The doctrine of perception was justly recognized by Sir William Hamilton as "a cardinal point of philosophy." He accordingly prosecuted his study of the subject with an earnestness and persistence elsewhere unsurpassed in all his labors. We are astounded at his wealth of learning and bewildered by his dialectic subtlety, but are left, withal, entirely adrift in regard to what we should think of the exact nature and the philosophical significance of this mental phenomenon. His extended discussions of the subject, however, will relieve the student from much wearisome toil in tracing out the history of the doctrine in its dreary succession of stages, as well as in the detection and refutation of errors that have crept into the speculations. We may thus take our departure at once from his voluminous expositions, resting in the conviction, that, if successful in grasping the truths in fact and logic which he has established, while shunning the mistakes and supplying the deficiencies that unhappily mar his work, as they do more or less all human endeavor, we shall attain the fullest and the exactest knowledge possible to us in this fundamental department of philosophical research.

PERCEPTION DEFINED.

We may safely start in our study with the summary exposition given of perception by Hamilton in his last utterance. He now defines perception to be "the appre-
hension, through sense, of external things."  

By "apprehension," as the word is here used, we must suppose Hamilton to have meant cognitive apprehension; and by "external things," as the object of this cognitive action, things exterior to the knowing subject or self. It is this characteristic of externality in its object which distinguishes perception proper—external perception, from the other kind of cognitive apprehension—internal perception—"which is concentrated on the mental phenomena."
The apprehension, further, in perception, is "through sense"—through the bodily organism.

In this posthumous exposition, we may note here, Hamilton proceeds to set forth, that in perception "the thing perceived and the percipient organ must meet," since a thing can act only where it is. Hence, he says, "it is erroneous to affirm, in the first place, that we are percipient of distant objects," and, "in the second place, to say that we perceive external things in themselves." Still further, he here teaches that "the real, the total, the only object perceived has, as a relative, two phases, and may be described either as the idiopathic affection of the sense, or as the quality of a thing actually determining such or such an affection of the sentient organ (i.e. an external reality in correlation to the sense)."

We must note, in passing, the inexactness here in Hamilton's statement, that the object in perception may be adequately described either, on the one hand, as "affection of the sense," or, on the other, as "the quality of a thing actually determining the affection." Most certainly "affection of the sense" and "quality of thing affecting it" are not identical, as this statement seems to imply. His doctrine of relatives apparently leads Hamilton astray into an identification of things simply because they reciprocally suppose or involve one another. A conspicuous exemplification we have in his affirmation respecting a

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2 Ibid., p. 678.
triangle, "that the sides suppose the angles, the angles suppose the sides, and, in fact, the sides and angles are in themselves—in reality—one and the same." This error underlies and vitiates his whole philosophy of perception.

We accept the definition given by Hamilton of perception, as marking the outer bounds of the field of mental phenomena to which our present investigation is directed. Perception proper—external perception—is the cognitive apprehension of external things presented to the mind through the bodily sense. The seat of the phenomenon is in the intelligence; and it is the activity of this function of the soul which is characteristically concerned in it. The object on which this activity is directed, is material or physical in the sense that it communicates with the soul only through the bodily organism, and is a different thing from the percipient,—is a non-ego,—and in that sense is exterior to the intelligent or cognitive subject. Perception proper, it should be remarked, does not deal with spiritual natures acting directly on the mind, and not through the bodily sense. We must accept, also, Hamilton's teaching, that the thing perceived and the percipient subject must meet—the locus of this meeting must be common to both.

There still remains in these elaborate discussions of Hamilton a crudity, perhaps we should say a prolific suggestiveness, that leaves the student in perplexity and unrest. There is to be detected, moreover, an incompleteness and inaccuracy of discrimination that make his discussion of the subject confused and indeterminate. Profuse learning and dexterous logic, combined with a dominant passion for tabulation and representation by diagram, seem sometimes to have displaced in his thought careful and exact discriminative observation. The truth of life does not bend easily to geometric lines; nor does speculative opinion range itself exactly in accordance with the nice balancings of logical opposition. The char-

\[Ibid., p. 134.\]
acteristic method of Hamilton's study, moreover, is through conditions and relationships, the outer limitations of his subject, and by the way of words and opinions. Science, on the contrary, to be stable and satisfying, as well as exact and thorough, must found directly on carefully noted fact and on interior and essential characteristics; and then build up after the measures and along the lines of legitimate thought, employing conditions and relationships, nomenclatures and speculations, rather as auxiliary and subordinate, as ladder and scaffolding.

The definition of perception, as given, clearly distinguishes it from "consciousness," as this latter term is understood both in philosophical discussion and in popular use. We are conscious of perceiving. This vital and critical truth is beyond question. Perception is the object of consciousness; it is therefore not identical with consciousness. The treatment by Hamilton of this most significant characteristic of the human mind is strangely faulty, and so is most pernicious to all sound philosophy. He affirms that "consciousness cannot be defined," and yet on the next page he says that "what we call consciousness" is "the recognition by the mind or ego of its acts and affections." It is, however, "not to be viewed," he adds, "as anything different from those modifications themselves." "Consciousness and knowledge are not opposed as really different." So, consistently, he identifies perception with the consciousness of external objects. He warmly insists, against Reid, that "consciousness comprehends within its sphere the object;" and that to say, "I am conscious of the inkstand," instead of saying, "I am conscious of the perception of the inkstand," is only a seeming incongruity. Consciousness farther, he maintains, supposes a discrimination, a judgment, also, and memory. But how the first act of consciousness can involve those composite states, seems inexplicable. Consciousness of knowing, must, according to this, necessarily precede conscious-

4 Ibid., p. 133.  5 Ibid., pp. 274, 286.  6 Ibid., p. 158.
ness of feeling—sensation—and desire and will. Consciousness, moreover, he says, is a condition of all knowing and feeling; while yet its sole function is to recognize those modifications of mind.

Out of this confusion and self-contradiction, we think, emerges distinctly the fundamental truth, that perception is to be broadly distinguished from consciousness as object from function. We are conscious of perceiving. The act of perceiving is, however, but a part of the comprehensive object of consciousness, which embraces, with all knowing of specific things, also all feeling and willing, besides, as will be hereafter indicated, that general, unmodified state of mind which exists when no specific function is recognized; the specialization which is involved in every mental act or affection of the human mind being here confined to the object engaging it, without reference to the particular function engaged. "The mind can know itself," taught Aristotle of old. We interpret the dictum in an allowable exegesis when we take it in its most comprehensive sense, so as to mean that the human mind as an essentially knowing activity is ever cognizant of itself, both when not specially modified by the prominence of any particular function, and also, when so modified, of the special act or affection by which it is modified.

Consciousness and perception are related, indeed, as activity and object. But the alleged "logical axiom, that the knowledge of relatives is one"—"is the same"—has a most unauthorized and baleful application when it leads to the identification of relatives beyond the particular attributes of the relation. In truth, we seem to find in Hamilton's erroneous exposition of consciousness as led by this so-called "logical axiom," the fruitful source of all his wild speculations about the Infinite and the Absolute. If, in a word, in affirming that I know that I know, I can mean nothing more than when I affirm that I know, consciousness thus being identified with knowledge, then

clearly I have no attestation of my knowledge—of my knowledge of anything; and agnosticism is the inevitable logical result.

Again, perception is to be discriminated from another phase of the cognitive faculty, technically known as the Judgment. It may truly be said in a sense to involve a judgment; but we should be far from concluding, with Hamilton, that to involve, necessarily means to constitute, or to furnish intrinsic constituents; it may mean only to condition or to determine from outer relationships. Perception, in relation to the judgment, is the conditioning factor; it is by no means the conditioned. It is the germ out of which the judgment is yet to be evolved. It is but inchoative and incomplete knowledge; a full and complete cognition appears only in the judgment. Perceptive knowledge is ever immediate and presentative; the judgment is ever mediate and reflective. The fruit of perception never comes to be proper truth; it is the prerogative of thought, of reflection, of the judgment, to bring forth truth, for truth is ever the fruit of attribution, the uniting of attribute with subject, which is the essential thing in judging. A perception, regarded as an Aristotelian entelechy, a percept, is ever single and simple; a judgment is ever organic, having two members,—two concepts, subject and predicate,—which emerge into being with and in the judgment, as the members of a living organism emerge into being with and in the organism itself. A percept is thus transformed into a new nature, when it becomes concept; from a single it becomes a dual, and more than this, it becomes a proper bimembal, the two being organically united in the life of the judgment. Percept and concept are thus broadly distinguished from each other, while yet genetically related. The percept is the bioplasmic cell which differentiates itself, in the process of cognition, into the organic concept—into the subject and the predicate as constituent members of the evolved judgment. This process of mental differentia-
tion, sometimes instantaneous, is yet at other times long protracted. The sense is impressed by some outer object; we perceive the object, but we sometimes hold up our sense for a deeper or fuller impression; then perhaps we linger long after this fuller apprehension before we discriminate the particular property of the object which affects us; and perhaps we linger still before we actually come to the final step of identifying the particular property apprehended with the object, that is, of attributing the property in a proper assertory act to the object. Judgment may, thus, wait long after perception; it may be often held in suspense; it may, indeed it often does, die out entirely before reaching full life, a mere abortion of knowledge.

We have now defined with perhaps sufficient exactness the particular portion of our mental experience which we have proposed to investigate. We have indicated it through its determining extrinsic or relative attributes; first, in being a part of that experience which is exactly circumscribed by the horizon of our consciousness; secondly, in being discriminated from consciousness itself as object from active function; thirdly, in being also discriminated in respect to specific object from its co-ordinate cognitive activity—internal perception or intuition—perception proper being engaged only with external objects reaching the mind through the bodily sense; and, fourthly, in being discriminated as part of a time-process from its mature complement—the judgment—to which it stands in the relation of a germinal cell, transforming itself through nascent differentiation into the bimembral judgment as the primordial type-form of all mature and living thought—of all truth, indeed, regarded as product of mind, however much in after-growth expanded, ramified, complicated. We are prepared now to concentrate our attention on the intrinsic attributes—the essential nature—of perception. Not, however, till we utter a necessary word or two on the character of the testimony which
our investigation employs and on which it securely relies.

CONSCIOUSNESS AS WITNESS.

We must freely and unqualifiedly recognize consciousness, as already defined, as the one sole primal source of light in regard to the nature and significance of perception, as we must so recognize it in regard to all the modifications of the human mind. This primitive witness, however, has a large diversity of supporting and corroborating evidence drawn from reason, from analogy, from effects and outworkings. It would exceed our proper bounds, in this discussion, to enter upon any further specification of this secondary and derivative but ever supporting evidence. It does seem necessary, however, to indicate in a brief and summary way the competency of consciousness as a witness, as in fact the one primal witness, as to the true character of perception. This necessity arises chiefly from the errors, the equivocalities, and the mystifications in which this phenomenon of the human mind has been involved. Of this we have already had some foreshadowings.

The term itself—consciousness—is used in divers legitimate meanings, giving occasion thus to confusion and consequent error. Like all terms denoting mental activity or function, it has a threefold signification and use, well indicated by Aristotle, as denoting, first, the activity as a mere potency or faculty in rest; secondly, as an energy or faculty in exercise; and, thirdly, as an actuality—entelechy—or faculty in achieved result of its exercise, and so a proper finality, since as an energy it comes to an end in its completed exercise.

Farther, within the allowed limitations of speech, the term is diversely used to denote both the activity—whether as potency, energy in action, or as entelechy or actuality—and also the realm of object with which its exercises are engaged. Still, with no dissent worthy of consideration, the philosophic world have agreed with the common
sense of man generally whenever appealed to, in accepting the broad yet definite enunciation of Jouffroy: "Whatever is accomplished by our intelligence, whatever is experienced by our sensibility, whatever is acted and decided on by our will, we are made acquainted with it at the moment—we have the consciousness of it." And farther: "We regard everything which this inward perception testifies to us as possessing an incontestable certainty."

Consciousness, we aver then, is an unquestionable attribute of the human mind. Its one sole office is to know, and to know only in the incipient form of knowledge, that of simple observation or cognitive apprehension of an object. It is simply a witness, not a judge. Its object, farther, is purely what passes within the mind itself; this and this only, and all this, it is its province to observe or apprehend. Its testimony, moreover, is incontrovertible and conclusive. If a man does not know, is not conscious of what he himself feels and thinks and intends; if he does not and cannot know that he himself feels and thinks and wills, and in what specific ways he thus acts, he cannot know anything; there is no knowledge to him. Consciousness, indeed, participates in the general character of finiteness attaching to the entire nature of man. It is not always awake and active; it does not apprehend every minutest thing that takes place within its proper range; and its range is circumscribed. Its uttered testimony may be imperfect, incoherent, feeble. Withal it is the most trustworthy witness that is ever summoned before a human tribunal. Its competency is of the highest order, for it is an immediate observer, and knows of its own knowledge, and cannot, if it would, deny what it observes. Its observations, still more, are the one original source of all our knowledge of mental phenomena, for the mind itself is sole immediate observer of what passes within itself. With full allowance, then, for the weakness and finiteness of all

*Jouffroy, On the Method of Philosophical Study.
that is human, we feel ourselves free to appeal to the human consciousness for the determining evidence in regard to the sphere and significance of perception as it is experienced in the human mind. Whatever imperfections or limitations attend its observations; whatever obscurity or deficiency mark its utterances; whatever mistakes may mar the interpretations of its utterances, still its actual observations, as we are enabled to gather them, are the chief, as also the trustworthy, guides in our investigations. Whatever mistake may occur, inasmuch as the field of observation is open to every human mind, may be effectually eliminated on repeated scrutiny; and concurrence in results must in reason be accepted as decisive. Such concurrence we have in fact, and on it we rest. We may repeat that this witnessing, this simply observing, is the one sole function of consciousness. Dismissing all the hallucinations of poets and mystics and sciolists and visionaries of every tribe, we take consciousness to be simply the mind's recognition of its own acts and affections as a truth contained in the more specialized truth that each of the threefold specific functional activities of the human mind is reciprocally both capacity and object to each of the others. The mind of man thus is at once a self-knowing, self-feeling, self-determining energy. It possesses self-knowledge, self-sense, self-determination. Consciousness, moreover, immediately regards the concrete act or affection, the mind as acting or feeling; the cognition of the mind or self being the attainment of subsequent discriminative, reflective thought, as is also the cognition of the act or affection considered in itself abstractly from the active or feeling mind.

THE INTERACTION OF THE MIND WITH EXTERNAL OBJECTS AS ATTESTED BY CONSCIOUSNESS.

We come now to the question, What is the intrinsic, essential character of that modification of the human mind which we designate Perception Proper, distinguish-
ing it, in respect to object, from Internal Perception, otherwise known as Intuition, and also, as a time-process in respect to stage, being inchoative and conditional, from the Judgment, which is the full and final stage—the attributive form of knowledge? We answer, first, that in all perception we discover, as an essential constituent, an interaction between two distinct factors, an ego and a non-ego, an inner and an outer, a subjective and an objective. Outside of the Heraclitic doctrine of an "eternal flux," which doctrine, it will be remarked, involves the denial of all proper perception, there is no alternative hypothesis. The meeting of such two factors in every instance of perception is an unquestionable as it is in fact, to speak generally, an unquestioned element and intrinsic condition. What precisely these two factors are, is not, at this point, declared. This simple fact is put forth, that perception essentially involves an interaction between two distinct forces, an ego in some form of functional activity and a non-ego in some mode of an engaging and interacting energy. This fundamental fact, which indeed is a genetic fact for all sound philosophy of perception, and so for all sound philosophy of thought, of mind, of being—for all sound logic, psychology, ontology, we then advance under the most unimpeachable attestations of consciousness: In perception I am conscious of an interaction between my own mind and some energy exterior to my own proper self. It is true that I am not always distinctly conscious of this foreign presence; as I am not always conscious of other things that are known to be present in my mind. As the external vision does not always discern each of the manifold objects that yet lie within its range, so the eye of consciousness does not always take into its distinct recognition every one of the manifold modifications of the mind that yet undeniably lie within its proper range. But there are times when I am sure of this interaction. The flow of my mental life, of my inner experience, is invaded, is disturbed, is changed; and the disturbance or
change is from no determinative or producing cause from myself. An energy has come in from without myself, which I distinctly recognize. I may sometimes be in doubt as to the source of the change; but prolonged impression, closer scrutiny, reiterated experience, remove the doubt, and establish my conviction beyond all impeachment. If I know anything, I know that there is a true non-egoistic presence in my mind. The universal confession of a like experience among men everywhere eliminates all possible mistake, dispels every supposable illusion, and substantiates my conviction beyond all controversy.

The *locus* of this interaction between the two factors in the perception must be of course within the realm of consciousness. This position requires no advocacy. It evidences itself. The world of thought has pronounced with axiomatic assurance that a thing can act only where it is. The common mind deems no other view to be possible. Neither of the coefficients, neither the ego nor the non-ego engaged, can supposably travel beyond its limited sphere of being. The non-ego, it follows from this, must come within the sphere of the ego—the external object perceived, within the sphere of the percipient subject. The doctrine of Hamilton, thus, that the thing perceived and the percipient organ must meet in place, we accept unhesitatingly, only with somewhat different views of consciousness and of perception from those of Hamilton. We are not therefore obliged to defend the preposterous enunciation, “I am conscious of the inkstand.”

Further, the outer factor—the non-ego—in this interaction must be a *real* object. Nothing but that which is real can act. If anything interacts with the mind, it must be as real as the mind itself. It proves itself to be real by the fact that it so interacts. It reveals itself—its own intrinsic nature—through this essential attribute—reality evinced in its acting. To act, to be active, is to be real—*wirklich*. This acting is the one sign and proof of reality.
The statement holds good of internal perception or intuition, in which the object that engages the percipient function is simply idea—some form of mental life or action. In this intuitive act the mind in some of its own modifications becomes object to itself. Perception, as involving interaction, thus ever involves two real factors. Consciousness attests this. Philosophy assumes it. The great Kantian critique starts from the assumption, taken as beyond all controversy, that the faculty of knowledge in man can be called into activity only "by objects that affect our senses." No thinker of any repute has questioned this teaching, if at least the term *senses* be understood to include both the inner and the outer. The so-classed idealist, Berkeley, accepted a real non-ego in perception. "That the things I see," he says, "with my eyes and touch with my hands, do exist, really exist, I make not the least question. The only thing whose existence I deny is that which philosophers call *matter* or *corporeal* substance."*

Still farther, this external factor in perception must be an immediate object of the percipient activity. The interaction itself involves this. The two coefficients, meet, join, touch, mingle in the interaction. Nothing intervenes. This cardinal point in philosophy, which the mere scrutiny of consciousness would seem to render so unquestionable and is itself so plain and simple, has yet proved the tripping point in philosophic speculation everywhere. The idealist in his developed system of speculation, fixing his eye too exclusively on the egoistic factor, overlooks or keeps from view the outer coefficient, and so easily glides into the doctrine that this object must be ideal, as nothing but the ideal or spiritual can find admission into the sphere of spirit, and consequently is only another modification of the ego itself; or a mode perhaps of the divine spirit, whether arbitrarily attending the presentation to the mind of the external object, as in the Leibnitzian hypothesis of "pre-established harmony," or in the more ac-

* Dialogues of Hylas and Philonous.
ceptable but erroneously interpreted doctrine that matter is after all best conceived as simple potency—energy potentialized. The natural realist, on the other hand, overlooking the necessities of an interaction in which mind is one coefficient, as easily glides into the acceptance of the gross popular conception of the nature of matter and proceeds so far as to justify the statement, in its literal import, that "I perceive the inkstand." The so-called representationists, who conceive that the object immediately perceived, although not properly a mere modification of the ego, is only a representative, an idea, type, image, species, of the true object, supposed to be real and natural, easily glide into the error that we know only this image, this representative, not the actual, outer object, forgetting that this very representative is not from the ego itself, but from without. Finding itself entangled in the meshes of this kind of speculation, philosophic thought in its desperate efforts to escape, plunges over into the wretched illusionism of the mere relativity of knowledge. So philosophers in their own respective ways stumble into positive error over this cardinal point. Then still further, there is what is worse than error—confusion. Mind and nerve force, cogitation and cerebration, psychology and physiology, in themselves as widely distinguishable as the two factors in the intuition, are intermingled and interchanged in most perplexing and dispiriting confusion.

THE INNER FACTOR IN THE PERCEPTIVE INTERACTION.

We pass now to the distinct consideration of the two factors engaged in the perceptive interaction. Beginning with the inner factor—the percipient subject—we recognize at the start the truth that the indivisible unity of the human mind obliges us to believe that in this interaction the mind is present in the totality of its functions, while at the same time we recognize the familiar fact that either one or more of the diverse functions may be in such predominance as to cast into the shade the others, and so to
remove them out of the distinct notice of consciousness. It may be, indeed, and we are often made conscious of the fact, that sometimes there is no one of the special functions distinctly presented to the conscious observation—the mind or soul is engaged as a whole with no specification of function. As has been sufficiently indicated, we are sometimes conscious of being engaged with some foreign energy when neither our knowing, nor our feeling, nor our willing function is specially enlisted. The mind is absorbed as one whole with the object and we are not conscious of either specific sensation, or thought, or volition. Then again a special function may be engaged, to the suppression from the view of consciousness of the other functions and even of the proper self as a whole. The sensibility thus may be specially engaged: we are conscious only of feeling, of a sensation. It is possible that the interaction may be prolonged, the outer object continuing for a longer or shorter time to impress the sensibility, and the sensation thus have a corresponding duration. The mind is then, as we say, all feeling, knowledge and purpose being while in abeyance. We recognize the fact, then, that sensation does not necessarily and in all cases involve any cognitive exercise—does not involve perception. Blind sense has sovereign sway.

But it is an unquestionable fact of experience that this passive state of the mind may continue after the external object that occasioned it has been removed. The smart remains sometimes long after the blow has been struck. We have now an entirely different and very noticeable mental condition, and it is a more or less abiding condition. Modern psychologists have been slow to recognize this mental state. Aristotle seems to have had it distinctly in his view as a form of the imagination, naming it phantasm. This proper work of the imaginative function of the mind, this phantasm or form, being an abiding state of the mind which as an abiding activity retains its impressions and affections as well as its proper active exertions, may, and
in fact often does, continue without drawing in any cognitive act; any perception discernible by consciousness. In itself, however, it lies entirely out of the cognitive department of mind—the intelligence—where it has sometimes been erroneously placed, thus obscuring this whole matter of the proper nature of perception.

Just in the same way of specialized activity the special cognitive function may be, and in fact often is, the function engaged in this interaction between the ego and the non-ego. It is so predominately enlisted sometimes as to occupy the whole vision of the witnessing consciousness, so that the sensibility and the will are both alike out of sight and notice. The mind may, when the outer object comes across its path and arrests its activity, turning it upon itself, chance to be in a predominantly cognitive mood—seeking knowledge, curious, inquisitive. This cognitive mood or habit, whether spontaneously or under the general directive sway of set purpose, may hold on and determine this specific character of the intelligence to be the predominant or exclusive function engaged. We have now the cognitive function as the inner factor in the interaction, and as the sole governing, exclusive function. The mind in the interaction comes into immediate contact and union with the exterior object through its intelligence or knowing function. The knowing function meets and touches the knowable object. Nothing intervenes. So consciousness attests; so analogy echoes. The mind knows immediately the object as true and knowable. This, primarily at least, is that particular stage of knowledge designated perception. We arrive thus, in distinctly traceable steps, in a way cleared of every obstruction, at the doctrine which we must hold as no longer to be controverted that in perception, the mind at times has a direct, immediate knowledge of an external object interacting with it—this object having reached the mind through the channel of the outer sense.

At the same time we may well suppose that the mind
may take cognizance of a sensation which may have been the specific result of the interaction between the mind and the object. This sensation may abide during the more or less prolonged continuance of the interacting object. Or it may be transformed into a proper phantasm—a phase of the imagination, and become as such the object of cognitive regard. This may in a looser sense be termed perception; but at best it is only mediate, not immediate perception. The cognition is mediated through the sensation or the phantasm. It is the fatal vice of the representationist theory that it recognizes only this kind of perception, overlooking the proper, the immediate form. The vice opens the way logically for scepticism—for the philosophy of doubt, which builds itself up on the assumption that for the human mind all knowledge of the outer world is through representation of some sort, through medium of image, species, idea, sensation, or other intermediate, which representative it is beyond its power to accredit.

Perception, whether immediate or mediate, we have viewed as the first stage of knowledge. It is simple cognitive apprehension of the object. It necessarily precedes, as it naturally leads on to, the other two stages, following in order, of discrimination and attribution. We must be in cognitive possession of the object before we can discriminate the parts from one another. Our discrimination may, moreover, be in the lines of the object itself as a composite, or in the pure lines of thought itself. If there be but one attribute apprehended, as is possible, then of necessity the discrimination must be confined to that which opposes attribute to subject, all discrimination of one attribute from another being of course in this case out of the question. The last stage, attribution, appearing in the form of the logical judgment, alone gives full knowledge—proper truth.

This great truth that the human mind is thus in immediate conscious communion with the outer world, can-
not then reasonably be questioned. The universal consciousness of men attests it. The inability to determine in many cases the actual source of the energy that impresses the mind, to trace back the movement of the energy to its original source, cannot in reason shake our confidence in the general truth. Presumably there are many things which the finite mind of man does not know, perhaps even is not able to know, at least in its immaturity. But it does know some things; and it knows that it knows them. It does know, by immediate perception and beyond all question, that it sometimes receives impressions from an external force upon it; it does accordingly know immediately external realities. It may know but a part. It may be that it knows vastly more of external realities medially than immediately. But this great fact of immediate perception, however limited and partial,—this fact of immediate consciousness and knowledge of the outer world,—is beyond all dispute. It is a truth of inestimable value to psychological science, to knowledge generally. It sustains a vital relationship to human character and destiny. It is a momentous truth that we are in immediate contact with the outer world, that there is something besides ourselves, without us, about us, above us; something real; something that concerns us; something which has to do with us, and with which we have to do."

THE OUTER FACTOR IN THE PERCEPTIVE INTERACTION.

The perceptive interaction, as involving the presence within the mental sphere of an active force or energy, imports the presence of what we call a thing; for this force or energy must be either this thing itself or else the essential attribute of the thing, and so inseparable from it. On either supposition the thing itself is present in the interaction. We know a thing only by what it is or by what it does; that is, only by attributes either of quality or action. If a thing reveal to the percipient subject only

10 Day's Mental Science, p. 221.
one single attribute, it makes itself so far known. Nothing more is requisite for the cognition of a thing as actually existing, for there is nothing in the thing beyond its attributes. Thing in itself, thing without attribute, is a nonentity, a very zero to thought, and, therefore, whenever admitted as a significant element, whether openly or surreptitiously, vitiates the whole procedure, necessitating purely fantastical results.

The primal, fundamental, universal attribute observable in the thing engaged in this interaction with the mind in perception, is that of reality. The interacting force or thing reveals itself through this attribute, which is an attribute constituent of thing as thing. This has already been indicated; but the present stage of philosophic speculation calls for emphatic reiteration and somewhat fuller explication of the statement. The point to be emphasized here is that this attribute of reality pertains to the outer factor in the interaction equally as to the inner; it is attribute of the thing engaged in the interaction; it is revealed by it and from it and as pertaining to it. It is in no way or degree the creature of the percipient subject, nor a result of the meeting of the interacting coefficient in perception. However real itself, perception has no stock of transferable reality on hand, and has no original power to bring it into being anew. Nor can any judgment that may attend or follow the interaction or the perception give birth to this objective reality. The function of the judgment is solely to assert what is, either actually or contingently; it gives only assertory being—thought being, subjective being,—never outer or objective being. The Hamiltonian philosophy is pervaded, and so utterly vitiated, by this fundamental error of confounding the being of mere thought with the being of the object of thought—reflective being with real being or the being of a thing. The outer factor in perception is judged or asserted to be real, simply because it is perceived to be real; because it reveals itself as real, through
this its essential attribute of reality, in the one sole way of such revelation, by acting, working; because it is itself, in its inmost essence, real. Just so, the sun is judged to be bright, because it is itself bright, and reveals itself to the sight through its attribute of brightness. The seeing of the sun does not make the sun to be bright; nor does the judgment that the sun is bright, bestow on the sun its attribute of brightness; the sun is itself bright before, and independently of, the judgment that attends or follows the seeing of the sun.

A second universal and essential attribute revealed at least indirectly if not directly from the object in perception is truth in the sense that it is of such a nature as to be cognizable. So far as interacting so as to produce perception, it must of course be perceivable; and inasmuch as all perception of an object may evolve itself into a possible judgment, such object must admit in its evolution of itself, of being judged; of being known so that the knowledge of it shall be a truth. The revelation of a single attribute makes possible, thus, the primordial judgment that the attribute pertains to the object. If a plurality of attributes be revealed from the same object, then, to be true or knowable, the object must reveal attributes that can coexist congruously in it. Otherwise no knowledge—no proper truth—is possible of it.

To these primal universal attributes, revealed in all perception from the object and in it, may be superadded the manifold diversity of characteristic attributes revealed respectively by diverse objects in the diversities of perceptive experience. Each separate object has its own characteristic force interacting in the perception by which the object is individualized and identified. We distinguish a sound from a scent, the ring of a bell from the crash of a falling rock, the fragrance of a rose from that of a violet. The interacting force from without may be traced back along its own characteristic way, more or less indirect, to a more or less distant source in the time-flow
of cause or the space-order of things; and conveniences of thought or other use may lead us to fix upon this nearer or that remoter point in the time-flow, or this or that more or less extended portion of space, as that by which we shall more habitually identify the impressing force and so fix our nomenclature. Perception, in the stricter philosophical method of study, regards only the last presentation of the interacting object when it appears as an actual working force in the mind. Even at this stage of perceptive experience, where the percipient subject meets the outer object, although immediate perception should be thought to be incompetent to carry farther the knowing process—and here is a question of great interest inviting the study of the philosophic investigator,—even here, in this simple apprehension of the outer interacting factor, we have a veritable cognition, so far as perception of an external object, so that we can answer the two fundamental questions concerning it, its quid and its quale,—what it is, and its quality or essential property. If is the non-ego: and it is the non-ego of reality and truth or logical congruousness, a revealed thing that can be known by the human mind. This is indeed but a most limited determination of a thing through property; but it is a genuine, veritable determination; and what may follow is more specific determination, is but addition of attribute, not alteration of thing. It is the same object, given at first only as real and true or cogitable, that at successive presentations becomes more fully known in further specialization of attribute, whether in immediate perception, if any, or through mediate perception, that is, through the medium of proper sensation, in which the object is seen only as reflected in the feeling or the impression on the sense; whether through its intrinsic or its extrinsic attributes or its relationships; or, still further—by the aid and instrumentality of the proper logical judgment in reflective thought. No proper creative or constructive work is wrought in all this more specialized determination on
the object itself. That remains the same; our view of it only is enlarged. We create no new sun, nor do we impart any new properties to its essence, as with continued and intensified gaze, or with guided and assisted vision, we discern new properties in it. The object was identified with itself—through its given attributes was individualized—at the first, in the primitive perception. What follows is only more specific determination of attribute, not original identification of object. Perception proper is ever apprehensive of the individual, of the single concrete through its attribute. The generic and the comprehensive, as such, lie outside of its sphere. They are reached by a cognitive process, analyzing and discriminating, that follows the original apprehension of the single and simple object in perception.

In the act of perception, then, there is neither counteraction nor reaction. In it the mind neither goes out to act on the object so as to warrant the statement, in any literal interpretation, that the mind constructs its objects in its knowledge of the external world; nor does it react upon its own state. The supposed counteraction is faulty speculation; the supposed reaction is faulty discrimination. Perception proper is apprehension, not impartation; it is reception of what is given, and neither discrimination nor attribution. As immediate cognition it gives, so far, certain knowledge. To doubt here is to disown reason and all knowledge, all truth. The mistakes and contradictions which enter so largely into our views of external things cannot rightfully be ascribed to proper perception, in which the knowing capacity fastens immediately upon the object to be known. The cognition may be limited, weak, infantile as in the very beginning of life; but it is real, it is genuine, natural, unerring, as the infant's instinctive taking of its nature-appointed food. Perception, let it ever be borne in mind, is receptive, not creative. Pythagoras uttered but a half-truth, that has been strangely perverted and abused, when he said, "Man is the meas-
ure of all things." Nature, it is true, has no yardsticks, and no bushels, as it has no perceptions, no judgments. Man uses his own measures and his own faculties; and it is he that knows, not nature; and he knows through his own knowing faculty. Nature knows not, has no knowing power; it is only knowable. This must be true; man is but the measure of things, not the maker. It does not belong to him to create things, or their essential properties. He can only take them as they are given. Our speculations and our words should most scrupulously avoid, even in appearance, the assumption of the creator's prerogative of constructing objects. Human knowledge is indeed human knowledge; weak, dim, finite, dependent. But the infirm and the diseased are real beings, and human knowledge, if finite and imperfect, is actual. Sense is but the imperfect image of a mirror more or less distorted; reflection is often halting and devious; all mediated knowledge is fallible. The knowing mind, simply apprehending what is given it by its knowable object in immediate interaction with it, gains infallible certainty, if there be any certain yes, any worthily denominated real knowledge, in the bosom of man. And the judgment unfolding itself in the natural process of knowledge out of this immediate perceptive cognition, asserting that the external object thus perceived is real and true, gives the most fundamental as well as the most certain knowledge we can have of external things; just as the judgment, evolving itself out of the immediate internal perception—the intuition of mental acts and affections, gives the deepest and the surest knowledge we have of the modifications of mind.

THE RELATIONSHIPS OF THE FACTORS IN THE PERCEPTIVE INTERACTION.

The study of the intrinsic characters of the two factors respectively in perceptive interaction leads on by an indissoluble connection to that of their extrinsic attributes
—their relationships. Somewhat of this study has already been anticipated from the necessities of this connection—as bud anticipates flower, as, indeed, in widest generalization, parts anticipate their related parts as well as the common wholes. The great truth confronts us that in every part we see something of its complementary part as well as also something of the constituted whole. The statement, "the knowledge of relatives is one—is the same," is a truth, but only a half-truth. It is equally true that "the knowledge of relatives is plural—is different." If we know one part to possess certain attributes, we know at the same time a complementary part to possess in part the same, in part different, attributes. In a word, it is impossible to perceive a part of an organic whole without perceiving something of the correlated part. We cannot, if at least we prolong our inspection, observe the vein of a leaf without observing something of the cellular tissue in which it lies, and also something of the leaf itself, of which the vein and the tissue are alike parts. The vein discloses peculiarities in shape, in color, in size, in inner structure, and in its organic working, which reveal to some extent the tissues and the leaf itself. Finiteness, boundedness, limitation, implies limits, bounds; implies that which constitutes or forms the limit. To be bounded by nothing, is not to be bounded at all; and the boundary itself is shaped by the things which it bounds, and so determines them as it is determined by them. Now in perception both of the coefficients are finite; the perceiving mind is finite in manifold respects, and the perceived object is also finite in manifold respects. Both exist and act in relationships which more or less reveal themselves in the perceptive experience. These relationships determine the experiences—the character of the percepts; they are given in the experience. The exactest discrimination might locate them more or less in the perception as accomplished, rather than in the object perceived. It is enough for our purpose that the perceptive
experience of itself, without dependence on other truths or facts, makes known to us with the knowledge of a part also more or less of the complementary part—more or less of relationships.

The first and perhaps the most prominent of those relationships revealed to view in perception is that which the two coefficients, the ego and the non-ego, bear to each other. They present themselves in the perceptive interaction as in the exactest harmony. They co-exist in the single phenomenon and they constitute a perfect unit in their conjunction. There is a complete conformability between the two coefficients, outer and inner; external nature and mind are conformable each to the other. This conformability is evinced in the harmonious interaction. The truth is not reasoned out; it is no a priori idea, either innate or connate; it is no incogitable antecedent condition coming from some unknown origin and of some unknown habitat; it is simply and purely an obvious fact. If we are conscious of anything, we are conscious of observing in this perceptive experience—this harmonious meeting of mind and outer object—this reciprocal conformability between mind and sensible matter. Any one perceptive experience discloses and recognizes this. All repeated experiences corroborate the testimony. Every conscious step forward into the realms of truth brings into view only ampler and richer exemplifications of the truth. The world and the human mind are reciprocally conformable to each other; they belong to the same order of things; they are in their primal natures under the same constitutive laws. The world without is apprehensible by the mind within. There is a revealed idea, and the idea revealed is identical in part of its essential nature with the apprehending mind. The universe is knowable. There is a certainty in human knowledge; there is truth for man. Moreover, to the field of this communicating and receiving interaction no human experience has as yet descried a limit. The horizon, in fact, ever widens to
advancing knowledge. The realm of truth is illimitable, even as that of being itself. This fundamental principle of unity under which the multiform immensity of being is constituted in thought into a proper universe is revealed, thus, in conscious perception, as a true and a real principle appertaining to all being, so far at least as a germinant principle. If we regard it in the special rank of a comprehensive principle or abstract idea, indeed, the percipient observation has passed on through the crucible of proper reflective thought, in which it has been transformed from mere observation into proper attribution; and the assertion has emerged in the judgment, that mind and matter, as the two uniting factors in perception, are conformable and so far make up a real unit and are one. We have thus given us the attribute of unity. The comprehensive idea of unity is thus the true outcome from perception, originating in it, growing out of it, and maturing its growth, without necessary contribution from any antecedent or any collateral whatever. The great idea of philosophic unity, the idea of a universe that embraces within itself in harmonious conjunction all things that exist, has its true origination thus in the perceptive experience,—a single perception containing the germ which, fed by continuing experiences of the same nature and maturing by a natural growth into the organic judgment, has come to be the all-absorbing object of speculative aspiration. It is no myth, no miracle, no mysticism, no incomprehensibility; it is simply the natural outcome of mental experience.

But again, this unity revealed in the perceptive interaction implies a dual. In the interaction are united the ego and the non-ego, the inner and the outer, this and that, one and one. And this is the primal, germinal notion of quantity. The idea of quantity thus emerging as abstract notion, like that of unity, is the evolved judgment, which, on coming forth into life, appears with its congenital, bimembral concept, grows out of this percep-
tive germ under the constitutive laws of knowledge. In this germ is its origin. There is no need, for any purpose of explanation, of supposing anything anterior to it, save, at least, knowing mind and knowable object in interaction. There is no more reason for regarding the idea of quantity to be an \textit{a priori} principle, than the idea of color or of dress. We perceive a red, a green, a blue; and our cognitive nature of itself builds up from the supplies of continued experience, the germinal percept through the natural processes of reflective thought to the comprehensive abstract idea of color. We perceive a tunic, a robe, a cloak; and we come at length, as pushed forward by the demands of life, through regular movements of thought, to the abstract idea of dress. It would be no more preposterous to talk of an \textit{a priori} idea of color or of dress as condition of perceiving a red flag or a coat, than to talk of an \textit{a priori} idea of quantity as a condition of perceiving one and one combined into a single as in the perceptive interaction.

In like manner, we, in the perception of the twofold in the unity of the perceptive act, discern a difference, as well as a sameness or unity. The inner coefficient is different from the outer; there is this and the other. Each of the two has its own distinctive characteristics—in other words, its proper quality. The primal perception contains the germ of this principle of quality. The principle widens with the larger specialization presented in repeated experience. It becomes idea in the way we have indicated, through the maturing processes of the judgment.

These three fundamental ideas—that of unity or identity, quantity, and quality—have been not improperly denominated categories of pure thought. They alike have their origin as germs in the perceptive experience, indeed, as we have shown; they are all, however, given equally in any instance of proper thought; but they attain their characteristic importance and authority only as
they are transformed through the processes of thought from simple germinal percepts into full-lifed ideas—abstract, comprehensive principles, embracing under their sway all objects of human knowledge.

A second relationship is presented to the eye of perception in the perceptive interaction, of a like character in signification with that already indicated. The interaction enters the even flow of a perhaps hitherto self-determined experience, and fixes a critical point, or line, or section in its history. There is a beginning of a new record in that experience. This beginning is as truly within the range of the perceptive eye as any other feature in the interaction. There is equally noticeable an end of the interaction. Moreover there is discernible duration—continuous duration between this beginning and this end. It is obvious that this element, which is most undeniably presented to perception in the interaction, does not belong as an intrinsic attribute or constituent to either of the two factors. No analysis of either can find it in either of them. The Kantian position to this effect—that it does not belong as intrinsic attribute to either, is correct. The fallacy in the argument, that therefore it must be some mysterious, inexplicable, a priori condition of all such experience, is exposed in the light of the truth that every finite object has extrinsic as well as intrinsic attributes. This time-element of duration is an actual, perceptible attribute, belonging to the interaction as a change; but it is not an intrinsic attribute constituting more or less of the essential nature of either factor to be found by an analysis; it is an extrinsic. The change occurs in time. Duration has a beginning and an end; and beginning and end are limits. But limits imply parts, which parts again imply corresponding wholes. The duration which is revealed in the interaction is, as limited, bordered by other duration, and this by other still, and so on interminably. Duration as limited is part; duration as unlimited is the necessary corresponding whole. Such is time. But the point for us to remark is this, that the idea of time
has its origin as a germ in the perceptive act, and is developed into its maturer form or stage as abstract comprehensive idea in a way precisely analogous to that already indicated in the genesis of the ideas of unity, quantity, and quality."

There is a third relationship presented to view in the perceptive interaction, which is of the profoundest philosophical interest and demands our distinct recognition. In this interaction something is recognized as coming from without to the mind within. There is a thither and a hither, a there and a here, verily an outer and an inner, and they have come together. There is motion from without to within, from point or line or section, and there is the interval of extension as of duration. This is not an intrinsic attribute of the external body; no analysis can find it there. It is undeniably present, however. It is an extrinsic attribute; the body is in space. The mind did not originate it; the body does not contain it, but is contained in it. The extension perceived is limited; it is a part, and implies the whole of which it is a part. The part, as part, is finite; the whole, as whole in relation to the part, is infinite. No human experience has ever yet found or presumably ever will find a limit. Space, like time, is, as thus thought out, unbounded, infinite. The idea, however, as the other ideas noticed, had its origin in the perceptive act.

The survey we have taken, however limited or imperfect, of the field of truth opened to our study in our perceptive experience, will suffice, it is believed, to evince that a world of truth lies spread out within the range of our observation—a world of truth most vital to us and most inviting to our earnest exploration. It may suggest perhaps, also, a possible improvement upon the hitherto prevalent method of pursuing mental studies. That method has been rather characteristically a grounding on hypotheses, theories, assumptions, and an expounding of

11 See a fuller exposition of the genesis of the ideas of time and space in Day's Mental Science. B.III. c. iv.
mental phenomena out of these assumed generalities or formulas. The philosophy of mind has been in consequence unstable, discordant, unsatisfactory. These assumptions of supposed principles for the purpose of determining and explaining mental phenomena have secured a useful end. They perhaps were necessary, unavoidable, in the weaknesses and totterings of the science in its beginning. But this age of infantile dependence is presumably passed. The sturdy vigor of adolescence now invites philosophy to independence and true self-reliance. Accurate observation and legitimate thought are the two constituents of a sound philosophy, as of any true science. To fact and logic alone let it henceforth look, for its materials and for its constructive skill.