ARTICLE V.

THE FUNDAMENTAL LAWS OF BELIEF.

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The term "belief" is used in philosophy with wide latitude. By most metaphysicians it is employed to denote that conviction of the truth of a proposition which is consistent with the falseness of the proposition. By them belief is made to represent that mental state which is the result of a certain degree of knowledge, but of knowledge that is necessarily limited and imperfect. If the knowledge becomes complete, the mental state ceases to be a state of belief, and the resulting state is known as knowledge. I know, for example, that I exist; but I believe that the sun will rise to-morrow morning. By other philosophers the term is employed to denote those predispositions and convictions which are rather the condition than the result of knowledge. They are those original data which reason is obliged to accept "on the authority," says Hamilton, "of what is beyond itself." These data Sir William calls beliefs, or trusts. In this sense, therefore, according to rigid propriety it would be more correct to say I believe I exist, than I know I exist. This belief is a primary condition of my consciousness.

In the second of these meanings the term will be employed in this paper; because, first, of its recognized use in this sense, and secondly and chiefly, because of its connection with the terms "necessary beliefs" or "primary beliefs," which are the names usually given to those principles of the philosophy of common sense whose laws will be examined.

The first purpose of our inquiry is to discover and to name these laws, and the second, to apply them as touchstones to several of these so-called primary beliefs, in order to learn
whether their primary character bears the tests which these laws impose.

The first fundamental law of belief which we shall investigate, and perhaps the most important, is self-evidence. Every primary belief proves itself. Conviction of its truth follows the statement of its terms. Why the human mind acknowledges its truth is unknown except that its truth is self-evident. The proposition that the earth is a sphere or that it moves in an ellipse is not evident upon its statement. It is proved only by certain mathematical and astronomical investigations. But that things equal to the same thing are equal to each other, that space cannot be annihilated, are propositions whose truth is recognized as soon as stated. All reasoning in its final stage is based upon self-evident principles. All reasoning in the mathematics is thus conducted. The axioms that form the foundation of the science are incapable of proof. If you do not see their truth, no reasoning can convince you of it. Merely by their combination and recombination the mathematician constructs his whole science. Unravel the demonstration of Euclid's forty-seventh proposition, and each thread finally ends in a self-evident truth. By the same method all the logical processes are carried on. Self-evidence is the fundamental test of the truth: beyond it the human mind cannot proceed in its logical regress; but with it the mind is ever accompanied in its search after the primary beliefs.

But it may be objected that truths which are self-evident to one are not self-evident to another mind. Mathematicians differ in regard to axiomatic character of certain so-called axioms. Truths that necessitate a long demonstration to me are self-evident to another. In reply it is sufficient to say that this consideration only proves the difference in the mental power of individuals. The objection fails to show that in the self-evident character of many, of most, beliefs different minds are not agreed. Self-evidence must still remain the ultimate test. That 2 plus 2 = 4 may be illustrated by marbles and marks on the slate, but if after the
illustration the pupil fails to see the truth, it only proves he is, as the Scotch say, an "innocent."

The second law of necessary beliefs may be termed the inconceivability of the contrary; or, more fully expressed, a belief is necessary when the truth of the contrary of the proposition in which it is stated is inconceivable. This law is in a sense the negative form of the preceding, for a proposition is self-evident when its contrary is inconceivable. To illustrate the law itself, is a belief in the infinity of space a primary deliverance of the human soul? The answer is easy. The contrary of the proposition that space is infinite is space is not infinite, that is, space is limited. Can the mind of man conceive that space is limited? By no means; for in his thought he adds space to space until thought seems to exhaust itself, and he knows that an endless expanse still lies beyond the extreme limit of his apprehension. The belief, therefore, in the infinity of space must be regarded as primary. The same mental process also occurs in the attempt to comprehend time, with a similar conclusion in the argument. Test the law by a belief whose necessary character is less apparent. Is a belief in the veracity of human testimony necessary? No, for the proposition, testimony is not veracious, may be readily conceived as true. The truth of the contrary of the belief can be conceived. A second law, therefore, may be laid down, though a form of the first, yet so important as to deserve a separate name and mention, as, a belief is necessary, primary, the truth of whose contrary is inconceivable.

A third law of primary beliefs, one which Leibnitz first pointed out, but which has received the assent of most philosophers, is necessity. These beliefs are necessary truths. Man must assent to them. To deny them is intellectual suicide. The laws of thought, of identity, of contradiction, of excluded middle, he must believe to be true. Why he believes in their truth he cannot indicate; he only knows that as his mind is so constituted he cannot do otherwise than believe. To conceive of their falseness transcends his powers.
But he finds no such necessity constraining him to believe in the existence of an external world such as appears to his eye. He can conceive that much of the world of sky and earth may be spun, spider-like, from the bowels of his brain. So, also, he can conceive of the non-existence of the earth; but the non-existence of the space in which the earth moves is beyond his conception. His attempt to destroy space in thought destroys thought itself. He cannot thus think. Necessity, therefore, is a third characteristic of the fundamental beliefs, and for this reason they are often termed necessary.

Another law, allied with the preceding, and which Leibnitz also pointed out with great clearness, is universality. These beliefs are held by all men. All men, as men, act upon them, though perhaps unconsciously, and acknowledge their truthfulness as soon as it is suggested. In this respect the savage and the civilized are alike. These beliefs are the common sense principles held in common by mankind. Their universal character is capable, however, not only of independent demonstration, it also results from their necessary nature. If they are necessary beliefs, if men must believe them, then all men do so believe. From their necessity results their universality.

The fifth law of the primary beliefs, and one which follows from their self-evident nature, is simplicity, or ultimateness. They are the elements of all mental experience. They are incapable of analysis. They cannot be deduced from any higher conception. Into what terms can the proposition that things equal to the same thing are equal to each other be separated? Attempt to analyze it, to divide it into simpler parts; it is impossible. Try to analyze the statement that time is infinite; endeavor to discover the elements of which it is composed; the mind revolts from the trial, and confesses the absurdity of the attempt. Simplicity, or ultimateness, therefore, is the fifth law, and last that will be named, regulating the fundamental beliefs of the human mind.

Equipped with these five laws of self-evidence, inconceiva-
bility of the contrary, necessity, universality, and simplicity, we may advance in our search for the primary beliefs of man. And here it is fitting to premise that in our investigation we are obliged to examine numerous questions which lie at the foundation of metaphysics; and that therefore to keep the discussion within proper limits it is necessary to pursue the direct line of inquiry, untempted by the delights of excursions into the surrounding fields of philosophic speculation.

The first belief fundamental to the soul of man is that which relates to his own existence. It is the being of the thinker thinking; the Cartesian cogito ergo sum. These terms are not the expression of an inference, but of an identical truth. I think, that is to say, I am. Cogito scilicet sum, as Descartes himself acknowledged, would be a more exact statement. The belief of each man in his own existence is necessary. It endures the tests of the laws of belief. It is self-evident. It is the premise which is unconsciously assumed in every mental process. Whoever doubts his existence, by the very doubt proves what he doubts. A nonentity cannot doubt. Furthermore, the contrary of the proposition that I exist cannot be conceived. There is a logical contradiction in my trying to conceive I do not exist. The very attempt nullifies itself. It is also a necessary belief. Each man must believe in his own existence. A metaphysical compulsion forces him to this conclusion. It is, moreover, a universal truth. All men, as men, civilized or savage, assent to the belief in their own existence. If necessary, it is universal; and all men cannot do otherwise than acknowledge their own being. It is, finally, a simple, an ultimate belief. It cannot be analyzed, or deduced from a higher conception. It is the centre of philosophy, about which the circle of metaphysical discussion moves, but which is itself unmovable. From this primitive belief is derived the belief in the existence of substance as it lies in the soul of man; but of itself it is fundamental and necessary.

The second belief which we shall examine is that concerning the trustworthiness of consciousness. By consciousness
is meant the notice which the mind takes of its own operations. "Consciousness," says Reid,1 "is a word used by philosophers to signify that immediate knowledge which we have of our present thoughts and purposes, and in general, of all the present operations of the mind. Whence we may observe that consciousness is only of things in the mind... It is likewise to be observed that consciousness is only of things in the mind, and not of external things. It is improper to say 'I am conscious of the table which is before me.'" Dugald Stewart2 similarly defines consciousness as denoting "the immediate knowledge which the mind has of its sensations and thoughts, and in general, of all its present operations." By their successor, Sir William Hamilton, the term was used as convertible with immediate knowledge, "and if," he says,8 "there be immediate knowledge of things external, there is consequently the consciousness of an outer world." The point under discussion, however, relates to the veracity of the testimony of consciousness to the correctness of the mental operations. Is the belief that consciousness is trustworthy primary? Does it bear the test of the fundamental beliefs? Is it, in the first place, self-evident? Ask any one if he relies upon his consciousness, and what is his answer? A smile at the utter foolishness of the question. Of course he believes in the trustworthiness of his consciousness. His belief in it is so clear and strong that he never dreamed of questioning its accuracy. He cannot, moreover, conceive of the falseness of the deliverance of his consciousness. Thus to conceive would be equivalent to conceiving that this final deliverance was false, which would therefore nullify itself. The belief is also necessary. The mind must entertain it. Pyrrhonist and sceptic have tried to throw doubt around the trustworthiness of consciousness, but man cannot be persuaded that all his mental processes are based upon a lie. From such a conclusion he revolts instantaneously. It is, still further, a

1 Intellectual Powers, i. ch. 1.
2 Outlines of Moral Philosophy, i. sect. 1.
8 Discussions, p. 51.
universal belief. Never has a race or tribe been known to exist that did not accept the trustworthiness of the individual consciousness. It is assumed in all the operations of business and society. All acknowledge its truthfulness. It is, finally, an ultimate truth. It cannot be analyzed. Its meaning may be discussed, the limitations of its applications marked, but the fact still stands simple and inexplicable that consciousness is trustworthy.

The most important attack that has recently been made upon the trustworthiness of consciousness proceeds from the pen of an English materialist, Dr. Henry Maudsley. In his interesting, but in many respects misleading work, "The Physiology of Mind," he urges four objections against "the trustworthiness and the sufficiency or competence of consciousness as a witness of that which takes place in the mind." 1 The first, which, he confesses, is of no great weight, since it applies to observation in any science, is "that there are but few individuals who are capable of attending to the succession of phenomena in their own minds." The second objection states "there is no agreement between those who have acquired the power of introspection; and men of apparently equal cultivation and capacity will, with the utmost sincerity and confidence, lay down inconsistent or directly contrary propositions." The third is founded upon the consideration that "to direct consciousness mainly to the observation of a particular state of mind is to isolate that activity for the time, to cut it off from its relations, and therefore to render it unnatural." The fourth asserts that the "madman's delusion, which is only an extreme instance of error growing out of causes that are constantly at work to prevent an individual's feeling and to vitiate his reasoning, is of itself sufficient to excite profound distrust, not only in the objective truth, but in the subjective worth, of the testimony of an individual's self-consciousness."

The answer, however, to these objections, which are urged with much energy of specious reasoning and vigor of lan-

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1 Physiology of the Mind, pp. 16, 17, 18.
guage, is easy. To the first it is sufficient to say that the latitude of its application destroys its force in reference to the trustworthiness of consciousness. It applies to every science demanding observation as fully as to that of self-introspection. In regard to the diversity of the conclusions of the testimony of consciousness which the second objection presents, it is evident that no such disagreement exists as Dr. Maudsley suggests. Upon the fundamental deliverances of the human consciousness mankind are agreed. But even if there were no such unanimity of conclusion the objection would be of no avail. For as, though the principles of good taste differ with each individual, yet certain canons are recognized as true by common consent, so though the details of the testimony of the consciousness of individuals may differ, yet upon the fundamental questions concerning it there is perfect accord. The third objection, also, cannot be allowed the weight which the author rests upon it. Granted the extreme difficulty of self-introspection, he fails to prove but that so far as it may proceed it is entirely accurate. By comparing present states of mind with the remembrance of past states, and by sudden glimpses into, or long-continued examination of, the dark chamber of self-consciousness, the mind discovers the general character of its operations and learns to trust their correctness. The fourth objection is very specious, and to a superficial observer is of much force. But a brief examination discloses its fallacy. In the case of the madman the consciousness is still trustworthy. Consciousness is, as has been defined, the notice which the mind takes of its own operations. In insanity the mental operations are distorted, the premises of reasoning are awry, the logical processes are consequently vitiated, and therefore the report of consciousness in reference to them bears the semblance of disorder. So strange are the doings in the mental forum that the consciousness is as liable to the charge of incorrectness in its report as the original powers are to disorder in their proceedings. But the truth is, the consciousness is still a veracious reporter, though of disorderly
procedures. She is like the photographic glass which receives the impression of every object that passes before it, of either beauty or ugliness.

A third belief which, in consequence of its close relation to the preceding, deserves only a passing notice, relates to personal identity, or, in Kantian phrase, the "transcendental unity of self-consciousness." It is the belief that I have been and shall ever be the same person that I now am. Its necessary character is made evident by the application of the five laws, as in the case of the trustworthiness of consciousness, and therefore requires no further consideration.

The fourth belief which we shall examine concerns the existence of infinity. Whether man can know the infinite, as M. Cousin maintains, or whether it is a form of the unconditioned, as Hamilton and his follower Dr. Mansel hold, is not the question. The question is simply whether the belief in the existence of an infinite is primary. That the infinite is not a substance but an attribute is now generally agreed; and the existences to which it is most commonly attributed are space and time. The question before us, therefore, is resolved into the consideration of whether the belief in the infinity of space and time is primary. Does, therefore, this belief bear the tests which have been prepared for all primary beliefs? It is, first, a self-evident truth. The proposition is understood as soon as stated. The mind adds length to length in extension and in duration, but is conscious that beyond the limits of its widest apprehension still lie numberless lengths ungrasped. It cannot deny that space is everywhere and time every-when. The conceivability of the contrary is also impossible. The mind cannot conceive that either space or time has a limit. If for an instant it posits a limit, in the next it has overleaped the boundary. The belief is, further, a necessity of thought. The mind cannot think of either along a line of extension or duration without acknowledging their infinity. If it is necessary, it is thereby made universal. All men who understand the proposition assent to its truth. It is, moreover, an ultimate belief.
It cannot be reduced to simpler elements. It is *a priori* and incapable of analysis.

The necessary character of the belief in the infinity of space and time receives additional evidence by certain truths which can be inferred *a priori* from them. A large number of these truths, fifty-six, have been tabulated by Schopenhauer, a few of which we venture to translate.¹

**TIME.**

- There is only one time, and all different times are parts of it.
- Different times are not co-existent, but successive.
- Time has three divisions, past, present, and future.
- Time is homogeneous and continuous.
- Time has neither beginning nor end; but every beginning and end is in time.
- Time has no persistence, it no sooner is than it is passed.
- Time has no rest.
- Time is everywhere; each instant is everywhere present.

**SPACE.**

- There is only one space, and all different spaces are parts of it.
- Different spaces are not successive, but co-existent.
- Space has three dimensions, length, breadth, and thickness.
- Space is homogeneous and continuous.
- Space has no limit; but every limit is in space.
- Space can never pass away; it endures in all time.
- Space has no motion.
- Space is eternal; each part of it is in all time.

The transition from the consideration of the primary belief in the infinity of time and space to an examination of the primary character of mathematical truth is easy and natural. For pure mathematics is the science of time and space. Arithmetic is the science of number, but number is the result of succession, and succession is the essence of time. Likewise geometry is the science of space. The definite examination of a few of the fundamental truths of mathematics proves their primary character. Geometry is based upon the proposition that a straight line is the shortest distance between two points. This belief bears the test of the laws of all primary beliefs. It is self-evident. It cannot be proved. Geometry assumes its truth in all its developments. The truth of its contrary is, moreover, inconceivable. That a straight line is not the shortest path between two points is

¹ Die Welt als Wille und Vorstellung, ii. 55.
an image which the mind cannot construct. It is, still fur-
ther, a necessary and a universal belief. All men cannot
but believe it, and all do assent to its truth. Evidently,
again, it is a simple belief. It is its own support, although
all geometry rests upon it. Similar conclusions regarding
the primary character of mathematical truths are discovered
by investigating the nature of the two allied propositions
which are the foundations of arithmetic, that if equals are
added to or subtracted from equals the results are equal.
The propositions are self-evident, axiomatic; the truth of
their contraries is inconceivable; they are necessary, man
must believe in them; universal and ultimate, they cannot
be separated into simpler conceptions. From these princi-
ples, together with the geometrical proposition just examined,
may be deduced the entire science of pure mathematics; but
the truths which form the foundation are the primary and
inexplicable beliefs which are ingrained in the human mind.
The sixth belief which we shall investigate relates to the
laws of thought. These laws are recognized by common
consent, as the law of identity, whatever is is; the law of
contradiction, nothing can both be and not be; and the law
of excluded middle, everything must either be or not be.
The primary character of these laws is past questioning.
They are self-evident. That if A is A it is A is simply an
identical proposition, and no explanation can add to its
clearness. That also A cannot at once be A and not A, and
that it must be either A or not A is obvious on the statement of
the terms. So, moreover, the impossibility of conceiving the
truth of the contraries of these laws is evident by an attempt
to construct a mental image of these contraries. That A is
outside of the realm of both being and not-being is absolutely
inconceivable. Necessary and universal, still again, are these
laws. In accordance with them man must reason; he is not
always, he is seldom directly, conscious of them, but all his
mental processes are, and must be, conducted by the methods
which they indicate. Accordingly they are of universal
application; and, so far as the finite mind can consider, they
are as binding on the inhabitant of Mars as on us. Evidently, also, they are ultimate principles, to which other propositions may be reduced, but which are themselves irreducible to simpler elements.

We now come to the examination of one of those questions of philosophy than which none is more important, or the subject of intenser contention among the schools, viz. the question of causality, or of the law of causation. This law is not that every effect must have a cause, for this proposition is simply an analytical judgment. The concept effect cannot be formed without also forming that of cause. But the law of causality is that every change or every event must have a cause. Without pausing to consider the eight different schools into which metaphysicians are divided respecting the origin of the law, we proceed, as in the case of the six beliefs already examined, to apply the tests to this belief also. Is it, first, self-evident? The very fact that philosophers have arrived at so many and diverse conclusions in reference to the law establishes a presumption that it fails to meet the test of this law. But this presumption is overthrown, and the primary character of the belief certified by each individual's self-introspection. As he reflects upon the operations of his own mind, as he perceives the relation between his intellects and emotions, between his emotions and volitions, between his volitions and deeds, he sees by an intuition that every mental change must have a cause. It cannot be proved by argument. It is an intuition. The same principle he applies to the external world. The occurrence of an event instantaneously points him back to a cause. There is no process of reasoning. The mind springs to the belief that the event was, must have been, caused. Similarly, it is impossible to conceive that an event is not caused. The statement is absurd. It is a better subject of ridicule than of reasoning. The belief is, moreover, necessary. Man not only does, he must, assent to its truth. On the basis of its truth he constantly reasons, and realizes that to abolish the principle is impossible. The human consciousness testi-
flies that it cannot but believe that every event must have a cause. Events it conceives as a chain, in which the position of each link is determined by its predecessor and determines the position of its successor. The necessity is indicated in the experience of the young as well as of the old, of a barbarous as well as of a civilized people. So, therefore, it is also a universal belief acknowledged by all men. It is, finally, an ultimate principle. It is a primary revelation of the human intellect. Its origin may be reasoned about, but does not admit of explanation. It may explain derived and secondary principles, but in its ultimateness it is itself inexplicable.

By means of these five laws of self-evidence, inconceivability of the truth of the contrary, necessity, universality, and ultimateness, we have indicated the primary character of the beliefs in the personal existence of the thinker, in the trustworthiness of consciousness, in personal identity, in the infinity of space and time, in the fundamental truths of mathematics, in the laws of thought, and in the principle of causality. These we regard as the entire catalogue of the necessary beliefs of man; others which bear the semblance of a primary and necessary nature can be derived from them. But at once the question springs to the lips, Is not the belief in the existence of God necessary? Upon no question are philosophers more divided than upon this. But to the opinion of those who maintain that this belief is not necessary we must incline; and this position is justified by a brief consideration of the definition of God. Dr. Calderwood argues with great force for the necessary character of the belief, and maintains that it embraces a belief in the existence of "the only Infinite and Absolute Being—the one Infinite Intelligence, the Holy God, the self-existent, all-powerful First Cause, Sustainer, and Ruler of all finite existence."

1 Philosophy of the Infinite (2d ed.), p. 98.
necessarily believes he is "holy," or if "holy," "self-existent," or if "self-existent," "all-powerful," or if "holy," "self-existent" and "all-powerful," how he is "the First Cause, Sustainer, and Ruler of all finite existence." Granted that the mind does believe all this, it is not thereby acknowledged that the belief is primary. The belief will not bear the first test of self-evidence. The same conclusion is also made evident by the explication of a more exact definition, both philosophically and theologically, of the Supreme Being; "God is a person on whom all finite beings are ultimately dependent, and who is endowed with every excellence in a degree infinite and perfect." If it could be proved that we have a primary belief that God is a person, it surely is not self-evident that on him "all finite beings are ultimately dependent," and still less apparent that he "is endowed with every excellence in a degree infinite and perfect. This belief will not bear the test of the fundamental laws. We must, therefore, decline to admit the belief in the being of a God into the catalogue of the primary beliefs of man. This belief we hold is derived from the union of the belief of the existence of the thinker with the belief relating to the law of causation. But the discussion of this interesting question would carry us outside the domain of the subject. The conclusion arrived at, however, it should be remarked, does not weaken the force of the arguments adduced to prove the existence of God. The teleological, the cosmological, and the ontological arguments must still be allowed to retain the weight which has been attributed to them by every great philosopher, with the exception of Kant, since Descartes.