The Open Court

A MONTHLY MAGAZINE

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

Founded by EDWARD C. HEGELER

VOL. XXXVIII (No. 11)

NOVEMBER, 1924

(No. 822)

CONTENTS

Frontispiece. The Taking of the Bastille.	PAGE
Interpretations Interpreted. J. Graham Edwards	641
An Undamaged Soul: Thomas Paine (Concluded). J. V. NASH	657
Individual Development. Henri Vanderbyll	675
Art and Scientific Education. HARDIN T. McCLELLAND	689
Arabic Parallels to Rabbinic Literature. Julius J. Price	696

The Open Court Publishing Company

122 S. Michigan Ave.

Chicago, Illinois

Per copy, 20 cents (1 shilling). Yearly, \$2.00 (in the U.P.U., 9s. 6d.)

Entered as Second-Class Matter March 26, 1887, at the Post Office at Chicago, Ill., under Act of March 3, 1879.

Copyright by The Open Court Publishing Company, 1924.



The Open Court

A MONTHLY MAGAZINE

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

Founded by EDWARD C. HEGELER

VOL. XXXVIII (No. 11)

NOVEMBER, 1924

(No. 822)

CONTENTS

Frontispiece. The Taking of the Bastille.	PAGE
Interpretations Interpreted. J. GRAHAM EDWARDS	641
An Undamaged Soul: Thomas Paine (Concluded). J. V. NASH	657
Individual Development. Henri Vanderbyll	675
Art and Scientific Education. HARDIN T. McClelland	. 689
Arabic Parallels to Rabbinic Literature. JULIUS J. PRICE	696

The Open Court Publishing Company 122 S. Michigan Ave.

Chicago, Illinois

Per copy, 20 cents (1 shilling). Yearly, \$2.00 (in the U.P.U., 9s. 6d.)

Following the Project Principle

Project is a term to conjure with in educational circles today. While this is particularly true in public education, it is likewise significant that those engaged in the task of religious education are not far behind. The project principle is more and more becoming the dominant note in progressive philosophics of education. You will want to read and use these four pioneer books on project teaching.

THE PROJECT PRINCIPLE IN RELIGIOUS EDUCATION

By ERWIN L. SHAVER

The first book to deal with the project method in the field of religious education. Theory and practice are alike considered and such questions as "How can a project be set going?" "What is the procedure for carrying through a project?" are considered. Part II, entitled Church School Projects, consists of descriptions of actual project teaching in typical church schools, and may be purchased separately for collateral reading in leadership training classes.

\$2.75, postpaid \$2.85 Part II reprinted and bound in paper \$1.25, postpaid \$1.35

LAW AND FREEDOM IN THE SCHOOL By GEORGE A. COE

An analysis of the part played by law in the project method, this book demonstrates the need for "projects anti," i. e., against wasteful and disastrous activities. It is of high inspirational quality to the teaching profession.

\$1.75, postpaid \$1.85

STORIES OF SHEPHERD LIFE By ELIZABETH MILLER LOBINGIER

A single Sunday-school project based on the life activities of the early Hebrew shepherds. The material gives the child many opportunities for drawing, sand-table work, dramatization, modeling, and construction. For the second grade of the primary.

\$1.50, postpaid \$1.60

RELIGION IN THE KINDERGARTEN By BERTHA M. RHODES

Will help the teacher of whatever degree of experience present religion to little children in a concrete, simple, and dramatic way. Plays, pictures, and music are used extensively with material gathered from the Bible, from nature, and particularly from the activities of the children themselves.

\$1.75, postpaid \$1.85

THE UNIVERSITY OF CHICAGO PRESS CHICAGO 5832 Ellis Avenue ILLINOIS





THE TAKING OF THE BASTILLE (July 14, 1789)

Frontispiece to The Open Court.

THE OPEN COURT

A MONTHLY MAGAZINE

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

Vol. XXXVIII (No. 11) November, 1924.

(No. 822)

Copyright by The Open Court Publishing Company, 1924

INTERPRETATIONS INTERPRETED

BY J. GRAHAM EDWARDS

THE relation of man to the world about him, coupled with his desire to live here and therefore hereafter, gives rise to many conflicts as man, generation after generation, continuously finds himself surrounded by the increasing need for more difficult adjustments. Such adjustments, no matter to what they may be referred, are usually felt in terms of one's present survival or become the excuse for one's present survival.

A conflict of large interest is that seen between the Fundamentalists and Modernists, or between Science and Theology, or Evolutionists and Non-evolutionists, or Vitalists and Mechanists. The probable reason for such a state of affairs is not far to seek, but such seeking would not help appreciably the solution of the conflict. The participants in any one or all of the phases of the conflict are after all rather grotesque. They do not argue for the sake of clarity or truth but they argue to show that their opinions, no matter how arrived at, are correct because they happen to be their opinions, not because they are even approximately true or correct. Owing to the desire of one group of participants to iron out the irregularities and seeming eccentricities of another group, competitive struggling and juggling is maintained.

Much has been said concerning the contradictions arising as a matter of course between the facts of science and the dogma of theology. Since that phase of discussion seems at present to an extent at least unresolvable, it may not be invaluable to show what some scientists (many biologists) who have become aroused by a multiplicity of accusations hurled at biology and biologists by those not, or primarily not scientific in concept, have said in fact, justification or compromise.

When evolution made possible a different interpretation of previous notions, opinions and beliefs, and the dynamics of science in general developed more rapidly than was permitted by the statics of religion and theology, much alarm was felt in certain quarters lest too much juggling was going on regarding the meaning and explanation of the diverse forms of life whereby man tended to lose dignity and God power. Due consideration seems not to have been given to the possibility that God was privileged to have acted in whatever way He saw fit in so vital a matter as organic evolution. No matter how the fashioning and maintenance of life was accomplished, it was and is a unique process meriting great admiration even though the admiration must come from so limited a source as the human mental eve. Those whose minds were not elastic enough to get this new focus on creation, thought the phenomena included in evolution to have been the result of the work of the arch-fiend himself, or of some entity with similar attributes. Finally, the way of the transgressor being proverbially somewhat hard and senescence not very combative, some believers in the theory of evolution, who also, it appears, wanted to continue evolutionists and at the same time walk in trodden paths, began to interpret the theory as follows:

Evolution, far from being the nightmare of the materiallyminded, is in reality the result of a stupendous and magnificent series of processes by means of which man has attained a complexity of structure and function which means improvement and progress. The concept of improvement and progress being designed, of course, to meet the more obvious phases of such complexity. Here was a toothsome morsel which would satisfy those conservatives who could see God from only one angle. And perhaps some were satisfied. But evidently those who were led to believe that the complexity of structure and function present in man, meant improvement and progress did not realize that such belief was held arbitrarily, or that man, for all the complexity resulting from his specialization in structure and function is no more adequate to cope with his environment or attain a millennium than animals less specialized or complex. It is obvious that man as any other animal, has an environment commensurate with a relative capacity to survive it. The human eye, for example, is no more adequate for the function it is required to perform, no matter how complex such function may be, than the pigment-spot of a one-celled animal is to the function it performs, no matter how limited it may be. Both man and the one-celled animals have, as regards a light-sensitive area, suitable means for responding to the demands of their respective environments. One is as much handicapped by his complexity as the other is by its simplicity. The microscope attests the truth of this and not its falsity.

To seek to interpret complexity of structure or function in terms of improvement or progress adds nothing to the practical solution of human problems. Such interpretations may actually serve to obscure the problem and prevent such a solution as might otherwise be practicable. It is worthy of note that the sense of superiority which many seem to derive from a contemplation of phenomena in general over which they have a certain control, is owing to human exploitation of that nature external to human nature. But the complexity which makes possible and ostensibly justifies such exploitation is not without its sinister aspect. The comparison of man with other animals involves different and more complex reactions or behavior on the part of man, but is by no mean clear, save by definition, that such reactions mean better adjustments and essential superiority. Nature's methods in securing for man so-called improvement and progress through processes of evolution are to be regarded with suspicion since the ends attributed to such methods do not in any real sense justify the means.

The implied assumption that cosmic design has all along been concerned with man as the ultimate pattern, while very flattering. is far from being substantiated. If it were substantiated, all of the available evidence revealing the varied aspects of maneuver displayed by this mysterious designer, nature-actor, creator, or inner perfecting principle, shows clearly how tedious and bungling the maneuver has been and is no matter if in cosmic or lesser processes man has finally emerged, or whether he arose by one mythical act of creation. Man's history since there has been a record, is more discreditable as dealing with an object issuing from omnipotent hands than if man had to plow with the assistance of unlabellable forces, through tons of colloidal ooze, requiring inconceivably long time. The object created cannot be more complex in character than the agency or agencies creating it, hence man and nature alike must reflect in their maintenance and operation something of the character of their originator. Therefore construction and destruction, integration and disintegration, life and death, "good and evil" and all the category of attributes relating to animate nature—to go no further—must inevitably be referred to an entity or entities, to a

process or processes. It is in the confused and confusing attempt to relate certain phases of man's behavior as well as of nature's in general to one entity, agency or cause while the remainder are, in attempt, related to yet another entity, agency or cause, that constitutes the most pitiable spectacle for the eye that would like to perceive that truth makes one free, or that knowledge is edifying, or that the so-called powerful cerebrations of that most haloed structure, the human brain really reflect credit rather than discredit on whatever entity, agency or cause that may cosmologically be responsible for its present status.

Another evolutionist is of the opinion that evolution has been accomplished in the past by means of the continuous action of cooperation or mutual service. It is, he holds, the discovery of this one fundamental underlying method, common to all creative processes of nature that constitutes the epoch-making truth which gives man creative power. He believes, moreover, that in nature-action, i. e., the way natural law and phenomena are manifest, is revealed the expression of a creative will and that it is in this nature-action that man may find the instruments of his salvation. He admits, however, that the processes revealing the creative will are almost equally destructive and constructive, organizing and disorganizing, integrating and disintegrating. But despite this sinister duality, he maintains that nature-action is such that a constructive surplus is achieved which justifies the duality and constitutes its secret. From this kind of reasoning he is enabled to deduce that evolution is a triumph of constructive over destructive processes and accordingly becomes the immutable pivotal truth around which man must orient his inward purposes and to this truth conform his conduct rightly or suffer self-destructive penalties. Likewise nature's way is the truth man must seek to discover and her methods be accepted as his moral code.

Such an interpretation of evolution, of course, promises well for persons who take more kindly to god than to animal ancestry. But to say that progressive creation is only realizable through better mutual service or cooperation or that the latter constitutes the great principle in evolution, gives man no slightest notion of how to apply the principle, as it may have functioned in evolution, to the solution of any human problem. Of what service to billions of warring chips is the knowledge that the cosmic tide in transporting them, does so by means of methods or principles of cooperation or mutual service entailing progressive creation, when the very complexity responsible

for progressive creation, however much brought about by cooperation or mutual service, conditions the horrible friction to which the chips are subject in their transportation? If cooperation or better mutual service should by any chance prove to be the great principle in the evolution of life—something knit of necessity into life's very fabric—should not the trend of exposition be then directed toward the kind of cooperation that should operate insofar as such a principle might be applicable in human cooperation and man might have consciously the power of constructive rather than destructive cooperation or mutual service?

When the attempt is made to reconcile one's hopes and ideals with the facts of reality, much confusion is to be expected. Such confusion is indicated by the statement that evolution is now the immutable pivotal truth around which man must orient his inward purposes and to it conform his conduct rightly or suffer self-destructive penalties; and again that evolution is something which compels man to accept nature's constructive methods as his moral code, when nature's methods are almost equally destructive and constructive. That nature should afford obvious truth or principles and compel man to conform to them, yet with the compulsion man does not conform, he accordingly must suffer self-destructive penalties, affords a questionable situation in the conduct of nature herself. More obvious and postulable than any method, code or principle of nature whereby man may obtain guidance in making necessary adjustments, is that nature cannot be personified to include such attributes or power as are ascribed to her. Neither nature nor evolution is a deus ex machina but rather words indicative of phenomena, a microscopic part of which phenomena man has become aware of in various ways in the course of time .

Because evolution is a word used to indicate what seems clearly to have happened in the differentiation of the diverse forms of life, and because there is that disparity in animal forms or phyla which appears to have justified man in assuming that he is the apex—the desired and desirable end of evolutionary processes—is the conclusion permitted that nature in producing man by means of such processes is more constructive than destructive, or that he is actually more advantaged by his sinisterly attained complexity? A complex machine is likely to require more attention in its functioning than a simple one. So it is with man who usually finds himself more handicapped by his complexity than other animals are by their relative simplicity.

One finds it but little clarifying to have discovered for him the great fundamental truth of cooperation or mutual service when even the discoverer also admits that there is an ever-present disorganization pervading the system or systems of nature—"a universal incompleteness of administration and a mocking instability of purpose, where chance creates and chance destroys or nips in the bud the tender shoots of new-sprung enterprise." And that "life stands on a meager franchise of the elements—a frail terrestrial film in an infinite sea of death"; that "organic evolution consists in utilizing the scraps in reducing the percentage of error by the actual process of living and dying-making one in a million fit to survive." That life should stand on so meager a franchise and constitute so frail a film and that evolution should involve the use of scraps in order that one in a million may be approximately fit to survive, is staggering to the intellect that seeks intelligence in nature or in her methods. Nature is the scrap-pile she is accredited with using. The intelligence of nature is expressed in scraps. The palpable horror is that one cannot be sure he really sees the pattern for the scraps. It is indeed the very scrappiness of nature that explains the origin and maintenance of so much mental dust.

If one turns for a moment to the point of view of another man of science, a point of view concerning nature rather different from the preceding, one find that this scientist sees man preying upon man (not to mention other animals in general), one a cunning parasite upon the other finally evoking reactions and consequences that overtake in catastrophe and cataclysm preyer and preyed upon alike. If this be true, what basis is there for the hope that either through science or any other agency one may obtain an antidote which will prevent "service from sinking to servitude and acquisition to rapacity destroying both the master and the slave, the robber and his prey"; or "cooperation from swerving into competition and friendship into enmity" entailing "fruitless cycles of unending struggle between pursuer and pursued, seeker and hider, aggressor and defender that have no outlet but mutual destruction or a deadlock of perpetual reprisal."

The relation of man to nature and nature to man, insofar as one relation may differ from the other, constitutes a problem not easily soluble at present—at least not soluble in sociological terms. In charmingly erudite statements one finds man discussed as a being with extracosmic relations—a being now independent of nature, now dependent on nature for guiding principles. Obviously man

cannot be regarded at one time as a product of nature and at another as a being remote from natural processes—a sort of casual spectator of that nature which he himself is. Care should be exercised in discussing the man-phase of nature so as to correspond in fact with discussions of any other nature-phase.

The illumination of darkness is manifest in the attempt to explain the relation of man to nature by saying that "while man from time immemorial, has carried his appeals for help, for right and justice, straight to the supreme court of nature, it was but yesterday that he succeeded in drawing from her in the doctrine of evolution, a clear declaration of general principles and a broad outline of nature's methods." Or is it not also pertinent to ask why nature refused something so fundamental when man has so assiduously courted her since time immemorial and is her latest and relatively most perfect creation? Then, too, as it is held, if growth, this spectacular manifestation in animate nature, is perpetually thwarted or checked by its own successes and again liberated when better ways for supplying its demands are found, producing an orderly progression from simple to complex, from disorganization to organization which evolution is taken to indicate, what evidence is obtained which will disclose how man is to select more readily better ways of progressing? Again, if as it is also maintained, "cosmic environment, from the earlier phases of organic evolution, has been broadly permissive for all kinds of life, provided life could find the right way to use it"-are not man and life essentially synonymous and both confronted with the same difficulties? Environment need not be permissive for any kind of life unless life contains within itself the means of its own realization. If it should appear that either man or life, so to speak, is trying to find a right way to live, the congenital equipment of cosmos contains as reciprocals not only the process of living and dying, but of every other process which mutually conduces to this end. It is, therefore, impossible to speak of an attempt of life to find either a right or a wrong way to live, for ample evidence is available which indicates equal effort in either direction. This is true of the individual, species or race.

The dictum which has been variously formulated and perhaps with a good motive, although it undoubtedly serves to confuse the uncritical, is that nature's way is the truth man seeks to discover, or that one overcomes nature by obeying her. This is deceptive, for nature's way is man's way and one cannot overcome nature without being himself overcome. It seems unlikely that man as nature's

best experiment should or could have become so separated from her that he has to undergo such violent pursuit in order to discover her way. Except for the difference in magnitude, one wonders if man in such ostensible seeking after nature's ways is or can be very different from beavers when they build their dam, or of squirrels when they store up food, or bears when they hibernate. Man does not seek nor does he have to seek in the way the dictum connotes, to discover nature's ways. The apparently more conscious desire in man to attain a better relation with his environment, leads him to say that he is seeking to discover that which other animals do more effectively and silently. Man is, it appears, merely aware of some of the processes of nature whereby his destiny is controlled. Awareness or so-called conscious manipulation of environmental factors does not mean control. The slave is not the master because he obeys the master's dictates. The apple does not overcome gravity by falling.

One critic of the biological picture which shows nature as selfish and wantonly destructive says that the picture is morbid and absurdly tragic and that it fortifies a false social philosophy which sees in social parasitism, in self-aggrandizement, in measureless acquisition of arbitrary power, the goal of a successful life. A philosophy which seeks to justify itself by an appeal to the struggle for existence, the elimination of the unfit and the survival of the fittest. This morbid and absurdly tragic picture and false social philosophy, this critic holds, miss the obvious fact that what actually happens in the struggle of life, is that life always wins and holds on to some increment of good. Be that as it may, the equally obvious fact is that "winning" and "good" are not easy to define biologically and one point of view is just as likely to be correct as another. At any rate life makes the canvas for whatever interpretations or points of view the human mind contributes. Man can only paint on this nature-life canvas with the oil and brushes which nature or life itself has furnished. The possibilities for all conceivable interpretations were innate in nature and life long before biology as a science and at a time when nature was "discovering" man along with her other discoveries and experiments.

The use of biological terms and data for false social philosophy should occasion no concern for one may be sure that other and equivalent terms would not be lacking despite the contributions of any science. Therefore it is hardly true to say in the case of Germany, for instance, that she was the first to incorporate into her politics.

business, religion and philosophy the most pernicious teachings of the struggle for existence and the survival of the fittest. For one knows now or should know that nature in producing pernicious teachers will also equip them with pernicious teachings all science to the contrary notwithstanding.

Biologists as well as those who speak only in the name of biology might well give more attention to a consideration of the fact that whatever is, is natural, no matter how convenient the arbitrary language indicating the varied aspects of nature may be. The so-called orderliness or lawfulness of nature which man thinks or fancies he has discovered—nay, even produced—is merely his experience of the phenomenal world. From the available evidence the conclusion may be easily drawn that, no matter how much change in material configuration of the animate or inanimate world, there was never less order at any time of the earth's history, or in cosmos, than now—less chance, chaos or accident; more design, purpose or teleology. Everything seems orderly if it can be observed sufficiently often in closely similar ways. The more acceptable way at present for man to discover that which he subsequently calls order in the world about him, is that offered by science. If no uncaused phenomenon (so-called noumena are really unanalyzed phenomena) is found and if certain sequences are repeated in approximately identical ways under approximately identical conditions, law and order are thus made possible of definition—but of definition only.

Another singular notion is that selfishness is self-destructive. The exponent of this notion believes that "Germany's dissolution will make the world better for the practical lesson it has received showing that selfishness for nations as for individuals is self-destructive." Selfishness, however, in the case of Germany or of any other nation has not led to self-destruction. Selfishness is primarily functional in self-preservation. It would be helpful, if true, for the public to know after thousands of years of increasingly destructive wars, that selfishness is self-destructive. But selfishness being self-preservative and *Nature* a conflict of imperfections, it is probable that attention could be more successfully directed here when interpreting Germany's conduct as well as the conduct of other nations.

Science also as well as selfishness and especially biology since "the dark and disfiguring shadow of Darwinism fell upon the fields of life" have been held responsible in various insidious ways for the growth and also the decay of nations. Germany's growth in power has been attributed to the development of her science as well

as a cause of her destruction. But are the biological sciences or science in general more destructive than the truth which makes one free. Real science is truth or fact and truth does sometimes make one relatively free. While scientific instruments and methods are used in modern warfare and national motives labelled in various ways, has the use of such instruments or methods revealed methods codes or sets of principles different from or subversive of those employed by nature in general? Verily history after nature repeats itself.

Unfortunately it is not clear what value in human terms is to be assigned to the creative aspect of nature, or what to progress. Processes of growth and creation as the biologist sees them have little sociological meaning although the desire is strong to read into them more than they can support or nature justify. The mere ability or capacity to differentiate into more complex forms or aspects of life entailing the accumulation of more complex social and industrial slavery (called organization) may be taken arbitrarily to mean progress. But what does the "progress" signify or justify? What rainbow promises are guaranteed in the physics of the spray of complexity, of growth, of creation? How may it be established with certainty that man through science, pure or applied, is "harnessing" nature as one aspect of so-called progress, rather than that nature through science is "harnessing" man just as the development of industrial organization is binding instead of freeing him? If the end or purpose of nature's travail is to yield a constructive surplus, why are "good" and "evil" such dynamic factors in that travail by means of which "improvement and progress" or "cooperation" realize themselves? Truly the human mind is finite.

Among the scientific protagonists of the theory of evolution who would coat it with some mentally narcotising substance, one is found who maintains that evolution offers a rational solution of the problem of evil. Without pausing to consider of what evil is actually composed, if it has any composition at all in a biological sense, one is made curious to inquire if this solution is merely offered tentatively, whether it will take one or more billion years for humanity to become aware of the offer and what the chances are for its acceptance. Because nature, through processes visible to man in terms of evolution, has enabled him to ascertain his relation to some of the processes that produced him, it may not be concluded that cosmos has been entrusted to his care, or that there will be no cosmology or cosmic functioning whether man is aware or not aware,

conscious or not conscious of evolution or cosmic functioning. Those among men who would control or shape man's destiny, might well find out from science or other reliable sources, something about how their destiny is controlled or shaped.

To say that evolution offers a rational solution of the problem of evil neither states the problem nor discloses how a rational solution may differ from an ordinary one. Since life is a "balance between constructive and destructive" forces or processes and the death process a normal part of the life process, the desire for "solutions, improvement and progress, better mutual service" is like a cry expressing pain—merely incidental to the life-death process. Why seek to justify or condone nature by saying that progress and creation are only to be realized through endless struggle involving continuous adjustment, as does the holder of the view that evolution offers a rational solution of the problem of evil, when the temporary solace it may give subserves no valuable end and may indeed excite the query concerning the meaning for the individual and race of life itself? Any answer to such a query cannot be other than speculative. In such speculation is the possibility that attention may become uncomfortably directed to the inadequacy of nature (man thus made conscious of his confusion at nature's hands) to handle her own problems (the creation and maintenance of man being one) in the ideal way some seem to think and hope man will be enabled to do by knowing nature better.

As an indication of how even among those with scientific training, to say nothing of the laity, a simple statement of fact may be deceptively subordinated to more or less rhetorical display, the following definitions of the aim of science are submitted: "Science aims to ascertain, as nearly as may be, what that sequence of creative rightness was in order that she may infer what it shall be." "The aim of real science—is to know the truth—and the truth alone can make us free." Both definitions suffer in directness and clarity because of the fact that the aim of any real science is the investigation of phenomena, no matter what motives actuate the investigator or what results may be obtained from the investigation.

In the second definition of the aim of science given above and in more historic references, one finds the idea that truth makes one free. However factual this may be under certain conditions, it must also be borne in mind that with each increment of knowledge, the individual or society so enlightened, becomes the more burdened—burdened by the larger revelation of the processes of nature of

which he or it is a part, and hemmed in by a larger sense of responsibility, or of duty, and of the necessity for an exemplary life.

The untutored man feels himself freer than the tutored in that he is unmindful of the determinants of his conduct and character. But this does not alter the actual condition of bondage in either case. The man of today is bound, as in the past, by the society he creates, by the industry he is impelled to develop, and by the science revealed through him. It is intellectually dishonest to excite hope for greater harmony of man with his environment by constructing a concept of freedom which ostensibly removes him from the physical slavery from which the concept gets its impetus. The law that binds the community may set the individual free and the law that binds the individual may set the community free, but it is freedom through bondage and bondage through freedom. The sequences are only rearranged so that relatively different effects are obtained.

Truth, of course, frequently makes one free of the fears induced by what hitherto was not understood or could not then be controlled, but a vicious cycle is engendered by new fears exising it place of the old so that society is as much frightened by what is revealed in the light as by what formerly was hidden in darkness. Moreover it is only partially clarifying to discuss merely man's control over nature leading him to feel that he has a directing part in vital and other phenomena, when he is himself impelled to whatever he undertakes or accomplishes more inevitably than a slave in a galley.

In apparently a further effort to placate man and condone nature, the contention is made that in the relations of animals to each other, the sacrifice of the individual and the preservation of the group, operate for the good of the colony, race or species; that race preservation and evolution is the supreme good and all other considerations of the individual are subordinate to this end. It seems possible to state this more simply by saying that nature has to care supremely for the good of the individual in order to care for the colony, race or species. As a matter of fact nature does not appear to care for either the individual or race, because it is not within human comprehension to so diagnose the cares of nature. To personify nature is a lazy man's way of appearing erudite.

The statement to the effect that scientific means are to be employed to improve the individual and race does not include anything concerning for what purpose the improvement is necessary, i. e.,

war or peace, for example, or that such improvement will insure the individual or race against destruction, or that either will be preserved for the larger attainment of that which is regarded as the greatest and most distinctive of human traits, namely, reason and consciousness. For even with regard to these it is said that they have revealed a world of evil as well as of good; a world of struggle and failure, of suffering and sorrow, of injustice and selfishness, of disappointment and despair—a world of pestilence and death in which the innocent suffer and sometimes the guilty; in which evil is often rewarded and good punished; in which all higher animals are born in pain, brought up with measureless care and trouble, live a life in which struggle and suffering are mingled with brief satisfactions and joys, and without a single exception go on to inevitable decay and death. Doubtless reason and consciousness justify their evolution just as certain idealists seem able to justify and explain soothingly everything in nature—hideous or otherwise. But the human mind is prone to seek a reason for whatever stimulates it hence mysticism, superstition, logic, science. Man may, in his awareness of certain phases of the course of nature, postulate directions as to this course which ostensibly explain, justify or deify it. But whether man does or does not postulate directions, or whether he is or is not aware of nature's course, makes little difference to nature. All the mental excrescence of deists, vitalists, evolutionists. mechanists, nihilists, or of any variation of these do not and will not affect that course of nature about which they argue and would contribute the last word. Man talks too much where nature is silent and where he is logical at all, he uses a logic of necessity rather than the logic of fact.

The frequent invocation of education for the purpose of improving the minds of men rather too flatteringly indicates the presence of minds for which educational machinery might function. Education has no power of itself. It is only a label for what sometimes happens to those who subject themselves voluntarily to mental discipline. Likewise religion, as though it, too, were a discrete entity, is to be employed to improve the morals of men, but the moral sense of man conditioned the development of his religion insofar as his religion entails a moral aspect.

While biology is the science against which so many spurious accusations have been made, it does not appear that biology has any apology to make to society as a whole or in part, neither does nature require justification for her maneuvers. The charge made that

neither animals nor men can struggle for an existence they already possess, but that they struggle for improvement and that what is needed in this struggle is a most significant cooperation ignores the fact that men and animals alike do struggle for a continuance of existence whether for improvement or otherwise. A most significant cooperation may be necessary, but what the world needs, it would appear, is not a statement of the need, but an actual disclosure of the *means* for obtaining and operating this most significant cooperation. Perhaps nature is so light-hearted and playful that she is concealing the means as a practical joke.

The same critical mind that finds animals and men struggling for improvement and needing a most significant cooperation also makes the further statement that Darwinism justifies the sensualist at the trough, Fashion at her glass, Prussianism at the cannon and Bolshevism at the prison door. Of course, none of the above characters has ever been heard of in Darwinism or biology. Darwinism neither justifies nor attempts to justify any of nature's products. This function seems to have been appropriated by pseudo-interpreters of Darwinism. The nature which makes the sensualist, the Bolshevist, the Prussianist and servile follower of Fashion must bear the burden of reproach, if such there be.

Venders of opiates for social ills have as their stock in trade it seems two chief brands: one brand functions in the claim that if evil were lacking good would prevail, at least this is what the claim can be reduced to. As has been seen, evil is the necessary and inevitable corollary of good. The other brand functions in embodying what purports to be actual solvents and eradicators of ills and evil. Thus is found in the latter brand an imperious need of more mind-more critical thinking. Given more mind and therefore more critical thinking and behold a wretched world made joyous. But here again one faces the cold fact that in the evolution of what mind there is, there has been revealed or produced many of the existing problems which the human environment reflects. As much as one would like to have faith in the efficacy of more mind, nevertheless it is not the solvent or even salve for human pain and problems. If everything else in this changing world could be kept constant while the human mind developed efficiency commensurate with the human problems it has generated by revealing them, one might lend a favorable ear toward devising ways and means of obtaining such an increase of mind. At present it does not seem remotely possible that the kind of mind-increase desired can be obtained biologically without the imposition of disproportionately greater and greater stresses in the social or nervous machinery. The human mind in the development of its present capacity for dealing with larger problems usually finds that the relation of capacity to problem is as embryo to adult. And characteristically embryonic is the notion of some that though born later the embryo can overtake the adult. But the adult is as fecund in defeating old age as the embryo is sterile in attaining its adolescence and maturity. Nature in increasing the load-carrying power of man has always a load equal to or greater than the increase in ability to carry. The squirrel with a nut and man with a sack are equally laden.

Another sample of how evil may be eradicated is found in the time-binding faculty of man. By virtue of this time-binding faculty the past is made to function in the present and constructively reveal the future. The discoverer of time-binding or time-binding faculty insists that this faculty is restricted exclusively to the human animal. The mere discovery of this human time-binding capacity, which the discoverer says functions according to the formula for geometrical progression, constitutes at last the full and perfect approach to Utopia. Of course, the discovery must be proclaimed at large and such is being attempted. Once man becomes acquainted with the fact that he is a time-binder, all human difficulties begin with celerity to vanish and a perpetual millennium is at hand. Obviously the matter is not so simple. Man, to be sure, may use and does use helpfully the experience of the individual, species or race to a relatively much larger extent than other animals in general. The difference in the use of such experience on the part of man and other animals is merely one of degree. Moreover, the time-binding faculty of man has in its operation solved no problems whose solution has not thereby conditioned or generated others. Here again a dissertation on the memory-function of man, racial or otherwise, by means of which he avoids tomorrow the disagreeable of today or yesterday, is entertaining, but the relative chaos of the present and past as compared with the predicted future which the discovery of the time-binding faculty makes possible is no more changed in its fundamental aspect than the discovery of the law, doctrine, or theory of evolution has changed evolutionary processes. With regard to evolution, some have sought to keep faith with science and God by saying that the horror of the processes manifest were and are justified by a predicted future in which man would evolve into that perfection observable only on the veiled face of the Creator Himself. If time-binding and evolution were test-tube experiments in which the reactions therein could be observed until standardized, predictions might then be made with regard to them with some degree of reliability.

Finally, is the question of whether the average man can stand a universe robbed by science of the supernatural and its consolations; of whether the man of the streets in accepting a mechanistic conception of life will not be led to such behavior as will jeopardize the existing social order. The answer to this question is doubtless that whenever the man of the streets can grasp a mechanistic conception or any essentially rational conception, he will cease to be labelled as such, nor will be need the consolation of the supernatural. The proponent of the question is himself more alarmed by the steady advance of science into social channels than the interest be manifests in the common man would indicate. It is the pseudointellectuals themselves, not the average or common man, who are alarmed over the mechanistic conception. They want to hold with God and run with science. To the extent that any man can actually grasp as a real scientist does the scientific or mechanistic point of view, he becomes a better and more worthy citizen. False interpreters of science to the public, mental Bolsheviks and other jugglers with fact, however, one may biologically expect, like the poor of whom Christ spoke, to have with one always.