III.—THE CONCEPTIONS OF CAUSE AND REAL CONDITION.*

By SHADWORTH H. HODGSON.

PROBABLY no more luminous conception was ever framed, nor any more permanently valuable step, ever taken, in Philosophy, than when Aristotle embraced the whole Universe of Being under his distinct and exhaustive classification of the Four Causes, that is to say, the four heads under which we can group the answers which we may be in a position to give to the questions *What?* *Why?* and *How?* concerning anything whatever which may come within our horizon, as an object of thought or of conjecture.

Aristotle's classification will be familiar to all my hearers. Briefly stated, the four causes, or rather the four kinds of causation, are these: the Material, the Formal, the Efficient, and the Final; or in other words, that out of which anything is made, that which specifies it as such and such a thing, that which brings it into existence, and that which it tends, or is intended, to do or to become. It will perhaps be an aid to some, as it has been to myself, towards grasping these collectively and realising their relations to one another, if we represent them as occupying the four sides of a square,—the Formal at the top, the Material opposite to it at the bottom, the Efficient at the left, the Final opposite to it at the right.

* A French translation of this paper was laid before the Congrès International de Philosophie, held, under the auspices of the Directors of the *Revue de Métaphysique et de Morale*, at Paris, in August, 1900, and will be found in the *Bibliothèque* of the Congrès, vol. i, p. 237. As this paper was written expressly for the Congrès, my thanks are due to the Directors and Editor (M. Xavier Léon) of the above *Revue* for their courteous consent to the present publication.—S.H.H.

For the fact is, that the material and the formal are complementaries one of the other, and the efficient and the final are complementaries one of the other. The material and the formal together make up a specific content, and, if known, would answer the question *What* the nature of any particular thing is at any given moment, being its inseparable constituents. The efficient and the final lie outside the nature of any given thing at any given moment, the former lying somewhere or other among its antecedents or concomitants, and the latter somewhere among its consequents, in the long line of its history or evolution, and, if known, would answer respectively the two questions, *How* and *Why* it came into existence.

But this sharp separation of the material and formal causes taken together, on the one hand, from the efficient and final taken together on the other, is permissible only as a provisional separation, made for purposes of method, and would be misleading if supposed to be the statement of ascertained fact. I mean that, in excluding as said above an efficient or a final cause from the nature of the thing under investigation, the exclusion is made solely as an aid to that investigation, and is not intended to anticipate its results. It cannot but be, that one or more of the efficient causes of a given thing at a given moment will be found to lie in previous states of the thing itself, and from them to have been continued into its present state, so that, to that extent at least, it contains within itself its own efficient cause. Similarly among the final causes, or reasons, of a given thing at a given moment, the thing itself in a higher stage of development or perfection may be found, and among its characteristics in that higher stage something may be found which it possesses now, at the given moment of enquiry.

Nevertheless the reason for making this provisional separation or exclusion is clear. It is, that we may designate clearly and precisely what thing it is, the efficient or final causes of which we are seeking. At the same time its provisional

character, as an aid to man's limited insight and feeble powers of investigation, is clearly evidenced by the fact, that it vanishes from our thought, along with the conceptions of efficient and final causes themselves, if we suppose, *per impossibile*, its task completely and in every case performed. For in that ideal completion, which can only be thought of as taking place *at infinity*, that is, in a complete knowledge of the Universe of Being, all efficient and all final causes, as we now conceive them, must be conceived as forming part and parcel of the Universe, and entering as constituents, that is, as either material or formal causes, into its infinite Nature. Infinity of space, eternity of time, all forms of power, all modes of consciousness, are included in that conception of the Universe. We cannot but conceive ourselves as within it, unable to transcend in thought, or even imagine ourselves transcending, its infinity and eternity. We see and think of it necessarily from our own station within it, but even so, if we think of it at all, we must think of it as having a specific nature, that is, as having some content and some form in inseparable union.

So far by way of introduction to the particular subject of the present paper, the conception of cause in connection with that of real condition. And here I must begin by remarking, that it is not with the conception of cause in general, but only with that of efficient cause, that I have now to do, for it is only with this one kind of cause, out of Aristotle's four, that the conception of real condition comes into contact or comparison. What then do we mean, what is it that we bring into our thought, by the term *efficient cause*? I suppose that everyone would reply,—something which makes something else, not itself, to exist or continue in existence, whether this something else is an entirely new product, or a change in something which exists already. In other words, it is the conception of an Agent as the vehicle, possessor, or exerter of agency, force, activity, or power, whatever may be the effects which

different agents or different agencies may produce. The root idea, therefore, I take to be that of agency, force, activity, or power (call it what you will); for it is only in virtue of possessing or exerting this, that anything whatever receives the name of an agent, that is, of an efficient cause.

The next question accordingly is, how we arrive at this idea of agency, and what we mean by it; or, otherwise expressed, what is the nature of the reality which is its object? The old or Kantian answer to these questions was, (1) that the idea was an *a priori* idea or Category of the Understanding, named *Relation between Causality and Dependence*, and (2) that the reality which was its object was nothing more than the Category itself, since this was originally formed in the very process of understanding, or in thought constructing the phenomenal world of experience, and in no other way, and for no other purpose. Thus, on Kant's transcendental hypothesis, the idea of agency, though now drawn out into what it implicitly contains, namely, a relation between causality and dependence, is still presented as a strictly ultimate and unanalysable idea, in the sense that it originates in the assumed understanding faculty of an assumed transcendental Ego, and is not the product but the parent of the realities (if realities they be) which seem in experience to be its objects.

But when, taking our stand simply on experience, we look closer at the idea of agency, we see that it is not so strictly ultimate and unanalysable, as this ingenious theory, built upon an adventurous hypothesis concerning the possibility of experience, would lead us to suppose, but is capable of analysis into simpler and more fundamental ideas, which are drawn directly from the content of positive experience itself, apart from any question as to its possibility, namely, from that of operations or events of a so-called physical nature. In early and, so to speak, pre-scientific days, alike of the individual as of the race, man's observation of, and conflict with, the so-called forces of physical nature, such

as the fall of heavy bodies, often with crushing effect, the action of winds and waves, the destructiveness of fire, the motions of the heavenly bodies apparently unimpeded by any obstacle, and so on, must have given him an array of facts, from which by an easy process of abstraction, such as all comparison supposes, the idea of agency, as their one common feature, could not fail to arise.

In process of time and along with the development of thought, this one common feature would become the one common logical pre-supposition requisite for understanding or interpreting the phenomena in which it was found. Next, from being the common logical pre-supposition for understanding or interpreting the phenomena, it would come to be thought of, in accordance with a well-known tendency of human speculation, as their common real antecedent, or inner nature, making the phenomena what they were, that is, agents exerting forces of various kinds. And then, on this basis, when once the thought of agency was confronted with the great and obvious difference between matter apparently at rest and matter apparently in motion, the fallacious conception of *Force the Cause of Motion* would finally become a conception difficult to eradicate even from scientific minds.

Assume, however, on the contrary, as it is I believe assumed by modern science, that motion in some form or other, whether impeded or unimpeded, overcoming or overcome, or exactly balanced, by motion in an opposite or in different directions, is an inseparable attribute, or rather constituent, of matter, and the former conception of *Force the Cause of Motion* is thereby at once replaced by the simpler and more positive one of *Force a Mode of Motion*. That is to say, in place of force as an agency of which no positive conception can be given, and the pretended conception of which rests on the fallacious process of hypostatising an abstraction, we now have the positively observable fact of motion, which scientific thought teaches us is inseparable from matter. We cannot, in

fact, think definitely and accurately of matter, without including force, namely, the simple force or fact of cohesion, in our conception of it. Without that force it cannot be thought of as existing at all. It would not *be* matter without it. Even an atom of matter, supposing atoms to be physical realities and not mathematical points, must cohere *ad intra*. So that finally a filled extension and motion in inseparable union, instead of ready-made matter acted on by ready-made force, take rank as the ultimate constituents of which the physical world is composed. In other words, that extended tangibility, which we commonly call matter, includes force, as a tendency of its parts to move towards one another, which is cohesion, as one of its constituents, and moreover as that constituent which was previously supposed to be an unanalysable entity.

Thus the hypostasised abstraction, Force or Agency, is now replaced by Motion, which is a feature positively presented in phenomena of experience. And it should be remarked, that this new conception of matter not only excludes Force from the position of a transcendental or supernatural Cause, but precludes Matter itself, inasmuch as it contains no reason for the inseparable union of filled extension and motion, from being possibly regarded as self-existent, or *Causa Sui*. That is, we cannot think of it as uncaused; and yet we are in total and apparently irremovable ignorance, as to what its Cause may be. In philosophy, therefore, the doctrine of Materialism is untenable. But this by the way.

So far as to the first of the two conceptions with which I have proposed to deal, namely, the conception of Efficient Cause. I now come to the second of them, the conception of Real Condition. This is the main purpose of my paper, and here it is that I am most anxious to secure your attention and, if possible, your approval. An efficient cause always consists of some portion or portions of matter in motion, and in action and re-action with some other portion or portions of matter in motion. I speak, of course, only of those efficient causes of

which we can form a positive conception. Not that I intend to deny, that immaterial agents may exist and exert agency; I maintain only that, the same principles of reasoning being plainly applicable in their case also, they cannot be used as explanatory hypotheses, unless and until we can form similarly positive and similarly verifiable conceptions of their nature, as we can undeniably form of physical agents and agencies. So that, for my present purpose, I propose to speak of physical causes only.

Portions of matter in motion, then, in action and re-action with other portions, are what we now mean by efficient causes. But what are their effects? Do these also consist of matter in motion and of nothing else? Not so. Take the case of matter itself. I have called it above *extended tangibility* in motion. Certain portions of it impinging on our organism, which consists of other portions of it, produce—what? Sensations of touch and pressure—those very sensations by which the nature of matter itself, as something which possesses and exerts force, is most directly and immediately known to us, and which are the basis of our conception of it. Sensations, observe, are among its effects; modes of consciousness which, in that respect, are *toto cœlo* different from modes of matter in modes of motion. And not sensations of touch and pressure only, but sensations of every other known kind, of sight, hearing, and so on. And not sensations only, but feelings of an affective and emotional nature also; and also, besides these, feelings belonging to what is most usually and distinctively called self-consciousness, feelings of effort, awareness of intellectual and active processes, attention, comparison, deliberation, choice, judgment; all of which together constitute our knowledge of man's whole nature, both moral and material, as exhaustively distributed under the three well-known heads of Feeling, Conation, and Cognition; and all of which have been, or are now in process of being, shown to arise in close dependence upon the processes and activities of his neuro-cerebral organisation.

Now each of these modes of consciousness has some specific quality peculiar to itself, and irreducible to that of any other mode of consciousness. There are many kinds of quality in consciousness, each kind containing countless modifications and sub-modifications within itself, but specific and peculiar as compared to other kinds, besides being, as consciousness, *toto cœlo* different from modes of matter in modes of motion. Sensations of light and colour are one such specific and irreducible kind of quality. Sensations of hearing or sound are another. And so on. Sensations of effort or tension are another. Love and hate among the emotions or passions are others. Everywhere in experience we come upon ultimate and peculiar kinds of quality, which, besides occupying some time-duration and in many cases some spatial extension also,—which are features common to them with matter and motion,—are qualities of consciousness only, and are, figuratively speaking, the bed-rock out of which and on which our whole knowledge, conception, and imagination of the nature of the Universe around us is constructed. These ultimate specific and irreducible kinds of feeling, together with their modifications and sub-modifications, and together with their inseparable co-elements, time-duration in all, spatial extension in some cases, are our whole evidence or *causa cognoscendi* both for the existence and for the nature of the Universe or Sum of Things.

But what is meant by a quality in consciousness? I put aside the question whether time-duration or spatial extension, in any or all of its dimensions, can be considered to be among the qualities of consciousness on the ground of their inseparability from the qualities of feeling which are their content. And I ask what is meant by a quality of feeling, quality I mean of a specific kind, in consciousness? Plainly we can give no definition of it in terms of consciousness, since it is peculiar and irreducible. But it is also plain, that what is meant by its general name, *quality*, is to distinguish it sharply from *quantity*. It is also meant, almost equally plainly, to distinguish it from the

when and the *where* of its being actually experienced, or actually thought of, or actually remembered, or actually imagined. It is simply quality *qua* quality that is intended.

Now here arises the special point which I wish to bring before you. Assuming that consciousness, as said above, is the product of matter in motion, the question that then arises is this:—Can the quality of consciousness itself, or that of any of its modes, *qua* quality, be shown to be so produced? There can be but one answer; it is, that we are wholly incapable of conceiving any quality of consciousness *qua* quality as caused in any way whatever. Try to do it, and you find that in every case you are conceiving, not the cause of the quality *qua* quality, or of its being *what* it is, but the cause of its occurrence or existence, the quality itself being pre-supposed. How can ether vibrations impinging on a retina connected with a brain *cause* the *qualities* of light or colours to be *what* they are as sensations, as distinguished from the event of their arising as sensations? If you attribute the causation, say, of the sensation-quality of light to a creative Mind, still you must conceive that Mind as having had the idea, the knowledge, of the quality of light, before creating it; so that here again the quality *qua* quality remains uncaused, and is by no means accounted for or explained by assuming it to have existed as an idea, before it existed as a sensation.

The same reasoning holds good in every case. I need not try your patience by adducing further instances. I will only add, that the reasoning which I have here applied to the case of matter in motion, when supposed to be the cause of quality in consciousness, applies with equal force to an immaterial agent or agency, if that should be supposed to be the cause of it. The difficulty does not lie in the nature of the supposed cause, but in that of the supposed effect, namely, of quality *qua* quality, which is not susceptible of being thought of as caused.

But now mark what follows, as the necessary consequence of this fact, with regard to the conception of Efficient Cause.

We have plainly hitherto attributed to it a far greater range of efficiency than it will bear. We have attributed to it the production of effects in their entirety, of their nature or qualities *qua* qualities, as well as of their occurrence as events, or of their coming into and continuing in existence. We must therefore reform our conception of Efficient Cause, and restrict its efficiency to the function of causing the existence or occurrence of its effects, withdrawing from it the function of causing the nature or quality of those effects. For even in cases where the resulting effect consists in some quantitative modification of a specific kind of quality, as in the varying pitch or varying intensity of sound, or where it consists in some qualitative modification depending upon combination or arrangement of qualities in relation to one another, as in the timbre or "colour" of sounds, or in the mixture or contrast of visual colours, still the resulting quality *qua* quality remains unaccounted for by any change in the agency producing it. No reason, for instance, why a note in a higher octave should be of a sharper or shriller quality than the same note in a lower octave, can be found in the fact that it is produced by the impact of more rapid vibrations on the ear. In other words, the occurrence only, and not the quality, of effects of any kind, can be strictly attributed to the causes which are said to produce them. So reformed and so restricted as these considerations demand, the conception of Efficient Cause becomes the conception to which I give the name of *Real Condition*.

We may accordingly in general terms define a Real Condition as something on the existence or continuance of which, in given circumstances, something else comes into or continues in existence, and without which it would not do so. We are thereby relieved from having to seek, in the nature of the agents or agencies concerned in any particular case, a reason for the nature of the effects ascribed to them, and are led to look simply for the uniformities or laws observable in the

sequences and co-existences of facts, or, in other words, in the sequences and co-existences of real conditions and their conditionates. It is for this inductive examination, into simple matters of fact, to disclose what kinds of objects are as a fact capable of operating productively as real conditions. Prior to such further inductive examination, the general definition of the term, since it can lean on no hypothesis as to the nature of the really-conditioning agency or agencies, has to rely, for its due precision, on treating all real conditions alike on the footing of what are known in logic as conditions *sine qua non*, that is to say, as conditions the absence of which would entail the absence of their supposed effect or conditionate.

This, I take it, is what the positive sciences have long been accustomed to aim at, giving up entirely any attempt to explain the effects of forces by hypostasising them as entities, and using their names simply as a means of designation and recognition. But since the human mind, to use the old name, is fertile in such hypostasised abstractions, it plainly becomes the duty of philosophy, which examines the subjective side of experience and of thought, to busy itself with these abstractions also, and endeavour to reduce even what appear to be ultimate conceptions to their simplest form, and to the simplest systematisation which is consistent both with itself and with the facts of experience. Philosophy cannot leave hypostasised abstractions severely alone, as the positive sciences can.

But in performing this critical and necessary task, and in applying thereto the facts and results which analysis has at various times disclosed, philosophy may often be led to see in the facts so employed a more than merely critical and negative value, and indeed be forced, perhaps unexpectedly, to regard them as facts which contribute to enlarge rather than restrict that general conception of the Universe, the formation of which (so far as man can form one) is its highest and distinctive purpose. We have, I think, an instance of this in the very

fact which has now been compelling us to reform our conception of efficient cause, the fact, namely, that quality *qua* quality is incapable of being thought of as caused or really-conditioned. I am far from being the first to bring this fact to notice; though, as the connections are various in which it may be observed, so also are the inferences various which may be drawn from it.

We have already seen its solvent effect upon the conception, previously unanalysed, of efficient cause. But at the same time what a vision it lays open to us, what a practical conviction it enforces, of the immensity of the Universe. Perhaps its only parallel is to be found in that spectacle of the starry heavens (which must be thought of as extending far beyond the range of human vision) by which Kant felt himself so profoundly moved, that he could compare its sublimity to nothing less than the sublimity of the Moral Law of Duty.

So also must it be with the thought of the ultimate kinds or qualitative elements of consciousness, which cannot be thought of as limited to that small number which enters into human consciousness, these being one and all dependent, for their existence therein, upon the existence of the human organism and its environment. The ultimate kinds or qualities of consciousness, therefore, are, for our thought, practically unlimited in number, like the stars; for we know of nothing by which their number can be limited, and cannot conceive their nature, though unknown to us, as really-conditioned at all. Their existence, on the other hand, if we think of them as actually existing, we must conceive as depending upon something which, though wholly unknown to us in point of nature, must nevertheless stand to them in a relation analogous to that in which known real conditions stand to the known qualities of human consciousness, with which we are familiar.