

MONISM NOT MECHANICALISM.

COMMENTS UPON PROF. ERNST HAECKEL'S POSITION.

Prof. Ernst Haeckel's *Anthropogeny*, the fourth edition of which appeared of late,* brings again into prominence that conception of monism which identifies the monistic view with mechanicalism.

A review of this book has appeared already in *The Open Court*, No. 231, in which we called attention to the great merits of a work which has become a household book, not only for the scientist, but for every educated reader who is interested in man and the origin of man. Our knowledge in *Anthropogeny*, certainly, will influence not only our general world-conception, but through our general world-conception it will extend its influence not only over every branch of science but also into the broader fields of man's daily life and his practical morality.

Professor Haeckel is the most popular naturalist of to-day and there is no one, perhaps, who has made a more effective propaganda for the monistic world-conception than he. So it is almost a matter of course that his definition of monism is generally accepted as the standard. We have formulated our view of monism in a way which in principle and general outlines concurs with the commonly accepted usage of the term, yet it deviates from it in some important points which are perhaps not merely matters of detail. It will be difficult to say how far we agree and how far we disagree with Professor Haeckel's monism because those subjects in which we disagree, have never been elaborated by him, and we are inclined to believe that he would modify some of his expressions, if he devoted a quiet hour's thought to the objections we have to make to his definitions.

Professor Haeckel's monism being mechanicalism savors strongly of materialism. He says in the latest edition of his "*Anthropogenie*" which is now before us, Vol. II, p. 851:

"There can be no doubt that a thorough consideration and unprejudiced de-
 "liberation of these facts will lead to a decisive victory of that philosophical concep-
 "tion which with one word we call monistic or mechanical in opposition to the
 "dualistic and teleological. Upon the latter are based most of the philosophical sys-
 "tems of antiquity, of the mediæval times, and also of the present time. The me-
 "chanical or monistic philosophy declares that certain and immutable laws obtain
 "everywhere in the phenomena of human life as much as in nature generally, that
 "a necessary causal connexus obtains everywhere in phenomena and, accordingly,
 "that the knowable world forms throughout a unitary whole, a monon. Monism
 "moreover maintains that all phenomena are produced alone through mechanical

* *Anthropogenie oder Entwicklungsgeschichte des Menschen*. Keimes- und Stammesgeschichte. By Ernst Haeckel. Mit 20 Tafeln, 440 Holzschnitten und 25 genetischen Tabellen. Vierte, umgearbeitete und vermehrte Auflage. Leipzig: Engelmann.

"causes (*causæ efficientes*) not through premeditated purposive causes (*causæ finales*)."

And in the first lecture "The History of Evolution and Philosophy," (p. 15) he says :

"We shall clearly recognise in the following investigations how the most wonderful enigmas of human and animal organisations, heretofore considered as inaccessible, have become accessible to a natural solution through Darwin's reform in the doctrine of evolution by a mechanical explanation of purposeless efficient causes."

In agreement with these views, Professor Haeckel regards the terms necessity and mechanicalism as equivalent terms. He rejects any kind of teleology, any kind of final causes, and also the freedom of the will. He opposes the so-called moral world-order as contradictory to the idea that the world is regulated by mechanical law and he adopts the latter to the exclusion of the former. All these points come out very strongly and clearly in Professor Haeckel's letter to the editor of *The Open Court*, where his view of monism is graphically presented in a concise tabular form.

We here reproduce this table from No. 212 of *The Open Court*, for the convenience of our readers :

MONISM.	FUNDAMENTAL CONCEPTS.	DUALISM.
Inseparable.	Matter and force. God and world. Soul and body.	As a matter of principle distinct entities.
Mechanicalism. Necessary evolution.	Life.	Vitalism. Teleological creation.
Universal (conservation of energy). Determinism.	Immortality. Freedom of will.	Individual. A person's will being absolutely free.
Causæ efficientes. (Efficient causes.)	Causation.	Causæ finales. (Final causes.)
Regulated by mechanical law.	World-order.	So-called "Moral."
Inseparable and subject to the same laws.	Inorganic and organic nature.	As a matter of principle distinct and subject to different laws.

Now we agree with Professor Haeckel in one main point, viz. "that certain and immutable laws obtain everywhere in the phenomena of human life as much as in nature generally, and that the knowable world forms throughout a unitary whole, a monon." But we cannot agree to his proposition that "the wonderful enigmas of organised life are accessible to a natural solution by a mechanical explanation of purposeless efficient causes." We grant willingly that mechanical

explanations will serve for all motions that take place in the world; even the motions of the brain take place in strict obedience to the laws of molar and molecular mechanics. But a mechanical explanation is not applicable to that which is not motion. If it were applicable it would not be desirable, for it would be of no avail. Mechanical explanations are to be limited to mechanical phenomena. Feeling however is not a mechanical phenomenon, and an idea, being a special and a very complex kind of a feeling, or rather and more accurately expressed, being the special meaning of a very complex feeling, is not a mechanical phenomenon either. It is true that when a feeling takes place and when an idea is thought in the brain of an organised being, that a certain nervous action takes place. The nervous action is a motion and this motion represents a definite amount of energy. There is no theoretical difficulty, although there are almost insurmountable practical difficulties, in measuring the definite amount of potential energy that is changed into kinetic energy when a man thinks. Yet the brain-motion is not the idea and by a mechanical explanation of the brain-motion we have not even touched the problem of what the nature of the idea is, why ideas originate and how they act.

We know that Professor Haeckel when he so vigorously insists on mechanicalism, opposes those philosophers who believe that there are motions which cannot be explained by mechanical laws. We side with Professor Haeckel against any one who maintains that some motions are mechanical (molar or molecular) and others are exceptions to the laws of mechanics, representing a kind of hypermechanics. But we cannot admit the explanation by mechanical laws of non-mechanical phenomena.

Professor Haeckel speaks of purposeless efficient causes—*zwecklos thätige Ursachen*. He speaks of efficient causes, as excluding final causes. He is right in his objection to final causes as the term is commonly used. But while there are causes that are *zwecklos*, there are no causes that are *ziellos*. Every process of causation takes a definite course, it has a certain and definable direction. The end of this direction need not be a conscious aim, but it is an aim whatever it be, it is a *Ziel*. In this sense every efficient cause is at the same time a final cause. The gravitating stone has no purpose, yet it has an aim. So the evolution of organised life is a natural process having a very definite aim. And this aim of the evolution of organised life is determined by factors of a very complex nature. One of these factors is almost imperceptible at the beginning, but it is of a constantly and rapidly growing importance; and this factor is the psychical element that appears with organised life. This factor is nothing supra-natural, nothing extra-natural, and yet it is not something material or mechanical. It is this factor which in its highest efflorescence changes aims into purposes, and with this change it creates again a new factor of evolution which is the purposive aspiration to conform to the world-order and thus to advance the further progress of mankind. This aspiration is in one word called morality.

When we speak of a moral world-order we mean that such moral behests as were formulated in prescripts by Confucius, by Buddha, by Moses, by Jesus, and other moral teachers of mankind have an objective and immutable foundation in the nature of things. The mechanical law in the province of motions, the logical law in the realm of thought, geometrical proportions in mathematics, the regularity of natural laws, etc., form in our world-conception a part of this moral world-order. The laws of social life are not opposed to them but correlative.

The purpose of a man's action reveals his character, and the character of the man is his innermost nature. In an analogous way the aim of evolution and especially the aim of the evolution of organised beings reveals the character, the innermost nature of the universe. Psychic life is absent so far as we can see in the primordial world substance as it appears in the form of a nebula; it is absent still in the primordial state of planets. It appears with the subjective states of awareness that rise into existence in organised life. The subjectivity of unorganised matter is, in comparison with man's subjectivity, to be considered as a blank; i. e., if there is in it a state of awareness, which we have reasons to doubt, it is apparently without meaning; it does not symbolise external objects; it is no mind; it is, as it were, blind. Yet the aim of evolution being the development of psychical life, shows that the subjectivity of unorganised matter is spiritual in its innermost nature. And the aim of psychical life being the development of moral ideals, we are very well justified in speaking of the world-order as moral. When speaking of the world-order as moral we mean that the moral prescripts of the great ethical teachers of mankind are founded in and derived from the world-order of nature.

There is one objection to calling the world-order moral, and we therefore dislike to use the phrase. It is this: Morality means conformity to a certain standard. The standard is not moral, but those who do or do not conform to it are moral or immoral. Therefore if there is any truth in the idea of God it is this that there is a standard for human conduct to conform to, there is an authority which has to be obeyed and this authority is God. To speak of God as moral or immoral is anthropomorphism. If "God" means anything, it means that power of the world-order obedience to which is called morality. If we say God is moral, God ceases to be God, the moral authority above him to which he has to conform would be the really true God. Thus logically the personal conception of God leads to a superpersonal conception of God.

These are in brief our objections to Professor Haeckel's definition of monism as being identical with mechanicalism and perhaps also with materialism. My opinion that Professor Haeckel may after all accede to our view of monism is based upon an interesting and friendly conversation which I enjoyed with him several years ago in Jena. Professor Haeckel is not the one-sided naturalist that he is often represented to be by orthodox clergymen. He does not see the workings of the natural laws only, he sees also the moral aspect to which a consideration of the natural laws leads. That his books emphasise the former without entering into the problems of the latter is

natural for a scientist, but he personally is certainly even broader than are his books, and I should say that his very opposition to certain errors which have been foisted by an antiquated dogmatism upon our religious institutions, show the deeply religious spirit of his character.

P. C.

MR. CHARLES S. PEIRCE ON NECESSITY.

Mr. Charles S. Peirce is one of those thinkers who in the investigation of a subject go right down to the bottom of the problem. This appears to me the more conspicuously so, as the result to which his investigations lead stand in a strong contrast to my own views. Yet I cannot help admiring the boldness of his trenchant critique which finds the difficulties at the point where really the main difficulty of all philosophical inquiry lies buried. It lies buried, i. e. it does not appear on the surface of things. If it lay on the surface, our most superficial thinkers would naturally light on it; but most of them walk their way in peace, unmolested by the question, Is there any truth in the idea of necessity. An editorial treatment of this problem may be expected in a forthcoming number of *The Monist*. P. C.