

THE PSYCHOLOGICAL REVIEW.

FREEDOM AND PSYCHO-GENESIS.

BY PROFESSOR ALEXANDER T. ORMOND,

Princeton University.

There is a tendency in the thinking of the time to evade the question of the freedom of the will. Some excuse themselves for this neglect on the plea that the issue has become antiquated or exploded. But so long as the sense of responsibility for his actions survives in man, the question of freedom will remain central for him and his interest in its solution will be vital. We may assume then that neither the psychologist nor the metaphysician can waive the responsibility of its consideration.

Much of the perplexity that surrounds the question arises from the absence of any definite concept of the nature of the subject under debate. Usually there is in the minds of both the asserters and deniers of freedom a kind of vague apprehension that it is somehow inconsistent with the idea of law, and that a world of freedom would be virtually the same thing as a world of chance. To a mental state like this the alternatives are chance and fate, and the only escape from the iron clutches of an all-devouring necessity seems to be through a repeal of the law of causation and a plunge into 'primal eldest chaos.'

The dilemma which thus arises supplies a problem to the psychologist, although the source of the difficulty is partly extra-psychological and consists in the assumption that mechanical law or determination by other is the only conceivable type of orderly activity, and that it must be extended over human volition, unless we are prepared to regard the will

as lawless. The resources of psychology in dealing with the question are both direct and indirect. The direct method of approach is through the analysis of the activity of choice as it manifests itself in consciousness. If we separate this analytic business from all questions of the remote antecedents of choice and set ourselves to obtain as adequate an intuition as possible of the actual factors which enter into a present act of volition, we shall, I think, reach something like the following conclusion. In the first place the idea of motiveless choice, for us men, must be dismissed to the limbo of exploded philosophical myths. Motivation may be assumed as a universal law of choice, and the initial question will be to determine the mode of the operation of this law. Here we take the first step that lifts the issue above the plane of both fate and chance. Psychological analysis proves the immanent character of all normal motivation. Whatever relation the remote grounds of our actions may bear to us, the immediate determinants of choice and action must, in order to influence the will, become internal as parts of the energy that wills and chooses. Determination here is not external but internal. This conclusion taken in connection with two additional considerations will suffice to give a fairly adequate notion of the nature of the voluntary function.

One of these is the selective character of choice. True choice is always a case where one is taken and another left. There are, it is true, influential psychologists like James who regard ideomotor action, that is, immediate reaction upon presentation, as the type of all volition. Against this position the objection holds, I think, that it reduces all choice to immediacy and leaves no place for deliberation. But the choice that we mortals know most about is a mediate function which operates through selection of alternatives. And selection of alternatives involves a two-sided process, conscious annulment of ends as well as conscious self-commitment to the end that is chosen. The remaining feature of choice that is vital to it is the power of arrest which the mind is able, through its command of attention, to exercise over the forces that are impelling it to volition. Through this power of arrest the mind is able to effect a stay of the voluntary proceedings until it has

collected its scattered forces and is in a position to act as a unit. Thus, in what we may call normal choice the determining motive is the whole self that chooses,* while abnormal forms of choice would arise as departures and aberrations in various ways from this normal standard.

This is perhaps as far as the direct analysis of consciousness can take us in determining the nature of choice, but it is far enough to justify several important conclusions. The first of these is that the activity of will cannot be subsumed under the category of mechanical causation whose form is determination by other, but that in will we come upon a form of activity that is self-determining. We have seen that the immediate antecedent of choice, when it is normal, is the whole present self. In choice then the mind simply determines itself from one state to another. If we represent the two states by *a* and *b* and the activity of choice by *x*, every case of normal choice will involve the self-moving of the mind from *a* to *b* through function *x*. The causal antecedent of *x* is, therefore, the mind in state *a*, while the consequent is the mind in state *b*, and *x* is the activity or movement in which the transition is made. Normal choice is, therefore, self-movement and not movement by other. Another conclusion that follows from the above analysis is that fatalism rests on a false idea of the relation of a man to his own choice. The fatalist is one who denies his own agency in volition. The only type of determination, in his view, is determination by other. He, therefore, makes a false diremption between himself and the determining causes of his action and conceives himself to be a mere puppet in the hands of God, Nature, Fate, or whatever his Absolute may chance to be. But if the immediate antecedent of choice is the chooser himself, and if choice is self-determination, the presupposition of fatalism falls to the ground; for, however a man's choice may be determined, it cannot be that he is a mere spectator of the drama, or that he is run by alien forces that act without his own assent.

Self-determination is freedom: or, if we regard it as a type

* Two interesting discussions of the relation of motive to choice are Baldwin's—*Hand-book of Psychology*, Vol. II.: *Feeling and Will*, pp. 352-376; and Hodgson's—*Mind*, April 1891: *Free Will: an Analysis*.

of causation, it is free causation. That freedom is realized, therefore, in the form of volition is a psychologically verifiable fact. But in arguing the question we have distinguished the present act of will from its indirect antecedents and conditions. They are, however, never separate in fact, but the present choice is, in some sense, what it is, because of its antecedents. This changes the issue into a question of predeterminism. It may be demonstrated that the present choice is self-determined, and at the same time the self that chooses may be predetermined by its antecedents. We may thus escape fatalism and still find ourselves in the clutches of necessity.

It is clear that the issues involved in this phase of the question cannot be settled by an appeal to the individual consciousness. The problem of predeterminism is one that involves the factors of heredity and environment, and the point to be debated here is the relation of the present self that chooses to these predetermining agencies. At the basis of the inquiry rests the fact of a developing series the parts of which are bound together by the law of causation and all of which are, therefore, dependent on the chain in which they constitute individual links.

Now, the series with which the psychic nature of man is most completely identified is the biological. Man is a living being and his psychic activity is a species of life. This does not, however, reduce psychology to a branch of biology, but rather comprehends the biologic activity in that of the soul, just as the intelligence of the animal is comprehended in that of man. The term that is central in the biological series is the germ-cell out of which the organism develops and through which it propagates its species, and it is in connection with it that the bearings of heredity and environment need to be primarily estimated. Of the two factors, that of heredity is clearly the more fundamental, since it is through its agency that each successive environment is supplied with the special material upon which its modifying forces are to play.

How then are we to conceive heredity? It is clear that the germ-cell is the medium through which persistent effects must be produced. But at the very threshold of the inquiry into the nature of heredity, biologists have split into two con-

tending camps known as Neo-Lamarckians and Neo-Darwinians, the leader of the latter school being Professor Weismann, whose whole doctrine of heredity rests on the assumption, which is beyond proof, that the germ-cell out of which the organism develops, after it has separated from the parent organism and become fertilized, breaks into two parts, one of these developing into the new organism which is open to the modifying influences of the environment, while the other part remains unchanged as the germ of a future organism. Weismann, therefore, denies the modifiability of that part of the germ-cell through which the continuity of the species is maintained, and on this ground denies the transmissibility of acquired characters or modifications. Having virtually eliminated the environment as a factor in development, the Neo-Darwinians have three agents left: (1) new combinations of original characters which are effected through the modes of transmission, sexual or asexual; (2) accidental variations, or the appearance of characters which cannot be accounted for by the first cause; (3) natural selection which tends to eliminate all variations arising through the first two agencies, that are useless or injurious, and causes only those that are positively useful to survive.

Now, a careful analysis of these factors gives us the somewhat startling result that a whole class of variations, those that have no ancestral copies and on which development most directly depends, are left virtually unaccounted for. Darwin himself regarded variations in general as accidental; at least he brought forward no theory of explanation, while the Neo-Darwinians are able to account for some variations by new combinations of ancestral copies, but they have no adequate explanation for that large class of changes which the opposing school of biologists are in the habit of ascribing to the modifying influences of the environment.

It is because the Neo-Lamarckian school have command of all the Weismannian resources and are able in addition to fall back on the modifying activity of the environment as a cause of original variations, that their doctrine seems to possess a decided advantage over that of their rivals both as a theory of development and of heredity. They reject Weismann's

absolute isolation of the germ-cell of future organisms and hold that it is to some degree open to the modifying influences that affect the present organism in which it dwells. They are thus able to reach an idea of the development of organisms that is more flexible than the Weismannian, since the germ-cell is represented as fluent and open to all sorts of modifying influences; as well as more completely mechanical, inasmuch as the results are represented as arising out of a long series of almost infinitesimal changes produced by the varying play of environing forces.

The functions of heredity and environment will be most adequately conceived when considered in their relation to the germ-cells out of which the successive organisms develop. We have in the germ-cell a biological unit which contains the stored-up potency of a developed life, there being included in this unit as part of its potential, the accumulated modifications of a series of antecedent environments. And this unit containing the results of past modifications is to be conceived as continuing susceptible to all the modifying influences that affect the parent organism in which it is latent as well as to the more effective agencies which play upon it after it has become the active germ of a new organism.

The history of the living organism may be taken as including that of the mind; for whether we regard the mental as involved in the original potency of the germ-cell, or as super-induced upon it at some stage of its development, in either case its fortunes will be cast in with the biological unit with which it is associated and through this connection it will be vitally affected by all those hereditary and environing conditions which influence the organism. Professor Orr in his work entitled *A Theory of Development and Heredity* has made a very interesting contribution to the psychology of the hereditary and environing forces. His contention is that the nervous system stands as a necessary medium between the environment and the living organism, translating the forces of the former into nervous energy, in which form it becomes the working agent in every part of the system. Now, the nervous force builds the organism, especially on its functional side, by means of two psychological laws; namely, repetition and asso-

ciation, and Professor Orr shows in several chapters of his book how in the sphere of psychic activity the operation of these laws leads to the development of habitual responses to the forces of the environment and how these tend to become ingrained in the nervous tissue and to be transmitted by heredity as the organized physical basis of instinct and mental habits.

The logical import of such considerations as these seems on first sight to be the suppression of freedom and the re-instatement of strict mechanical necessity, and this is the conclusion drawn by physiological psychologists like Dr. Maudsley and Professor Ziehen, who dismiss freedom as pure illusion, asserting the connection between choice and its antecedents to be essentially the same as that between a physical cause and its effect. It would be useless to deny that from the common point of view these conclusions are not without some reasonable grounds. If the will of man is strictly predetermined by its antecedents; if its choices are but links in a chain of mechanical causation, it would seem that the fact that the form of choice is self-determination loses most of its value, and I am unable to see how a libertarian could continue to fight for it with much stoutness of heart. But the irony of the situation arises here in the fact that at this point the investigation is usually dropped and the inquirer goes his way thinking he has solved the problem. As a matter of fact he has only succeeded in stating some of its data and the solution is yet to be achieved. In the preceding investigations we have simply been getting at the two sides of our problem. We have demonstrated two conclusions. The first is that all choice is self-determination; that normal choice is the unimpeded and full expression of the individuality of the chooser. Nothing that we have discovered since has overthrown that conclusion. It still holds that man himself chooses and that his choice is not a function of some external necessity. The second conclusion demonstrated is that this self that chooses belongs to a mechanical series and has been helped to its present position by the forces of heredity and environment. Choice is self-determined, but the chooser is predetermined through heredity and environment.

We have to deal then with the two factors, mechanism and self-determination. Any freedom that is open to man must include both. It is clear that if freedom and mechanical causation are mutually exclusive terms, freedom for man is a chimera. Mechanism cannot be expelled from his activity, but is inseparable from its highest equally with its lowest phases. The freedom that is open to man must be one that can be realized through and in connection with mechanism. Is any such freedom possible? In seeking an answer it is to be noted in the first place, that the problem of freedom in this larger sense could only arise to a consciousness that had stumbled upon a dualism and had been brought face to face with the alternatives of a higher and a lower self. When the actual consciously faces the ideal whose claim to legislate for it by imposing upon it a law of duty, it recognizes, the question will inevitably arise as to the practicability of obeying the law of the ideal and realizing the higher life which it enjoins. This was the issue as it presented itself to Kant, and in his attempt to solve it he committed what seems to me to be his gravest theoretic mistake. Kant proceeds on the assumption that the ideas of mechanical causation and freedom are mutually exclusive and that the same system of reality cannot contain both, and he thinks, therefore, that in order to establish the reality of freedom it will be necessary to show that outside of the bounds of mechanism there is a sphere of psychic activity that is unaffected by mechanical conditions. The only conclusion Kant could reach from such grounds was the one he actually drew; namely, that while there may possibly be a transcendent region in which such activity is conceivable, yet so far as actual experience goes we never get beyond the reach of mechanical influences.

This conclusion is instructive not only as to Kant's state of mind, but also as revealing the morass in which so many contemporary thinkers are still floundering. Kant's trouble arose from the fact that while he had a very keen intuition of the mechanical conditions with which the mental life is begirt, he had scarcely any notion at all of psycho-genesis. Otherwise, those forces which seemed to him only to bind and circumscribe would have appeared in a new light as conditions of develop-

ment. As it was, Kant could only sit and wring his hands and wish that the universe were different from what it is, until in a happy moment it was borne in upon him that the difficulty might be overcome by tagging freedom on to the end of a moral postulate. But this, at the best, turns out to be a sort of device by which morality may comfort itself, the actuality being different. It is not open to the contemporary thinker who has become disillusioned on this point to betake himself to the Kantian refuge, and it has not occurred to him, as yet, to apply the genetic idea to the question of the relation between mechanism and freedom.

The most pregnant application of the genetic idea to the basal problems of psychology that has ever been made is that of Aristotle. It arises through his translation of the ontologic ideas of Platonism into the formal principles of individual things, and his conception of these forms dynamically, as activities which tend to unfold from a mechanical state of mere potency or capacity toward one of actuality or a state of self-activity. This view is involved in his treatment of the three categories, *Δύναμις*, *Ἐνέργεια*, and *Ἐντελέχεια*. *Ἐνέργεια* is the category of self-activity in its absolute form, while *Δύναμις* and *Ἐντελέχεια* stand as a pair of correlatives which together embrace nature and relativity. They also represent the opposite poles of a process in which nature is conceived as passing from a stage of matter, or pure mechanical response to external impulsion, to that of soul, in which mechanism is subordinated to the form of self-activity. Soul, in Aristotle's view, is the climax of nature and embraces in its constitution a synthesis of passivity and actuality. This appears in his definition of it as the 'first Entelechy' of a body that has the capacity of life. The fine point of the definition is apprehended only when the dual significance which Aristotle attaches to the term *Ἐντελέχεια* is kept in mind. This term, as he uses it, is a sort of watershed between potency and actuality, giving a reminiscent look toward mechanism as well as a prospective glance toward the self-activity of spirit. Soul, then, as the first entelechy of a potentially living organism, is to be conceived at any and every point of its life as embracing a synthesis of polar moments, passivity

and activity, potence and actuality, and this synthesis may be regarded as grounding the relations which arise later between the categories of mechanism and spirit, determination by other, and free self-activity. But this is anticipating. Again, Aristotle's definition connects soul with life as a form of its actualization. The highest form of life is soul. This is Aristotle's doctrine. It escapes the dualism of the theory that soul is a distinct principle introduced into the living organism, and plants itself firmly on the ground that life is one, that it is not completely actualized, and that it does not reveal its true and complete nature, anywhere else than in soul. But the point of vitalest interest in connection with the special theme of this paper is the fact that Aristotle's conception of soul and its relation to life enables him to incorporate the principle of development into its very constitution in such a way that it can no longer be adequately represented under static categories. And it is here that the Aristotelian conception of the soul seems to me to furnish a much more adequate and effective basis for psychology than that of Herbart-Lotze, for example, in that it shows more clearly how the genetic method may be grounded in a real principle of psycho-genesis.

I mean by a real principle of psycho-genesis one that not only grounds development as a constitutional law of the psychic life, but also supplies some definite notion of what *psychic* development means. The Aristotelian concept helps to the formation of such a notion in this way. It asserts, not simply that soul-life is a development, but that it is a development of a particular species; namely, of a principle of self-active consciousness, from a state of potence or mere capacity up to a state where all its powers shall have become actual and its nature completely revealed. The nature of the psychic principle and the species of its development are thus to be determined in view of their outcome. If the actualized result is a self-active and self-determining consciousness, then we have the right to say, on the Aristotelian principle, that it was potentially that from the start, and that in every stage of its evolution it was going on to be just that. And without raising any question of transcendent teleology or design, we see how the process is immanently teleological from the beginning.

The value of the Aristotelian insight will be manifest in view of the fact that the two most pregnant ideas in the domain of psychology to-day are these of psycho-genesis and the immanent teleologic character of consciousness. The tendency of the one is to modify static conceptions and to view the soul-life as fluent and progressive; that of the other is to shatter the hard front of mechanism and to reduce it to the position of a servant to a teleological process. The Aristotelian insight enables us to ground these categories in the very constitution of the soul itself. So that when we find consciousness to be a selective principle which is everlastingly in pursuit of ends even when it does not know itself to be teleological, we can rationally ground the discovery in a doctrine of the nature of the soul as a self-active principle whose law is development from mere potency into the actuality of a self-conscious and self-determined life.* And when we find in consciousness a dualistic dialectic between an empirical will and an ideal which utters itself in conscience, we are able to trace this dialectic to the teleological law of psychic development, which is the law of the immanent ideal activity that the psychic process is ever going on to actualize.†

We conclude then that all psychic activity is in its essential nature teleological. What it actually is or realizes, never truly or completely expresses its nature. But its real character only comes out in the light of what it has in it to become, or what it is going on to be. Now in the light of this we ask why freedom should not be teleologically construed. In the former sections of this paper we demonstrated two conclusions; namely, that normal choice is a form of self-determining activity, and that in its connection with heredity and the environment, the self that chooses belongs to a causal series and is predetermined. In view of current modes of thinking the last conclusion seemed to swallow up the first and to leave the life of man in the clutches of necessity. But when

* The Aristotelian idea of soul thus seems to supply a rational basis for James's doctrine of the selective character of consciousness.

† I do not mean to assert that conscience is completely explained as the immanent ideal of the soul. In my work on 'Basal Concepts in Philosophy' I seek to show the relation of immanence to the transcendent. The point here is that conscience on its psychic side utters the immanent ethical end of the soul.

in the light of later conclusions we claim the right to put a teleological construction on the whole process, the clutch of necessity seems to be loosened. For the developing series then acquires a meaning outside of the mere determination of consequents by antecedents. Instead of a soulless corporation, it becomes animated with spirit, and we see that what has outwardly the appearance of dead mechanism becomes a fluent and living organism whose whole significance is the immanent potency which it contains and the immanent end or ideal which it is going on to realize.

It is clear that from the teleological point of view, whose justification has been shown to spring from a profound view of the nature of psycho-genesis, mechanism becomes the handmaid of teleology, and while it conditions, also furthers the immanent end. Heredity conserves the end by preserving and transmitting the gains of individual experiences, while the enviroing forces supply the necessary stimuli of development. And when we apply these considerations to the problem of freedom it becomes clear that the moment we subordinate mechanism in general to teleology, we thereby subordinate mechanism also to freedom. And instead of standing by and wringing our hands because predeterminism swallows up freedom we may go on our way rejoicing, since our new insight enables us to see that nothing of the sort happens, but that free self-determination is the end which all this hard and forbidding-looking mechanism has had at heart and has been realizing from the beginning. For, just as the end subordinates the means, so freedom subordinates the mechanical agencies through which it is achieved.

There is no reason why psychology when it has committed itself to the genetic idea should stubbornly persist in construing freedom in some absolute sense which is above man and then deny its existence because it is inconsistent with the mechanical conditions of human life. Why should not freedom be construed in harmony with development, and why should it not be teleologically conceived? The questions supply their own answer. The teleological idea of freedom is the only one that a genetic psychology can consistently entertain. For, to genetic psychology conscious activity *is* teleologic activity, and volition is the type of conscious activ-

ity on the practical side. Volition is self-determining activity, as we have seen, and self-determining activity is free activity. If free activity is the outcome of mental development and this outcome is the immanent end and meaning of the process, the conclusion naturally follows that the development only achieves its complete reality in freedom.

Now, if we identify freedom with self-activity and construe it teleologically, there are several senses in which the term may be used in its relation to mental development. As potence or capacity for self-activity, it will be a condition of development. As actual self-determination it will be the form of all normal choice; whereas, as the self-determination of the ideal it will be the end toward which development is tending but which it never realizes. But in each and all of these senses its vital relation to experience is evident. Freedom is not a speculative will-o'-the-wisp, but it is something that, in the words of Bacon, concerns 'men's business and their bosoms' in that the possession of it is the condition of their being men, while the realization of it is the great end of rational and spiritual activity.

The doctrine of freedom here developed has also another merit. It supplies a rational ground of distinction between the normal and the abnormal in the sphere of choice. Freedom can be postulated without qualification, only of normal choice. The normal function of heredity and environment is the development of free activity. In other words, the normal is the good. The abnormal will enter as some kind of evil or aberration from the normal standard, and while it will be negative, it will be also real. The abnormal will become a factor in both heredity and the environment, and it will operate as a kind of loading of the dice, and in the development of predispositions to evil, in diminishing and thwarting and turning aside the forces of development. The abnormal will embody itself in organic and functional defects, in ingrained hereditary evil tendencies, in environments which hinder and clog progress. The abnormal thus supplies a special problem to the psychologist as it does also to the moralist and the jurist. But to the psychologist as well as to the moralist and the jurist a correct diagnosis of the normal is a necessary condition of the rational treatment of the abnormal.