we have any record, and will probably continue to be for some little time to come.] All human beings will want to share in material pleasures and replace one another in the possession of power. [The history of that is what history is.] Human history cannot, fortunately, end in nothing more than an exchange of pocket-books. [History stops at the record of facts.] But who ought [Metaphysical derivation.] to set the first example? Evidently, those who are at the top of the social ladder-the middle classes. I am carried back, despite myself, to the ideas I expressed at the beginning. The bourgeoisie has to revise the concept of property and consider property as a responsibility rather than as a right; and it must accept all the sacrifices, all the pains, that go with that new attitude."
    $2569{ }^{1}$ Such derivaions we have already analyzed at length in $\$ \$ 2147^{18}, 218 \mathrm{I}$ f.

[^118]:    $2570{ }^{1}$ Those derivations turned up on the occasion of the uprisings in Romagna in June, 1914. The speculators and their satellites, gravitating around the sun of legality, spoke of the riots as criminal activities on the part of enemies of the country, or at least on the part of poor misguided individuals inspired by the leaders of the "subversive parties." The subversive parties on the other hand called the riots "a well-justified move on the part of an oppressed proletariat to claim its rights."

[^119]:    memorabilibus, IX, I, 9. Plutarch, Sulla, 32 (Perrin, Vol. IV, p. 431), accuses Catiline of murdering a brother, and still another person, one Marcus Marius.
    
     поえıтeia is probably to be taken, as explained by Plutarch, De unnius in republica dominatione, II, 826 (Goodwin, Vol. V, pp. 395-98), to signify participation in the government of the Republic. The passage therefore means that Catiline did not run again for any office. Dio Cassius, Historia Romana, XXXVII, 29, 2, mentions a decree of the Senate which Catiline believed-and rightly, according to Dio-to have been framed against him, and says that it induced him to attempt to overthrow the comitia by force.

[^120]:    $2577{ }^{1}$ Appian, Op. cit., II, 2: "He sent about all over Italy to find soldiers of Sulla who had squandered the booty they had obtained by violence and asked nothing better than to do the same thing over again." The point is confirmed by Sallust, Bellum Catilinae, XVI, 4. Alluding to the troublesome elements that were gathered about Catiline, he adds: "Trusting in such friends and associates, Catiline conceived the plan of overthrowing the Republic, because meantime there was a huge debtor class throughout the land and because many soldiers who had served under Sulla, and had spent their wealth too lavishly, remembering their former victories and all the plunder they had brought them, were anxious for another civil war." Plutarch, Cicero, 14 (Perrin, Vol. VII, p. II5), also speaks of Sulla's veterans as "again desirous of plunder and pillage." Dio Cassius, Historia Romana, XXXVII, 30, 2, makes the same point. Either documents have suddenly lost all value or it is impossible not to see in testimony so varied and of such weight traces of a conflict between force and the methods of political manoeuvring.
    $2577{ }^{23}$ Cicero, Pro Marco Coelio, 4, 10: "Coelius's intimacy with Catiline is held against him . . . though many altogether respectable persons were attracted to that worthless and wicked man." Farther along (5, 12; 6, 13, 14), Cicero awards to Catiline a praise that Caesar also deserved: "He had about him many allurements to licence, but also many encouragements to industry and effort. He was a man of countless debaucheries, but he had a keen interest in military matters. . . . What man was ever more charming for his distinguished associates, what man more closely affiliated with the worst elements? By that varied and complex nature he had gathered all the most desperate and wicked characters about him from all quarters: but he also fascinated many good and sensible men with a certain false face of talent."

    Some day, when our present plutocratic régime has been overthrown by the Anarchists, or the Syndicalists, or the militarists, or by any party, in fine, whatever its name, which will meet the cunning that is now triumphant with force, the world will perhaps remember words such as Sallust, Bellum Catilinae, XX, 8-1о, puts into the mouth of Catiline: "So all influence, all power, all honour, all wealth is theirs [Of the powerful of his day, counterparts of the speculators of ours.] or of those on whom they choose to bestow them. To us they have left the dangers,

[^121]:    $2582{ }^{1}$ Histoire de Jules César, Vol. I, p. 339.
    $2582^{2}$ Against our view Napoleon III contends, Op. cit., p. 339: "Legality may legitimately be violated when society is rushing to its doom and a heroic remedy is indispensable for saving it, when, in other words, a government is supported by the bulk of the nation and becomes the representative of its interests and desires. [Exactly what Cicero thought with regard to suppressing Catiline's conspiracy, and as Napoleon III thought with regard to his own coup d'état.] But when a country is split up into factions and a government represents only one of them, it must cling to the most scrupulous observance of the law in dealing with any conspiracy."

[^122]:    $2587^{1}$ Vopiscus, Divus Aurelianus, 41, gives an account of the death of Aurelian, the interregnum, and the reign of Tacitus. He quotes $(41,2)$ the letter in which the legions requested the Senate to select an Emperor: "Send us some one of your number to be Emperor, but a man in your judgment worthy," Tacitus, a consul at the time, thought that a dangerous honour was being paid the Senate and said

[^123]:    $2590^{1}$ For instance, Pliny, Historia naturalis, XIV, 5(4) (Bostock-Riley, Vol. III, pp. 234-35): "Acilius Sthenelus, a man of the freed plebs, rose to the greatest eminence. He got his start by developing a vineyard of 60 jugera [about 35 acres], not more, in the Nomentum district and selling it for 400,000 sesterces $[\$ 16,000$ ]. Vetulenus Acgialus, also a freedman, of Liternum in Campania, won great fame and a popularity greater still, for developing a farm on the estate which Scipio Africanus had occupied in exile." Most famous of all was Rhemmius Palaemon, a Greck tutor, who bought a vincyard for $\$ 25,000$, with the help of the freedman Sthenelus mentioned above, developed it till it was earning $\$ 16,000$ a ycar and then resold it to Annaeus Seneca for $\$ 100,000$. Pliny alludes to another millionaire freedman, a Thessalian cunuch, in XII, 5 (Bostock-Riley, Vol. III, p. 106).

[^124]:    2591 ${ }^{1}$ Satyricon, 77 (Mitchell, p. 141) : "Credite mihi: assem habeas, assem valeas: habes, habeberis. Sic amicus vester qui fuit rana nunc est rex."
    $259{ }^{2}{ }^{2}$ Satyricon, 59 (Mitchell, p. 115). Trimalchio also gives a lecture on mythology. Says he: "Diomed and Ganymede? They were two brothers. Helen was their sister. Agamemnon carried the lass off and gave Diana a doe to call it quits. Now what Homer is trying to tell is why the Trojans and the Parentines are fighting all the time."
    $2592^{1}$ Satyricon, 67 (Mitchell, p. 125): " 'But tell me, Gaius, please-why doesn't Fortunata join us?' 'What?' said Trimalchio. 'She? She wouldn't stop to take a drink of water till she has laid away the silver and given the children their supper.' . . . But at last Fortunata came, wearing a yellow sash over her cherry-red tunic, gilt anklets and gilt shoes . . . and wiping her hands on a towel that was thrown over her shoulders."

[^125]:    ${ }^{1}$ [Pareto's own Index-Summary with his own references, accurate or inaccurate as they may be. Number references are to paragraphs in the text. Word references are adapted to the Index and Bibliography following. Numbers that Pareto starred as important are printed in italic.-A. L.]

