The OPEN COURT

Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religious Parliament Idea

FOUNDED BY EDWARD C. HEGELER

MAY, 1931

VOLUME XLV NUMBER 900

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THE PHILOSOPHICAL REVIEW

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JUPITER OPENING THE COSMIC EGG

The frontispiece from the first edition (1651) of William Harvey's *Generatione Animalium*.

Frontispiece to The Open Court.

THE OPEN COURT

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Devoted to the Science of Religion, the Religion of Science, and the Extension of the Religious Parliament Idea.

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THE INFLUENCE OF THE THEORY OF PREFORMATION ON LEIBNIZ' METAPHYSICS

BY SALVATORE RUSSO

HOW Leibniz, the eclectic philosopher, solved his dual problem of substance has not been adequately explained and still requires attention. His metaphysics is a curiously colored tapestry in which we can trace the varied threads of his predecessors; we know that he inherited the problem of substance from the atomists on the one hand, and from Descartes and Spinoza on the other. But there is something in his philosophy which has hitherto defied genesis; something which was new in philosophy and not to be found in the mathematics and mechanics of his age. By virtue of an internal principle he maintained the reality both of the part and the whole, the many and the one. How, then are we to account for this notion of immanence which harmoniously combined the two? Preformation, a biological theory prevalent in the seventeenth and eighteenth centuries, offers the solution: by the application of this theory Leibniz evolved his Monadology. The obvious rôle that mathematics and physics played in his system has often been rehearsed, but somehow this biological influence has not been adequately acknowledged, and the relation of the one to the other has been strikingly misunderstood.

Of course it has long been known that Leibniz accepted the theory of preformation, but historians in general and commentators such as Latta, Dewey, and Russell have not clearly understood this direct influence. They have maintained that the sole function of this theory in his philosophy was to explain the problem of generation.

Even Leibniz himself does not admit how significant it is in his thought. The only commentator who has understood, in part, the relation, is Professor Carr, who contends that if the microscope did not suggest, it certainly confirmed Leibniz' principle of Pre-established Harmony.[1]

More erroneous still is the belief, current at the close of the last century, that the theory of preformation was original with Leibniz. Mr. Russell seems to suggest this when he writes, "Leibniz supported his theory of preformation by reference to the microscopic embryology of his day."[2] No less a commentator than Professor Cassirer makes the same historical error; evidently he believed that Leibniz created the theory, and that it was later applied to biology. Thus he declares:

"The most decisive empirical result which arises from the application of the concept of the monad to biological problems lies in the idea of preformation."[3]

This unfortunate and misleading error was, in part, fostered by the biologists themselves, who were careless in their references. Mr. Osborn, for example, in his *From the Greeks to Darwin*, makes a statement to this effect, though other references show that he was aware of the time sequence. Speaking of preformation, he writes that Charles Bonnet "derived it from *e-volvo* to express his remarkable theory of life, which was an adaptation of Leibniz' philosophy to embryology." It is true that Leibniz influenced a host of men, Robinet, Bonnet, Réamur, Diderôt, Maupertuis, Linnaeus, Cuvier, and others, but he received his inspiration from the embryology of his contemporaries. This obvious mis-conception has been corrected by Locy:

Although it was a product of the seventeenth century, from several printed accounts one is likely to gather the impression that it arose in the eighteenth century and that Bonnet, Haller, and Leibniz were among its founders. This implication is in part fostered by the circumstances that Swammerdam's *Biblia Naturae*, which contains the germ of this theory, was not published until 1737—more than half a century after his death—although the observations for it were complete before Malpighi's first paper on embryology was published in 1672.

We have, likewise, been so much concerned with Leibniz' rela-

[1] *Leibniz*, by H. W. Carr
[2] *The Philosophy of Leibniz*, page 154
[3] *Leibniz' System*, by Ernest Cassirer, page 410.

tion to the physicists and mathematicians of his time, Kepler, Newton, Huygens, Pascal, Bernouilli, and Robert Boyle, that we have considerably underestimated this other influence. His interest in scientific discoveries, and his immortal contribution to mathematics are well known, but his relation to the biologists of his day, William Harvey, Marcello Malpighi, Robert Hooke, Jeremiah Grew, John Swammerdam, Francesco Redi, and Anthony van Leeuwenhoek, from whose work he took much, should not be undervalued. These men laid a foundation that made biology as great an influence in philosophy as were mathematics and the physical sciences. Its vital presence in the philosophies of such men as Hegel, Schelling, Spencer, Schopenhauer, Nietzsche, Bergson, and S. Alexander, give evidence of this. The philosophical importance of the sciences was at its height in the times of Bacon, Descartes, and Spinoza; the decline of the mathematical influence began with Kant, who contended that the method of mathematics was not applicable to philosophical problems. Leibniz was the first modern philosopher to give biology a prominent place in his system; thus biology is doubly important in a study of Leibniz. Our purpose is to show especially the influence that the theory of preformation had on his metaphysics.

After the work of Hippocrates and Aristotle, the most important problem of biology, that of generation, remained untouched until Fabricius published his *De Formato Foetu* in 1600. His beloved pupil, William Harvey, whose work in embryology is often considered as important as his physiological discovery, continued the experimental work of his teacher, and with the aid of a simple lens brought it up to a point from which little departure has been possible. In his *Exercitationes de Generatione Animalium*, he advanced a theory of epigenesis which described development as a process of gradual differentiation of the primordium of the parents. He maintained that all the characteristics are produced in the embryological development; that they were not there before. This radical theory, anticipated by Aristotle, was little entertained until revived by Wolf in 1759, who later abandoned it for the preformation theory of his contemporaries. The theory of epigenesis was not accepted again until 1827.

Our interest here is not in Harvey's theory of epigenesis but rather in the biogenetic aphorism, *omne vivum ex ovo*, which he made popular. The belief that the egg is the common beginning of all ani-

mals (*Ovum esse primordium commune omnibus animalium*) became basal to biology. Curiously enough, the first edition of Harvey's *Generatione Animalium* is provided with an allegorical frontispiece embodying this idea of the origin of life from the ovum.[4] It represents Jupiter opening a round box or egg bearing the inscription "ex ovo omnia": from the box issue all forms of life, including man.

In direct opposition to Harvey, Swammerdam and Malpighi expounded a theory of "evolution" which was later called the theory of preformation or encasement (*emboîtement*). This use of the word evolution in its true etymological meaning of unrolling or unfolding to describe a supposed method of organic development must not be confused with the later biological and metaphysical usage of the word. Preformation taught that the pre-existence and predelineation of the organs of the chick, for example, are present in the egg before incubation: there is no differentiation during the embryonic stage, but only an unfolding of what was already there.[5] The phenomenon of growth is simply an expansion and enlargement by continuous development of the enfolded embryo. The homunculus was thought to have been discovered at last, with its head bowed and its limbs flexed. Each ovum contained an animalcule, a miniature of the adult, complete in every detail, and requiring only nourishment to reach maturity. It was the old problem of being and becoming, and Heraclitus was denied. "There is no such thing as becoming," wrote Haller in his *Elements of Physiology*. "No part was formed before another; all were created at the same time . . . The caterpillar, for instance, contained in itself the pupa, and the pupa the butterfly, therefore the butterfly was already present, as such, in the caterpillar."

But there was another aspect to Preformation which was des-

[4]It must be remembered that the ovum studied and referred to was chiefly that of a chick. The mammalian ovum was not discovered until 1827 by Ernst von Baer. For a long time it was believed that the female sexual organ secreted a fluid called "testes muliebres"; the term ovarian was invented by Stensen in 1667. In the same year Regaier de Graff published a description of the follicles which bear his name (Graffian follicles) and thought that these follicles were the ova. Von Baer showed that the Graffian follicles were not the ova, and that the ovum was a minute body imbedded in the follicular epithelium.

[5]Malpighi's belief in this matter, which materially affected the theory of preformation, was founded upon an unfortunate error. Apparently some of the eggs that he studied were incubated, for he thought he saw slight traces of the future organism in the egg.

tined to be even more significant. This was the theory of *emboîtement,* which maintained that the germs of all coming generations were accounted for on the supposition that the human ovum contained numberless other ova, each containing an individual in miniatures, and within these others, like a nest of Chinese boxes. "In the extension of this box-within-box doctrine (*Einschachtelungslehre*) the distinguished physiologist Haller calculated that God created together, 6,000 years ago, on the sixth day of his creatorial labors, the germs of 200,000,000,000 men, and ingeniously packed them in the ovaries of our venerable Mother Eve."[6]

Humorous as this may seem, it was one of the first expressions of the theory of the continuity of germ plasm that had in Arthur Weismann its latest exponent. In answer to the doctrine of acquired characteristics advanced by Darwin and Lamarck, Weismann said that the germ plasm alone is inherited. This is accomplished by the reproduction of germ tissue from generation to generation, everything being present at conception. This sounds like a modern theory of preformation, and the continuity of the human race from the seed of Adam has its counterpart in the study of the heredity of such families as the Jukes, Kallicacks, and the Edwards.

Twenty years after Harvey had published his book, Ludwig Ham, a medical student in Leyden, discovered the spermatozoon,[7] and thereby divided the preformationists into two groups. Ham showed these little bodies to his teacher, Leeuwenhoek, who began to study them with such zeal and enthusiasm that he postponed the further study of eggs for a long time, declaring that the spermatozoa were the essential germs, and that in them were the beginnings of future souls. Carried on by his fancy, he thought he saw the complete outline of both the maternal and paternal individuals in the spermatozoa, and went so far as to make sketches of them. They

[6]*Biology, General and Medical.* By McFarland. Erasmus Darwin ridiculed his scholastic element in his *Zoonomia.* "These embryons . . . must possess a greater degree of minuteness than that which was ascribed to the devils who tempted St. Anthony, of whom 20,000 were said to have been able to dance a saraband on the point of a needle without in the least incommoding each other.

[7]Most books written about the beginning of the twentieth century state that it was Leeuwenhoek who discovered the spermatozoon instead of Ham (also spelled Hamm, Hamen, and Hammen.) Latta makes this error and so does Osborn in his book *From the Greeks to Darwin.* He also credits Degrafi with the discovery of the ovum in 1678. This misunderstanding may be due to the fact that it was Leeuwenhoek who announced the discovery of the spermatozoon to the Royal Society in London in a letter dated November 1677.

were made out to be minute animals of both sexes, capable of coition. Thus Leeuwenhoek, together with Hartsoeker,[8] who maintained that the ovum was merely a nidus in which the sperm developed, began a movement contending that the sperm rather than the ovum was the miniature of the human foetus.

The Ovists took the matter with comparative indifference. Some believed that the spermatozoon was a parasitical animalcule,[9] others believed that it possessed simply a stimulating force which helped the growth of the egg. Both factions agreed, however, that the whole race was contained in a seed, and that there was some contact between the sperm and the ovum.[10]

It now became a contest between the Spermatists and the Ovists to prove whether the future was contained in the ovum or in the sperm, whether the human race was originally put in Adam or in Eve. Leibniz, who was at first an Ovist, now sided with their opponents in believing that the origin of the human race lay in the sperm. He was as impressed with the idea of continuity as he was with the idea of uninterrupted development within the germ. But he did not agree with Swammerdam who predicted that the end of the human race would take place when the last germ of this miraculous series had been unfolded; he believed that the germ was immortal because it did not contain within it the seeds of destruction. Only an act of God could destroy it.

In summing up the theory of preformation, which was accepted as the biological dogma of Leibniz' time, we find that it consisted of five main points:

1. That all life is biogenetic and all generation comes from pre-existing germs.
2. That all life was created and predelineated by God in the beginning.
3. That encasement (*emboîtement*) gave continuity to life.

[8]Hartsoeker, qui voyait dans l'animalcule la larve humaine, plaça tout l'homme dans sa tête; il réserva la queue pour la cordon ombilical. Sa métamorphose s'opérait dans la cicatricule, qui, selon lui, n'était qu'une cellule unique de la capacité du zoosperme. *Archives du Muscum d'Histoire Naturelle* Paris 1839. Tome IV, p. 250.

[9]The name spermatozoa itself (seed plus animal) was chosen to indicate that it was an internal parasite of the sperm.

[10]Long before Aristotle, the principle of syngenesis, or formation of the embryo by the union of elements from both the parents, was rightly understood by Empedocles.

4. That development was from within, precluding all influence or change from without.
5. That these germs were immortal.

Let us now see how this theory influenced Leibniz.

In the *Monadology* we are told that the monad is a simple substance which enters into compounds. By simple he means indivisible and without parts; by compounds he means bodies. The entire universe is composed of monads, either simple or in compounds. Determined in no way from without, the monad experiences all its changes from its own inner necessity, which is one of unfoldment or evolution.

I assume also as admitted that every created being, and consequently the created Monad, is subject to change, and, further, that this change is continuous in each.

It follows from what has just been said, that the natural changes of the Monads come from an *internal principle*, since an external cause can have no influence upon their inner being.[11]

The life and individual history of the monad is the result of realizing what is latent and inherent within the monad. The invisible is made visible, and implicit explicit, the potential actual, and the unconscious conscious.

. . . every present state of a simple substance is naturally a consequence of its preceeding state, in such a way that its present is big with its future.[12]

Each monad contains the principle of perfection within itself, and also the degree to which it may achieve.

And this reason can be found only in the *fitness* or in the degree of perfection that these worlds possess, since each possible thing has the right to aspire to existence in proportion to the amount of perfection it contains in germ.[13]

The scale or gradation of monads from the lowest to the highest is characterized by a degree of perception. Both inanimate objects and plant life possess an unconscious perception; the perception of the stone, resembling sleep in human life, is obscure and confused, while that of a plant is such that it reminds us of a comatose state. Animal life is marked by a clearer perception accompanied by memory, which is called conscious perception. In man this perception or reflective knowledge is self-conscious; it is apperception, to use Leibniz' term. These degrees of perception are accompanied by a

[11] *Monadology*, sections 10 and 11.
[12] *Ibid*, section 22.
[13] *Monadology*, section 54.

corresponding degree of appetition, unconscious impulse, instinctive desire, and will.

Concerning the origin of life—and "there is nothing fallow, nothing sterile, nothing dead in the universe"—Leibniz adopts the theory of preformation.

Philosophers have been much perplexed about the origin of forms, entelechies, or souls; but nowadays it has become known, through careful studies of plants, insects, and animals, that the organic bodies of nature are never products of chaos or putrefaction, but always come from seeds, in which there was undoubtedly some preformation; and it is held that not only was the organic body already there before conception, but also a soul in this body, and, in short, the animal itself; and that by means of conception this animal has merely been prepared for the great transformation involved in its becoming an animal of another kind. Something like this is indeed seen apart from birth (*génération*), as when worms become flies and caterpillars become butterflies.[14]

In his *Principles of Nature and Grace*, which is supposed to be something of an earlier version of the *Monadology*, Leibniz says about the same thing:

Modern research has taught us, and reason confirms it, that the living beings whose organs are known to us, that is to say, plants and animals, do not come from putrefaction or chaos, as the ancients thought, but from *preformed* seeds, and consequently from the transformation of pre-existing living beings. In the seed of large animals there are animalcules which by means of conception obtain a new outward form, which they make their own and which enables them to grow and become larger so as to pass to a great theatre and to propagate the large animal. It is true that the souls of human spermatic animals are not rational, and that they become so only when conception gives to these animals human nature.[15]

In the Preface to the *Théodicée*, Leibniz acknowledges this again:

God has *preformed* things, so that new organisms are nothing but a mechanical consequence of a preceding organic constitution: as when butterflies come from silkworms, which M. Swammerdam has shown to be merely a process of development.

Consistent with this theory, Leibniz denies the doctrine of metempsychosis which has been sustained by certain philosophers. He writes:

There is no such passing. And here the transformations noted by MM. Swammerdam, Malpighi, and Leeuwenhoek, who are among the most excellent observers of our time, have come to my aid and

[14] *Monadology*, section 74.
[15] *Principles of Nature and Grace*, pp. 6

have led me the more readily to admit that no animal nor any other organic substance comes into existence at the time at which we think it does, and that its apparent generation is only a development and a kind of growth. I have noticed also that the author of the Recherche de la Verité,[16] M. Regis, M. Hartsoeker, and other able men have not been very far from this opinion.[17]

He repeats this idea in the same essay:

And thus, since an animal has no first birth or entirely new begetting (*génération*) it follows that it will have no final extinction or complete death, in the strict metaphysical sense, and that consequently, in place of the *transmigration* of souls, there is nothing but a *transformation* of one and the same animal, according as its organs are differently enfolded and more or less developed.[18]

Death is only a dissociation of the body, the composite or compound, as Leibniz called it, and not the annihilation of the monad or soul; mirroring the universe, its activity is never completely interrupted: death is merely a slumber, a state in which perceptions become temporarily confused, waiting again to be "re-developed" by another awakening or so-called birth. It is impossible to create monads or destroy those already existing.

What surprises me is that, having recognized that the animal can only have its origin with the origin of the world, and that generation only affects change and development, we have not also recognized that the animal must endure while the world endures, and that death is only a diminution, and envelopment, not extinction.[19]

He seeks to support the immortality of the monad by asserting that it is physically impossible even for fire, our most destructive agent, to annihilate completely the monad.

[16]Malebranche also seems to have believed in Preformation: "Theodore. We see quite well, that, if we do not wish to have recourse to an extraordinary Providence, we are bound to believe that the germ of a plant contains in miniature the plant which it engenders, and that the animal contains in its organs the creature that will come out of it. We understand even that it is necessary that every seed should contain the whole species which it can produce, that every grain of corn, for example, contains in miniature the ear which it will eventually produce, every grain of which in turn contains the ear, all the grains of which again can always be just as fruitful as those of the first ear. . . . God was able to preform within a single bee all those bees which were to come out of it, and to adjust the simple laws of the communication of movement in such a wise manner to the design which He had of making them increase insensibly and of producing them each year that their species could never die out." *Dialogues on Metaphysics and on Religion.* Tenth Dialogue.

[17]*New System of the Nature of Substance.* Paragraph 6.

[18]*Ibid.*, paragraph 7.

[19]From a letter to the Electress Sophia of Hanover, dated 6 February, 1706.

As the minuteness of organic bodies may be infinite (which may be seen from the fact that their seeds, enclosed in one another, contain enfolded a continual succession of organized and animate bodies), it is easily seen that even fire, which is the most penetrating and violent agent, will not destroy an animal, since it will at most reduce it to such smallness that fire can no longer act upon it.[20]

In answer to Locke's statement that nothing can exist in the mind which was not first in the senses, Leibniz substitutes the dictum, nothing can exist in the senses which was not first in the mind. Since nothing can be materially gained from without, the monad can neither increase nor diminish its content except in obedience to its preformed arrangement. The principle of Pre-established Harmony accounts for the harmonious relation between the monads, since it was prearranged that a change in one monad would be accompanied by an adjustment in the others. To these death-denied monads commerce and intercourse are impossible, for they have no windows through which anything can come in or go out. The external world can serve only as a stimulus to quicken and awaken what is already immanent in the monad.

The qualitative internal principle which binds the part and the whole to each other, consists of two elements, perception and appetition. The perception of each monad, which is a unity as well as a unit, determines objectively its place in the scale of monads, and internally reflects within itself the whole system, giving us the manifold in unity. The scale itself is not due to an arrangement or design from without, but is due, rather, to the inner development of the procreative monads themselves. The idea of a scale most likely came from Aristotle, yet the inner perception reflecting the whole system came from this theory of generation which insisted that everything was a part of the series of a preformed scheme.

The life of the monad, written as if with invisible ink, on a scroll miraculously wound, a reel that needs but to be unrolled, is expressed by appetition. Appetition accounts for the change within the monad according to a preformed design; its method of producing change entirely from within according to an internal preformed principle is obvious, and shows more clearly than the nature of perception, the direct application of preformation to the monad. The following quotation sums up both influences:

I hold that the souls which are to become some day the souls of men existed already in the seed, that they have existed always in

[20] *Monadology*. Paragraphs 72 and 73, first draft.

organized form in the ancestor, back to Adam, that is to say, to the beginning of things.

Thus we find that the five main points of Leibniz' metaphysics are:

1. That the monad, which is the unit of substance, consists of activity or life.
2. That everything was prearranged by God (expressed by his principle of Pre-established Harmony).
3. That the monads comprise a continuous series graded according to their perception.
4. That all development and expression moves in accordance with an internal principle, which contains the principle of perfection.
5. That the monads are immortal.

The direct relation and indebtness of his metaphysics to the theory of preformation should now be clear: the five main elements of the one corresponding to those of the other to a marked degree. By the judicious application of this embryological concept, by which all possible development was made immanent within the monad, Leibniz was able to solve the baffling problem of substance, preserving both the multiplicity and the unity apparent in the universe.

Moreover, the monads, now completely endowed with both a molecular nature and a cosmic perspective and teeming with a predestined future, enabled Leibniz to evolve an ethics and an original epistemology, as well as to effect a harmonious resolution of the diametrically opposed features of substance, which had thus far been the stumbling stone of metaphysics.

THE SOCIAL PHILOSOPHY OF JESUS

CLARENCE ERICKSON

I

MANY and of astonishing variety have been the interpretations placed upon the semi-mythical personality and teachings of Jesus, as presented in the Books of the New Testament. Most of these interpretations of the words of the reputed founder of Christianity have little or nothing in common with one another. Some of them are exceedingly far-fetched and frankly amusing.

Witness the attempt on the part of that prophet of the spirit of modern business, Bruce Barton, to transmogrify Jesus into a handshaking, go-getting club member. An astonishing miracle of scriptural exegesis indeed, to discover a spiritual likeness between the guileless other-worldliness of Jesus and Business—with its motive of profit shamelessly betraying itself beneath its too-transparent euphemism, "Service"!

Amazing in number and diversity are the religious, social, and ethical movements that have claimed possession of the only true insight into Jesus' message. The Ana-baptists, the Mormons, the Christian-Socialists, the Salvation Army, the Dukhobors, the Tolstoyan Anarchists, are only a few of the hundreds of cults having a social significance that have arisen since the Reformation introduced freedom of scriptural interpretation.

All of the Western nations, with the exception of Russia, call themselves Christian, in spite of the fact that there are great social, political, and economic differences among them. It is interesting to see how proposed changes of any sort in countries having the most dissimilar institutions, uniformly draw the same kind of protest

from the pulpit—the proposed reforms are un-Christian, and the existing state of things is the only Christian one. The divine right of kings, the institution of slavery, are but two examples drawn from history of decaying social institutions seeking justification in religion. Even to-day, in our own America, we hear no end of arguments on prohibition, capital punishment, marriage and divorce problems, claiming to be based on the Scriptures and the teachings of Jesus.

What is the reason for this Babel of conflicting social interpretations of the saying of Jesus? The answer is that Jesus had no consciously-held social philosophy. His teachings and sayings, scattered through the four Gospels, do not form a finished, rounded-out social program. They consist rather of ethical commandments delivered to the individual, not to society as a whole. A social philosophy representing the teachings of Jesus does not exist ready-made from the hand of the Master Himself. The various teachings, addressed to the individual only, must be interpreted and scanned for their social implications. Interpretations of sacred writings usually take on a form calculated to fit in with the interests and preconceived notions of the interpreter. Hence, it is not strange that the teachings of Jesus have been aligned with so many conflicting social philosophies. Allegorical writings are usually sufficiently vague to allow several conflicting interpretations to be drawn from them. The words of Jesus have been treated as allegories, and have thus been made the divine props of a great diversity of social institutions and social movements.

Properly speaking, it is misleading to speak of the social philosophy of Jesus. Jesus was not a sociologist, but a teacher of individual morality. He lacked entirely, or else ignored, the conception of the individual man being a part of an organic whole, Society, to which he has clearly defined obligations. Morality, to Jesus, was not the subordination of the wayward individual to the collective good. The ethics of Jesus is almost entirely individualistic in tone. It appeals to the man, not as a member of a social body, but as an individual morally responsible only to his Maker, his God. The individual conscience, the God-given light within, was the guide to the morally right action with Jesus. The conception of morality as being founded on social necessity or utility was foreign to Him.

Hence, Jesus was not concerned with the establishment of an

ideal society, directly at least. He was more or less indifferent to the condition of earthly institutions. His great concern was the salvation of the individual soul. The object of being good was to enter the kingdom of Heaven. The other-worldliness of Jesus, then, prevented His having a conscious social philosophy, designed towards bettering conditions as they existed on this earth.

That Jesus had no desire to institute any social or political reforms, that he was not a revolutionist and a social agitator as has sometimes been maintained by radicals seeking to set up Jesus as one of their number, is proved by His refusal to allow the priests and scribes to draw forth any seditious utterances from Him. "'Is it lawful for us to give tribute unto Caesar, or no?'" asked one of the scribes. Jesus answered, "'Shew me a penny. Whose image and superscription hath it?' they answered and said 'Caesar's.' And he said unto them, 'Render therefore unto Caesar the things which be Caesar's, and unto God the things which be God's'." (Luke 20:22.)

Jesus did not seek to reform man from without, by reforming his social, economic, and political institutions. His method was to reform the individual man from within. If society ever were to be bettered, thought Jesus, the change was to be brought about from within, by the moral regeneration of the separate individuals of which society is composed.

Jesus, instead of offering a direct remedy to cure the injustices and abuses of human society, gave merely a balm to assuage the pain of the victims of the cruelly functioning social machinery. He offered consolation to the unsuccessful and lowly in such sayings as "Blessed be ye poor: for yours is the kingdom of God. Blessed are ye that hunger now: for ye shall be filled. Blessed are ye that weep now: for ye shall laugh. . . . But woe unto you that are rich! for ye have received your consolation. Woe unto you that are full! for ye shall hunger. Woe unto you that laugh now! For ye shall mourn and weep." (Luke 6:20.)

This implies that those who are wretched in this life will be happy in Heaven, and that those who are happy now will suffer in the hereafter. The future state is to be a reversal of the mundane state. The happy and the miserable will exchange places. It is easy to see how the asceticism of medieval, and some forms of modern, Christianity could have had one root at least in such teachings.

Happiness in this world virtually carried with it a penalty in the hereafter; hence, suffering and misery were deliberately cultivated for future blessedness.

Addressed, then, to the individual, and not to society, and designed to console and give comfort to the former rather than to reconstruct the latter, the teachings of Jesus can hardly be said to constitute a consciously-held social philosophy. His teachings are a set of commandments that the individual must follow to win the blessing of God, and to enter the kingdom of Heaven.

But while Jesus cannot be said to have had a conscious social philosophy, His various teachings are full of social implications. If these teachings were universally accepted by all men, society would undergo a radical transformation. The social philosophy of Jesus, then, for our purpose, will consist of the hidden social consequences latent, but unexpressed, in His message to the individual.

As before intimated, various attempts have been made to construct a complete social philosophy out of the sayings of Jesus. But almost invariably these constructions have been made by the partisans of some preconceived religious or social creed. Far-fetched and ingenious distortion of the meaning of the scriptural texts; the taking of isolated passages out of their context, thus destroying their original meaning; and allegorical interpretation are some of the means by which the sayings of Jesus have been made to fit such a large and conflicting variety of movements and cults.

A disinterested tracing of the social implications in the teachings of Jesus, up to the present day, has scarcely been made. All the existing social interpretations have been biassed by special interest on the part of the interpreters. Even the official interpretations of the Church itself, during the early history of Christianity, and the Middle Ages up to the time when the Reformation gave the individual the right of private interpretation, were bent to the social and political requirements of the particular time in which they were made. All too often the Christian religion became a supernatural sanction for all sorts of injustices and abuses on the part of rulers, feudal barons, and church dignitaries.

This paper, as far as is humanly possible, will be a disinterested study and research into the inner sociological meanings of the message of Jesus. No attempt will be made to make the teachings of Jesus conform to any particular creed, whether religious, eco-

nomic, political, or ethical, of the present time. The words of the Scriptures will be taken at their face value, and not treated as so many cryptograms in which the true meaning of Jesus is supposed to be hidden. The tendency toward excessive reading between the lines when interpreting the Bible has ever been dictated by preconceived interests. Ingenious interpreters have ever made the sacred texts mean whatever they personally wished them to mean, or whatever their sect or cult wished them to mean. The sayings of Jesus in the New Testament will be the sole source of material used, so that no ideas foreign to the mind of Jesus will be allowed to creep in.

Our plan of procedure will be to take the various teachings and sayings of Jesus, and show what sort of a social order would result if every individual took these teachings into his heart and actually lived them. First we shall examine our present society and show the ways in which it runs counter to the social tendencies inherent in the message of Jesus. And then we shall give a brief sketch of the truly Christian society, in which every person puts the principles of Jesus into practice.

II

This is an era of the deification of business and the business man. Some years ago, a prominent business man, in an interview published in one of our leading chains of newspapers, was asked to set forth his ideas as to the nature of God. He said that to him God was Business, with its spirit of mutual helpfulness and service! This calls to mind Francis Bacon's Essay of Superstition, in which he says, "It were better to have no opinion of God at all, than such an opinion as is unworthy of him. For the one is unbelief, the other is contumely: and certainly superstition is the reproach of the Deity."

But however our religious susceptibilities (if we have any in this advanced age) may be shocked by such an arrant piece of irreverence, the fact remains that to-day the business man gets the largest share of the material goods of life, and all too often the spiritual goods as well—however unable to appreciate them he may be.

The attitude of Jesus towards business is unmistakable. Any attempt to prove that business is Christian, or based on Christian principles, is a most transparent bit of sophistry. Every one must be familiar with the story of Jesus and the money-changers who turned the temple into a place of business. Jesus chased the bankers, money-lenders, merchants, or whatever they were, out of the temple, saying, "It is written, My house shall be called the house of prayer; but ye have made it a den of thieves." (Matthew 21:13.) It has been claimed by apologists for business men that the men Jesus expelled from the temple were usurers, but the Scripture is quite clear on this point. It is written that Jesus "cast out all them that sold and bought in the temple." Even if we regard Jesus' attacks as addressed only to usurers, and not to business men or merchants as such, we must remember that in the time of Jesus, and indeed until only a few centuries ago, a "usurer" was not only one who took exorbitant interest, but one who charged any rate of interest whatsoever. All forms of interest constituted "usury" to Jesus, so that banking and investment in general would fall under the disapproval of Jesus, and would in His eyes be simply robbery. It must be plainly apparent to any unprejudiced thinker that Jesus regarded business, that institution of helpfulness and "Service", as a form of robbery.

Modern business is certainly no whit better than the business of the time of Jesus. That its essential nature has remained unchanged is shown by the character of the teachings given students in schools of commerce and business. It is only necessary to cite the remarks of a professor in a business school of good repute, who, in the first lecture of all the various courses he taught, was in the habit of telling his students that the fundamental principle of sound business practice was to regard every one with whom one has dealings as a potential "crook". Do not trust your own brother, do nothing without all the necessary written agreements, receipts, contracts, etc., are other fundamental axioms of modern business. These rules exist only because of the dishonesty and unreliability of men in general in their business dealings. The essence of successful business is the obedience to the letter of the laws while their spirit is being violated.

Imagine business men endeavoring to follow the Golden Rule in their practical dealings with their customers and competitors!

"But I say unto you, That ye resist not evil: but whosoever shall smite thee on thy right cheek, turn to him the other also. And if any man will sue thee at the law, and take away thy coat, let him have *thy* cloke also." (Matthew 5:39.) If such precepts as these were put into practice, what a plight business would be in!

It is certain that business as we know it would soon vanish if all men were suddenly to accept and live the philosophy of Jesus. Accumulation of wealth and Capital would be impossible. "Give to him that asketh thee, and from him that would borrow of thee turn not thou away," said Jesus. (Matthew 5:42.) Obviously, no man could ever acquire any capital if he practised such unbusinesslike principles.

Our economic system depends for its distribution of the goods produced by agriculture and industry upon certain men having in their possession goods which they themselves have no intention of consuming. These goods they acquire for the purpose of conveniently passing them on to the ultimate consumers, or to still other distributors. For the service of forming a chain linking the consumer with the actual producer, these distributors get a remuneration in the form of profits. The distributors of the material goods of society, and the financiers who control, or try to control, the workings of the monetary exchange and credit system, make up the class engaged in what is called business. Their services are, of course, very necessary, for without distribution and a smoothly functioning system of monetary exchange, production would be of no use except to the immediate producers themselves and their near-by neighbors. Business is a necessary evil.

But while business is thus socially necessary in a society in which the principle of the division of labor exists, the fact that the men engaged in business get their recompense for their services in the form of profits is the unfortunate circumstance which leads to the intolerable abuses, chicanery, veiled deceit, and hypocrisy characterizing the business of Christ's time as well as our own. The profit system leads to an unjust reward for services performed in all but exceptional cases. Either the profits are far too much, or else far too little, for the relative value of the service rendered to society. In the mad scramble for large profits all ideals and restraints are cast aside. The man with high ideals of justice and honesty entering business is at such a great disadvantage in

competing with those who act only from motives of material gain, that by a process of natural selection the idealists are weeded out, and only the Pharisees and hypocrites remain. Thus it happens that business has its double-faced character, its hiding of the motive of material gain beneath a cloak made of such shibboleths and by-words as "Service", "Integrity", "Probity", "Square-dealing". It is said that honesty is the best policy. In reality, the business which gives the outward appearance of honesty, while secretly violating the spirit of honesty, succeeds best. The proverb should be amended to read, "The outward appearence of honesty is the best policy." Jesus observed these same facts nineteen-hundred years ago, hence his calling of the business men "thieves".

Jesus constantly reproached the Pharisees for their hypocrisy, so that the word "pharisaical" has come to stand for the practice of observing the letter of the laws while violating their spirit. Business, driven by the main-spring of profit, is the example par excellence of the pharisaical spirit. Jesus said that no one whose righteousness did not exceed that of the Pharisees could enter the kingdom of Heaven. Hence, if men became really Christian, according to the true meaning of Jesus' message, business as we know it would disappear, and society would be vastly different.

But Jesus, with His system of individualistic ethics, and His attempt to better the world only by morally regenerating the individuals that make up society, was mistaken in attacking the business men themselves. Business is evil not because the men engaged in it are evil; on the contrary, the men engaged in business are Pharisees because business under the profit system corrupts them and makes them Pharisees. The men engaged in business must become Pharisees; if they remain idealists they will be at such a disadvantage that natural selection will soon eliminate them.

Social institutions cannot be reformed through the medium of the individual conscience. Human nature is as much a product of existing social institutions as institutions are a product of human nature. Moral reformers are prone to see only one phase of this double truth, and have ever confined themselves to the hopeless task of reforming society from within, through the individual

conscience alone. Man cannot be reformed from within alone; he must be reformed from without, through the medium of the social institutions which constitute the influences determining and shaping his character.

Hence, it is futile to attempt to idealize business, or any other human institution, by threatening the individual business man with Hell-fire and damnation, for the business man is not a sinner through free will, but through the shaping influences of the social institution Business. The doctrine of the freedom of the will is thus seen to be partly responsible for the mistakes of moral reformers in trying to bring about reforms by individual regeneration alone. Business men and business can be reformed only by ridding business as an institution of the moral canker that makes it an evil. That canker is the profit system. It is up to would-be reformers to find a satisfactory substitute for the present main-spring of business, the profit motive.

Modern preachers, of course, do not stress those teachings of Jesus which damn business men, for the Church, both Protestant and Catholic, depends upon the support of wealthy contributors. It would be poor diplomacy, to say the least, for a minister, with the wealthy donors to his church sitting in their pews, to quote such sayings of Jesus as "How hardly shall they that have riches enter into the kingdom of God! For it is easier for a camel to go through a needle's eye, than for a rich man to enter into the kingdom of God." (Luke 18:24).

Since the Church is so indebted to wealthy patrons and business men, it is not surprising to find attempts among theologians to reconcile the practical ethics of business and society with the obviously conflicting teachings of Jesus. Some time ago, a prominent Roman Catholic divine, noted for his profundity in matters of church doctrine, advanced in a newspaper devoting a weekly department to the views of prominent clergymen, an ingenious ethical theory designed to vindicate to-day's ethical practices. He put forth a double standard of ethics. One was based on the old Mosaic law, and was termed the "minimum requirements of religion." To se-

cure salvation, and escape damnation, it was only necessary to observe the ten commandments. The much more advanced requirements of Jesus, according to this authority, were not absolutely necessary for salvation. They represented a higher set of religious requirements, the "maximum requirements of religion". They were for intensely spiritual, ideal natures, who would not be satisfied with the "minimum requirements" of Moses.

Now, the chief distinction between the old Mosaic law and the law of Jesus is as follows. The law of Moses was directed toward overt acts, while the law of Jesus goes to the inner man and questions his motives. A man might observe all the commandments of Moses, and still be a very bad man. Take for example the commandment, Thou shalt not lie. A man with an evil motive might tell the truth, and nothing but the truth, but tell it in such a context, or with such an inflection, or in such circumstances, that it would deceive and mislead the listener, and have the same effect as a deliberate lie. Indeed, the most dangerous kind of a lie is the half- truth. Judged by the old Mosaic code, the man thus using truth in the interests of an evil motive, is not sinning, since he is not guilty of the overt act of lying. But judged by the law of Jesus, the man is a sinner, because his motive is contrary to the spirit of the commandment.

It is easy to see how the theory of "minimum and maximum requirements of religion" allows for the escape of business men and the wealthy from damnation. They are safe so long as they follow the crude rule-of-thumb ethics of the ten commandments, with their innumerable loop-holes. The author of the theory did not try to explain what Christ had in mind when he so unequivocally said that it is easier for a camel to pass through the eye of a needle than for a rich man to enter the kingdom of Heaven.

The teachings of Jesus unmistakably imply that no man can be both a capitalist and a Christian at the same time. This is proved by the story of the rich man who came to Jesus asking him what he must do to win salvation and eternal life. Jesus said to him, "Thou knowest the commandments, Do not commit adultery, Do not kill, Do not steal, Do not bear false witness, Defraud not, Honour thy father and mother. . . One thing thou lackest: go thy way, sell whatsoever thou hast, and give to the poor, and thou shalt have treasure in heaven: and come, take up the cross, and follow me."

(Mark 10:19.) The man went away downcast, according to the Scripture. It is thus clear that in a social order based on the Christian teachings there could be no capitalism and capitalists.

III

Perhaps the most salient feature of modern society is the efficiency, complexity, and enormous extent of industry. Primitive man lived from hand to mouth, never caring for the future, while modern man produces goods to satisfy his wants sometimes years in advance. More and more man harnesses Nature to his purposes, wresting ever greater security and abundance of living from her, whereas he once depended upon her free gifts, which were niggardly and frequently withheld altogether for long periods, leading to hardship and famine.

But if men turned Christian and lived up to the commandments of Jesus, our wonderful industrial system would vanish, along with business and capital. Jesus' sayings on this point leave no room for doubt. "Therefore I say unto you, Take no thought for your life, what ye shall eat, or what ye shall drink; nor yet for your body, what ye shall put on. Is not the life more than meat, and the body than raiment? Behold the fowls of the air: for they sow not, neither do they reap, nor gather into barns; yet your heavenly Father feedeth them. Are ye not much better than they? . . . Take therefore no thought for the morrow; for the morrow shall take thought for the things of itself. Sufficient unto the day *is* the evil thereof." (Matthew 6:25.) Man, then, said Jesus, is to stop providing for his sustenance and material well-being, for God will feed him as He feeds the birds.

The contention that has been advanced that Jesus was a Socialist is thus seen to be erroneous. The Socialist aims at the establishment of an industrial social order in which the industrial machinery and means of production are publicly owned. But Jesus considered industry superfluous. God alone was to look after and provide for the wants of His creature, Man. The social order that would result from the universal application of the teachings of Jesus is, then, a non-industrial one.

The modern trends in the relations of the sexes are also utterly

contrary to the views of Jesus. Divorce is constantly becoming more free and easy, and the divorce rate is increasing at a pace that has aroused the fears of sociologists and thinking people in general for the continued existence of the family. John B. Watson, the behaviorist psychologist, has gone so far as to predict that marriage as an institution will disappear in another fifty years.

The teachings of Jesus in regard to marriage are as clear and unequivocal as his other teachings, when they are taken at their face value, and without any preconceptions. Divorce and re-marriage were absolutely banned by Jesus. "Whosoever putteth away his wife, and marrieth another, committeth adultery: and whosoever marrieth her that is put away from *her* husband committeth adultery." (Luke 16:18.) In this one respect, at least, the Roman Catholic Church is true to the spirit of Christ.

Our religious institutions, with their often immense, sumptuous palaces of worship, their elaborate rituals and formal services, are also contrary to the spirit of the alleged founder of the form of worship practised in them. How many so-called Christians go to church only to keep up the outward appearance of piety, to conform to convention! "And when thou prayest, thou shalt not be as the hypocrites *are*: for they love to pray standing in the synagogues and in the corners of the streets, that they may be seen of man. Verily I say unto you, They have their reward. But thou, when thou prayest, enter into thy closet, and when thou hast shut thy door, pray to thy Father which is in secret; and thy Father which seeth in secret shall reward thee openly. But when ye pray, use not vain repititions, as the heathen *do*: for they think that they shall be heard for their much speaking." (Matthew 6:5.)

Neither was the attitude of Jesus toward the priesthood or ministry one of sympathy and approval. He warned His apostles not to be as the scribes and rabbies of the time. "For they bind heavy burdens and grievous to be borne, and lay *them* on men's shoulders; but they *themselves* will not move them with one of their fingers. But all their works they do for to be seen of men: they make broad their phylacteries, and enlarge the borders of their garments, and love the uppermost rooms at feasts, and the chief seats in the synagogues, and greetings in the markets, and to be called of men, Rabbi, Rabbi. But be not ye called Rabbi: for one is your Master, *even*

Christ; and all ye are brethren. . . Neither be ye called master: for one is your Master, *even* Christ." (Matthew 23:24.) The simple, straightforward doctrine of Jesus required no long years of study of the laws, the sacred books, and theology. His disciples never studied for the priesthood. The long, arduous studies of the priests, then as now, were due to the necessity of their learning to interpret the sacred writings properly; that is, to twist and misconstrue the words of the laws and commandments, so as to make them fit the practical ethics of the particular time.

Jesus cast some aspersions on the missionary work of the scribes and Pharisees that are strikingly relevant to-day to our modern Christian missions. "Woe unto you, scribes and Pharisees, hypocrites! for ye compass sea and land to make one proselyte, and when he is made, ye make him twofold more the child of hell than yourself." (Matthew 23:15.) All too often, along with our so-called Christianity, we introduce to the frequently contented and peaceful heathen people we convert, ideas of warfare, deceit, vice, and drunkeness. It is a well-known fact among students of the various races of mankind that many tribes of savages have a much higher morality among themselves than we supposed Christians. Lying, stealing, and murder are often practically unknown among these simple folk. They obey all the commandments of Moses and Jesus without actually knowing them. But how different is the story when the white man takes hold of the savage and tries to civilize him! He soon learns all the vices of his Christian brothers, and is exploited and cheated out of his land and possessions by the Christian imperialist country that sent the missions.

Needless to say, if all men became true followers of Jesus, there would be no more wars. All resistance and force are forbidden by Jesus. Even self-defense is un-Christian, for did not Jesus say, Resist not him that is evil, and Turn the other cheek? In our society, the only instance known of any one turning the other cheek, is that of the bribed prize-fighter who allows himself to be "put away" for a consideration. Patriotism and defense of one's country would be non-existent in a society truly Christian.

Not the least of the ways in which our society runs counter to the will of Jesus is the manner in which its work of charity is conducted. "Take heed that ye do not your alms before men, to be seen

of them: otherwise ye have no reward of your Father which is in heaven. Therefore when thou doest *thine* alms, do not sound a trumpet before thee, as the hypocrites do in the synagogues and in the streets, that they may have glory of men. Verily I say unto you, They have their reward. But when thou doest alms let not thy left hand know what thy right hand doeth: That thine alms may be in secret: and thy Father which seeth in secret himself shall reward thee openly." (Matthew 6:1.) The ostentation and pomp with which a great deal of our charitable work is performed, indeed, remind one of the sounding of a trumpet. The names of the givers of large gifts to charity are conspicuously displayed on the front pages of newspapers, and unusually large gifts draw forth the thunderous applause of the press. However, it is not necessarily a condemnation of the really valuable work carried on by our charitable organizations, that they should be so ostentatious in their work of almsgiving. Perhaps this open display and glorification of the alms-givers is as necessary to charity as the profit motive is to business, at the present time at least.

In a purely Christian social order, our present system of law and justice would of necessity vanish. For Jesus taught that judgment and punishment should be left to God alone. "Judge not, that ye be not judged." Thus all our human institutions of law and justice, our entire system of trial and judgment, are against the teachings of Jesus. Likewise, the means of executing and enforcing the decrees of our judicial institutions are denied us by the unmistakable import of Jesus' message. All compulsion, force, and resistance are contrary to the will of Jesus. Resist not evil, and Do unto others as you would have others do to you, clearly exclude the sanction of force and compulsion in a truly Christian society.

The enforcement of justice depends ultimately upon force, or the threat of force. When a man convicted by our courts of justice is taken away to have his punishment given him, if he resists, he is taken by force, perhaps at the point of arms. If he submits peaceably in the great majority of cases, it is only because he realizes that force will be applied to him if he does resist. In our human system of law and justice might is used to enforce the right, or rather what we think to be the right. Unfortunately, might is not always on the side of the right.

It follows from the impossibility of a human system of law in a truly Christian society that government and State would also have no place. The power of the State, in the final analysis, depends ultimately on might and compulsion, on the police and the militia, to be specific. The State, in a democratic form of government, represents, in theory at least, the will of the majority of the people. But there must always remain a minority unsatisfied with the decrees of the majority. It is only the force held in reserve by the State, that prevents a disgruntled minority from using violence to gain its ends. The rarity of the occasions where the State is forced to use its might to protect itself does not mean that the State could dispense with force. It is the constant threat of force that maintains peace and order within the State.

Government and the State, being thus based upon actual or potential compulsion of man by man, are absolutely against the spirit of Christ.

IV

What sort of a society, what sort of a social philosophy, is really implied in the teachings of Jesus? We have seen that if Jesus' teachings were really followed by all men there could be no government and no State; no compulsion of man by man; no law, at least no law that depended upon coercion for its enforcement; no accumulation of wealth or property; no industry; no war or strife of any kind; and, of less importance, no divorce and remarriage. We have also seen that our religious, charitable, and business institutions would be profoundly different, if not absent, in a hypothetical Christian society.

Inasmuch as there could be no State, the social order built upon the philosophy of Jesus would be an Anarchial society. Jesus was then an Anarchist. But He was an Anarchist unwittingly, of course, for He did not trace the social consequences hidden in His message to the individual.

The word "Anarchist" carries with it to the general mind connotations of a violent criminal with long whiskers who carries bombs, with which to blow up public buildings, kings, government officials or other personages who have incurred his displeasure.

Needless to say, this is not the real meaning of the word, but only one of the nonessential traits that have unfortunately accompanied a certain type of Anarchist known as the "direct actionist". By definition, Anarchy merely means a form of society in which there is no State or government. There are many different kinds of Anarchy, having in common only the idea of a social order in which the State has been abolished.

The type of Anarchy suggested by the principles of Jesus would be a very simple and primitive one indeed. Unlike most other forms of Anarchy, the Anarchy of Jesus would have no industry, because Jesus believed that we should make no effort to provide for our food or clothing, since God would care for us as he cared for the birds. Men would live together in simple, peaceful brotherhood, sharing all possessions alike, and living off the gifts of nature only. Society would revert to the condition called by economists the "direct appropriation stage", in which man appropriated the free gifts of nature, and subsisted without the aid of agriculture and industry. A description of the type of society latent in the teachings of Jesus, in one phrase, would be *Non-industrial Anarchial Communism.*

It would appear, then, that of all the interpreters and followers of Jesus, Tolstoy has come nearest to catching His true spirit. Tolstoy advocated a communal brotherhood of men, living a life of simple toil. In two important respects, however, Tolstoy differs from Jesus. Tolstoy's simple, Anarchial society was to be agricultural, while Jesus made no provision for any kind of employment for His followers, believing as He did that the Heavenly Father would care for them as he did for the birds and beasts of the field. Also, if Tolstoy's proposals were followed, the human race would die out in a generation, for he advocated strict celibacy, even among the married. Jesus did not go to such an extreme as His follower, Tolstoy, however, in this matter. He merely spoke against adultery and divorce.

As we have already intimated, it must not be supposed that the social order that would result from the universal application of the teachings of Jesus was the conscious object of His efforts. Jesus had no social ends in view. His purpose was a purely individualistic one, the salvation of souls, the pointing out of the means by which the individual could win the approval of God.

The object of living, with Jesus, was merely to win blessedness in the hereafter. If some of His teachings have a high ethical or social value, it is only because He deemed them commandments of God which must be followed to secure salvation. It is significant that the first great commandment of Jesus was, "And thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind, and with all thy strength: this *is* the first commandment." (Mark 12:30). "Thou shalt love thy neighbor as thyself" was placed second.

Jesus was not an Anarchist in the sense that He wished to construct a new and better social order. But He was an Anarchist in the sense that if His teachings were adopted by all men, a simple fraternity of men, under the fatherhood of God, would result, in which government, law, and compulsion would have no place.

Jesus never intended His aims to be brought about through active antagonism to the existing government. "Render unto Caesar the things which be Caesar's, and unto God the things which be God's". If Jesus' teachings were followed, governments and all the present legal and political machinery would disappear, because of there being no man willing to exercise the compulsion upon his fellowmen demanded of a ruler, official, or judge.

V

It is scarcely necessary to say that such a social order as that implied in the message of Jesus has never existed, and never will come into existence. The teachings of Jesus have always been only partially accepted, and there is no reason to believe that this will not always be the case, as long as men continue their pretense of being Christians.

There are two senses in which the teachings of Jesus have been only partially accepted: a part, and not the entire body of people, may accept the Christian ethic, allowing exceptions, in the shape of rulers and exploiters; a part of the Christian teachings may be accepted, but enough ignored so that the true spirit of Christ is lost. Both of these methods of partial acceptance have been prominent in the history of Christendom.

Alas, how often have rulers, exploiters, and "strong" men of all

descriptions used Christianity as one of their instruments of control of the exploited! How well adapted to the purpose of tyrants and exploiters are the admonitions, Resist not evil, Turn the other cheek, and Do unto others as you would have others do unto you! When Christianity became the official religion of the Roman Empire and rulers and emperors adopted it, what a transformation and perversion took place in the doctrine which once had been the sole source of comfort of the slaves, the oppressed, and the lowly! The religion of brotherly love and equality of all under God the universal Father; the religion which had had no place for compulsion and force, became an instrument of social control, used by rulers to help hold the masses in unresisting subjection. The original Christian doctrine was sufficiently tampered with to make it a supernatural support for the divine right of kings, of feudal barons; and in our own day, the divine right of property, capital, or what not. While the lowly and the righteous followed the teachings of Jesus, burly sinners ruled, and are still ruling, the world.

As for the second of the methods of partial acceptance of the teachings of Jesus, we have already seen how the teachings detrimental to the interests of the privileged classes are carefully ignored or expurgated by the ministry and the priesthood. Such ingenious doctrines as the theory of maximum and minimum requirements are advanced, in the attempt to render Christianity not too obviously incompatible with the ethical practices of modern Christians.

It is obvious that the true Christian society can never appear as long as some men remain who do not accept Christianity. These latter will have a tremendous advantage in the pursuit of life over the followers of the true Christian ethic, and will inevitably rise to the position of mastery. Since it is now more impossible than ever that all men should become miraculously converted to Christianity, we may consider the realization of a social order based on the teachings of Jesus an absolute impossibility. Man no longer has the simple faith that God looks after us and cares for us as He does the birds. In fact, we know that even the birds are not thus cared for. They must struggle and compete with other birds for their living the same as men, and the apparently well-cared-for birds we see are merely the survivors of a process of natural selection.

These last reflections suggest an explanation of the hypocrisy, the glaring contrast between ethical theory and ethical practice, which pervade modern life. In a society only partly Christian, we have seen how the believers will be at a marked disadvantage in the struggle for life with those who disregard the Christian ethic. Hence, the instinct of self-preservation will cause great numbers of believers to violate the teachings of their religion. But respectability demands that they remain nominal Christians. Besides, many people have a sentimental regard for the religion in which they were brought up. The world becomes filled with nominal believers, who through economic pressure no longer practise Christianity. But, as Kipling would say, that is another story.

DETERMINISM, EGOTISM AND MORALS

BY JOHN HEINTZ

THERE is probably nothing so destructive of human egotism as the idea of determinism. Even the theory of evolution, with its long line of brutish ancestors, leaves a way of escape open for the salvaging of this universal and often useful attribute. But the one hundred per cent determinist gets little satisfaction in the way of self-applause due to noteworthy performance.

The old saying of virtue being its own reward fits admirably into his system of philosophy but even here the glow of satisfaction which the free will advocate may experience is denied him, or at least is largely mitigated, by the belief that his virtuous acts are simply so much ethical phenomena in which he plays the part of a link in an endless chain of cause and effect.

One is tempted to ask, therefore, what use can there be in such a theory of conduct if the result of possessing it is the dampening of such a stimulating motive as egotism? One answer which has been given is that for a sound moral theory good conduct must depend upon character, which is equivalent to saying that if a man cannot, merely by the exercise of free will, go against the dictates of his conscience we have something which constitutes a real and permanent basis for a moral theory. However, while this may be a step in the direction of determinism it does not disprove the idea of free will except in an absolute sense; it does put brakes on it, conditions it, but it does not dispose of the claim of the free will advocates that a moral theory to be real must allow for a certain amount of free choice in the individual, that we possess such a freedom of choice, and that a moral act consists in the right exercise of it more so than in the good effect of the action itself.

It will immediately be seen that the notion that over and above all

influencing circumstances, both objective and subjective, we possess an element of dissociation which leaves us free to *choose* a course of conduct and which assigns egotism to an important position in the system of free will, and that determinism, in denying this element of dissociation automatically removes egotism from its philosophy. In other words, in free will, credit for good conduct is earned; in determinism, it is unearned. Getting back to our question then if conditioned free will is not discredited by a moral theory which bases good conduct upon character and if it retains by its ideas of dissociation a subtle element of egotism which makes it appear desirable what claims can determinism advance for possessing a sounder theory of morals?

Probably the best claim that determinism can advance is that it can be shown that it is logically related to the kind of a universe which science has revealed to us. Free will naturally associates itself with the deductive, or intuitive, theory of morals. It coincides with its assumption that we have within us a perceptive faculty which enables us to sense right from wrong and that this intuitive gift is originally innate in the constitution of our nature. Out of this innate moral insight conscience springs and here again we come across the notion of dissociation which we found to be essential to free will. Now such an assumption of innate conscience, so suggestive of divine origin, naturally presupposes a reason for its being which can be no other than that it was implanted in us as a guide to conduct and this in turn consistently, if not necessarily, suggests a free choice in the matter.

Determinism, on the other hand, while it is not absolutely inconsistent with the idea of innate moral perceptions, links itself up more logically with the inductive, or utilitarian, theory of morals. The notion that morals were originally based on utility and by a successive association of ideas became metamorphosed into ideals coalesces readily with the belief that conscience is not innate but is subject entirely to the laws of heredity and therefore is a variable phenomenon forming a link in a chain of causes and effects. Thus determinism, because it views every moral and immoral act as a perfect result of foregoing causes, of which the type of conscience exhibited constitutes one, is the logical corollary of the utilitarian theory.

As for the claims for truth of these two opposing theories of

morals I believe that the theory of evolution and the researches of modern psychology have made a damaging case against the school of Butler and Cudworth. Unquestionably, utility is the basis of morals. It is requesting too much of the modern intellect to ask it to believe that our brute ancestors of former geologic periods possessed an innate conscience and if they did not its sudden appearance in the human race defies explanation. The truth is that conscience has been a result of ages of slow development. In no other way, consistent with the known physical facts of our world, can its presence be accounted for. In no way, save by heredity, can the infinite variety and gradations of conscience be explained.

Thus determinism, because it is the logical outgrowth of the theory of morals which gives the best explanation for conduct in the kind of world which science has revealed to us, affords the best promise of establishing human conduct on a scientific basis. It strikes a blow immediately at the conception of equality implicit in free will which it has been the misfortune of religion to emphasize. Thus the sinner can save himself if he only will. Failure to do so is due to obstinacy or indifference on his part. Left out of consideration are such psychologically important things as heredity, emotional stability, meagre subliminal activity. Congenital obstacles in the way of reform never mitigate the censure of the religionist for the unregenerate.

With such conceptions of an innate equality of moral insight determinism can make no compromise. It is committed to the belief that all conduct, good, bad and indifferent, can be entirely explained by the antecedent conditions of which inequality of conscience and will are themselves results of causality.

Now it is this attempt to get at the rock-bottom facts underlying conduct, instead of assuming that man possesses an innate moral faculty which his remote physical ancestry refutes, that causes determinism to appear so promising when it comes to placing human conduct upon a scientific basis. It declares that were the antecedent causes leading up to an individual's choice completely known, it could be predicted with as sure a certainty as the chemist can predict results in his laboratory. All the psychological theories as to the influence of environment and other determining factors in normal and subnormal life are based ultimately upon this belief which in turn rests upon the knowledge that nature is perfect.

For an imperfect result cannot emanate from nature. A cripple is a perfect cripple according to time and conditions. The antecedent causes in his case having been thus and thus he is the perfect result. So with conduct; every act must be a perfect result of objective and subjective causes. Here then, considered in the large, is the justification for the sacrifice of egotism by determinism: it affords an approach to the exceedingly difficult problem of conduct that is based on things as they are; not as we would like them to be and therefore assume so. Thus, of the two theories of morals, determinism, not free will, belongs in the promising category of an experimental science.

As to the individual reaction to the loss of egotism the question has to do with a morally superior and inferior viewpoint. Egotism often plays a beneficent role in human conduct and must be given a place by determinism in the chain of antecedent causes. Thus the desire to be well thought of by his fellowmen impels an individual to virtuous actions. Still such an incentive, however practical or efficacious it may be, is an egotistical one, because the individual is seeking credit for something he could not help but do. From the deterministic view-point pride over conduct is related to conceit over good looks. A large element of humanity has reached the intellectual stage where, inasmuch as they realize that good looks are but an accident of birth, vanity with respect to them arouses their derision. For while good looks, rather than ugliness, is to be desired we feel that no credit accrues to the possessor.

Such is the attitude of the determinist towards his own good conduct. Like the Sufi who give all credit to the Creator for their virtue the determinist attributes his moral acts altogether to impelling causes. He has a high regard for good conduct and acts in accordance with his ethical convictions but takes no more credit for such acts in the last analysis than for good looks if he is fortunate enough to possess them. His compensation for the loss of egotism is that he has reached an intellectual position where he is beyond the egotistical need of the applause of his fellowmen. A pure and unadulterated incentive to good conduct is the last word in morals.

EXPLAINING EINSTEIN

BY HENRY CHARLES SUTER

NOT a few people are experiencing some difficulty in understanding Einstein's theories. We can realise how that may be in the land of the laity with their limitations of learning. However many students also experience the same difficulty in this respect and seek to have Einstein explained and simplified, so that they may interpret his theories to others in an understandable way. Therefore let us spend a little time in dealing with Einstein, in the Socratic method, and thus from the student standpoint.

"Long before you became any sort of student do you remember your first experience in an elevator?"

"Yes! as a child it seemed to me that we got into a little room and the upstairs came down!"

"That is so, and even Einstein would quite approve of such a statement, since he asserts the dependence of natural law upon the movement of the observer. In a word, we judge all that happens about us from the standpoint of our own system that is stopping as it were and that is at rest. There is but one exception to this and that is the velocity of light, which travels constant and certain, no matter how we may be moving."

"But as a student I find Einstein so paradoxical. In fact the haunting fear of paradox seems to me to be the bane of all science. It is not so with mathematics you know. From the conceptual conclusions arrived at there and the logical terminations met with in mathematics there seems from such a standpoint to be a position continually taken that is impregnable. But while I was a dunce at mathematics, I delighted in its definite decisions and was glad when it constantly showed up the absurdities of science, something that I more or less hated."

"Ah, as a student of science, no doubt you had your troubles, and when you considered the theory of relativity, you found that very full of paradoxes."

"Why! yes! when first introduced to Einstein, I felt like Alice Through the Looking-Glass. I had supposed that a yard was always and everywhere thirty-six inches long; that time was accurately measured by clocks and watches; that an object weighing a pound in one place would weigh sixteen ounces in another place; and that when you had measured the length, breadth and thickness of an object, you could state the volume with confidence. But Einstein tells us that there are circumstances in which a yard may be contracted to a span, an hour may shrink to a mere fraction of sixty minutes, and an object which started weighing a few ounces may come to weigh a ton. All that is necessary to accomplish these miracles is to get the objects moving fast enough, approaching the velocity of light, which, it may be said, is the fastest thing in the world. He tells us, moreover, that there is a fourth dimension, namely, time, and that no measurements are correct which leave this out. In Einstein's world, cause and effect have no meaning, except for purposes of explanation; there are no straight lines; space is curved and imparts its curvature on to the movements of objects in space. Newton's famous apple then for instance, did not fall to the ground because a mysterious power called gravitation drew it down. Circles exist without tangent, and the ratio between the diameter and circumference of a circle varies from time to time, depending upon whether the circle is rotating or at rest. Why, in such a world as Einstein depicts to lapse into a little levity, I'm reminded of the reason why Pat preferred a train wreck to a shipwreck. "In a train wreck," he said, "there you are; but in a shipwreck, where are you?"

"Ah! but the worst of it ever seems to be that Einstein proves that what he states in his seeming contradictions, is true. His world is not the conceptual world of mathematics, but rather a real world of experience. In fact he followed the example of his great forerunner, Galileo. Up to the time of this great physicist, it used to be thought that a heavy weight would fall faster than a light one. Had not Aristotle said so, and no one thought of disputing with such a man as Aristotle did they? But one day Galileo ascended

the leaning tower of Pisa, and let two objects of unequal weight fall, and they reached the ground at the same time. In similar manner Einstein based his conclusions upon the observance of actual events."

"Well while Einstein has somewhat disturbed my student mind, I must admit that he has strengthened my confidence in the deliverance of experience. The curse of formal education, from which, like other lads, I suffered, is that it takes a lad out of a world rich in experience and introduces him to a world of authorthority. He is taught that one and one makes two figuratively, but in the world of experience it does not necessarily mean that two lads placed together will perform twice as much work, because experience shows that they will probably be swapping yarns and the result of the sum total of work done may not be equivalent to that of even one. Scientifically one and one do not always make two, for instance, as in the case of the two drops of mercury, nor naturally in the case of two birds in a nest, or fish in a pool. Then again he is taught that a straight line is the shortest distance between two points, and then that only one straight line can be drawn between two points, while on the globe before him he can see plainly a large number of lines passing through the two poles by the shortest distance possible on the surface of the earth."

"Ah, the world of experience is full of movement, but in Euclid's world the movement has no place, in fact it is a static world."

"True, for I remember what a shock I got when, in the fourth proposition of his first book, Euclid proposed to make his proof by lifting one triangle and depositing it on the other. It seemed a sadly improper thing to do. In fact I felt that Euclid's world was not even a concrete world. It is a world of points and lines and planes which you cannot make concrete. As soon as you attempt to do so, as, for instance, when you put a point on the blackboard, it vanishes, for the point has magnitude, which Euclid's definition denies. Even his propositions, such as the one that the interior angles of a triangle are together equal to two right-angles, is only true in a flat world, which we do not inhabit."

"Yes, it is only too true, and even I remember how some years ago, I was awakened from the dogmatic slumber into which my formal education had plunged me when my little lad came

to me with a sliver of wood and cried, "Show me the inside, Daddy." I promptly took a penknife and split the sliver in two. But my lad's mind, in spite the fact he had not yet started school, was too acute for me. "But that is the outside now," he cried with glee; "show me the inside." It was then I first realized dimly what Bergson later taught me to see, namely, that the mind cannot penetrate into the inner heart of things, but must be content with surface only. That then is the reason why nature is so full of paradox, and Einstein's word to us is just simply this, the data of experience must be accepted no matter how paradoxical they may seem."

"It is so. How different the real every-day world which we experience is from the world of science and mathematics."

"Yes, but we recognize that we are not here referring to the world of atoms with their protons and electrons, for that is another story as Kipling would say. But take the ideas of space and time, with which relativity is chiefly concerned. We move to and fro; we let our eyes wander and thus we get the conception of space. We put our finger on our pulse, and count its beats. We remember that a short time ago we heard the clock strike, and are reminded that in half an hour we have a date with someone. Thus we get the idea of time. Then in the interests of formal knowledge, we invent standards and instruments for measuring time and space, clocks whose faces are divided into sections of twelve and sixties (which it is to be noted, are really space measurements) and measuring sticks which are divided into feet and inches. This is public time and space, and very useful when we wish to communicate with one another or make plans for buildings or keep engagements. But is it not the height of absurdity to say that an hour spent in agreeable company is the same length as an hour spent at an isolated station, waiting for a late train, or that a mile in a motor car is the same distance as a mile in an ox cart?"

"Ah you said something and so did Burns when he wrote:

"How slow ye move, ye weary hours,
As ye were wae and weary;
It was not sae ye glinted by
When I was wi' my dearie."

That is not only experiential but is decidedly experimental let me tell you as a student."

"Indeed, and thus in Einstein's world space by itself and time by itself sink to shadows, and only a union of the two preserves reality. And this is true of experience—we live every day in a world not of three but of four dimensions and the fourth dimension is time. What we experience in daily life is not objects but events. Things not only are; but they happen also."

"Well now that you explain it thus, it seems that Einstein to my student mind certainly emancipates me from the dominance of merely spacial ideas, and reveals to me more fully the world of time."

"Indeed he has taught us to hear what the years and the centuries have to say against the hours and the minutes, to resist the usurpation of particulars and penetrate to their universal sense."

"Ah that's a lesson as a student of life that I sadly need to learn to-day. I am too largely led by spacial conceptions. I talk, like everybody else about bigness and swiftness; big business, big busses, big buildings; swift autos, swift planes, swift ships. While we have annihilated space, we say, nevertheless, space still rules our minds."

"Yes, then there is another test to which we must put these big, swift things. *Will they last?* That is the test you will remember Paul put the big things of his day—Prophecy, the big thing of the Hebrews; Knowledge, the big thing of the Greeks; and Tongues, the big thing of the Christians. The fault Paul found with these big things was that they did not last. Prophecies fail, tongues cease, knowledge vanishes away; only Love endures. Bergson teaches that duration—the time we feel—is the very heart of reality, and Einstein would seem to agree with that. He even refuses to accept the idea of an infinite universe. He thinks the universe is finite, and yet it has no boundaries. Its magnitude depends upon its density. If it were of the density of water, it would measure not more than three hundred and fifty million miles in diameter; but we know there are stars so distant that the light we see to-day started hundreds of thousands and perhaps millions of years ago; so the universe must be much larger than that. Some have estimated its diameter to be four hundred trillion miles, but we need not

bother about that. Einstein thinks the universe is curved like a sphere, or perhaps like a cylinder."

"It is all interesting and I feel Einstein has strengthened my student intellectual desire for unity. All philosophers have ever sought to bring all phenomena within a single formula. One found it in water, another in air, another in fire. Pythagoras said *man* was the measure of all things."

"True, and in seeking to bring the world of physical phenomena within one category—one supreme equation—Einstein is again following the pathway of his fellows in the past. Tycho Brahe brought harmony into the Aristotelian scheme of the universe. The position of Mars in the solar system refused to conform to Aristotle's mechanism by an amount as great as eight minutes of the arc. "Out of these eight minutes," said Kepler, "we will construct a new universe that will explain the motions of all the planets." In like manner the orbit of Mercury refused to conform to the Newtonian mechanism, and was found to be rotating in its own plane at the rate of forty-three seconds a century. Out of these forty-three seconds, Einstein revolutionized our nineteenth-century conceptions not only of astronomical mechanics, but also, as we have seen, of the nature of time and space, and the fundamental ideas of science, and in doing so, he has brought new unity into the universe. His theories have carried us to a height of knowledge which surpasses all elevations hitherto reached in the past thinking of the race. From this lofty peak we find ourselves contemplating nature with an insight such as no one has ever had before."

"Had we not already discovered that matter is made up of electrons, and that radiant energy is electro-magnetic?"

"Yes, but before Einstein, it was regarded as probable that all physical phenomena except gravitation were manifestations of the electro-magnetic field. Now Einstein has brought gravitation itself within the same structure. Gravitation is no longer a mysterious force acting at a distance, but a fundamental property of things. What philosophy has tried to do in the past Einstein has done for science. He has for the first time brought mechanical, electro-magnetic and gravitational phenomena into one structure."

"That is a great achievement, and in the realms of religion, ought to strengthen our faith in "one God, one law, one element." It makes me want to be more tolerant—to live and let live."

"Indeed, he teaches us that there are different orders of knowledge, and the reality we are seeking has different forms. These orders we must be careful to distinguish and not to confuse. We must not forget that truth in terms of one order may not necessarily be a sufficient guide in the search for truth in another order."

"Ah, as a student, I find much is said to-day about the conflict between science and religion, and Christian apologists have not always been wise in seeking to belittle this conflict. I suggest that it were far better to realize frankly that science and religion belong to different orders of truth and reality."

"Yes, indeed, for some of the critics may be competent authorities in mathematics, but that does not give them the right, which they frequently assume, to speak with authority about the futility of religious belief. There are five natural senses we know well, but there is also a sense of sin that comes of another order and of a spiritual nature that came in the consciousness of sinfulness when the Hebrew poet prayed, "Create in me a clean heart, O God!" He was probably ahead in his search for truth than many a modern critic. On the other hand one need not think that Christian apologists are following the course of wisdom by nailing the flag of the newer physics to their masthead. Since no matter how much you may attenuate matter, you do not in that way reach spirit. There is an infinite diameter between the dance of electrons and a sense of beauty or of purity of heart which sees God."

"After all you say of Einstein, it seems he teaches us to be critical of our own categories. We are shown the direction in which we may possess our souls with tranquillity and courage. Certain spectres which frequently obtrude themselves on the pilgrim's path, and the student's stride, such as materialism, scepticism and obscurantism, alike fade away and vanish into thin air. There comes to us a contentment and a peace that passeth understanding."

"Yes, we know that those whose frame of reference differs from ours may see things differently from what we do. Maybe they are right and we are wrong, but our right is satisfactory to us, and surely that is the main thing."

"Yes, indeed, and thank you for your patient explaining of Einstein to my student mind, for I feel with Browning:

"All that I know of a certain star,
Is it can throw (like the angled spar)
Now a dart of red and now a dart of blue;
Till my friends have said they would fain see too
My star that dartles the red and the blue!
Then it stops like a bird, like a flower stands furled;
They must solace themselves with the Saturn above it.
What matter to me if their star is a world?
Mine has opened its soul to me: therefore I love it."

WILL PEACE EVER COME TO OUR WORLD?

BY HAROLD BERMAN

MAN, say the apologists for War, has always been a fighting animal. Ever since his first appearnce on earth, at some remote and unascertained pre-historic day, he has been fighting his fellow-humans. At all times there were the group and the clan, the tribal and the national feuds to enliven the monotony of an otherwise drear existence for a simple and crude aggregation of men, and not infrequently a means to furnish the only worth-while and honorable occupation for the healthy manhood of a tribe; or, later on, for a certain class within the particular ethnic group. From these premises many superficial observers, predisposed to the belief that a practice or an institution is right *because it is*, the mere fact of its existence proving it essential to our being as well as congenital to human nature, have come to the ready conclusion that war as an institution as well as a legitimate implement in human relationship was just, and was with us to stay for all time. It *was* and *is*: Ergo, it *will* be; blithely overlooking the poignant fact that slavery was and is with us no longer; that polygamy was and is no longer; that autocracy, and the stake and faggots for religious transgressors also were with us and are so no longer. These worshippers of the *Status Quo* have not studied the cultural history of the human race. If they had, they would know that this history represents a constant forward progression, and that the integrated Philistine respectability of today was the decried revolutionism and innovation of yesterday, and hadn't even been dreamt of the day before yesterday.

There is a fundamental difference however, between all the wars of history and those fought by the modern, industrialized democracies during the past fifty years or so; barring, of course, the Balkan Nations in the Sixties and Seventies of the past century, who fought

for their independence, and Czaristic Russia which was a purely Mediaeval State in every essential. Or, if you wish to state it thus, the difference between the wars waged before the advent of the Industrial Revolution—which includes practically the annals of the entire human race, up to the beginning of the Nineteenth Century in England, and considerably later in most other countries—, and those fought since by the Industrialized Nations of Europe and America. Primitive man, resembling in most attributes and essentials his four-footed fellow creatures, *fought for meat* pure and simple. His pastoral descendants fought for fat grazing lands for their flocks, while those who came upon the stage of history later on, men who, by some way or other, had acquired the mysterious and revolutionizing art of soil-cultivation as a means for increasing artificially the grudging and uncertain food supply of nature and the chase, fought for and invaded lands that proved more fertile than their own and assured them a more bountiful as well as a more dependable harvest. Of such origin was the migration of tribes and nations in all countries in historic and pre-historic times, traces of which migrations are found in all countries of the globe even at this late day. As the tribes were gradually welded into Nations, and these again came to be ruled over by Kings, Princes, Emperors or Dukes, possessed of the pride of place and power and obsessed by dynastic ambitions, these rulers decreed wars and made peace in accordance with these same ambitions, grudges and interests. These wars frequently were fought by Mercenaries, or by levies on the peasantry and the retainers of the various feudal lords, the people at large never being consulted at either occasion, it being assumed to be none of their business what their divinely-appointed rulers did or abstained from doing at any particular time and at their own sweet pleasure.

The World truly was a big place in those days. It held many mysterious, still unexplored, regions. The means of communication were no better, (if not much worse) than they had been in the days of the Romans, of Alexander of Macedon, or when Haniball crossed the Alps to attack Rome in her stronghold. Napoleon had to wait for weeks for a favorable wind before he could set afoot his long-cherished invasion of Britain. Though his galleys were properly manned, provisioned and munitioned for the venture, yet when the winds refused to accommodate him and change

their course, he suffered his most ambitious project to go by the board, even as a warrior of an earlier millenium would have been obliged to do. There was no help for it. *Nature was the master.*

Each nation, in those simple and happy days, practically was self-sufficient, producing what it needed and getting along in the main without the product of the others. Imports were confined to luxuries, craved for and enjoyed by a small fraction of the populace, the nobility and the court circles mainly. The yeoman raised his crop of eatables, reared the animals that furnished the motive power for his labor, meat, milk and leather, his women folk spun the wool and wove the cloth out of which his garments were made, rendered the tallow for his candles and soap, and so on and so forth. He was a self-supporting and self-sufficient individual—the "sturdy" yeoman" of our early writers—whose fate, next to Nature's vagaries, lay in his own hands, and in his own hands only. The townsman was not much more cosmopolitan than the peasant in his physical interests.

The conditions that held true in the realm of economics held true as well in the realm of ideas and beliefs. The average man knew next to nothing of the things that went on beyond the borders of his own country, and, frequently, not much of the transpirings in a neighboring province or district. Rumors, myths and all sorts of fairy-tales could easily spring up and be as readily believed, about the foreigner, his mode of living, his faith, his general conduct and his actions. For it is axiomatic in human life that the deeper the degree of ignorance about any given subject, the more fertile the crop of rumors, and the greater the room for the romancing fictioneer and for the wilfull libeler. It was, in brief, an ideal atmosphere for the breeding of mistrust and its offspring, hatred, for the hatching of all sorts of plots and counterplots. There was no need, then, for the *artificial stimulation* of hatred through the creation of "propaganda bureaus", in charge of slick and prostituted press agents well versed in the manufacture of non-existent atrocities and horrors!

Now consider the world of today, since the advent of the machine and the mechanical means of communication and production. The globe has shrunken tremendously in size, while self-sufficiency has been *tracclessly* lost to the human race, excepting perhaps to the most backward portion of it, which is negligible. Our stock of knowledge—in the physical realms, at any rate—has been im-

measurably increased, while our physical comforts have multiplied and our general well-being enhanced. But all these have been secured at the cost of our former self-sufficiency and sturdy independence. The farmer no longer produces things primarily for his own needs and barter, nor does the artisan produce any longer your cloak, your boot, your table or your bed in his cottage-work-room and to your demand. The Texan or Argentinian ranger grows a steer whose flesh is destined for consumption in New York, London or Berlin. Another man pastures a flock of sheep in Nevada, Australia or New Zealand, destined to nourish a Manchester spinning-mill employee, while their wool may find its way into the Far East or the furthest West. He doesn't know, and doesn't care. A man digs coal in Wales which is to furnish heat or motive power for an electric-generating station in Bulawayo or Syria. A hide is tanned into leather in Kansas City, is turned into shoes in Binghamton, N. Y., to be worn in Czecho-Slovakia or in Turkey. At your breakfast table each day you drink coffee grown in Brazil or Porto-Rico, sweeten it with sugar raised in Cuba or Haiti, cut yourself a slice of bread made of wheat raised in Minnesota, the Dakotas or perhaps in Argentina or Russia, and smear it with butter made out of the milk of an Iowa cow, or with jam made in England out of oranges grown in Spain or Italy. When you get ready to go out, and if it happens to be cloudy, you put on your feet rubber shoes made of the gum of a tree growing in the Jungles of the Congo or Malaysia, and you may also put on a coat made of the same foreign substance. A few hours later you may, if you so desire, lunch on fruits gathered in from a dozen South and Central American Countries, not counting the varied products of your own, far-flung, native land. And it is the same way with your means of livelihood, the tools and materials that you employ in the process and the product of your skill or effort. All these have ceased to be individual, but have become a composite of the human race. It is interlocked and intermingled with the product and the need of peoples scattered all over the face of the globe.

But do not think for a moment that these variegated boons are yours for the asking, a free-will offering from kind-hearted Mother Nature. You have paid for them, and paid dearly. You have paid for them with *your independence*, your self-sufficiency, your skill as a worker, creator or independent trader. You have given your

hostages to fortune, hostages most likely never to be accorded their liberty again. You have given them in exchange for these enhanced comforts and your lessened ignorance! You have become the Faustus of the legend. You have bartered away your calm of mind and repose for a brief taste of youth and ease!

Even the joy and the thrill of the early machine-days are gone. To-day man no longer feels like a conqueror, like the discoverer of some hidden power or force. Man no longer dominates the machine, but really is dominated by it whether he knows it or not, and I rather think that he does know it only too well now, in these days of technological unemployment and widespread misery due to this very domination of his life by the machine. While human energy is capable only of moderate increase, the power of the machine may be, and is, constantly increased in ways and in degrees without end. In the Malthusian dialectic it would perhaps be proper to say that while the one increases in an arithmetical, the other in a geometrical ratio. The machine lends itself to repeated improvements, to the almost endless enhancement of its productive abilities, and to its own supercession again and again by newer and better machines. Every day various plans are being tried out for the increase of the productive capacity of each unit, the Taylor System of an earlier day and the mass production of the present day, for example.

That machine or personnel whose capacity for producing commodities is increased, needs in turn a larger quantity of raw material to work with, as well as new and enlarged outlets for the things produced. This modern Homunculus—the machine produced and compounded in the modern Frankenstein laboratory—now came to dominate as well as to frighten its creator, keeping his nerves frayed and on edge day and night, as truly happened to his celebrated prototype in the story. The Homunculus is growing larger day by day. He keeps man in a state of fear. What is he to do with him? He can't kill him. He can't undo him, and perhaps doesn't want to; but where will he find the food day after day with which to appease his ever-increasing appetite? When the monster is hungry, as he now is, man, his feeder, too, is hungry, and with no prospect or outlook for appeasing *that* hunger. And what, again, will he do with his plethora of honey-goods—into which this monster transmutes the feed that we dole out to him? "I must hasten", says Frankenstein, "to find some more backs on which

to place these additional coats, heads to wear these hats, feet to put into these additional pairs of shoes! I must find people to drive these cars, to listen to these phonographs and radios, to smoke these million upon million packs of cigarettes and to chew these useless heaps of gum. *I must teach the people to want* these and more of their kind. I must inculcate in them new habits, make them desire the things that they have no normal craving for and would be better and happier without. I must do it, or be devoured by my Homunculus. And I must not only teach my own people to acquire these habits, but must also become a schoolmaster in other and distant lands. The Chinaman must be taught to smoke Virginia cigarettes, the Filipino must be made to chew gum made in Chicago, the Malays must be taught to use the phonograph and the radio, while the Kaffir in his *Kraal* must be told to carry a Kodak and eat American pork, as otherwise I'd be overwhelmed by my Homunculus, there'll be a panic and misery in the land, and the monster's erstwhile servitors will stand shivering in the breadline, waiting for a dole of charity soup". Parenthetically, and by way of concrete illustration, the rampages of this angry Homunculus are all too evident in the world-wide crisis we are even now experiencing, and the misery that it brought to untold and bewildered millions.

In plain and simple language, industrial civilization has really reduced itself to the simplest essentials; to the double-edged formula of raw materials for production, and ever-increasing markets for the ever-increasing amount of produced things. And this is the sum total of all foreign policies, of all diplomacy, of our modern imperialism and "economic penetrations", of war and peace as waged and signed today.

We no longer wage war for fertile fields and pastures. It is no longer a fight of hungry men for loaves and fishes. The world today suffers from a plethora of commodities that the machine could, and does, produce. There are no hungry tribes in our midst waiting to descend on their neighbors and despoil them in their own desperate hunger, as all lands now are equally fertile and equally barren by the *fiat* of the new economic order and the ready means of transportation. Nor are there any longer any innate tribal hates or jealousies. During the World War the various nations engaged in the silly and wasteful struggle had *to create* and maintain their

propaganda bureaus in order to *foster hatred artificially,* and had to stimulate it day by day, for fear that it would die a natural death if let alone for any length of time. And it is the testimony of these men and women who mingled with the soldiers, or were soldiers in the late war themselves, that these fighters were singularly passionless and free from all hatred towards the enemy, but fraternized with him whenever the opportunity offered, and when not expressly forbidden to do so by their panicky officers; while as for dynastic rivalries, they have become almost negligible, conspicuous mainly by their total absence among the masses of people, who fight the modern bloody wars and are called on to make the supreme sacrifice in them.

Now as to the specfic causes of this new tension in post-war Europe. They are traceable indirectly to our machine civilization and more directly to the division of the spoils following the great war. Of all the nations that participated in the World War on the allied side, Britain gained the most, in a territorial sense, at the time when the small group of aging buccaneers carved up the World between them. She annexed, under the guise of the newly-invented "Mandate" system that deceived no one except a certain elderly and unsophisticated American autocrat, all the former German Colonies in Africa, "took" Palestine, Mesopotamia and Trans-Jordania, and tightened still further her death-grip on Egypt. She almost "walked off" with Turkey, and would have if she had only succeeded in capturing betimes the person of Kemal Pasha. Then she would most unhesitatingly have put a noose around his neck—as she so unceremoniously did to so many other Turkish and Egyptian patriots in 1921—or would have transported him to some Island prison to pine away and languish for the remaining few years of his life—as she also had done to some others—, and, presto! "the Empire on which the sun never sets" would have become enriched by another rich province or colony. That she didn't succeed wasn't really her fault. She was willing enough to become the strangler of one more nation, but was denied the chance by the mere flip of the dice in Fate's ironic hands.

At the present time, and as a result of this too liberal appropriation of the spoils, her prestige in the World is considerably enhanced, the fear of her among the subject and non-white races greatly increased. She now rules over territories, and exerts an influence

through her "Diplomatic Agents", "Commissioners" and "High Commissioners" and what not, over ever so many more territories and lands as to cause Rome in her most flourishing period to look like some tiny Principality alongside of her.

But for all that, she has become the Midas of these Post-War days. Midas had more gold than anyone else in creation. The Gods had granted his prayer to turn everything he touched into gold, including most maliciously, his bread and water, so that he starved to death in the midst of the greatest wealth ever brought together by man. Britain, which before the War had been "the workshop of the World" now is so no longer. Two to three millions of her young and vigorous sons are chronically idle—not because they want to be, but because they have to—drawing a weekly "dole" to keep body and soul together. Her one million or so of coal miners in South Wales are unemployed and unemployable, because the demand for the coal that they used to dig is gone, its place having been taken by the coal dug in the Ruhr and Upper Silesia. These later mines were there before the War too, it is true, and their coal was not exactly allowed to stay hidden away in their bowels; but it is now being dug more feverishly, in greater abundance and with half-starved labor. Why is this so? Because, as regards the Ruhr, Germany has become the galley slave of the World. She must work not only to support herself, but to support France, England, Belgium, Italy, Japan, the U. S. A., and a few other nations. She must produce so many millions of tons annually to give away as a free-will offering to her late open, and at present secret, enemies. She must produce some more to meet her own domestic needs, and still some more for export, so that she have the wherewithal to pay for her imports as well as to find the money with which to satisfy the International Sheriff standing guard at her door. All in all, she is obliged to drive her workers to the very last ounce of their strength and to the fullest capacity of the machinery, and at a wage reckoned at the barest subsistence level,[1] in order to provide for all these natural and artificial needs. The result of this German super-efficiency in production, and the semi-starvation of her serfs, is

[1]Wages in the Ruhr a few months ago were; 60 Pfennigs per hour for unskilled labor and 78 Pfennigs (19 cents) for skilled labor. 40 per cent work 57 hours weekly, while 60 per cent work 60 hours weekly. The production of iron ore has increased 27 per cent, of steel 42 per cent over 1913! Two million draw the "dole".

that the miner in South Wales, and to a certain lesser extent in some other countries, finds his calling slipping away from him!

Or take the case of Upper Silesia, as an example: This territory has been awarded to Poland after the so-called and trickily-manipulated Plebiscite of 1921. Poland, a new and inexperienced country fighting hard against threatened bankruptcy, is working her mines day and night—under the efficient tutelage of the Americans and the French—in order to produce wealth for the American bondholders of her many loans, aside from finding the means wherewith to run her own government. And her laborers receive about one-half the wage of their English confrēres, so that she could easily undersell them in the World market.

What is true of the mines is true also of the factory and workshop. Germany, for example, must produce not only for the needs of her own sixty-five million people, but for the use of a dozen more, major or lesser, Powers.[2]

Add to the above the fact that the source of raw materials—her colonies—have been taken from Germany, and that she is obliged to buy all her raw supplies in the competitive open market, and you have a very pretty picture indeed of the present situation. The German Homunculus—the machine—is geared up to a feverish and neck-breaking state of efficiency, with the result that the British *Golem* finds his own strong arms dropping limply to his side, and the entire International economy—an artificial economy at best—is put out of joint. For, while it was entirely possible in ancient and mediaeval days for the conqueror nation to enslave the vanquished nation, keeping it at work while it lolled in idleness itself, it could no longer be done to-day after man has been displaced by the machine, and his skill, individuality as well as his self-sufficiency have been taken from him!

And even Britain, victorious Britain, is not entirely free from war-time obligations. She has to pay back her borrowings to Uncle Sam ("Uncle Shylock" some of her sons have dubbed him); and she has her war pensions and indemnities, and the rehabilitation of her disabled ones among her own subjects to pay for!

There is Middle Europe. Austria and Hungary have been plucked and dismembered, and their neighbors given unduly large portions

[2]The interest payments on her loans for her Dawes Plan payments amounted to One Billion Marks yearly! A little less under the Young Plan. Despite of long hours and steady work, 791,000 families are homeless!

of the bleeding carcass. The former can't live, and they nurse their resentment, while the others are bloated and misgovern themselves and others. More recently the new Russian menace—not in the revolutionary sense, but in the recovered economic field—has appeared like a spectre on the World's horizon. She is producing goods in great quantities, is selling them to other nations at reduced rates. For these blessings she is roundly abused and cursed, abused and cursed as the menace to all fellow-nations! A generation ago—previous to the coming of the machine age—she would have been blessed by all for it!

And here is where Russia comes into the picture. If either or both of these rich Anglo-Saxon nations had not continued to play the Pecksniffian role, had agreed to abandon the holier-than-thou attitude towards the Soviet Government, recognized the *fait accompli* and adopted the simple shop-keeper's attitude towards her (and they have that opprobrious term thrown at them all the time, anyhow!) then they could both appease their hunger to a considerable extent by trading with her, reduce their own unemployment and restore their respective sets of nerves to a less frayed state. But they won't do it. As a result of it, we have about six million people unemployed now in the United States; two to three million drawing the dole in the United Kingdom, while there is no ghost of a chance for any of the Welsh miners to be absorbed in any other industry, when there is no room in it for the old workers!

And so chaos continues and will continue to predominate over the affairs of the helpless and enmeshed man, with no other prospect but war to disentangle them for a while, preparatory to their reentanglement the moment actual hostilities are ended and the Homunculus set to normal working again.

SCIENCE AND RELIGION—ANOTHER ATTEMPT AT RECONCILIATION

BY VICTOR S. YARROS

RECENT developments in science, notably physics and astronomy, have led, most naturally, to new attempts at effecting a reconciliation between religion and exact science. We have been assured by many that the majority of the modern physicists are Idealists, not Materialists or Mechanists, and that science has acquired a new humility by reason of the universal abandonment of the old conception of matter. We have been assured—by Gilbert Chesterton among others—that Agnosticism, Rationalism and Disbelief have run their course and are fading away, making room for a revival of religion and faith.

What more logical and comprehensible, then, than a new effort to establish an *entente cordiale* between Science and Religion?

In this paper we shall examine the contribution to that effort of Prof. Julian S. Huxley, grandson of the great Professor Thomas H. Huxley, in The Atlantic Monthly for March. As the editor of the magazine remarks, this contribution is the more interesting and significant because of the difference between its spirit and tenor and those of the contribution of the grandfather to the same subject in another era and another intellectual atmosphere.

"Religion Meets Science" is the title of the paper we are about to consider and comment upon. For the most part, the paper is admirable and thoroughly sound. It dwells on the adjustments religion has to make in the light of modern astronomy, modern physics, modern cosmology. The notions expressed in the Old and New Testaments are too dead to deserve even passing references. We have new views of the world, of space and time, of evolution and dissolution. We cannot indulge anthropomorphic fancies. We can-

not talk seriously about Jesus sitting at the right hand of God. We cannot talk of heaven as a place somewhere in space. We cannot talk of prayer and miraculous intervention in response to prayer. All this, we see, is naive and childish, and we must put away all puerile ideas about God, the next world, individual immortality.

But if we do put these things away, do we not also put away religion?

No, answers Prof. Huxley. Science may destroy certain theologies, even certain rigid and unprogressive religions, but it cannot destroy *religion*, which "is the outcome of the religious spirit, and the religious spirit is just as much a property of human nature as is the scientific spirit".

These words obviously call for a definition of the term religion and the phrase religious spirit. Prof. Huxley, aware of this, furnishes the definitions, but in a rather indirect and distinctly unsatisfactory way.

"The practical task of religion," he says, "is to help man to live and to decide how he shall use the knowledge and the power science gives him". Again: "What religion can do is to set up a scale of values for conduct and to provide emotional or spiritual driving force to help in getting them realized in practice".

Science, reasons Prof. Huxley, is morally and emotionally neutral. It has no scale of values, apart from the value of truth and knowledge, which of course it emphasizes and upholds. What we are to do with facts, ideas, opportunities supplied by science, it is the duty and privilege of religion to determine.

This is perfectly clear, if not at all new. But let us glance at Prof. Huxley's assumptions. Science, he premises, is morally neutral and has no scale of values, aside from the value of truth and knowledge. But to what sciences does this generalization refer? Physics has no scale of values. Astronomy and chemistry are morally neutral. So are several other sciences we call natural or physical. But is it a fact that ethics, economics and politics are morally and emotionally neutral sciences? Is history neutral and *sans* a scale of values? Is sociology?

The answer assuredly is that today no progressive thinker will admit for a moment that the social sciences are neutral morally and emotionally. Prof. Huxley is sadly behind the times.

Take the science of economics. Since Adam Smith it has been

held that economics has its scale of values and is morally quite partisan. Its business is to promote the material welfare of nations, to do away with unmerited poverty, unjust inequality, lack of fair opportunity. It is bound to point the way to economic justice and to permanent general prosperity. It has principles, postulates, objectives, ideals. Its exponents are *not* neutral, cold, objective. They take sides; they attack; they defend; they *fight* for what they consider the right solutions of problems.

Now, men of science who fight and work for objectives possess driving force. They do not have to borrow it.

What is true of economists is true of ethicists, sociologists, workers in political science. They severally have their respective ideals and standards—scales of values. They fight for these. Hence they are *not* morally neutral. What becomes of Prof. Huxley's whole argument if his major premise is false—as it is?

True, he may rejoin that the militant men of science just referred to *are also religious,* and that it is religion, not science, that furnished the driving force they display and apply. But that plea would beg the whole question. If science has scales of values, it does not require any aid from religion. And science is merely descriptive if it does not set goals and predict results. The social sciences have long since ceased to be merely descriptive. Any knowledge of economics, politics, ethics, sociology as taught for a century or more leaves no doubt upon the point.

It is sufficient to mention such names as Mill, Spencer, Toynbee, Comte, George, Ward, Proudhon, Hobson, Keynes, Dewey, Tawney. And one hardly needs adding that the radicals among the economists, sociologists and ethicists have never failed to stress the moral and human aspects of their sciences. Indeed, Prof. Huxley's own grandfather, who wrote much on political, social and ethical questions, even though they were not strictly within his special province, and who was a militant Agnostic, was never morally neutral or indifferent to social and spiritual values.

So much for facts. Dealing with the matter theoretically, is it not absurd to suppose that the social sciences *could* dispense with scales of values, with standards and ideals? Science is based on experience and observation. The human race has lived on our globe long enough to have discovered that societies, economic systems, political organizations cannot possibly exist without codes of con-

duct, principles of co-operation, restraints upon instinct and appetite. Science formulates and explains these codes, rules and standards. Laws, in truth worthy of the name are *discovered,* not arbitrarily enacted. They grow out of conditions and necessity. Religion has nothing whatever to do with them.

To quote George Santayana, "the principle of morality is naturalistic. Call it humanism or not, only a morality frankly relative to man's nature is worthy of man".

If all theologies and religions were abandoned tomorrow, morality and hence ethical science and ethical philosophy would remain. Morality changes with conditions and circumstances, precisely because it is human and relative to human needs under the dictates of association and co-operation, as of competition and permissible conflict.

Thus Prof. Huxley's basic assumption collapses under inquiry. Religion is *not* necessary to morality.

It is not necessary, either, to the arts and to the appreciation or cultivation of beauty. Religion has sought the aid of art and beauty, and for good utilitarian reasons. But the sense of beauty is natural to man, as it is in some degree to the lower animals, and would be cultivated and fostered in societies devoid of all religious institutions or ideas.

We are brought back, however, to the question: What essentially *is* religion? Can it be completely shed and renounced? Since Prof. Huxley does not help much in our search of adequate definitions and clear ideas, let us turn to Prof. Nathaniel Schmidt of Cornell University and his book on "The Coming Religion". According to him, religion is "devotion to the highest"—the highest truth, the highest duty, the highest beauty. Science, Prof. Schmidt holds, agreeing in this matter with Prof. Huxley, seeks knowleedge for its own sake, without regard to its applications or effects, and by purely intellectual processes. Religion, like science, seeks knowledge and truth, but it seeks these in the realm of what is felt, desired and conceived as the highest good".

Now, there is no serious objection to giving the name Religion to the sentiment of devotion to the highest, but it is plain that this is an arbitrary proceeding. It does no grave harm, but no good, either. It would seem to be more sensible and more scientific to call sentiments and emotions by their own names. If I long for the highest

in music—for Bach, Beethoven, Brahms, say—I do so because this music gives me the deepest and keenest pleasure. It exalts and stirs me, and I like to feel exalted and moved. But why call this state of mind religious, and what do we gain by so calling it? We only confuse issues by so doing. If, again, I want to know the highest truth attainable in regard to my duty to others, or to society, I consult the best ethical teachers and guides. I may wish to be just, but the sentiment of justice is not enough—definite ideas and concepts of justice are necessary to right conduct. Prof Schmidt talks of one's feelings, but feelings are not always right. And even when right, they need interpretation and direction.

Prof. Schmidt falls into the same error as Prof. Huxley in asserting that the processes of science are purely and strictly intellectual, and, therefore, science is not interested in applications or effects. The sciences that have to do with human welfare and human progress are decidedly interested in applications and effects, and the workers in these sciences, as we have seen, are not incapable or ashamed of emotion when they enforce a truth or oppose a fallacy or falsehood.

We must conclude that religion cannot rationally lay claim to a monopoly of devotion to the highest good. Men not in the least religious are devoted to the highest good, and this because they are human and all things human are natural to them.

Let me try to offer a different definition of religion. It is a name for one's attitude toward the unknown, the mysterious, the unknowable, possibly. Contemplation of space, time, space-time, the stuff of the universe, the evolution and dissolution of the manifold forms that stuff has assumed and is assuming including what we call life and mind, fills one with wonder and awe. After all, science solves no ultimate problem. It does not pretend to be able to do so. It observes, classifies, generalizes, theorizes, verifies, modifies its theories and finally formulates so called laws. But it has its limits, and has no hope of transcending them.

The emotions aroused by contemplation of the great, unfathomable mysteries may be called religious emotions. That begs no question. But we must recognize that those emotions are unaccompanied by definite ideas. We marvel, we sigh, we ask questions, but no answer comes. Religion *remains* emotional. The explanations offered by the theologies are crude, inadequate, or even mean-

ingless. We have outgrown all the theologies. We have reached Agnosticism, and there we stick.

It is, therefore, neither necessary nor possible to reconcile science and religion. There is, in truth, no conflict. Religion is an emotion, and it is common to all human beings. Science cannot get rid of it, and does not desire to get rid of it. It is, moreover, an ennobling emotion. It engenders humility and modesty. It makes for better science and better conduct.

But when, in the name of religion, some theologian essays a theory of cosmic evolution, of life and destiny, science immediately steps in and simply asks for the evidence. Feelings are facts; theories are propositions to be demonstrated. No religion now professed, no theology now expounded, is able to demonstrate its propositions. It is preposterous to ask us to accept mere propositions on faith. Why should we? How can we and remain reasonable beings? Suppose some one claims to have had a revelation. The claim itself implies a theory that has to be proved. A revelation from whom? By what sign do we distinguish revelations? Are they real or imaginary? The prophets who have claimed revelations had preconceived notions to control their thinking. They had naive ideas of psychology and of the nature of evidence. Those ideas today provoke a smile, and yet we are expected to adhere to theologies and religious systems based on those primitive and puerile ideas!

We refuse to abdicate and stultify ourselves. We insist on studying religious beliefs and institutions scientifically, and when we do this, we are apt to conclude that religion is an emotion and nothing else, and an emotion compatible with Agnosticism. The Agnostic knows where science stops, but he also knows that emotions are not ideas, and that intellectual honesty and clear, sincere thinking are indispensable to all genuine human progress.

A GOSSIP ON EMERSON'S TREATMENT OF BEAUTY

BY CLARENCE GOHDES

I SAYE that beawtie commeth of God, and is like a circle, the goodnesse wherof is the Centre. And therefore, as there can be no circle without a centre, no more can beawtie be without goodnesse" (Hoby's Translation of *The Courtier* of Castiglione).

Any attempt to determine the canons of esthetics underlying Emerson's "expositions in poetry" is bound to result in failure because of his unmitigated eclecticism, as well as his mystical attitude toward the "things of the spirit." So many inconsistencies are in evidence in all his writings that in basing conclusions upon them one is apt to stumble into a quagmire, or, at least, to cross over in a gingerly fashion on the stepping-stone of a cautious 'perhaps'. In his essay on Thoreau, Lowell aptly remarks that the artistic range of Emerson is "narrow." This, however true, does not signify that his love of beauty was bounded by the limits of a narrow imagination, or even of a moderately developed artistic sensibility. To accuse him of being a mere dilettante, masking an uncultivated taste beneath a spurious interest in art is to fail utterly in an appreciation of his character. Few men have ever had a greater capacity for appreciation than he. The frequent occurrence of the term *beauty* and its significant bearing upon all that went to make up character and morality for him are sufficient indication of the important place that beauty held in his thoughts, as recorded in his journals.

Emerson's use of the term beauty indicates not only that, for him, at least, beauty has a place in the field of ethics as well as esthetics, but that it has various significations even within that latter field.

"Strange," he writes, "that what I have not is always more excellent than what I have, and that Beauty, no, not Beauty, but a beauty instantly deserts possession, and flies to an object in the horizon" (*Journals,* Vol. VI, p. 202). The word with the capital letter, no doubt, meant to his mind that spiritual exaltation which he chose to identify with truth and goodness—the refinement of Platonic idealism that filled the imagination, and at times passed through the pens of such delicate emotionalists as Shelley and Spenser. I wonder if the Sage of Concord would have been able to recognize his chaste love of abstract beauty in that which revealed itself to Rossetti in the eyes of one of the mystical hourris immortalized in his sonnets. Intrinsically, the beauty that Emerson sought to find in an autumn sunset or a wooded hill is the same as that which Rossetti glimpsed in the perfection of a woman's throat or the spontaneous gesture of her arm. The word in the passage quoted, written with a small letter, on the other hand, meant a mere phase of this all-embracing Beauty, a specialized manifestation of a lower order, and, as such, akin to "a nature passed through the alembic of man"—namely, Art. It is in regard to this latter that Lowell's remark applies.

Setting aside his understanding and appreciation of literature, Emerson's journals reveal the fact that their author was little interested in the various types of creative artistic genius. Music, for example, appears to have meant surprisingly little to him. Despite the fact that he glorified the eye as the most perfect member, he shows very little appreciation for plastic art. One has merely to read the accounts of his impressions gained abroad to see that his genius did not admit of a full, or even proper, interest in the host of glories shut up in the galleries of Europe. Two reasons for this appear to suggest themselves: first, his eye was of that inner kind, "which is the bliss of solitude"; and second, his New England background was rather barren, if not altogether bleak, so far as any cultivation of the fine arts, other than letters, is concerned. There is something wistful, if not whimsically pathetic, in Emerson's comparison of the tasteless churches of Massachusetts with the

hoary cathedrals of France and Italy, crystallizing in their ponderous towers and stained windows the artistic aspirations of ages.

Much has been made of Emerson's lack of knowledge and true appreciation of plastic art—in fact, too much. When aroused, his broad sympathies and profound insight into essentials enabled him to do the fullest justice even to painting. "The head of Washington," he writes in the eighth volume of his Journals (p. 300), "hangs in my dining room for a few days past, and I cannot keep my eyes off of it. It has a certain Appalachian strength, as if it were truly the first-fruits of America, and expressed the country. The heavy, leaden eyes turn on you, as the eyes of an ox in a pasture. And the mouth has a gravity and depth of quiet, as if this man had absorbed all the serenity of America, and left none for his restless, rickety, hysterical countrymen. Noble, aristocratic head, with all kinds of elevation in it, that come out by turns. Such majestical ironies, as he hears the day's politics at table. We imagine him hearing the letter of General Cass, the letter of General Scott, the letter of Mr. Pierce, the effronteries of Mr. Webster recited. This man listens like a god to these low conspirators." Could Gilbert Stuart say that he ever put more into a picture of his famous subject than Emerson got out of this one? How well does this passage illustrate his critical principle, "Art requires a living soul" (Vol. VII, p. 33); or, as he elsewhere expressed the idea, "—there is that in beauty which cannot be caressed, but which requires the utmost wealth of nature in the beholder properly to meet it" (Vol. VI, p. 446). That "wealth of nature," so necessary to the best criticism, was surely his to an eminent degree. His acquaintance with Ruskin's works was close enough to admit of no doubt as to his appreciation of the problem of plastic art in elevating natural beauty to its place above the conventional. Again, he refers to plastic art in these words, "I adhere to Van Waagen's belief, that there is a pleasure from works of art which nothing else can yield" (Vol. VIII, p. 253).

How, then, can one reconcile with this seeming understanding and appreciation such an eloquent tirade as the following: "Art is

cant and pedantry. . . A grand soul flings your gallery into cold nonsense, and no limits can be assigned to its prevalency and to its power to adorn" (Vol. V, p. 488)? The answer is that this mystic-moralist is not only juggling with words as mere inept symbols for ultimate verities, but that he desires to indicate the subordinate place of traditional, finite conceptions of beauty, in view of that cosmical exaltation of the 'Reason,' unbounded by time and space, and experienced to the full only in rare moments of ecstatic union with the oversoul. This is the beauty that "cannot be clutched," that identifies itself with goodness and truth, that requires a finely developed spiritual apprehension upon the part of the beholder. "Imagination transfigures, so that only the cosmical relations of the object are seen. The persons who rise to beauty must have this transcendency" (Vol. IX, p. 279). Accordingly, the "great soul," the transcendentalist, alone can be the true judge and critic of this higher beauty, this phase of the all-pervading spirit. That clever half-truth, "Art requires a living soul," is, accordingly, the essence of the Emersonian esthetics, if one dare apply the term to such emotional egotism. Glorified individual appreciation—denial of the reality of objective beauty—is to be the criterion of true beauty. This is the mystical aspect of Emerson's love of the beautiful. Fortunately, Emerson possessed a poet's appreciation of concrete manifestations of this spiritual force. The manly, experiential side of his nature saved him from being carried too far away by the Pegasus of refined idealism.

It remains now to attempt a consideration of the reasons underlying a poet's repudiation of art. It is not enough to say that his moral penchant made the secular nature of most artistic creations incompatible with his own. Those pages, already referred to, which record his experiences upon his first trip to Europe, indicate his lack of full appreciation for the purely sensuous, as does also his fierce assertion that "there is no greater lie than a voluptuous book like Boccaccio" (Vol. III, p. 456). It is quite true that his staunch New England ancestry with its rigorous adherence to a Puritan sense of decorum narrowed his scope of appreciation:

yet one must seek further for a more fundamental reason—in the man's own character, not in his surroundings. Traditional religion he threw overboard with a gusto: yet he chose to exalt the beauty of moral perfection above art, although he was a literary artist first and last. Why did this champion of individual submission to mood and whim not allow the fine frenzy of creative genius to sweep him along with its current?

The answer is to be found in his many attempts to describe ineffable moments when a wood, or skyline, or bird-note ushered in a torrential flood of mystical beauty so powerful in its grip upon the imagination that time and space rolled back like a scroll and, despite the passivity of sense perception, a belief—no, a knowledge, of an all-pervasive unity thrilled the spirit of the man. Why seek through art to obtain indirectly a mere aspect of beauty, when the glories of nature offer a means of direct contact with it in its entirety? The answer is simplicity itself. How can we live art when "we can love nothing but nature"? Since art is a mere imitation of nature, those who pursue it as a motivating force in life are but choosing a reflection of a reality for a reality. A beauty becomes Beauty when it detaches itself from the object and, freed from all mundane trammels, exhibits itself as a mere aspect of the cosmic entity—the spirit. As a creator of beauty—as an artist—Emerson knew the beauty of expression with all its implications, at least so far as literary art is concerned; however, he chose to subordinate at times the poet's function of creation to the mystic's function of passive acceptance of the beauty of the "Spirit." And beneath his interests in the creation and reception of beauty, one must remember, there was an insistent conscience that tried to bend all the thoughts and activities of his life in the direction of "the moral sentiment."

Although Emerson did not see fit to "make rules out of beauty," he would, in all probability, have endorsed Woodberry's principle of art for life's sake. Possibly he would have preferred to word it, "Art for character's sake." "But," he insists, "there will always be a class of imaginative men, whom poetry, whom the love of Beauty

leads to the adoration of the moral sentiment" (Vol. X, p. 9). There is something eminently worthy in this belief that "culture is for the results" (Vol. VIII, p. 539), a belief that immediately turns art from the small shrine of an esoteric cult to the broad, green Druid temples of humanity. Carp as one may at his inconsistency and his emotional egotism, the fact remains that he made a most noble attempt to make the love of beauty a source of comfort and discipline to all men. His incapacity for making a proper, objective estimate of human potentialities makes the essential nobility of his purpose no less striking. It is unfortunate that Emerson flattered mankind with the belief that his own mind and heart were typical of the lot.