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HUMAN NATURE AND MORALS

ACCORDING TO AUGUSTE COMTE

WITH

NOIES ILLUSTRATIVE OF THE PRINCIPLES OF

POSITIVISM

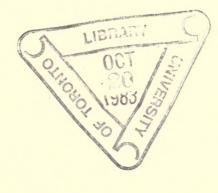
BY

JOHN K. INGRAM, LL.D.

AUTHOR OF "OUTLINES OF THE HISTORY OF RELIGION"

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PREFACE

N the Preface to my Outlines of the History of Religion I explained that, for all the essential ideas of that book, I was indebted to Auguste Comte. I have a similar statement to make with respect to the present publication. In Chapters II. and IV. of the portion of it entitled Human Nature and Morals I follow closely in substance, though not always in arrangement, his treatment of the subject in Chapter III. of the Politique Positive, borrowing additional materials from other parts of his writings. Chapter V. is in the main new, but the doctrine stated in it in contrast with that of Butler, is Comte's. In Chapter I. and the Notes a greater freedom is used, but their contents are also largely derived from him, various portions being founded on passages, not only in the Politique, but in the Philosophie and in the Discours Préliminaire, or (as it is called in Dr. Bridges' translation, happily -unlike the translation of the entire Politiqueprocurable by all English readers) General View of Positivism. The Notes, it may be added, at first intended as developments or explanations of particular passages in the Human Nature and Morals, are now placed on an independent basis as elucidations of fundamental points in the Philosophy and Religion of Comte.

His Cerebral Theory, explained in the present volume, may be regarded as a renovated form of the system of Gall. Those who can recall the forties and fifties of the nineteenth century will remember how much progressive intellects in these islands had been impressed by the Phrenological doctrine, which, for the first time, placed the study of the Moral and Mental nature of Man on the right basis. Never has greater injustice been done than has befallen the memory of its illustrious founder. He is, in many minds, confounded with the crowd of charlatans who once successfully traded on the popular interest he had awakened. And men of Science who have profited by his labours have often refused him the honour which was his due. It is true that his method was too purely empirical, not resting on a broad philosophic basis, his conclusions as to the localisation of functions too sporadically and, it would seem, accidentally arrived at, and his proofs often inadequate. But he is not to be estimated by his inevitable partial failures in a new and difficult enterprise, any more than are others who have yet made the most valuable contributions to our knowledge. It is his immortal merit to have established for ever the four propositions laid down in the *Avertissement* prefixed to his *Fonctions du Cerveau*:

- "1. That the moral qualities and the intellectual faculties are innate;
- "2. That their exercise or manifestation is dependent on our physical organisation;
- "3. That the brain is the organ of all the inclinations (penchants), sentiments, and faculties;
- "4. That the brain is composed of as many particular organs as there are penchants, sentiments, and faculties, which are essentially distinct."

All study of the moral and intellectual life of Man must be founded on these fundamental discoveries. This is now more and more seen; and it is not surprising to find Mr. Alfred Wallace regretting the neglect into which Phrenology has

fallen, and seeking to recall public attention to it. But it is only with the more philosophical character given to it by Comte, and the particular modifications he has introduced, that it will take the place which it deserves. It is my conviction that Positivism is the subject which ought now, most of all, to engage the earnest study of thinking men; and this essential branch of it—the Positive Theory of Human Nature—calls for special attention.

Comte had, long before the close of his career, projected as an element of the Subjective Synthesiswhich was to contain a view of the whole of science as co-ordinated by Religion-a Treatise on Morals, to consist of two volumes, entitled, respectively, "Theoretic Morals, instituting the knowledge of Human Nature," and "Practical Morals, instituting the improvement of Human Nature." This treatise he unfortunately did not live to write; but we find numerous anticipatory indications of its contents in his published works. For the present publication I have, as above mentioned, drawn largely on these anticipations so far as they relate to Theoretic Morals; and it is my hope to follow it up by a book on the second branch of the subject, which is virtually the Positive

Doctrine of Education. Whilst not professing to present a complete view of either side of the great theme, I have thought that I should do useful work in offering to my fellow-countrymen, in a brief and simple form, the leading ideas of Theoretical and Practical Morals, as Comte conceived them, so far as those ideas can be gathered from the partial treatment of the subject which he was able to place on record and to bequeath to us.

What we possess of his, if rightly utilised, is sufficient, first, to supply the essential basis of the great religious and social regeneration which it was the labour of his life to prepare, and, secondly, to guide his disciples in the regulation of their individual lives. It will remain for some one of his sacerdotal successors in the future, adequately endowed by nature and with his heart and mind formed by the influences of the Religion of Humanity, as well as by mature encyclopedic studies, to produce the definitive volumes which will represent the Master's intended, but unwritten, contributions to the *Subjective Synthesis*.

JOHN K. INGRAM.



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HUMAN NATURE AND MORALS

CHAPTER I.

INTRODUCTORY.

The object of the following pages is to give to English readers a brief, but—it is hoped—not altogether inadequate account of Auguste Comte's theory of the moral and intellectual constitution of Man, and the practical consequences deducible therefrom. The widespread and growing reputation of its illustrious author naturally attracts attention to his treatment of so important a theme; and his doctrine on the subject appears to be by far the most satisfactory that has ever been proposed.

It would indeed be desirable that the student should undertake the examination of the theory as a part of the entire philosophic system expounded in the *Politique Positive*, and in connexion with the investigations by which it is there preceded and followed. But copies of the English translation of the *Politique* are rarely to be procured, and, even if this were not so, many persons who may be

specially interested in the subject here dealt with, might not have leisure or inclination to apply themselves to the integral study of that great work. It has therefore been thought expedient, before presenting the direct exposition of the theory, to supply some preliminary philosophical considerations on Science generally, and particularly on the Sciences conversant with man, in order to guard the reader against certain common misconceptions, and to place him, as far as possible, at the same point of view which he would have occupied if he had approached Comte's doctrine of Human Nature in the course of a regular perusal of the Politique. It is not necessary to enlarge on what all rational intellects agree in recognising-namely, the importance of right method as an essential condition of success in every scientific inquiry.

Three different modes of philosophising on the phenomena of nature, whether material or moral, have been pursued in the past and are still more or less practised in the present. We may regard those phenomena as produced by the action of quasi-human supernatural beings, by whose wills the entire series of events is determined; or we may conceive them as resulting from abstract forces or entities inherent in the various existences which exhibit them; or, lastly, setting aside, as radically inaccessible, all inquiries as to the essential mode of production of phenomena, and to Causes First or Final, we may simply endeavour to ascertain the

laws to which they conform, or, in other language, the invariable relations of similitude and succession to which an immense and unvarying induction shows them to be subjected. These three methods are those known respectively as the Theological, the Metaphysical, and the Positive. The first is provisional and preparatory; it is that which arose spontaneously from the earliest contemplation of the world by our remote ancestors; the second, which is really a modification of the first,* historically succeeded to and superseded it in each branch of research; and the third represents the final and permanent point of view at which the human intellect arrives in the normal course of its development. This is the Law of the Three States, discovered by Comte, without the recognition of which it is impossible to understand the movement of thought in the past, or the several varieties of

^{*} The metaphysical stage is naturally transitional, because the entities which it recognises may be regarded either as emanations from the divine agents, enabling the objects in which they permanently reside to undergo the operations of those agents, which would be in accordance with the Theological view, or may be gradually subtilised so as to pass insensibly into the position of being merely abstract names for the phenomena, which would not be inconsistent with the mental attitude of the Positive stage. It is from its equivocal character and its consequent power of facilitating this transition, that the metaphysical mode of thinking derives its historic importance. Originally only a modification of Theology, it afterwards became its effectual solvent. But, though having been thus serviceable and even necessary in the past as a critical agency, it is henceforth both philosophically and socially useless, being incapable of construction and therefore impotent for organisation.

theoretic opinion which exist in the human family in our own time.

But, though indispensable, this Law is insufficient for the explanation of the general course of the history of Science. For, whether we regard different epochs in the past, or different co-existing forms of opinion in the present, we are led to the conclusion that the human mind, social or individual, does not pass with equal velocity in the several branches of inquiry through the two first of the three states above-mentioned, and therefore does not arrive equally soon at the third and definitive state. There is a hierarchy of the Sciences, founded on their fundamental dependences in relation to each other, and on the diminishing generality and increasing complexity* of those which succeed each other in the series; and it is in accordance with this order that these Sciences respectively assume the characters of the three historic states, and thus attain the ultimate normal state, in which method and doctrine are alike positive. This Law of the Encyclopedic Scale, which is complementary to the former, and which also we owe to the genius of Comte, disposes the fundamental (or abstract) Sciences in the following order: - Mathematics, Astronomy, Physics, Chemistry, Biology, Sociology,

^{*} It may be added, though not necessary to our immediate purpose, that the phenomena of the later sciences are also, by reason of their complexity, the most modifiable, and therefore afford the largest sphere for human intervention.

and Morals. We need not here enlarge on the earlier terms of the series; but, with respect to the last three, some remarks are necessary.

The position of Biology in the series sufficiently indicates its dependence on the Sciences of inorganic Nature which precede it in the scale. Living bodies are subject to the laws of Physics and Chemistry, and, through them, to those of the earlier Sciences in the series. But, besides these, they have laws of their own which must be separately investigated. These laws relate either, on the one hand, to structure, or, on the other, to life. And the true spirit of Biology consists in the constant harmony to be exhibited between Anatomical and Physiological (or, in other words, Statical and Dynamical) considerations—between the ideas of Organisation and of Vital Activity. In fact, the most general problem of Biology is-given an organ to discover its function, or, reciprocally, given a function to determine the corresponding organ.

Now, since the labours of Gall (though much of his work, as we shall see, was premature and transitory), it cannot be disputed that the study of the moral and intellectual constitution of man, as of all animals, is, in part—though, as will appear, only in part—a branch of Biology. The intellectual faculties have always been recognised as seated in the brain. The opinion long prevalent, and held even by Cabanis and the great Bichat, that the affective qualities—the feelings and the inclina-

tions—have their seats in the principal organs of vegetative life, is now universally repudiated, and it is agreed on all hands that these, as well as the intellectual faculties, have their residence in the brain. The study of both is therefore the subject of Cerebral Physiology; and the ideal of achievement in this department of research is the discovery of laws enabling us to connect each cerebral organ with the function which belongs to it, or *vice versa*.

In thus seeking to establish a relation between the Anatomical and the Physiological characters of the brain, we are free to set out either from the consideration of structure or that of function. Now the mere structure of an organic apparatus rarely indicates its function, and this is eminently true of the brain. Its descriptive anatomy, though pretty accurately known, aids us little in determining the functions of the several constituent parts. If we could divide the hemispheres into distinct and welldefined regions wearing the appearance of organs prior to the discovery of their functions, the task of ascertaining the latter would be much facilitated. But the surface of the hemispheres is continuous, and apparently similar throughout, and there are no obvious indications of the appropriation of different portions to special uses. It is therefore, not only expedient, but necessary, to begin with the study of the functions as more directly accessible—to enumerate and classify these, leaving it to further inquiry to determine the corresponding

organs. This is, in fact, what has been often attempted in the history of Mental Science in the metaphysical stage, but with little real success.

The French, German, and Scottish schools have, in different ways, endeavoured to construct schemes representing the primary propensions and faculties of man. But there has been a prevailing disposition to study principally, or even exclusively, the Understanding, and to neglect or entirely subordinate the affective qualities, so that a decisive progress was marked by the title of Hume's early Treatise of Human Nature (1739). The notion, too, of the soul as an absolute unity long prevented, or, at least, obscured the recognition of the great variety of different powers and more or less discordant tendencies existing in the same individual, and led metaphysical thinkers to reduce all the human qualities to one or a very few principles, as, for example, to represent all the sentiments and affections as modes of self-love (Hobbes), and all the intellectual phenomena as transformed sensations (Condillac).

When we approach the subject from the Positive point of view, we have to ask in the first place—What resources has general Biology to offer, which, with due modifications, will be available for the study of the cerebral functions?

This question, indeed, will not arise if the pretension of the Psychologists can be maintained, that the one and sufficient organon for the study of

the moral and intellectual nature of Man is what is called internal observation.* But the truth is, that such a process is, in general, radically impossible, and, even if possible, would be untrustworthy. is, of course, true that only from our consciousness, as made known by memory, we can acquire the elementary notions of the several mental and moral impressions and acts; but that their laws can be investigated and discovered by self-observation is certainly an error. The idea that a man can contemplate himself thinking is absurd; the mind, like the eye, sees everything but itself. How could it, at the same time, pursue some train of thought and observe its behaviour in doing so? It must divide itself into two, in order to be thus simultaneously subject and object. In the case of feeling, the supposition of its observation by the intellect is not so absurd; but when the feeling has any considerable strength, the cerebral excitement produced is radically opposed to the work of observation; through memory we can receive some ideas of the nature of the several passions—that is, of the meaning of their names—but such vague notions, if not otherwise supplemented, must be of little scientific value. And, as we have said, if this internal observation could furnish any substantial results, they would be untrustworthy, because the

^{*} See the Note on Psychological Introspection in the present volume.

facts would necessarily be coloured by the idiosyncrasies of the individual, who would be led to erect his own constitution into a type of the whole species; they would represent the mental phenomena appropriate to a particular temperament, sex, age, state of local and contemporary civilization and scientific advance. It is no wonder that the psychologists during their prolonged study of Man have achieved so little solid success when they have followed so irrational a mode of inquiry.

What, then, are the real resources available for the study? We answer, all those Positive (that is, genuinely scientific) methods which can be used in general Biology. First, Observation, not of self, but of other men, and their normal intellectual and moral acts and products; secondly, observation of pathological cases; and, thirdly, the comparison of the like phenomena in other animals, especially those occupying the higher grades of the organic series, and therefore most resembling man.

As to the first of these resources, we may add to the every-day observation of men, which contributes so much to the formation of practical judgment and (in the best sense) "knowledge of the world," the many just delineations of our fundamental nature which are to be found in the poets and other imaginative writers; and we may occasionally invoke the common sense of mankind, too much contemned or overlooked by systematic theorists. Science, in general, is only a prolongation

of popular good sense, which arrives at its conclusions by essentially similar, though less regular and guarded, processes. And this authority deserves to be treated with special respect in regard to the subject of human nature, so long and habitually the object of general contemplation and reflection. Many just notions respecting it are embodied in proverbs and other common sayings, and even in individual words, which often indicate a remarkable sagacity in the apprehension of real relations.

As to the second resource, bearing in mind the general biological principle of Broussais, that the morbid state does not differ radically from the normal, but is only an exaggeration or reduction of some of its elements beyond the limits of variation habitually proper to them, we see what important aid may be rendered by the study of insanity in its several forms and degrees. Such cases, in fact, supply spontaneous experiments, where we should be debarred from instituting artificial ones. And we are thus enabled to watch the manifestations of a particular faculty or moral tendency, acting in an intensified degree, and uncontrolled by thoughts and feelings by which it is habitually directed or restrained. And, as to the third resource, it being true that the higher animals present, in broad outline, though in various degrees, the same fundamental qualities and tendencies as man, their study offers the same advantages for the

investigation of his moral and intellectual nature as Comparative Physiology furnishes in general biological research. This comparison with the other members of the animal series will be especially useful in determining the really innate and universal attributes of Man, unmodified by systematic cultivation or social influences. Any moral propension or intellectual function alleged to be a constituent element of human nature, but totally absent in the other higher zoological types, must be disallowed as an elementary principle and regarded as a complex result of artificial culture or of the social relations.*

It is to be remembered that the cerebral functions, from the biological point of view, with which we are here concerned, are regarded only with relation to the primary destination of animal life generally, as aiding and facilitating vegetative life, by procuring materials and avoiding dangers. Man has been described as "an intelligence served by organs"; but he might more justly be characterised, with respect to his original and fundamental position, as "a group of organs served by an intelligence." This relation, it is true, afterwards tends to be inverted, at least in the higher human types; but such in-

^{*} See the remarkable *Lettres sur les Animaux* of Georges Leroy, edition of 1862, with an excellent preface by Dr. Robinet. An English translation appeared in 1870. This work is in the *Bibliothèque Positiviste*, and Leroy's name is in Comte's *Historic Calendar*.

version (never more than partial) is the result of the prolonged and continuous action of the social state on the individual members of the race. When we study Man under the head of Biology, we provisionally abstract from those social influences, which remain to be considered at a later stage of our inquiries. They belong to the province of Moral Science, which is posterior to Sociology in the Encyclopedic scale, and presupposes its results. The principal importance, indeed, of the study of Cerebral Physiology lies precisely in the fact, that at least a first outline of it is a necessary preliminary to Sociology, which requires as its foundation this partial study of the units whose combined action and continuous development it has to exhibit. But even for such partial study the subsequent reaction of Sociology is most valuable; for, the nature and working of the propensions and faculties being identical in the individual and the species, they can be viewed on a larger scale, and therefore more distinctly seen in the history of the human race than by observation of their personal manifestations. When we come to construct moral theory on the basis of Sociology, we must return to the consideration of the affective and intellectual functions of Man, and we shall then be able to regard them from a higher than the merely biological point of view, as exercised, cultivated and enlarged by the social evolution.

Though the primary object of the present study

is to exhibit a draught of our elementary powers and tendencies, as distinct from a determination of the corresponding cerebral organs, it must be always kept in view that the latter is indispensable to the scientific completeness of the biological theory of Human Nature. Every function which is proved to exist must have its own organ in the brain, the determination of which, though it may be postponed, is a task which cannot be indefinitely left unaccomplished. Here, as in every branch of Biology, a correspondence between organ and function must be established; neither the anatomical nor the physiological aspect can permanently stand alone, whatever precious instruction either, especially the latter, can singly furnish. Gall, when laying the foundations of Cerebral Physiology, was forced to attempt a detailed scheme of localisation of the functions, in order to be able to propose a doctrine capable of general discussion. This was a perfectly legitimate exercise of the right of forming scientific hypotheses, which is limited only by the condition that they should be ultimately verifiable. But the effort was premature, and his scheme, as a whole, was certainly a failure, though it contains many elements likely in the end to find acceptance. What is now insisted on is that we must always carry with us the conviction that, to every elementary function of whose existence there is adequate proof, there corresponds in the cerebral apparatus a definite organ, real, though—it may be—at present unassignable.

We say "to every elementary function"; for there can be no doubt that in cerebral action several organs habitually take part in producing a result, sometimes in the way of concurrence, and sometimes in that of conflict. This is obvious in the case of different affective impulses, and as between those impulses and intellectual acts. And it will be seen hereafter that the scholastic facultiesreason, judgment, imagination, and the like-are really composite, the result of the simultaneous operation of more organs than one. When we have arrived at a definite number of elementary (or irreducible) propensions and faculties, it will remain to show how, by their various combinations, states of feeling and thought are produced which a hasty speculator would be apt to attribute to the action of a single organ. The followers of Gall have undoubtedly multiplied, without necessity, hypothetic organs, especially, as we shall see, in the department of intellect. For the rectification of these errors, we shall require a more thorough study than has yet been carried out of the sympathies and synergies—as well as the antagonisms—of the different constituents of our moral and intellectual nature.

Another preliminary observation must here be made as to the necessity of recognising the reaction of the vegetative viscera on the cerebral functions. This was not sufficiently attended to by Gall, and thus his construction was injured by its too great

separation from general Biology. Such a tendency was heightened by the adoption of the special title of Phrenology* for the study of the mental and moral attributes of Man—a title which Gall himself never used. This name is now further objectionable on the ground of its appropriation by the vulgar Cranioscopists, who have compromised the theory in public estimation by their ignorance and charlatanism, though they could not destroy the abiding fame of its illustrious founder, based on the powerful impulse he gave, and the valuable contributions he made, to the scientific study of Man.

^{*} The term 'Phrenology,' which was introduced by Spurzheim, has some advantages. It involves no ontological idea such as is implied in Psychology. The Greek word, too, from which it is derived, includes the affective as well as the intellectual nature. Hence Comte, in the *Philosophie Positive* (Leçon 45), suggested the use of the name *Phrenological Physiology*, which would prevent the isolation of the study from general Biology; but he did not in his later writings use this name. *Cerebral Physiology* seems the title least open to objection.

CHAPTER II.

INTELLECTUAL AND MORAL POWERS OF MAN.

WE now proceed to the actual analysis of the mental and moral nature of Man. We shall reduce our treatment of the subject to a series of comments founded throughout on the text of Comte, and relating to his final Table, which is reproduced at the end of this volume—the "Tableau Systématique de l'Âme," otherwise entitled "Positive Classification of the Eighteen internal functions of the Brain." With this Table the student should make himself thoroughly familiar, and should test it by frequent applications.

It is, in the first place, evident that these functions are divisible into the two primary classes of the Affective and the Intellectual. It is, further, obvious from observation, as well of man as of the animal kingdom in general, that the *heart* (understanding that word metaphorically, in accordance with popular usage, to denote the affective tendencies collectively) preponderates over the intellect in determining the nature and life of the individual. These tendencies are instinctive appetencies towards particular external ends, inde-

pendent of any intellectual determination, and not implying a conscious and deliberate pursuit of the corresponding outward object, or even necessarily a distinct apprehension of such object. They are, in fact, blind propensions, stimulating to action in particular directions, but unable, apart from the intervention of the intellectual faculties. to judge of the eligibility of the desired ends or to indicate the means of attaining those ends. Each of them may exist in various degrees of strength or activity, from passions of great intensity to mere sentiments or modes of feeling. There are normal limits to their respective energies, and some of them may enhance or counteract others. All impulses to action must come from the affective elements of our constitution. The intellect can only appreciate facts, not supply motives. It may by its representations give occasion for the action of the emotions, may judge of the fitness of indulging them or point out the means of gratifying them; but the practical stimulus lies wholly in the affective principles. The intellectual powers themselves require to be awakened or stimulated by those principles, which present to them more or less definite and permanent aims, and so disperse the torpor or concentrate the vague activity which would otherwise, in ordinary cases, benumb or distract them. There is, it is true, inherent in all our powers, bodily or mental, a demand for their appropriate exercise, leading, when unsatisfied, to

ennui and sometimes even to life-weariness; but this, though a real force, is indeterminate in its character, and is, in general, insufficient to produce, and still more, to maintain, either practical or theoretic effort, in the absence of a special emotive impulse.

Besides the affective tendencies, properly so called, there are in our nature certain other qualities, in some sense intermediate between them and the intellectual faculties, rather aptitudes than impulses, which are popularly summed up in the word character, taken in its more limited application, as when we speak of a "strong character," or note a case of the conjunction of a good heart or a superior intellect with a "weak character." These qualities it is that determine the more or less successful results of operations prompted by the affective tendencies and recommended by the intellect. These three elements of our being-the affective motor, the intellectual monitor, the practical director—are combined in every complete act; and their joint operation, and the corresponding triplicity of our nature, are represented by Comte's "systematic verse":-

"Agir par affection, et penser pour agir."
(We act from affection, and think in order to act.)

Thus we arrive at a broad general conception of our cerebral constitution.

We next pass to the consideration of the several

particular qualities comprised in the three classes already recognised.

The Affective motors are evidently divisible into the personal and the social. The latter appear, more or less, in all the grades of animality above that at which the sexes are completely separated. The entire moral life of Man consists (as we shall see) in a permanent struggle between these two groups of motors; and this struggle must not be regarded as foreign to the other animal species; it exists in the higher forms, though with less intensity, and especially with less continuity, than in the human type. The personal motors naturally tend to predominate, being inherently stronger than the social. It is necessary that it should be so; for the animal life in general has for its destination in the individual the maintenance and accommodation of his vegetative existence, and the needs of this existence which are always felt and cannot be evaded, dominate the being, when his principles of conduct are found altogether within himself. This spontaneous prevalence of the egoistic instincts is true of Man. as well as of the other animals, when he is considered apart from Society. In the social state, whilst the demands of personal conservation arestill indispensable to give a fixed direction to our activity and a determinate collective aim, there is a tendency to an inversion of the comparative energies of the self-regarding and the altruistic motors; the "great problem," how personality can

be systematically subordinated to social feeling—self to the species—is thus proposed. But this problem is peculiar to our race, and must be dealt with, not by Biology, but by Morals.

Our next step must be to arrive at an enumeration of the really simple and irreducible personal motors. Taking them in the order of decreasing energy and increasing dignity (by which last is meant their appearance only in the higher ranks of the animal series) we have successively the impulse which aims at the material conservation of the individual, or (1) the *nutritive* instinct, where 'nutritive' implies not the only, but the most obvious and habitual of its acts; next, those which tend to conserve the species, namely, (2) the *sexual* and (3) the *maternal* instincts.

The first of the three is the most indispensable, and is universal throughout the animal world. In man it is the most deeply seated and strongest of all. Comte quotes, in illustration of this, the celebrated sentence of Dante, in which he speaks of the parental feelings of Count Ugolino as overborne by the demands of hunger:—

Poscia, più che 'l dolor potè 'l digiuno.

Inf. xxxiii. 76. ·

The sexual instinct is stronger in the male than in the female sex of animals in general, and, taking our race as a whole, is certainly stronger in it than is required for its useful efficacy. It is satisfied by the possession of the desired person of the other sex, without any regard to his or her well being. We must not deceive ourselves by regarding the primary instinct as at all identical with the highly composite sentiment which social influences develop between worthy types of the sexes, in which a tender and reverent friendship becomes the principal element of the feeling. It is the nobleness and wisdom of Humanity that has made the coarse original passion the basis of the admirable moral progress resulting to both sexes from a well constituted marriage.

The maternal (or parental) instinct, too, essentially belongs to the egoistic side of our nature. Not only in other animals, but also in man, we can see that it is in fact primarily a propension to control and manage, not to love, our offspring. But the sympathetic feelings, to be considered hereafter, are developed, as in the case of the sexual instinct, by the natural contacts arising from the relation, chiefly in the mother, but secondarily also in the father; and there is thus associated with the instinct in the finer natures of several animal races a special tenderness noted and celebrated by the poets of all ages.* Here again, the providence of Humanity

^{*}Compare the "admirable picture of the moral existence of a bird," which, as Comte says, Dante has "placed amidst the sublimities of his Paradise"—"Come l'augello intra l'amate fronde," Par. xxiii. 1; and the self-denial of the mother-bird, briefly, but beautifully, touched in Homer, IL. ix. 324.

has modified the relation, and so has elevated the feeling. Society, especially in modern times, has acted on the family; and the child, originally a chattel, often exposed at birth, or sold, or otherwise made an instrument of sordid cupidity, or subjected to cruel severity or wanton caprice, has become (though these vicious practices are far from being altogether obsolete*) more and more an object of fond devotion, calling out the most beautiful and noble efforts of self-sacrifice. In the absence of offspring, the feeling often leads to adoption, or shows itself in fondness for the children of others or even for the young of other sociable species. The early development of the instinct in the human female is seen in the behaviour of girls to younger children, and the pleasure they take in managing, dressing, and talking to their dolls.

Next in the scale follow two, which are also primarily directed to personal satisfaction, but are capable, through the reaction of outward circumstances, of becoming promoters of the most important social ends. Man and the higher animals seek to improve their position, and this in two different ways—by the destruction of obstacles and by the construction of means, or, in other words,

^{*} We have been startled of late by the great number of cases in which the Societies for the prevention of cruelty to children have had to restrain or punish the oppressive conduct of parents. Comte points to the influences of cupidity in determining for children their professional destination or matrimonial connexions, with little consideration of their wishes or probable happiness.

if we designate them by their most obvious social results, by (4) military or (5) industrial action, which may properly furnish names for the corresponding instinctive tendencies. The destructive instinct is not peculiar to the carnivora, but shows itself in the herbivora also, who must destroy many objects for their subsistence, and sometimes even other animals, especially in struggles arising from want of food or from the sexual impulse. In man, it is chiefly, though with least useful efficacy, developed in the less advanced phases of social existence, where it does not lead, as at a later stage, to permanent conquest. It is, however, no less than the constructive instinct, a necessary function at every stage, and the two must always continue side by side, though the industrial element, in the course of human history, has tended, and still tends, to a decisive predominance; for, however successful conviction and persuasion may be in preventing or abating social evils, compulsion will never cease to be required. And it is to be observed that the destructive tendency in man is not limited to the exercise of physical resistance or constraint, but may be seen in the energy of political or moral protestation or in the fire of an orator tearing a sophism to tatters.

To this couple succeeds another, which works still more distinctly towards social ends; seeking, indeed, personal satisfaction, but indirectly, through the opinion of others respecting us, or their submission to our control. One of these is the desire of domination, the other the desire of approbation; often known respectively as (6) Pride and (7) Vanity, though these are names belonging rather to their excessive than to their ordinary action. They are sometimes confounded with each other, but are in fact entirely different. Vanity is the higher, because the more social, of the two, seeking to establish personal ascendancy on the basis of opinion instead of on force. Pride is more connected with temporal power—command; Vanity with spiritual influence—counsel. They are the special germs in our individual nature of the social institutions of the Patriciate and the Priesthood.

Having now completed the series of the personal instincts, from the lowest to the highest, we arrive at the social, or altruistic, motors. Here dignity increases, whilst energy diminishes. The latter inferiority is compensated, to some extent, by the wider range open to them; all can participate in them, not merely without mutual conflict, but to the greater satisfaction of each. These noble inclinations are common to several animal races, exhibiting sometimes in them greater intensity than in man. There, too, they are seen, free from the effects of intellectual development, and unaffected by the peculiar influences which act upon them in human society; and thus their innate character is unquestionably proved. Indeed, the most irresistible evidence of their natural existence in man, which theological and metaphysical sophistry has often denied, is furnished by the convincing proofs of their presence in those inferior species.

The Altruistic impulses cannot, without confusion, be reduced below the three recognised by Gall, namely (8) Attachment, (9) Veneration, and (10) Benevolence. In fact, such inclinations may first be divided into those which have a special application, and those having a general. The former are the more intense, but the less noble. One of them is that which is adapted to the most circumscribed relations—principally, though not exclusively, to the domestic circle. It binds together most strongly two beings at a given time, and sometimes throughout life. It is the natural foundation of monogamy and of perpetual voluntary widowhood. It is developed, sometimes very strongly, among the lower animals. Veneration is of wider, but still of limited application. It consists essentially in voluntary submission, and it naturally has chiefs or leaders for its objects, whilst Attachment prefers equality. Many animals are capable of the sentiment. The dog sometimes honours even his dead master.* The distinguishing character

^{*} This may recall to our memories Wordsworth's poem, entitled Fidelity—"A barking sound the shepherd hears." The same poet finely touches the feelings of attachment and wider sympathy in the lower animals in his "Incident characteristic of a favourite dog," and his "Tribute to the memory of the same dog." See also Matthew Arnold's beautiful poem—"Geist's Grave."

of Benevolence-otherwise goodness (bonté) or, in Christian phrase, Charity—is its collective destination, as it has for its object a tribe, a population (in Patriotism), or the whole race, or even all sentient beings. It becomes weaker, however, as its sphere extends. Compassion is a form of it. It is not peculiar to the human race; but the lower animals participate in it less than in the two more special affections. It is so characteristic of humanity, that that word is equivocal, meaning sometimes the race, sometimes the affection.

When we come to the study of Morals, the distinction of the three altruistic motors, previously established by Biology, becomes of great practical value, as indicating the true, because the natural, mode of educating the sympathetic feelings a discipline which is often, particularly by the Socialists, misconceived, as if man were to pass at once to the supreme sentiment without the previous training of those which are more special and less elevated. Our individual lives are naturally and necessarily subordinated to the three collective existences-Family, Country, Humanity; and our highest wisdom and best happiness consist in the knowledge and practical recognition of these several subordinations.

One of the most important conclusions from the analysis of the affective tendencies which we have now completed, is the normal classification of individual natures to which it leads. In judging

a man, we have to ask what are the motives that habitually determine his conduct, whatever may be the means his intellect devises for the attainment of his ends. The answer will be with respect to some men, the Altruistic; with respect to others, the Egoistic; and a man must be pronounced good or bad, according to this criterion, if the inclinations are well marked. But the majority fluctuate between these classes, which never contain very many individuals; to the multitude, those strongly-distinctive epithets cannot be applied. There is a third type, directed chiefly by the inclinations intermediate between the altruistic and egoistic - desire of power and desire of approbation. From this class, in the sociable species, most leaders are drawn. In human society, they seek to command others or to influence them by counsel, according as they are led respectively by the one or the other of these instincts. This classification is applicable, with due modifications, to all the important animal races, and the character of a species—as well as of a social group or a nation—is determined by the proportions of the several types which compose it.

Whilst we thus classify individuals in relation to the affective motors only, which do really fix the general nature and life of each, we must bear in mind that the types thus discriminated will depend in part for their effective action on their possession of intellectual ability. Accordingly, we now pass

to the consideration of the mental powers, which discover the proper means for satisfying the several affective inclinations. It is here that Comte differs most widely from Gall. The latter, notwithstanding his want of a definite scientific method, was kept substantially right as to the affections, partly by the indications of popular good sense and partly by the guidance supplied by animal comparison. But for the study of the intellect these aids are insufficient. Popular ideas with respect to it are too vague and confused to furnish much instruction, and the observation of animals, though it may confirm, cannot suggest a true theory. Biology alone is incompetent to deal successfully with the problem. Sociology must react on the inferior science; without a Positive theory of the collective evolution of the human race, which was in fact its education, the nature and march of the intellectual functions cannot be clearly brought to view, though, when thus apprehended, they can be verified not only in the human individual but in the more or less cognate animal species. Gall multiplied the intellectual powers unduly for want of the sociological inspiration, through which alone a just analysis can be attained; whilst a recoil from the extravagances of Condillac and others led him to restrict too much the domain of the external senses, transferring some of their operations to special cerebral organs. What is really strong in him, on this branch of our subject, is his critical discussion of the doctrines of the

psychologists and ideologists.* He shows conclusively that they err in representing judgment, memory, and imagination as elementary faculties; but he is wrong in viewing them as modes of action common to all the cerebral organs, affective as well as intellectual. This last is a grave error. The powers in question, so prominent in the traditions of the schools and so familiar to us in ordinary language, whatever may be their nature otherwise, are purely intellectual. They are altogether foreign to the affective part of our constitution. The acts of the latter have always been justly regarded as blind, being restricted to feeling and desiring, though they influence the mental faculties, determining their destination and stimulating their exercise. Emotion and impulse are theirs, but these exhaust their domain; they are incapable of judgment. Nor does memory belong to them; we often cannot recall, though most desirous of doing so, emotions vivid in the past, unless they have left behind them traces

^{*}Sur les Fonctions du Cerveau et sur celle de chacune de ses parties, Paris, 1822–1825; see especially Vol. I. A similar criticism, marked by much acuteness and force, will be found in Broussais's L'irritation et la folie, Paris, 1828, Preface and Part I. chap. 5. Broussais at first rejected Gall's system, but became a convert to it, and, as Comte says, "honourably crowned his noble career by the conscientious energy with which he studied and disseminated a doctrine which he had previously misunderstood." The reference in these words is to Broussais' Cours de Phrénologie, Paris, 1836, in which work, however, the illustrious physiologist, whilst treating the general foundations of the theory with great ability, adopts too indiscriminately the mental analyses and localisations of Gall and some of his successors.

which enable the intellect to present such images and signs as are fitted to reproduce the vanished feeling. Imagination, for like reasons, must be denied to the affective side of our nature. The only power attributed to the intellect by some metaphysical thinkers, which really belongs to the affective province, is Will. It is the last state of desire, when the intellect has recognised a dominant impulse as one which should be allowed to pass into action. A true will, capable of determining action, can never emanate from the intellect; it is always the product of an affective motor.

Judgment, Memory, and Imagination being thus intellectual attributes, are we to regard them as Elementary functions? Not so; they are really composite results of several primary mental operations. In judging, the intellect is at once active and passive; there is always a combination of observation and reasoning. The simplest appreciation of an external fact is similar in principle to the solution of a scientific problem. It is an application of the universal precept of Positive logic—to form the best hypothesis capable of representing the ascertained phenomena, or, in the present case, the immediate data of the senses. Still less possible is it to regard memory and imagination as elementary functions.* In order to

^{*} Sir M. Foster, in his learned and instructive "Lectures on the History of Physiology" (p. 299), says, we are "within measurable distance of being able to assign, not as feeble, short-lived hypo-

recall past events, complex acts of the mind are often required, inductions and deductions founded on the mutual relations of things; the only spontaneous part of the process is the tendency of impressions to reproduce themselves according to a general law of animal life. And in imagination there is always joint action of several speculative powers, and its pictures sometimes imply combinations as profound as are involved in scientific thought, though not of equally abstract nature. A consideration confirming these conclusions is the following—that all the classifications of the several branches of knowledge founded on these pretended faculties, such as those of Bacon and D'Alembert,* are admittedly failures; and the same may be

theses, but as proved experimental results, to sensation its seat, to memory its seat, and even to imagination its seat." On this I may be permitted, first, to observe that the writer leaves out of account, as much as did the older physiologists, the affective elements of our nature, which he would not, I suppose, localise in the viscera, and, secondly, to venture the prediction that distinct organs of memory and imagination will never be assignable, but only organs whose combined action produces the effects commonly attributed to those powers. I doubt the existence, which he implies, of a sensorium commune, additional to the several ganglia of sensation.

*Bacon says (Advancement of Learning, Book ii.):—"The parts of human learning have reference to the three parts of Understanding, which is the seat of learning: History to his Memory, Poesy to his Imagination, and Philosophy to his Reason." D'Alembert, in the Explication détaillée du Système des Connaissances humaines, prefixed to the Encyclopédie, founds his classification, as Bacon did, on the supposed principal faculties of the understanding above-named, and indeed adopts the entire scheme of his predecessor, introducing only minor modifications especially relative to the head of "Philosophy, or Science."

confidently asserted with respect to classifications of individual intellects which it is attempted to base on them. The *particular* memories alleged by Gall-will be found, on thorough examination, to be results of situation or training, combined with special differences of energy in some of the universal faculties.

In considering the question—What are the primary or irreducible intellectual powers? we have to keep in mind that all our real knowledge consists exclusively of facts and laws, that is, of phenomena, either particular or general.

The irreducible operations must be abstract in their nature, so as to be applicable alike to all the products of our intelligence. The march of the intellect is always essentially the same, whether in practical combinations, or in theoretic compositions, æsthetic or scientific*; and we must therefore reject the too special faculties sometimes admitted by Gall's successors in cerebral physiology.

There are, in the first place, two sorts of mental faculty, relative respectively to conception and expression. That these are distinct, their morbid affections prove. In the normal state the latter are subordinate to the former. In childhood the power

^{*} This subject of the fundamental similarity of the processes followed by the human mind in its various labours is ably treated in Mlle. Sophie Germain's posthumous treatise—"Considérations générales sur l'état des Sciences et des Lettres." See her *Œuvres Philosophiques*, edited, with a biographical notice, by H. Stupuy, Paris, 1879. Comte highly esteemed her philosophic powers, and gave her name a place in his Historic Calendar.

of expression is earliest developed; formulas are learned before they can be really understood. Different human types and different animals possess these two sorts of faculty in varying proportions.

When, in the ascending order of the zoological series, the training of the young and a real domestic life, with something of a social state, come into existence, the function of Conception, which at lower stages was probably single, is divided, and takes two separate forms, Contemplation and Meditation. The one receives from without through the sensory organs the primitive materials of mental constructions. On the basis of these, Meditation forms the more or less general combinations which are to direct habitual conduct.* Ideas, properly so called (that is, images), belong to Contemplation, while Meditation produces thoughts. It is an entire mistake to regard either of these faculties as a peculiar appanage of our species. In the higher grades of the animal kingdom, as we have said, they both exist in different degrees, being as necessary there as they are for us in personal, family, and especially social life. The nutritive wants, the sexual relations, and the care of the young excite every day not only observations but reflections.

^{*}Contemplation is more developed in woman: meditation in man. And a similar difference between the sexes exists in relation to Inductive and Deductive meditation.

Sagacity, prevision, and invention cannot be reasonably denied to several of the inferior animal races.

Thus, so far, we have arrived, primarily, at a combination - Conception and Expression - and afterwards, by analyzing one of its members, at a progression which represents the natural march of the intellect-first, Contemplation, then Meditation, and, finally, Communication. We must further decompose the two former, following our general method of classification according to increasing speciality and decreasing importance, in order to obtain really elementary, that is, irreducible functions. The communicative faculty, that of language, does not admit of division. But Contemplation, which observes facts, is twofold. It is either (11) Synthetic, Concrete—consisting in the observation of beings, and therefore most subservient to Art; or it is (12) Analytic, Abstract—appreciating events, and therefore specially active in Science. Ideas, properly so called, emanate only from Concrete Contemplation, a true image being always of a being, never of a pure phenomenon. Meditation, which discovers laws, is also divisible, as either (13) Inductive, which compares, forms groups, and generalises; or (14) Deductive, which co-ordinates, forms hierarchies, and systematises. Thus Contemplation observes (a) beings, then (b) events; Meditation (a) elaborates principles, (b) then derives consequences.

As to (15) Language, it is the final issue, in domestic and social existence, of this mental series. It is also capable of employment by the human individual, as a test of the maturity of his conceptions, and a means of improving them. In the lowest animal species, where life is purely personal, expression results from acts themselves, which involuntarily indicate the impulses from which they emanate. Elsewhere, a clearer and more direct transmission of feeling and thought is necessary for the establishment of concert between different beings with a view to obtaining sympathy or assistance. Language, as an institution, begins with the imitation of natural signs. These are insufficient when relations become complex and frequent, and a more or less artificial language arises. Its first elements result from decomposition of spontaneous cries or gestures. It is gradually developed and systematised till it becomes the continuous depository of the collective sense of the community. domestic transmission of the "mother tongue" is the most precious part of the heritage of each human individual, and is the first basis of all instruction.

The essential office of the faculty—the invention and learning of signs—does not change when, instead of mimetic movements, vocal sounds come to be chiefly or exclusively employed. The universal preference of the latter as instruments of expression is not only determined by the greater

comprehensiveness and definiteness thus attained: it depends also on the spontaneous correspondence between the voice and hearing; we can talk to ourselves, and this makes oral expression capable of continuous improvement.

The importance of language for the solitary utterance, and so, either for the calming or exaltation, of sentiment is most appreciable when we consider religious practices. Its reaction on thought is universally recognised. For true language, as distinct from empty verbiage, the cerebral faculty of expression must be subordinated to the four other intellectual powers—to the two species of Contemplation, respectively, for names of substances and of properties; to the two sorts of Meditation for means of comparison and processes of co-ordination.

Now, having sufficiently dealt with the affective impulses and the consultative work of the Intellect, we have to pass in review the qualities of *Character*, properly so called, on which depends the final realisation of the result wished for and prepared. These practical aptitudes evidently are (16) *Courage* (or Energy) to undertake an operation, (17) *Prudence* (or Circumspection) in executing it, and (18) *Firmness* (or Perseverance) to carry it through. No practical success can, in general, be achieved without a sufficient combination of these three qualities. They are in themselves independent alike of the affective nature and the intellect; their

exercise, like that of the emotions, is blind; they are as much disposed to assist bad designs as good, and obey the impulses alike of the higher, the mean, and the lower inclinations; and they may be called into energetic exercise in pursuit of chimerical ends and impossible projects, though, of course, practical efficiency is much furthered by right feeling and sound thinking.

Each of the eighteen cerebral functions which we have now completely enumerated can act apart, but our operations usually require the concurrence of several faculties. The synergy of the affective and active regions is scarcely denied; it is only for the intellect that independence is claimed. But the truth is, that it can only choose between two masters, the personal inclinations and the social. When it believes itself free, it is in fact obeying the egoistic instincts. Every sort of intellectual operation is stimulated by a moral impulse. Attention, even in its lowest degree, depends on some affection; and this is still more true of meditation. Again, the intellect is dependent on the character no less than on the heart. The theorician, as well as the practical man, requires courage, circumspection, and perseverance. Failure of the intellect is less frequently due to its own insufficiency than to an ill-regulated heart or an impotent character. This joint action of different cerebral faculties or qualities is the most important harmony in the animal constitution; but it should never be forgotten that the

brain must also be studied in its relations with the whole organism, not only with the mechanisms of sensation and motion, but with the vegetative viscera. Without such a study we must fail to appreciate the consensus of the human system as an indivisible whole, and should not do justice to the synthetic character of Physiological Science.*

^{*} Comte always recognises the vitalistic school of Stahl and Barthez as compensating its ontological tendencies by its synthetic spirit. In estimating the merits of Stahl and fixing his position in the history of Science, his great philosophical service in this respect is sometimes not sufficiently considered. Justice can be done to him without depreciating the important work of the physico-chemical school, though it was affected by the opposite vice of a materialistic tendency.

CHAPTER III.

CEREBRAL ORGANS OF THE MORAL AND INTELLECTUAL POWERS.

Having completed the theory of the moral and intellectual functions of human and animal nature, we turn to that of the corresponding organs. Whilst recognising the valuable practical results to be attained by the physiological study considered separately, and without entertaining an exaggerated notion of the importance of the anatomical complement, we must yet regard it as requisite for a complete cerebral theory that a sufficient correlation should be established between the functions and the organs.

Comte's anatomical theory of the brain is, he admits, less precise and less convincing than his physiological theory. He did not judge it possible to do more at present than to assign the *situation* of each organ, leaving indeterminate their respective forms and magnitudes. Even the situation is more or less hypothetical; and it must be the work of anatomists in the future to ascertain the shape and size of the eighteen organs whose existence is inferred from the physiological investigation. One

day there must be brought to light such differences -physical, chemical, or of minute structure-between different portions of the brain as will indicate the limits and the dimensions of the several organs; and then, the various applications of the Comparative Method will gradually supply a wellsupported scheme of localisation. But even previous to this verifying process, the hypothetic arrangement proposed by Comte will be found highly useful. It is the best concrete representation ever suggested of the entire nature of man and the higher animals, enabling us to recall readily, and to place in their proper relations to each other, the several faculties and tendencies which compose that nature. operation of assigning situations to the several organs is, indeed, in Comte's view, founded altogether on the general principle, that their relative situations must be conformable to the true relations of the corresponding functions already enumerated.

The first application of this principle is in determining the respective positions of the two groups of the intellectual and the moral organs (the latter comprehending the *character* as well as the *heart*). Now, the former must be so placed as to be in connexion with each sensory apparatus through which they appreciate the outer world, and must therefore have their seat in the frontal region—a conclusion which agrees with the inspirations of ordinary good sense. The rest of the brain—much its larger

part—will thus belong to the affective qualities and the practical aptitudes.

The affective region has no direct apprehension of, or immediate action on, external things; but it is in communication with the intellectual and practical regions, receiving from the former impressions which awaken its emotions, and transmitting to the latter impulses which emanate from its desires. The seat of the active aptitudes must be intermediate between those of the affective qualities and the intellect. The affective motors—themselves blind require the intervention of the intellect, but only to judge of the fitness of their desires; whilst the executive aptitudes need to be informed by the intellect of the whole outward situation in order to accomplish the wished-for result. The practical qualities are thus more closely connected with the intellectual functions, and their organs must be nearer to the frontal region than to the posteroinferior. This view represents to us in a pictorial form the general economy of human and higher animal nature—the relations of its affective, speculative, and active constituents—heart, intellect, and character. The affective region is the essential centre of moral existence and animal spontaneity, and chiefly determines the nature and life of the being. The other two regions are in relation with external things—the one to know, the other to modify them. Feeling, whilst inspiring and sustaining both these, has no direct cognisance of what is without; but it is acted on by the vegetative viscera, and, in its turn, reacts on them.

It is obvious that some organs may be median, that is, occupying a continuous space divided between the right and left hemispheres; or bi-lateral, consisting of two portions apart from each other, but similarly situated in the two hemispheres. In either case the symmetry recognised by Bichat as characteristic of the animal portion of the organism exists, and enables each organ, by intermittence of function of one of its two divisions, to alternate, without absolute cessation, periods of activity and repose. The entire organ will at times be quiescent. Comte, however, believed that, whilst the action of the intellectual and practical organs, connected as it is with external impressions or movements, may be entirely suspended, the affective region is never wholly dormant, and thus, even in sleep, the animal continuity is preserved, and the cerebral action on the vegetative functions is uninterrupted.

We shall first assign the most probable seats of the affective motors, beginning with the seven egoistic instincts.

That which has for its province the material preservation of the organism, and is, as we have seen, the most indispensable and fundamental element in the entire cerebral system, is best placed in the central portion of the cerebellum; whilst that which has for its office the continuation of the

species is to be regarded as residing in its double lateral expansion. The seat of the maternal instinct is above the cerebellum in the median part of the lower posterior brain; this situation harmonising with the increased dignity and diminished energy of function. The higher, but still personal, impulses of the military and industrial instincts are to be conceived as lodged, the former in a bi-lateral organ, at the sides of the maternal instinct, the latter, in a median, above it. The desire of power and that of approbation, more elevated and social qualities than those hitherto enumerated, should be placed, the former at the sides of the industrial instinct, the latter immediately above it on the median line. Thus is completed the group of organs corresponding to the egoistic motors, and the relatively great volume of this group is conformable to the natural ascendancy of these impulses in the animal constitution.

Coming next to the three altruistic motors, we place the noblest of all the moral instincts—that of Benevolence—in the highest median portion of the frontal brain, in immediate proximity to the intellectual region. Directly behind it is the seat of Veneration. To the rear of the latter we leave for the present a blank space, to be hereafter appropriated to one of the practical organs. Attachment we conceive as adjoining Veneration on either side, and extending backwards so as to be in contact below with the Desire of Approbation; and thus

the local continuity of the affective principles is maintained.

The speculative region can now be considered, corresponding to the powers which judge of the opportuneness of the affective impulses, and suggest the means of satisfying them. It contains, as the physiological investigation has shown, five organs, four presiding over the processes of conception, and the fifth over the expression of the results. Passive Conception (or Contemplation) must be in direct relation with the organs of sensory perception, and is therefore situated in the lower frontal region. The upper portion of the same region naturally belongs to Active Conception (or Meditation), which elaborates the materials transmitted by Contemplation. disposition places in contiguity to the affective region that intellectual organ which, when furnished with information from without, gives the final decision on the impulses emanating from the several propensions. But, as we saw in the preceding part of the present treatise, neither Contemplation nor Meditation is an absolutely irreducible function. They are, each, divisible into two simpler operations. These are designated, in the case of Contemplation, by the respective epithets "Concrete" and "Abstract," the former dealing with beings, the latter with events. The former is more, the latter less, directly connected with external impressions. Concrete Contemplation has a double organ, each of its parts above one of the eyes and extending

towards the corresponding ear, whilst the seat of Abstract Contemplation is on the same level in the frontal median line. Meditation, again, as we have recognised, is twofold-Inductive, acting by comparison, and Deductive, by co-ordination. former resides in a double organ placed at the sides of the upper frontal region and touching the seat of Concrete Contemplation, whilst Deductive (or Systematizing) Meditation is situated in the middle of the same superior region, where it is in immediate contact with the noblest of the affective motors, to whose service it is especially devoted. The fifth and last intellectual function, that of Language—the invention and use of signs—has its double seat at the lateral extremities of the speculative region, and is thus equi-distant from the eye and the ear, which are its chief auxiliaries, according as expression is by gesture or by speech. is also in contact with the practical region, with whose functions it specially co-operates, and is, in fact, the link which connects that region with the intellectual organs.

We come lastly to the closer consideration of this practical region, which presides over the execution of projects originated by the affective motors and sanctioned by the intellect. Firmness (or Perseverance) is a median organ situated in the space formerly left vacant, behind Benevolence and in front of the Desire of Approbation. Prudence (or Circumspection) is a double organ at the sides of Firmness, inclining forward towards the intellectual region, and crossing, at its outset, Attachment, which stretches in the opposite direction. The remaining practical aptitude, Courage, occupies the sides of the double organ of the Desire of Approbation. By this arrangement, the practical region touches both the affective and the intellectual, with which its offices are in relation—at once receiving counsel and carrying wills into effect; and it is in contact alike with the nobler, middle, and lower affective motors, to all of which it is occasionally subservient.

This completes Comte's scheme of localisation, which—as we have already said—is limited to the single question of relative situation, without seeking to fix the forms or magnitudes of the several organs. It is essentially founded on the relations of the functions, considered in themselves, apart from any but the most obvious anatomical suggestions. It is accordingly hypothetic, but conforms to the logical conditions of normal hypothesis by being ultimately verifiable, and representing best all the positive notions on the subject at present attained or available. It will be the work of anatomists in the future to test its conclusions, and to establish a complete harmony between the Subjective method of study, which must here, by the nature of the case, have the initiative, and the Objective, by which it is highly desirable, if not absolutely necessary, that it should be supplemented. The resources available

for this anatomical study are mainly those of the Comparative Method, which is specially characteristic of Biology. It admits of varied applications to different individuals, ages, sexes, nations, and animal races. Morbid phenomena—those of intellectual delusion and moral perversion, of insanity and of certain forms of crime, will also be subjects of study from this point of view, affording—as they do real experiments.* But the violent processes often resorted to, such as the removal or mutilation of portions of the living structure or such alterations of the medium as are destructive of the organism, are not only in the human case impossible, and in their application to the lower animals open to objection on moral grounds, but will commonly fail in cerebral research, owing to the general disturbance thus introduced into an economy which, more than any other, is characterised by an intimate consensus.

In the meantime, until this further research is completed, the scheme above explained is certainly much superior to the first draught due to the founder of cerebral physiology, even as judiciously modified by some of his successors, and offers at least a sufficient synthesis of statical and dynamical con-

^{*}The true nature of scientific experiment does not lie in the artificial arrangement of the circumstances of a phenomenon, but in the rational selection of cases which are best adapted to bring to light its essential character. The cases may be spontaneous or factitious, and the former may be as instructive as the latter. The one thing needful is a well-defined change of the conditions, leading to a corresponding variation in the phenomenon.

ceptions to supply a working theory and to inspire rational general views bearing on Sociology and on practical Moral discipline.

This last is really the final goal of all intellectual research; and the doctrine here expounded enables us to state in complete form and in definite Positive terms the great Human Problem which must preside alike over thought and action, namely—How to make the three altruistic organs, seconded by the five intellectual, habitually surmount the seven egoistic motors, so as to consecrate the three active powers to the continuous service of Humanity.

CHAPTER IV.

POSITIVIST MORALS.

N seeking to construct a system of Morals we must set out from the conclusions arrived at in our Biological investigations. We recall the fact that there are in Man a number of affective instincts which impel him to action and determine the nature of his activity. A few of these—and they intrinsically the less energetic-incline us to love and serve our brother-men and our sentient fellow-beings generally; whilst a larger group lead us to pursue certain outward objects without any regard to the welfare of others. The former we call the altruistic, the latter the egoistic, feelings. These are the only motor impulses which exist in our nature; they alone prompt to action. Intellect suggests considerations which recommend or discountenance the gratification of those impulses, and devises means of attaining the ends at which they aim; but it has no impelling power, and, in their absence or inertia, would leave us quiescent. Such is the multiplicity and variety of our affective principles that, if they were left free to work according to their respective energies, the individual would be impelled, at different times, not

merely in different, but often in opposite directions, and no continuously predominant temper of the soul could be attained. The man would be the sport of every "random gust" of feeling within, and, as the result of this, his external activity would be marked by fluctuation, irresolution, and inefficiency. But the demand for internal harmony and outward consistency and continuity is a real and abiding force. The poet justly speaks of "the weight of chance desires"; he is tired of an "unchastened freedom";* and in these words he gives expression to a universal consciousness out of which arises "the great Human Problem"-how to establish and maintain a sufficient unity in our being—a sufficient convergence of our motor principles to a common destination, without which it is obvious, and is experimentally known to us, that we cannot be at peace with ourselves.†

It might at first be supposed that there are two

^{*}These phrases are quoted from Wordsworth's fine "Ode to Duty."

[†] J. S. Mill is somewhat impatient of Comte's insistance on "unity." But surely its importance is recognised by all notable moral teachers. "How long halt ye between two opinions?" "No man can serve two masters... ye cannot serve God and Mammon." See St. James i. 6, 8. Or consider the following words from the *Imitation*: "Cui omnia unum sunt, et qui omnia ad unum trahit et omnia in uno videt, potest stabilis corde esse et in Deo pacificus permanere.... Quanto aliquis magis sibi unitus et interius simplificatus fuerit, tanto plura et altiora sine labore intelligit, quia desuper lumen intelligentiæ accipit." Positivism accepts fully the *spirit* of these sentences.

different modes in which this unity could be attained, according as the personal or the altruistic impulses are habitually predominant; and it is true that unity is reached on the former basis in the lower grades of the animal series, where the sexes are not separated and the nutritive instinct has almost undisputed control. As our observations ascend through the biological scale, we find germs of a unity founded on sympathetic feeling. In the highest animal races there are sometimes noble and beautiful examples of unselfish devotion, especially to their offspring, as well as of voluntary subordination and self-dedication to the service of Man. But, taken as a whole, the basis of such unity as they possess is egoistic. In our own species, the consensus of the individual-his inner harmony-if it is to be thorough and abiding, must rest on the ascendancy of the altruistic instincts. Not only is the life of relation more fully developed in individual human nature, but the social state, domestic and civic, which, in any high degree, is peculiar to our race, demands a large development of sympathy, and also constantly tends to repress egoism and evoke altruism. It is the admirable property of the benevolent affections that, whilst intrinsically a source of the deepest and purest satisfaction and reproducing themselves by virtue of their inherent charm, they involve no conflict, such as the selfregarding feelings often create, between different individuals, but, on the contrary, awaken responsive sentiments and propagate themselves by moral contagion.

But though the influences of social life produce, in some degree, such an effect, nourishing our sympathetic and atrophying our selfish instincts, a more profound as well as systematic and continuous action on the heart is necessary to solve the Human Problem-to invert the relative energies of those opposite motors, and subordinate the naturally stronger to the feebler but more noble impulses.

To establish human unity is the work of Religion, and a complete solution of the problem of unity is for the first time reached in the final-that is, the Positive religion, which makes known to us Humanity, not merely as an aggregate of individuals, but as a real collective Being, superior to ourselves whilst homogeneous with us, controlling our destinies and sympathising with our efforts, and to which we are indebted for immense benefits. In earlier social stages, mankind attributed to imaginary Powers, not only the phenomena of the outer world, but also the happy influences exerted on our lot by the collective life; and, through willing subordination to these supposed benefactors, a certain unity was rendered possible, and was in fact increasingly realised. But that unity was necessarily imperfect and precarious-imperfect, because those ideal existences were often conceived as not only diverse, but mutually hostile: and precarious, because the

corresponding beliefs, even when rationalised to the utmost, being purely subjective, discrepant amongst themselves, and at variance with scientific fact, tended in process of time to be enfeebled and to disappear. A conviction of the subjection of all phenomena to invariable laws has been gradually reached, as the outcome of a vast induction; and the theory of the government of the world by supernatural wills has become incredible. There has risen in its place—as we have said—the recognition of Humanity as a perennial Power, submitted—like all other beings—to the uniformities of co-existence and succession constituting the spontaneous order of the world, but modifying that order through Her acquired knowledge of natural laws, and inspired by the conscious persistent aim of working out on our planet, so far as is consistent with our fatalities and limitations, a scheme of universal good. Using, then, the language of Religion, we say that the definitive unity of the individual will be reached through devotion to this true Great Being, whose existence and attributes no scepticism can dispute, and whose constant benefits, when rightly appreciated, must excite gratitude and love. Religion, appealing to and fortifying the altruistic principles in our nature, calls upon us to suppress every internal movement and abstain from every act which is opposed to the maintenance and development of the life of Humanity, and to cultivate all

the tendencies that promote Her well-being and further Her work. To know Humanity within the attainable limits becomes the task to which intellect should be consecrated, to serve Her the work to which our practical energies should be devoted; and thus a profound harmony is established between the different elements of our nature—Affection, Thought, and Action. And, whilst the altruistic impulses are made predominant, the personal instincts retain their due place; they are recognised as indispensable in the conditions of our life; their legitimate satisfaction is justified, and, though subordinated, they are dignified as the necessary basis and condition of useful social activity.

Except in some happily constituted natures, a perfect spiritual harmony, though always the ideal type or limit, is reached only in brief periods of exaltation and self-surrender. The characteristic fact of our ordinary moral life, as we have more than once indicated, is the recurring conflict between the personal instincts and the social affections. The former are felt to be the stronger in themselves; but the latter are always present and protest against the ascendancy of the others; and the question is again and again debated which are to prevail; moral progress being marked by the more frequent and easier prevalence of the altruistic motors. This is the struggle which St. Paul recognised when he spoke of the Spirit and

the Flesh—of nature and grace—as in constant antagonism.* Positivists differ from him only in this—that the office which he attributed to supernatural grace, they assign to natural agencies, which they seek by organised intervention to strengthen and generalise.

It will be observed that, in our enumeration of the fundamental elements of human nature, the name of Conscience, or of the so-called Moral Sense, does not appear. There does not, in fact, exist in our constitution any principle which knows intuitively, and pronounces with decisive authority on, the duties of men. We have, indeed, spontaneous sentiments of moral approval and disapproval, but they are the result of indirect and composite actions of our cerebral nature. The instincts which impel us to benefit others, imply and contain within them a feeling of good will to those who manifest similar affections, and of sympathy with the actions prompted by those affections; and, as liking implies disliking, we are repelled by sentiments and acts which are at variance with those affections. Our earliest moral appreciations are of the sentiments and acts of others. When our own are made objects of our contemplation, they necessarily affect us in the same way, unless self-partiality

^{*} So also the great Catholic Mystic: "Quis habet fortius certamen quam qui nititur vincere seipsum? Et hoc deberet esse negotium nostrum: vincere videlicet seipsum et quotidie fortiorem fieri et in melius proficere... Oportet ut discas teipsum in multis frangere."

should dull, or violent passion distort, our feeling. When a vicious impulse has been gratified, and so becomes quiescent, regret, or even remorse, is felt, because the altruistic instincts, no longer silenced by passion, speak once more, and we are dissatisfied with ourselves.

But whilst all morality has its origin in the social affections, these are far from supplying an adequate guidance to conduct. That can be found only in a rational study of the consequences of feelings and acts as affecting public or private welfare-consequences which are not, by any means, always obvious, for we must remember that benevolent inclinations are, in themselves, as blind as the egoistic, and may, in practice, sometimes defeat their own The altruistic impulses being supposed duly operative, the question remains-What are the real tendencies of any act or habit in relation to the wellbeing of Humanity, which those impulses set before us as the aim of our action? And this is matter for scientific investigation. Moral precepts are capable of demonstration, as resting on the knowledge of our personal and social nature and the facts of our situation: and convictions founded on that knowledge may be as strong as those based on scientific evidence in other provinces. Such convictions, if early formed and deeply impressed upon the mind, will be able to resist not only the persistent pressure of the selfish instincts, but-what are more dangerous—their sudden and unforeseen assaults.

Whilst the determination of duties is a matter of scientific proof, there may, and perhaps always will, be persons incapable of apprehending, in some instances, the demonstrations which establish moral rules; but under the Positive regime, they will be accepted on similar grounds to those on which, for example, the Earth's double motion is universally recognised. Moral beliefs, in fact, except in simple cases, where their foundations are obvious, will be just and beneficent social prejudices; they will always be demonstrable, but seldom demonstrated. It is not by the teaching of moral theorems that virtue is to be so much promoted as by the direct expansion of the social sentiments, which must, therefore, be developed from the earliest age by all the artifices which a sound philosophy or a sagacious empiricism can suggest. The principal resource will be the cultivation of practical habits; for in the moral art, as in all others, we learn to do things by doing them.

The special feature which distinguishes Positivist Morality is its pervading *social* character. All moral questions are referred to the well-being of Humanity. The "duties to ourselves," on which moral theorists sometimes dwell, have, as such, no meaning for the Positivist. The duties themselves, which are intended, are indeed real; but they are to be regarded, not from the personal, but from the social, point of view. The corresponding virtues are obligatory, because they adapt us for the better service of

Humanity. Without the practice, for example, of sobriety and continence, we cannot perform our social functions aright. This way of regarding personal morality removes all that is arbitrary in the conduct of our individual lives, and leads us, in contemplating particular acts, even such as might at first seem indifferent, to look beyond them to the habits they form and the capacities they develop, which are generally more important than their immediate consequences. And we are thus taught, not only to condemn undue self-indulgence, but to disapprove (whilst respecting the motives which sometimes dictate them) such excessive austerities as weaken forces which ought to be husbanded for social uses.

Two further remarks are needed for the complete elucidation of Positivist Morals.

I. "Right" and "Wrong" are commonly regarded as qualities inherent in actions, whatever the vague word "inherent" may be supposed to mean. But it is plain that these qualities have relation to the contemplative and meditative action of an observing intellect, as well as to the sympathetic sentiment of an affective nature. This consideration, whilst it renders it impossible for us to speak of Morality as "eternal" and "immutable," does not at all make it either arbitrary or dependent on the peculiarities of the individual. Its fundamental rules of conduct are indeed relative; but it is to collective Humanity that they are relative,

and they are, therefore, valid so long as the essential nature and situation of man remain what they are, being the necessary outcome of the general constitution of the species and its relation to the permanent environment. But the more detailed and special rules are relative also to the successive states of society arising from its dynamical laws. They become more numerous with the progress of social development and the growing complexity of social life, and are modified in their substance by our increasing knowledge of sociological, and even cosmological, laws. Obvious examples are supplied by the cases of Slavery and Polygamy, and by the altered duties imposed on individuals by changes in the system of civil government or by the evolution and recognition of a Spiritual Power.

2. For Positivists, "rights" of individuals do not exist in the sphere of morals; with the disappearance of supernatural wills, from which alone they could originate, they lose their meaning. Apart from special prescriptions of human law, on which, no doubt, rights may be founded which in its sphere are valid, we recognise only duties, and this at once changes the spirit and tone in which questions of mutual obligation are approached. For stormy self-asserting controversy, peaceable impartial study is substituted. By a "duty" we understand a useful social function voluntarily discharged. When it is so regarded, all that is vague and mystical in the notion of a "right" is cleared

away; and the claim of Humanity on our service takes its place. The one right (if we will persist in using the word) which any member of society can demand at the hands of his fellows is that of being free to do his duty, and being, within reasonable limits, enabled and assisted to do it.

For the moral regeneration of society, which is the great aim on which Positivism seeks to concentrate human effort, the principal resource must lie in Education. And the Education of the future must be, principally and throughout, religious, not indeed in the old, but in the Positive sense. modern intellect has revolted against this truth, when proclaimed especially by Catholicism, because it repudiated the ascendancy of the decadent faiths. But the Religion of Humanity re-asserts the claim, which lost its hold on progressive minds by being associated with retrograde beliefs. It will begin, in the domestic circle and under the guardianship of the mother, to train the heart of the child and discipline his habits, so as to prepare him for the future effective service of the true Great Being. The germs then deposited will be developed by the priesthood in the later systematic education of the youth, all knowledge, from the most elementary truths of science upward to its highest regions, being sanctified by this presiding destination. And these influences will be continued in the maturer life of the believer by the permanent consultative action of the Sacred Order, by the Social Sacraments which will be the moral landmarks of his life, by the regular practice of private prayer, and by the solemn and imposing festivals of the Church of Humanity.

CHAPTER V.

THE MORAL SYSTEM OF POSITIVISM COMPARED WITH BISHOP BUTLER'S.

THOUGH Positivists are generally averse to controversy, especially to criticism directed against the best of the preparatory religious systems, it has been thought expedient, for the better understanding of the doctrine expounded in the present volume, to place beside it an authentic statement, with the necessary comments, of views which the Christian theologians of recent times have generally adopted, so that it might be easily seen how far the two bodies of opinion on the Nature of Man and the Foundation of Morals agree and in what respects they differ. We have chosen the writings of Bishop Butler as expressing the Theological doctrine, because he is regarded as the ablest writer on Morals who belongs to that School. He, says Stewart, "has gone farther towards a just explanation of our moral constitution than any other modern philosopher"; and a similar judgment would, we believe, be expressed by the so-called "orthodox" British moralists with scarcely a single exception.*

^{*} The comparison here instituted will necessarily involve a certain amount of repetition of what occurs in the earlier part of the volume, the Positivist doctrines requiring to be re-stated.

Butler's Philosophy is not, however, uniformly and consistently theological; this is, indeed, no more than can be said of all moralists of that school. But theological considerations predominate; in general, with him, what should determine conduct is the divine will. But the metaphysical view also sometimes appears; and we find that, after all, the will of God is not the ultimate determinant. Thus he says:-" Hatred, malice, and revenge are not only directly contrary to the religion we profess, but to the nature and reason of the thing itself. The divine will is conformable to the law of truth, and in this the moral attributes of God consist"; so that behind this Will stands an antecedent and independent rule, which is its regulator, and conformity to which is its justification. In a well-known Note to the Analogy, he says, "it seems . . . inconceivable to suppose God to approve one course of action or one end preferably to another . . . without supposing somewhat prior in that end to be the ground of the preference," and he does not "deny that the will of God is determined by what is fit, by the right and reason of the case." This is the mode of treating Morals which Butler describes as that of inquiring into "the abstract relations of things."

Positive conceptions are also found in him, but blended with these theologico-metaphysical ideas.*

^{*} Butler is not free from the common equivoque as to the meaning of the word 'law.' In one—the scientific—sense, it signifies a

He recognises the existence of a natural or spontaneous morality in man, prior to precepts or rules of life. "There is," he says, "a natural disposition to kindness and compassion, to do what is of good report, . . . that part of the nature of man which, with very little reflection, and of course, leads him to society, and by means of which he naturally acts a just and good part in it, unless other passions or interest lead him astray. There is a fellow-feeling which each individual has in behalf of the whole species as well as of himself." Here he is plainly right; if there were not such a natural morality (or, as a Positivist would say, innate altruistic impulses) in man, education and discipline could never produce a systematic one. What we have to do is to strengthen and develop it.

He wavers as to the question whether in human nature Benevolence (or, to speak more properly, the

general fact in material or moral nature, without further implication; in another, it means an ordinance respecting conduct, deriving authority from a power which imposes and enforces it. "Man," he says, "is a law to himself without the distinct consideration of the positive sanctions of that law, the rewards and punishments which we feel, and those which, from the light of reason, we have ground to believe annexed to it. . . . Your obligation to obey this law is its being the law of your nature. . . . "This sounds like an appeal to something in our constitution as, in itself, a sufficient basis for moral distinctions and obligations; but no—he presently subjoins—"it is our natural guide, the guide assigned us by the author of our nature"—which brings us back to the theological point of view. The equivoque here referred to is the same which leads to the Theistic argument—"laws of nature imply a law-giver," which really begs the question at issue.

altruistic affections, which include Attachment and Veneration along with the more general affection) does, or does not, cover the whole field of virtue. "Vice, in general," he says, "consists in having an unreasonable and too great regard to ourselves in comparison to others"—and "that mankind is a community, that we all stand in a relation to each other, that there is a public end and interest of Society, which each particular is obliged to promote, is the sum of Morals." These statements a Positivist can accept, though, whilst recognising the facts, he does not proceed with Butler, going beyond the facts, to refer the felt obligation to a divine command, or to hold that, if we ought to do good to others, it is because we were "intended to do it." But in the Essay on Virtue (which is, in the opinion of the present writer, one of the weakest of his productions) he declares that "benevolence and the want of it . . . are in no sort the whole of virtue and vice"—at the same time, however, securing for himself a retreat from this position by reserving the questions "how far, and in what sense, virtue is resolvable into benevolence, and vice into the want of it." However this may be, he, in the passages previously quoted, regards the instinctive social feelings as laying the foundations of human morality, which is, without doubt, the true conception.

But there being, as he has abundantly shown, a great variety of conflicting propensions in our nature,

only a partial and precarious moral order will spontaneously exist; they cannot be left to their unregulated play; some permanent control will be necessary. And Conscience (or Reason, as he sometimes calls it) he regards as a faculty placed within us, to govern those propensions. "Reason alone," he says, "whatever anyone may wish, is not in reality a sufficient motive of virtue in such a creature as man; but this reason, joined with those affections which God has impressed on his heart." Here his language conveys a decided misconception. intellectual powers can never act as motors; they cannot prompt to any line of action. Such impulse belongs only to the affective part of our nature. Apparently he came to see this; for he elsewhere represents Conscience as not a distinct faculty, but a compound of intellect and feeling; and both do in fact generally take part in moral action, but not intellect—only feeling—can impel, can ultimately determine our acts. Two offices, and two only, intellect can fulfil in relation to conduct. It can show us how to arrive at the ends at which our affections aim, and it can point out the consequences to ourselves and others which will certainly or probably arise from our action. The affective principles alone can move us to act; reason can only present considerations which may awaken dormant, or stimulate languid feeling; if the feeling were not there, we should remain passive.

Stewart, too, speaks, as people habitually do, of

"yielding to the suggestions of Reason in opposition to the impulse of Passion"; but though we may adopt this popular way of speaking, we must always remember that only feeling—an affective instinct can impel to action or restrain us from it. When Reason seeks to influence conduct, it must do so by appealing to one of those instincts. If we say to a man contemplating an act—"It will injure your reputation," we appeal to his love of approbation: if we say "it will injure your family," to his parental affection; if we say, "it will cause you material loss," to his love of wealth (industrial instinct); if we say "it will ruin your health," to his self-preserving instinct; if we say, "you should not submit to tyranny," to his military instinct; if we say, "it would be unkind," to his benevolence, and so of the other motors.

Butler speaks of conscience as unerringly leading any plain honest man to solve aright every question of conduct.* This proposition he elsewhere modifies into—"almost every fair man in almost any circumstances." But the Positivist does not believe that there is any such absolute principle in us, whether

^{*}As if there were no cases of conscience, or systems of casuistry; as if Taylor and Sanderson, not to speak of Suarez or Escobar, had never treated them; and as if some men had not much more delicate moral feeling than others. Besides he here leaves out of account the indisputable fact that moral opinion varies, within certain limits, in the course of the historical development of Society—a fact, which as has been elsewhere shown, does not at all lead to the conclusion that morality is arbitrary.

simple or composite, dictating our duties *ex cathedra* by a sort of intuition. Only by observation and reflection as to the results of conduct were the rules of duty ascertained, and only in the same way can further convictions respecting them be now produced.

Butler is not without occasional glimpses of the true account of Conscience. "To be a just, a good, a righteous man," he says, "plainly carries with it a peculiar affection, to or love of, justice, goodness, righteousness, when those principles are the objects of contemplation. Now, if a man approves of, or hath an affection to any principle, in and for itself, incidental things allowed for, it will be the same whether he views it in his own mind or in another—in himself or in his neighbour. This is the account of our approbation, of our moral love and affection to good characters, which cannot but be in those who have any degree of real goodness in themselves, and who discern and take notice of the same principles in others." A Positivist would say— All men, in proportion to the strength of their altruistic affections, love and esteem those affections in others, approve of the actions proceeding from them, and disapprove of those which are at variance with them: this is what is real in the Moral Sense; the thing so-called represents indirect results of the benevolent instincts. And the moral appreciations thus generated first and most directly apply to the feelings and conduct of others, and

secondarily to our own, in which latter case they take the name of Conscience.

By nothing are Butler's views so much confused as by his admission of another regulative principle besides Conscience, of what he calls "rational selflove." Often as the name Self-love is heard, no such principle exists in human nature. We have a number of appetencies or propensions which aim at particular ends. Some of them have relation to the good of others; some—the egoistic—only to our own. One affection of the latter kind is the selfpreserving (or, as Comte calls it from its chief action, the nutritive) instinct. But this is no rational principle, any more than, for example, the maternal instinct. It acts automatically. "Self-love," he says, may "set us on work" to gratify our affections, appetites, and passions. But this, as we have already pointed out, is an error. The only stimuli to action are these affections, appetites, and passions; the self-love superadded is an imaginary appendage. The intellect, as we have said, may show us how to gratify these, or may recognise one of them, whether self-regarding or altruistic, as rightly protesting against such gratification; but they alone can impel or "set us to work," and a principle of "self-love," distinct from them, has no meaning at all. "Every man," he says, "has the principle of self-love, which disposes him to avoid misery and consult his own happiness"; but what is happiness? It must lie in the gratification of some of our inclinations, which do not require self-love to excite or strengthen them. When he says that because "the private interest of the individual would not be sufficiently provided for by reasonable and cool self-love, therefore the appetites and affections are placed within as a guard and further security," he inverts the true relations of things, for private interest would have no meaning in the absence of the affections and passions. He appears to have had a partial perception of this; for he seeks in the Preface to distinguish between "cool or settled selfishness," and "passionate or sensual selfishness," giving to the first only the name of self-love. To this he adds what is plainly impossible, that the former may create the latter, that self-love, properly so called, may produce movements towards external objects. "All men," he says, "form a general notion of interest, some placing it in one thing, some in another, and have a considerable regard to it throughout the course of their life; so, on the other hand, they are often set on work by the particular passions themselves, and a considerable part of life is spent in the actual gratification of them, i.e., is employed, not by selflove, but by the passions." He then goes on to present considerations which are really fatal to this view; as, indeed, it is obvious that if men place their interest (that is, as he himself explains, their happiness), some in one thing, some in another, what he calls "rational self-love" would consist in following the corresponding particular impulses, so far as they are not overborne by others.

There is, indeed, in human beings, the practical quality of "prudence," but its nature is commonly mistaken. It is not a selfish principle; it has no necessary relation to the preservation or the interest of the individual. It only determines the character of our action as cautious and circumspective. It may give that character to the service, either of self or of others, of vice or of virtue. Its highest office is to secure a wise benevolence, and to remove obstacles from the path of well-doing.

Butler affirms, that there is "no greater competition between benevolence and self-love than between any other particular affection and selflove." And he tells us that men, in general, have not the principle of self-love in excess, that it would be better for the world if it were stronger; yet, alongside of this, he speaks of the "overfondness" and "partiality for ourselves, which we are all so liable to," as leading us into evil. And elsewhere he admits that benevolence, "though natural in man to man," yet is "kept down by interest and competitions." These paradoxes and inconsistencies arise from his assumption of a self-love which has no special relation to the egoistic, or self-regarding, instincts. When we see that no such motor really exists, we distinguish men as they are habitually under the control of those egoistic feelings, or under that of the altruistic affections. Thus, that a man habitually devotes the aptitude which we call "prudence" to securing the objects which only gratify him personally, stamps him as an egoist, and places his nature more or less in opposition to that of a man who exercises his gift of circumspection in pursuing the good of society. Men's actions are prompted by their affections. The whole moral question is, what the predominant affections are.

"Duty and interest," he says, "are perfectly coincident; they mutually carry on each other." As we understand from him that "interest" means merely "that an appetite or affection enjoys its object," these assertions imply that there is no real opposition, as to their effect on the conduct of the moral agent, between the self-regarding and the altruistic feelings. In that case the conflict indicated by St. Paul would not exist, nor what Comte calls "the great human problem"; intelligent selfishness might be made the rule of life. What is really true is, not that these principles in our nature are harmonious, but that they may be harmonised—only, however, on the basis of the permanent subordination of the one group to the other. On this subordination, according to Positivism, true happiness depends.

On the fundamental question of the ultimate motive to virtue, Butler, as usual, fluctuates. Sometimes he distinctly puts forward the doctrine of personal Eudæmonism, "Nothing can be of consequence to mankind or any creature but happiness."
"Though virtue or moral rectitude does indeed consist in affection to, and pursuit of what is right and good as such; yet, when we sit down in a cool hour, we can neither justify to ourselves this or any other pursuit, till we are convinced that it is for our happiness, or at least not contrary to it." This latter sentence has shocked some of Butler's admirers; it might, indeed, have been written by a Hobbist. It is plain that he held no definite and clear opinion on the question. His intellect easily got entangled in metaphysics.*

He discourages the consideration of the general consequences of conduct (at least in the present life), as if it ought not to enter into our moral estimate of acts, and says, "The happiness of the world is the concern of him who is the head and proprietor of it"—a proposition which must be emphatically denied. Quite independently of theistic belief, it is the business of all men, according to their capacities and opportunities—indeed, with his habitual inconsistency he appears elsewhere to admit this.

Positivists have a decided view as to both the questions, What is virtuous feeling? and what is

^{*} Generally speaking, we may pronounce that his forte did not lie in analysis. In the first note on Sermon V., in replying to Hobbes, whose view he rightly rejects, he absurdly represents that philosopher as making the pity for friends equivalent to fearing our friends.

right conduct? According to them, Virtue consists in the habitual subordination of egoism to altruism, or, in the language of their Religion, in the systematic service of Humanity. And it is the function of the intellect to discover how Humanity can be best served. Love must be the motor of virtuous action; interpreted experience is its necessary guide.

NOTES

ILLUSTRATIVE OF THE PRINCIPLES OF POSITIVISM



'ABSOLUTE' AND 'RELATIVE.'

Comte has the following sentence—'Tout est relatif; voilà la seule proposition absolue.' He observes that so characteristic of his philosophy is the principle of relativity, that, if the name 'Positivism' did not offer superior advantages, it might be called 'Relativism.'

All our knowledge, in fact, being confined to phenomena, is purely relative. We can know nothing of 'things in themselves'; but only of their relation to us and to other things—how they affect us, and how they modify other objects. The want of a single sense shuts out from us the knowledge of one whole class of physical facts; and, no doubt, the acquisition of an additional sense would reveal to us another class now outside the range of our observation.

Further, all events depend on conditions, and are determined by them; and, in this sense also, there is nothing absolute. Creations and first origins are inaccessible to us. Phenomena are

simply changes; and it is a uniform fact within the whole range of our experience that, previous to any given change, definite conditions must be satisfied, and that, when they exist, they render the change inevitable.

The Positivist does not consider perfect knowledge of the outer world, of society, or of human nature, to be either attainable by us or necessary for us. He thinks the right aim is to attain such knowledge as will be useful for real human needs, and he regards much that is accessible as valueless, and the labour spent on its acquisition as wasted. The true end of all knowledge—he holds—is to be the guide of practice—whether in action on the physical world, or in the regulation of our hearts and lives; and whatever cannot be shown, or does not appear likely, to tend directly or indirectly to that end may safely, and indeed ought to, be neglected. But of course, in applying this rule, we must beware of forming hasty or narrow judgments.

Observation forms us to the habit of expecting and estimating degrees in the properties and acts of things and of persons. We do not find perfection anywhere, only different grades of approximation to it. And hence the Positivist, whilst honouring all useful existences, especially such as are superior to himself in moral qualities, does not prostrate himself in spiritual self-effacement before any. In his aspirations towards goodness, he does

not place before him a goal of flawless excellence; but, impressing on himself a constant sense of his shortcomings, aims at daily becoming better. So also in social affairs, he is neither an optimist, nor a pessimist, but a "meliorist"; recognising, with Leibnitz, the present as, in its essential features, the child of the past and parent of the future, he wishes for such a gradual progress as shall be "the development of order." For the regeneration of society, to which he looks forward, sentiments and opinions, in his view, must come first; then habits of action; and lastly institutions, which may be prematurely, as well as too tardily, created. In his judgments respecting historical acts and institutions, he cultivates the same tendency to relativity, regarding them in the light of the character and circumstances of the times to which they belonged; but he does not approve them indiscriminately.

These modes of thinking have their most important application with respect to Religion. Knowing that there is an ascertained law of ordered change in men's opinions, by which, in process of time, they regularly move from their primitive state towards the final Positive synthesis, he recognises the natural relation of the religions of the past to the contemporary and local civilizations, and therefore, instead of condemning them, seeks to understand and explain them, and to appreciate their real, though only transitory, usefulness. But he

gratefully acknowledges the progress which has taken place in passing from the earlier to the maturer systems, and proclaims the inferiority of all the preparatory syntheses to the final, which is alone adapted to the stage of civilization now attained by the most advanced communities.

The relative character of Positivism is very clearly seen in its system of commemoration, as exhibited in the Historic Calendar constructed by Comte. In this, all who have from the earliest times made important contributions of whatever kind to the progress of Society, find their appropriate places, none being excluded on the ground of their religious doctrines.* Such a comprehensive glorification of services rendered to Humanity was impossible under any of the theological creeds, and especially so under Monotheism, the most absolute of them all.

^{*} Even those who are not Positivists will find this Calendar most valuable as a concrete representation of the course of history, and may be advised to adopt its system of dates, in conjunction with that in present general use, as bringing frequently before their minds the immense benefits bequeathed to us by the Heroes, Saints, and Sages of the past.

II.

'ABSTRACT' AND 'CONCRETE.'

THERE is often a good deal of vagueness and confusion in the use of these words, and it is desirable that we should conceive distinctly the contrast which they imply. In the study of the natural order, we may adopt two different modes of proceeding. We may, firstly, examine the nature and manner of existence of a body inorganic or organized, taking into account all the properties it exhibits and all the influences which affect it. When we have a practical aim in such a research, it is usually that of improving this body or the circumstances under which it exists. Or, secondly, we may study, not a body, but an event, or, in scientific language, a phenomenon. This phenomenon must be, as far as possible, isolated from every other which in any real case coexists with it, in order so to ascertain the necessary and sufficient conditions of its manifestation. We separate it in idea from the body in which it appears, and group it, not with the other properties of that body, but with phenomena similar to itself which are observable in other bodies or classes of bodies. And, if we have a practical object in ascertaining the law of the phenomenon, it is usually that of being able to foresee and thus to facilitate, prevent, or modify its accomplishment. Now, of these two modes of proceeding, the former is concrete, the second abstract.

These considerations determine the distinction between Abstract and Concrete Sciences. A Science is abstract, if it discovers independently the laws of a distinct general order of phenomena; whilst, if it derives its truths altogether from a combination of the results of other sciences, and does not rest on special inductions of its own, it is Concrete. Thus, for example, Astronomy is an abstract Science, because it establishes the law of gravitation, which is not implied in the Mathematical laws of magnitude and motion; and Biology is an abstract Science, because the vital laws cannot be wholly derived from those of inorganic nature. But Geology is a concrete Science, because it announces no new law respecting any mode of existence, but merely supplies a theoretic history of the action of laws already established on the condition of the Earth's surface. And Meteorology is a concrete Science, the phenomena of the Atmosphere being composite results of simpler phenomena whose laws belong to almost all the Abstract Sciences.

A complete systematisation of Concrete Science is impossible, as beyond our feeble powers of combination. It is only Abstract Science that we can truly systematise, and this not in an absolute sense, but sufficiently for our real needs. For philosophical ends, apart from industrial requirements-for a right understanding of the general economy of nature—for the construction of an intellectual and moral synthesis-for the religious co-ordination of all our theoretic ideas round the central conception of Humanity, so as to supply a foundation for the conduct of life (which is the ultimate aim of all speculation), the Abstract Sciences, as a whole, are sufficient; and hence these alone enter-but they all enter-into Comte's classification and into the synthesis which he constituted, and they will for ever form the basis of the Positive system of universal education. On the other hand, for industrial purposes, such combination of laws as is required for the solution of special problems must be committed to practical men; and not only so, but for the conduct of practical operations generally, even in the highest departments of human affairs, as for example in politics, we must mainly rely on special experience and the sagacity it develops, Abstract Science furnishing only such indications as may enable the practician to generalise and co-ordinate his conceptions. Abstraction, though necessary for these objects, always involves the omission of some of the features

which present themselves in any particular case. and therefore diminishes the reality of our scientific When precision of actual fact is statements. required, we have to re-introduce the omitted features. This is often a difficult and sometimes an impossible process; and either the neglect of it, or the unsuccessful attempt to effect it, not unfrequently leads to dangerous errors of practice, as in action founded on the (so-called) Science of Political Economy. In the art of morals alone it is true that all men are alike practicians; and the philosopher, or, more properly, the priest, must teach not only the theory, but the practical application of it. And this was provided for in Comte's scheme of education, as well as in the book which was to form the most important part of his 'Subjective Synthesis' and of which unhappily his death deprived us; the first volume of this book was to have had for its subject Theoretical Morals, or the Knowledge of Human Nature, and the second Practical Morals, or the Improvement of Human Nature.

There are in Comte some uses of the word 'abstract,' in which it is not fully explained by the above observations. Thus, in speaking of the elementary or irreducible intellectual powers, he says:—"they must be abstract in their nature, so as to apply indifferently to all the varied products of the intellect." The meaning is, that in their application to different subjects of contemplation or

meditation, their processes are essentially identical. Afterwards, when enumerating the intellectual faculties, he recognises two modes of Contemplation, one Synthetic, referring to objects, and more used in Art, the other Analytic, taking cognisance of events, and more used in Science; and, of the latter, he adds, "its nature is, therefore abstract." As he had previously asserted the abstract nature of all the intellectual faculties, he does not intend (as indeed he expressly mentions) to discriminate between the two sorts of Contemplation as involving the idea of different mental processes being followed in Science and Art; both sorts are employed, though not equally, in the two domains; but one regards objects, the other phenomena or the properties of objects.

III.

LAWS AND CAUSES.

It is known that Comte discountenanced the use of the word 'cause' in relation to natural phenomena. In his view, it was inseparably associated with pre-scientific conceptions. He repeatedly employs the phrase 'the double causality' to express the first two stages of thought respecting the facts of nature—the Fetishistic and the Theological that which attributes them to direct volitions of the individual objects which present them, and that which refers them to the action of beings distinct from the objects, and presiding respectively over particular classes of phenomena. Most writers, however, have regarded it as possible to preserve the word 'cause,' giving it a purely scientific interpretation; and J. S. Mill, in his Logic, argues in favour of this course. If we thus positivise the term, it will mean a fact, which is invariably followed by another fact. This invariable conjunction, as Hume long since showed, is all that we can predicate as to the so-called 'causal' connexion between two

events, and, whenever it can be predicated, that one which precedes the other may properly enough be spoken of as its cause. There is no decisive objection to the use of the word in this way, so long as it is really emptied of any fictitious theory.

Yet it may be questioned whether it does not, as Comte thought, almost inevitably suggest the exploded doctrine and tend to revive it in our intellects. We think of a 'cause' as a sort of semi-personal agent enforcing the sequence of an effect. So long as the theological idea of nature subsisted, the cause, being a spiritual volition, or an inherent entity, was essentially single. But when scientific analysis succeeds, we see that the cause is, in general, multiple; it is an assemblage of conditions, sometimes numerous, that determines the effect. As J. S. Mill says, in his Logic (Bk. III., chap. 5), "the cause, philosophically speaking, is the sum total of the conditions, positive and negative, taken together; the whole of the contingencies of every description, which being realised, the consequent invariably follows." And hence he goes into lengthened explanations as to when and how far one of these several conditions, even a negative one, may rightly be called the 'cause.' It would perhaps be more accordant with reality and would prevent misconception, if we spoke of the collective conditions of a phenomena as its 'determinants,' and dispensed altogether, in philosophic discussion, with the use of the word 'cause.'

There appears to be a lingering notion that some degree of the mystery attaching to the mode of production of all phenomena alike, is removed by the resolution of a given law into a higher law. But this is not so; it is only that one mystery is exchanged for another of wider range. It is indeed desirable that derivative laws should be reduced to more comprehensive ones, but the gain is only a simplification in relation to our memories and logical processes. All that we can attain in the way of 'explaining' or 'accounting for' laws is of this nature, and even this sort of explanation is restricted within narrow bounds,-a fact which men of science do not always sufficiently keep in view. "Even when Science," says Comte, "has become aware of the inanity of [ontological] causes, and gradually establishes the reign of laws, it aspires, as much as Theology and Metaphysics, to complete objectivity, dreaming of a universal explanation of outward things by means of a single law as absolute as gods and entities, in accordance with the Academic utopia." Such an objective unity is chimerical; a subjective unity, founded on the moral destination of Science, is alone attainable, and has been constituted by Positivism.

Whilst endeavouring to exhibit, as far as possible, the several uniformities which exist amongst phenomena as cases of more comprehensive laws, we must remember that the really vital questions respecting any law, derivative or other,

are—Is it true within the limits within which we have occasion to use it? And does it really enable us, in a certain degree, to arrive at prevision, and so serve to guide our conduct? By far the greatest number of those that are practically important to mankind are empirical in the sense that they are possibly, or even probably, derivative,* and that we do not know the laws from which they would be deducible. But we must not be prevented by any philosophic purism from valuing them as they deserve, and utilising them, though we have not succeeded, and may never succeed, in resolving them. The great desideratum is to find, in any attainable measure, unity amidst diversity.

^{*} Such are, as Mill mentions, the laws of chemical action, as at present known, the laws of vegetation and organic life, all truths of common experience, constituting a practical knowledge of mankind, and all the laws of human society, inferred from history.

IV.

'OBJECTIVE' AND 'SUBJECTIVE.'

THE order of the Sciences in the encyclopedic scale may be fixed on two different principles. We naturally first arrange them as, in the intellectual evolution of our race, they successively became subject to Positive (or genuinely scientific) This order was by no means either treatment. arbitrary or accidental; it naturally and necessarily coincided with the line of least resistance, and therefore depended on the mutual relations of the several elements of the series, that is, on the diminishing generality and increasing complexity of the phenomena with which they deal. When we follow this ascending order, rising from Mathematics to Sociology, it is natural to suppose that in this last we have reached the highest degree of speciality and complication. And this was at first Comte's view. But it was one of the results of his latest and best period that he added to the series a distinct science of individual human nature, for the study of which he had previously thought

sufficient provision was made in Biology (especially in the cerebral theory), and in the moral analyses necessarily introduced in Sociology. One reason for this addition is given in the *Positivist Catechism*; and it is conclusive from the objective point of view. This reason is the necessity, in the interest of theoretic completeness, of having regard to the cerebral reactions of the vegetative viscera, which are not considered in the general theory of life, and which, since, by the diversities of individual temperament, their effects are neutralized when society is viewed as a whole, form no part of the proper subject-matter of Sociology.

But there is another way of looking at the whole system of the sciences. The individual may set out from the standpoint of Practical Morals. Conscious of the conflicting tendencies of his being, and tired of the irresolution and inefficiency (not to speak of worse consequences) arising from this internal dissonance, he may propose to himself the question of self-discipline-how the heart, and through it, the conduct is to be regulated; how man can attain the harmony of feeling and the unity of aim which constitute the health of the spiritual nature. He will easily discover that not within himself is the solution of this question to be found, the random and undisciplined play of various and even opposite affective impulses which there exists being the very evil from which he seeks deliverance. His salvation must be in voluntary subordination to

something outside and above himself, which, when theological fictions have lost their hold on him, must be the collective existence which rules his life. Thus he will be led to recognise the necessity of studying Humanity-of learning the nature of the social medium in which he is plunged, and which incessantly modifies him—in other words, he will see that Sociology must precede Morals in the scientific hierarchy. But Sociology will plainly require a previous knowledge of the general laws of life, which condition and dominate Society. Vital science leads us back to Cosmology, the outer world being the scene of the phenomena of life, and material laws influencing organic acts and structures. First, Chemistry, and then Terrestrial Physics are thus introduced into the scale; and these must have for their basis Celestial Physics or Astronomy, which, again, pre-supposes Mathematics as teaching the general laws of universal existence —those, namely, of motion, extension, and number. This completes the scientific system; and thus is reproduced, from the Subjective and synthetic point of view, the same construction which the Objective method had previously created by dispersive and analytic efforts. But, in the second method, we reverse the process first pursued, and pass through the several steps of the scale, not in the ascending, but in the descending order; the members of the series taking the same respective places as before, but not on the ground of their increasing

complexity, but on that of the increasing closeness of their relation to Humanity.

And, from this standpoint, looking back on the history of Science, we see that all the great theoretic minds, from Thales and Pythagoras to Bichat and Gall, were occupied, not perhaps always consciously, in preparing the materials necessary for the ultimate systematisation which was to be the guide of practical life. The result of their labours was the formation of a body of positive conceptions relating to the outward world and to social and individual man, which, when completed and properly co-ordinated, were to compose the dogma of the final Religion, and on the basis of which its discipline was to be constructed.

We may justly say that there is, in reality, but one science—Morals, or the Science of Man, which implies and potentially comprises all those below it in the hierarchy, since they deal with actual elements or conditions combined in Man, whose nature contains in itself all inferior forms of being, whence some of the ancients called him a microcosm. If, notwithstanding the legitimacy of such a conception, we maintain the multiplicity of steps in the series, it is because the lower orders of phenomena cannot be directly studied in man; logical necessities compel us to examine them in the simplest cases of their manifestation. And, ascending, one by one, the successive grades of the scale, we are thus at last brought back to Morals as the crown of the edifice, where, the

abstract and the concrete at last coinciding, man is considered in his indivisible existence, all the preceding sciences contributing their methods and their conclusions to this highest department of research with a view to the practical end of the adaptation of the individual to the service of the Great Being.

Besides the methods best exemplified in the several simpler sciences-Deduction in Mathematics, Observation in Astronomy, Experiment in Physics, Nomenclature in Chemistry, Comparison in Biology, and Historic Filiation in Sociology, Morals has a method peculiarly appropriate to itself, namely, the Subjective, which proceeds not from the world to man, but from man to the world. It presides over construction, as distinct from deduction and induction; and we have given an example of it in its mode of constructing the Encyclopedic hierarchy. We cannot admit the claim of Intellect divorced from Feeling, to the supreme control of our systematic thought. When, having traversed the inorganic and vital provinces, we come to the directly human domain, the social point of view becomes paramount; and it is seen that intellect must take for its function the enlightenment and service of the social sympathies, abandoning its tendency to speculative digressions which have no relation to the welfare of Humanity. It is the work of the Subjective Method, which succeeds to the Objective without superseding it, to direct the action of the latter, to supply the light in which the whole system of laws, and each order of them,

is to be regarded; to set aside inaccessible or idle inquiries; to propose the questions requiring solution in the human interest, and to suggest the lines of that solution; and, where ascertained laws leave open a selection, to satisfy our æsthetic impulses by framing the best mode of representing phenomena—the best, that is, in relation to the improvement of our nature, as tending to the development of synthesis and sympathy. It has to keep in view what might otherwise be overlooked, and is habitually overlooked in the pursuit of the dispersive specialities of Knowledge (whether science or erudition)-namely, the final religious purpose of all research as well as of all activity. Theology once inspired this conviction, and cultivated the corresponding mental habits; but its action was vitiated by the search after chimerical causes. The Subjective method, the only one it used, could not arrive at solid results till it had been preceded by the entire development of the Objective, which was directed to the normal aim of the discovery of laws, but tended to subordinate unduly the spirit of generality to the spirit of detail. But, having now, from absolute and personal, become relative and social, it must again, in this amended shape, exercise the regulating and coordinating office which rightly belongs to it, and present Science as an indivisible whole, disciplined and unified by social sentiment.

'STATICAL' AND 'DYNAMICAL.'

THESE words are of course borrowed from Mechanical Science, and have relation primarily to the states of equilibrium and motion of a body or system of bodies. As applied in Biology, they indicate respectively the facts of organisation (Anatomy) and the phenomena of Life (Physiology). By Comte their use was extended to Sociology, Social Statics being the title of that portion of the Science which describes the conditions of existence common to all human societies. and persisting throughout the course of their development, or, in other words, the Theory of Order; and Social Dynamics, the name of that portion which ascertains the laws of the evolution of Societies, or, in other words, the Theory of Progress. Both these studies are necessary for the constitution of a Positive Sociology.

They are far from being absolutely independent of each other. As, in Mechanics, Dynamics is essentially connected with Statics; as, in Biology, the doctrine of growth implies that of healthy existence; so Social Statics and Social Dynamics are bound together by the general fact enunciated by Comte that "Progress is the development of Order."* In fact, in each of these Sciences the two points of view, while clearly distinguished, must be habitually combined.

But here arises a question which cannot be overlooked. In the study of Society there are plainly three distinct subjects to be considered—first, its constitution as regards the several social forces coexisting and working in it at a given time; secondly, the play of these forces amongst themselves, their mutual action and counter-action; and, thirdly, the changes which take place from time to time, whether by way of normal development or of degeneration, in either the organs of the Society or the functions of those organs. Do, then, Social Statics and Dynamics, taken together, cover the whole of this ground? Ought not the division of Sociology to be, not binary, but ternary? Should Social Statics be regarded as dealing exclusively with structure, as the analogy of Anatomy might seem to indicate? Is the name of "Dynamical Laws" of Society to be applied only to those changes by which it passes to a higher or lower plane, and not also to those of the inter-action of

^{*} This may be regarded as analogous to D'Alembert's Principle in Mechanics.

social elements in which its daily life at any period consists? Comte, whom no question of method escaped, saw that this doubt arose, and gave it a definite solution.* "With regard to every living being," he says, "we must introduce, between the connected ideas of organisation and life, an intermediate idea, hitherto too vaguely conceived, for which we must reserve the special name of 'existence.' Applicable to all real substances, this word expresses always their proper and continuous activity. In Biology it corresponds to what is radically permanent in each system of vital phenomena; so that the 'life' of a being consists in the series of modifications which its 'existence' successively undergoes in a series ending in death." . . . "In Sociology the term 'existence' expresses the fundamental economy of the great organism."* Social Statics must comprise the study, not only of structure, but of existence—of the essential functions, which in fact conserve the structure, whilst Social Dynamics, on the other hand, deals with the life of a society in the large sense of that word—the successive changes which in process of time modify, whether the social structure or the functions of the several organs composing that structure. These changes are indeed continually in progress, but in Social Statics, when considering the several elements of a Social state and their con-

^{*} Pol. Pos., II., chap. 6.

sensus, we "abstract, as far as possible, from the fundamental movement which is perpetually modifying them all."

This conclusion as to Sociological method harmonises with the conception now universally accepted, that in Biology, Anatomy and ordinary Physiology should be kept in close relation, organ and function being thus studied combinedly; whilst the study of Development, not in the individual life alone, but in the animal series (whether we adopt or reject the Darwinian hypothesis), forms a second great division of the subject. And, carrying back the same conception into Mechanics, we see that quite similar is the division between the study of the structure and ordinary activity of a system of bodies on the one hand, and that of its general modifications on the other—as, in the Solar System, its constitution is in our view to be combined with its general movements regarded as permanent, whilst a separate study is made of the changes, whether constant or periodic, wrought in it by perturbations, and possibly in the past or the future by, e.g., the cooling of the Sun or of the several planets.

FINAL CAUSES.

THERE are strong expressions in the writings of the most eminent philosophers as to the worthlessness of the consideration of Final Causes. Bacon says, in often-quoted words, "Causarum finalium inquisitio sterilis est, et, tanquam virgo Deo consecrata, nihil parit" (De Aug. Sc., III. 5). And, under the head of Idola Tribus (Ib. v. 4), he notes as a grave error "quod homo fiat quasi norma et speculum naturæ; neque enim," he adds, "credibile est . . . quantum agmen idolorum philosophiæ immiserit naturalium operationum ad similitudinem actionum humanarum reductio, hoc ipsum, inquam, quod putetur talia naturam facere qualia homo facit." And again, in Nov. Org., I. 48,—"Causas finales, quæ sunt plane ex natura hominis potius quam universi, atque ex hoc fonte philosophiam miris modis corruperunt." Similarly Descartes—"Let us never found any of our reasons concerning physical phenomena on the ends which we may imagine God or nature had in view in the

constitution of the universe" (*Principia*, I. § 28); and "I am of opinion that the whole of this speculation concerning Final Causes is altogether useless, because I do not think that we can, without rashness, presume to investigate the designs of God" (*Med.* IV.). Stewart labours (*Act. and Mor. Powers*, Bk. III. chap. 2) to show that these objections were made only against the introduction of Final Causes into *physical* investigations; but, if just, they plainly lie against the use of such considerations in the research into all sorts of natural facts.

It has been argued against this exclusion of Final Causes from the domain of Positive Science that the consideration of ends or uses may lead—and, in fact, has led—to discovery, especially in Biology; and the well-known case of Harvey and the circulation of the blood, as related by Robert Boyle, has been appealed to* (Stewart, op. et loc. cit.). But, in so far as the study of Final Causes can be made available for the discovery of Biological laws—the principal province of its application—Positive philosophy replaces the theological dogma by the scientific principle of the conditions of existence, which, without involving any hypothetic element, recognises the simple fact that, as a given organ (or element of structure) enters into the com-

^{*}Harvey's discovery (or rather, demonstration) of the circulation did not, however, rest exclusively on the consideration of the direction of the valves in the bloodvessels. See Foster's *Lectures on the History of Physiology*, chap. II.

position of a living body, it must necessarily concur, in a definite, though possibly, an unknown manner, in the series of acts which constitute the existence of the body; and thus, that there is no more an organ without function than a function without organ* (see Phil. Pos., III., p. 459). When we have ascertained the existence of a function, we cannot be surprised to find, on anatomical examination, an organ (or a structural character) which enables the function to be exercised. But this principle leaves it open to us to argue on independent grounds, special to the case, that the organ is imperfectly constructed, or that the function is an unnecessary complication. Thus, for purposes of research into the laws of organic nature, it appears that the principle of "conditions of existence" effects all that the study of Final Causes has been alleged to do; and its scientific usefulness is by no means limited to that department of things.

This, however, does not exhaust all the questions that may be asked on the subject of design and adaptation. Any candid observer must admit that there are in nature many things that bear, at least on the surface, and at first view, the appearance of being the result of the design of a mind constructed like the human. But when we ask, Are they really the fruit of design? the more the subject is

^{*}This principle is not to be taken as inconsistent with the existence of rudimentary organs—however these are to be explained—or of organs which have become atrophied by desuetude.

considered, the more it will appear that we cannot arrive at a satisfactory answer to the question, whether in the affirmative or the negative. Positivists prefer to refrain from urging the considerations which are adverse to the theistic view, because they recognise the fact that the inquiry is radically inaccessible to our means of exploration, and that, with respect to the facts of nature, we can sometimes answer the question—How they occur, but never the question — Why? They contemplate the opinions which have existed on the subject from the historical point of view exclusively.

Primitive men naturally supposed that the really inscrutable causes which produced phenomena were Wills similar to the human, either dwelling in the objects, as the Fetishist thought, or outside them, as the Theologist supposed. But these hypotheses must be taken simply as spontaneous imaginations, not admitting of proof, and interesting to us only as marking temporary stages in the intellectual development of the race.

Our true attitude in relation to the question is not to exhaust ourselves in endless debates, which cannot lead to any issue, but, recognising once for all that it is insoluble, to put it aside, and concentrate our attention on really accessible subjects, which vitally affect our destiny. What is in fact at present leading mankind more and more to neglect such inquiries is our better understanding of our situation and our real wants, and the

consequent change in the direction of our speculative efforts. When Science has once satisfied us that events do not depend on divine volitions, but take place according to invariable relations of similitude and succession, the question of Theism loses all except a historical interest, because it ceases to have any practical importance for us, since we cannot, as the Theologist believed, influence events by appeals to supernatural intervention. The belief thus tends silently to disappear, surviving only in conventional formulæ, whilst the truth is increasingly recognised, that the one real Providence is that of Humanity, and what we have all to do is, in our several degrees, to regulate its exercise for the benefit of Society at large, present and to come.

In these tendencies there is nothing common with Atheism, regarded, not as a mere phase of transition, but as a permanent doctrine—either in its inherent character, or in its reaction on the heart and the intellect. Whilst Positivism transfers our allegiance from God to Humanity, and founds on voluntary subordination to the latter as presiding Power, and on the ascertained laws of the physical and the moral world, a definite scheme of demonstrable duties, which constitute its principal province, and absorb its chief attention, Atheism occupies itself with questions incapable of solution as to cosmical origins, the beginnings of animal life, and the like, drawing us away from the scientifically accessible subjects, which are really im-

portant for us, especially those dealing with the natural laws which regulate political and moral phenomena.

We do not enter into the question suggested by the somewhat obscure pronouncement of Renan, that "God is the category of the ideal," a ground on which some might rest the necessity of preserving Theistic belief. For it is obvious that God cannot supply the human ideal. A being supposed to transcend immensely our conceptions, and to exist under conditions—if any—either unintelligible to us, or utterly different from those to which men are subject, can never furnish an imitable type for them. The recognition of this is implied, when the last and best of the decadent religions humanises its God, and presents to us, not the divine, but a supposed perfect human character, as the model for our imitation.

Similar observations apply to the Future Life, as conceived in Theologism. Such a life is entirely incapable of proof, and we can make no affirmation or negation respecting it. The Positive, as distinguished from the Theological doctrine on the subject, is a statement of undeniable facts. Every servant of Humanity has two successive lives—one objective and temporary, in which his direct work is done, the other subjective, a life in the minds and hearts of others, where he works indirectly but permanently, the result of his labours and example being eternally preserved in the sum

of things, though his name may be forgotten. This is the true immortality, consisting in the perpetuity of service, not in personal survival.

But, it may be said, must not the mere possibility of a personal future life, or any, the smallest, ground for regarding its probability as preponderating in the scales of judgment, have a potent effect in determining our conduct? To suppose this would contradict all we know of human nature, which is little influenced by expectation of remote and dubious consequences. Now that Science has thoroughly undermined theological doctrines, resolutions overmastering our selfish instincts and directing our whole behaviour, often in trying circumstances, cannot be inspired by such vague and uncertain bases of belief. They must in future be dictated by profound convictions, resting on rational study of the demonstrable results of different systems of conduct—those convictions operating chiefly on the altruistic affections which Theology and Metaphysics have often denied, but which Science has proved to be amongst the real elements of our nature.

VII.

MATERIALISM.

ONE of the most important views presented by Comte relates to the nature of what is called Materialism. It is often regarded as consisting in a particular opinion as to the intimate essence respectively of matter and mind—a subject quite inaccessible to our researches. Its true significance appears on an examination, from a special point of view, of the Encyclopedic Scale. Each science in that scale borrows conclusions from the preceding and simpler sciences. But each also requires independent inductions of its own, which give it its individual character. Now Materialism consists in denying or overlooking the latter fact, and attempting to construct one of those sciences exclusively from the materials supplied by its predecessors. This vicious procedure may take place in relation to any science after the first in the series. Materialism to attempt—ignoring the fundamental dualism of Inorganic and Organic bodies-to seek to explain the facts of life from Cosmological laws

alone. Especially is this true when the attempt is made with relation to the phenomena of Cerebral life. It is Materialism, again, to represent the science of society as a mere corollary of Biology, neglecting the historic inductions on which it is chiefly founded. So is it also to reduce Morals to Sociology, overlooking the laws of personal unity of the internal harmony of the individual. The general tendency of these errors is to compromise the originality and dignity of the higher fields of research and to degrade them to the level of the lower. The radical vice is everywhere the same, and it extends even to the internal repartition of each science, which, when rightly framed, is regulated by the same principles as the arrangement of the fundamental members of the Hierarchy-namely, the diminution of generality and the increase of complexity of the corresponding phenomena.

It is in relation to the noblest speculations that this tendency is most dangerous, and has been felt by the public instinct to be so. It would, indeed, be unjust to impute to those who have fallen into this error a moral culpability, or to suppose that their principles of conduct are necessarily perverted by it. On the contrary, the mode of thinking here described, by being associated with the insurrection against the oppressive domination of Theologism, has been in many instances invested with a progressive character, and has been allied with generous inspirations. Still, it is undeniably true

that, especially since Negativism has ceased to be an instrument of progress, the mental tendency here characterised has usually the effect of deadening the finer feelings and creating an habitual depreciation of the affective as compared with the intellectual life, the latter being regarded as more explicable by the materialistic hypothesis. Historically, an opposition has been offered to it by Spiritualism, which is, however, no less irrational. But now an adequate barrier against it is erected by the Encyclopedic Hierarchy, which gives the due weight in methodology, on the one hand, to deduction from earlier sciences, and on the other. to the original inductions belonging to each successive stage in the order of research; and which represents the final science as presiding over the whole system and repressing the effort at invasion of the lower elements into the higher domain.

VIII.

PSYCHOLOGICAL INTROSPECTION.

THE late Professor Huxley, both in a special Essay which he devoted to Auguste Comte, and in occasional references to him elsewhere, betrayed a spirit of what might almost be called malignity towards the memory of that great man, and assumed a de haut en bas air which, to those who know what Comte really was, would be ridiculous if it were not offensive. One of the most curious, and even amusing, exhibitions of this feeling and tone appears in the volume on Hume, which Huxley contributed to the series entitled "English Men of Letters." It is well known that Comte attached little value to the introspective method of the socalled Psychologists, believing that the direct observation of one's own mind in the act of thought, or under the influence of emotion, could not lead to trustworthy results. Of course, he did not dispute that our knowledge of the general nature of thought and emotion—of what is meant, for example, by such words as 'memory,' 'love,' &c.,

could only be had from consciousness; but he maintained that the *laws* which regulate our mental operations and the phenomena of our moral nature could not be discovered by such a process. Here is the passage in which Huxley, after speaking of the combination in Comte of "scientific incapacity with philosophical incompetence," goes on to comment on the view which we have just stated:—

"The Positivists, so far as they accept the teachings of their master, roundly assert, at any rate in words, that observation of the mind is a thing inherently impossible in itself, and that psychology is a chimera—a phantasm generated by the fermentation of the dregs of theology."

[It is scarcely necessary to say that no such words as these last were ever used by any Positivist. The mention of theology is introduced merely to create prejudice, and to conciliate the 'orthodox.']

"Nevertheless, if M. Comte had been asked what he meant by 'physiologie cérébrale,' except that which other people call 'psychology,' and how he knew anything about the functions of the brain except by that very 'observation intérieure' which he declares to be an absurdity—it seems probable that he would have found it hard to escape the admission that, in vilipending psychology, he had been propounding solemn nonsense."

He goes on to contrast with Comte's alleged error the sound judgment of Hume in holding that "the inquiry into the contents and

the operations of the mind must be conducted upon the same principles as a physical investigation, if what he calls the 'moral philosopher' would attain results of as firm and definite a character as those which reward the 'natural philosopher.' "He then quotes with approbation a passage of some length from the Introduction to Hume's Treatise of Human Nature to show that the author agreed with him, in opposition to Comte, as to the usefulness and necessity of the method of internal observation. But, when we read the passage, we find with surprise and, as I have said, with amusement, that Hume really takes the contrary side and agrees with Comte. "Moral philosophy," he says, "has this peculiar disadvantage, which is not found in natural, that, in collecting its experiments, it cannot make them purposely, with premeditation, and after such a manner as to satisfy itself concerning every particular difficulty which may arise. When I am at a loss to know the effects of one body upon another in any situation, I need only put them in that situation and observe what results from it. But should I endeavour to clear up in the same manner any doubts in moral philosophy, by placing myself in the same case with that which I consider, 'tis evident this reflection and premeditation would so disturb the operation of my natural principles, as must render it impossible to form any just conclusion from the phenomenon. We must,

therefore, glean up our experiments in this science from a cautious observation of human life, and take them as they appear in the common course of the world, by men's behaviour in company, in affairs and in their pleasures. When experiments of this kind are judiciously collected and compared, we may hope to establish on them a science which will not be inferior in certainty, and will be much superior in utility, to any other of human comprehension."

Huxley seems to have discovered, on further considering the passage, that it really cut the ground from under his feet; and so he subjoined to it the following note:—"The manner in which Hume constantly refers to the results of the observation of the contents and processes of his own mind clearly shows that he has inadvertently overstated the case"; that is to say, Huxley understood better than Hume the opinion of the latter on the subject in hand.

CARTESIAN THEORY OF THE AUTOMATISM OF ANIMALS.

IT is not necessary to combat this theory, which has had no recent supporters. But we find in Comte the following excellent note (Phil. Pos. Leçon 45), which illustrates well the important and often misconceived subject of the place of Descartes in the history of thought—"Perhaps nothing characterises better the difficult situation in which the mind of Descartes was placed; namely, that of a constant struggle between the Positive tendency which was so strong in him and the theologicometaphysical impediments imposed by his epoch than the paradoxical conception to which he was, in my judgment, very naturally led, on the intelligence and instinct of animals. Wishing to limit, as far as he believed it possible, the empire of the old philosophy, and yet not being able to conceive the extension of his fundamental method to such an order of phenomena, he took up the daring position of systematically denying their existence by his celebrated hypothesis of Animal Automatism. Once arrived at Man, the evident impossibility of applying to his case the same philosophical expedient forced him to come to a compromise—so to say—with metaphysics and theology by abandoning to them, or rather maintaining for them, by a sort of formal treaty, this last part of their original offices. Whatever may have been the real and grave inconveniences arising from this singular automatic theory, it is important to observe that it was precisely in order to its refutation that the physiologists, and especially the naturalists of the eighteenth century, were gradually led to the demolition of the radical separation which Descartes had thus attempted to establish between the study of man and that of animals, which has finally brought about in our days the entire and irrevocable elimination of the whole theological or metaphysical philosophy in the most advanced intellects. Thus this strange conception has not really been by any means useless to the general progress of the human mind in recent times."

