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ARTICLE X.

HICKOR'S RATIONAL PSYCHOLOGY.1

By Tayler Lewis, LL. D., Prof. of Greek, Union College, Schenectady, N. Y.

PSYCHOLOGY — the word, the reason, the science of the soul. "It is only a developed consciousness," or a development of consciousness, says the writer of the famous article on Reid and Brown in No. CIII. of the Edinburgh Review. The objection here is to the word The definition is true as far as it goes. Psychology is a development of consciousness; but is it not something more? Dr. Hickok, as well as others of the general class of thinkers to which he may be said to belong, and among whom this work will, beyond all question, give him a very high standing, maintains that it is. would probably find no fault with the statement, if the term consciousness were so extended, beyond what is commonly called the soul's experience, as to embrace the inward contemplation of the truths which the experience awakens it to find within itself as among the conditions of its own being. To avoid all such confusion, however, he has entitled his examination of the soul - A Rational Psychology. It is, in other words, the soul's experiences seen in the light of its own reason, - not as dispensing with experience, or preceding it in the order of time, but taking it first as a guide to that position from whence it is seen, not only that such experiences are, but that they must have been just what they are, and could have been in no other possible way. This is his use of the term à priori which occurs so frequently. It is not the absurdity of à priori knowledge as actual consciousness in the order of time, but the gaining, through experience or consciousness, taken in its widest sense, of an advance position from which the soul looks back and sees that there was but this one path, and that thus its guide experience was itself determined all along by that higher light to which it has at last conducted the spiritual consciousness. Hence it is called an à priori, or rational psychology. It assumes to show us, not only how we feel, how we perceive, how we understand, how we comprehend, or, -- to use the gene-

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¹ Rational Psychology, or the Subjective Idea, and the Objective Law of an Intelligence, by Laurens P. Hickok, D. D., Prof. of Christian Theology in the Theological Seminary, Auburn. Published at Auburn, 1849, by Derby, Miller & Company.

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ral term which embraces them all—how we know, but also that so we must have known, in a mode as surely determinable and determined as truth itself, which is the object of knowledge, is determined and could have been no other than what it is. Thus there is an à priori idea for each power and department of the soul, whatever, or how many, they may be, and there is to each an objective law in perfect harmony with it. There is an idea of the sense, and corresponding to it an actual law of feeling and perceiving. There is an idea of an understanding and a corresponding law of thinking. There is an idea of a reason (whether we have it as faculty or not, although the one would certainly seem to necessitate the other) and there is within us a law presenting in consciousness the ends to which such a faculty may be directed, and the intellectual and moral wants, above the region of the sense and the understanding, to which it may give a satisfaction and a meaning.

This distinction of the understanding and the reason has been claimed, by his ardent followers, as exclusively belonging to Coleridge. Nothing, however, can be more unfounded. There is no doubt that Coleridge everywhere obtrudes it upon the reader as his own, and yet there can be as little doubt that he borrowed it, or might have borrowed it, to say the least, from the German metaphysicians. is equally clear, too, that the same distinction was held by the two master minds of antiquity, and what is more, that it is inseparable from the very spirit of the language in which they wrote. We may say, moreover, that the more common division employed both by the learned and the unlearned, - we mean that of the sense and the reason, in which the department of the understanding is shared between the two, or that of the sense and the understanding, in which the reason is merged in the latter, - is by no means so inconsistent with the threefold distinction as might at first be imagined. No one of these faculties, it may be said, ever acts alone. There is no pure sense (at least in man, whatever may be the case with the lower animals) without some act of the understanding. It is never, as Aristotle says, purely aloyor; and, moreover, there is no exercise of the human understanding without some faint cooperation of the reason. Hence, by conjoining the second with the first, and the third with the second, we naturally fall into a twofold division; especially if we employ the terms more in reference to the objects about which the mind is employed than the mental exercises themselves. Hence the un-

¹ Aristotle De Anima, Lib. III. 9. 2.

derstanding employed on the objects of the sense is, with no great impropriety, called by the general name of the sense, as distinguished from the reason (or the understanding which is in this mode of speaking connected if not confounded with it) regarded as occupied with those enduring notions of the one, or those universal truths of the other, which sense alone could never give.

The distinction, then, is the author's own, as much as it is Coleridge's, or Schelling's, or Kant's. It is his own, because no one, we will venture to say, has more carefully thought it out, or more scientifically marked out the field of each faculty, than has been done in This, however is a matter of but little consethe work before us. The threefold division of objects and of corresponding powers must present itself to every mind that truly reflects. are three energies of the soul (call them by what name we will) ideally distinct, although it may be that they are seldom actually separate in their operation. There is that within us which takes notice of appearances, or phenomena, or the forms that dark sensation assumes under this gaze of the soul, and which, if it were the only mode in which the intelligence energized, would give us nothing else. There is another which takes cognition of things and events, or, in other words, the realities, which this faculty informs us these phenomena represent; and had the soul no higher power, there could be no interest in, and therefore no knowledge of, aught beyond. There is, however, another power of the spirit which all must be conscious of, obscure as may be its operation in some minds, and which occusies itself with the meaning of things, - affirming à priori that they must have a meaning, and seeking to explore what that meaning is. Thus we have appearances, -- things -- and the meaning, or reason 1 of things. We have the phenominal, the natural, and the supernatural. We have the present, the temporal, the eternal, — in other words, that which has no existence but in the moment or moments of impression, - that which the law of the understanding, transcending the sense, compels us to regard as having a producing being, - and that which a higher faculty, transcending both sense and the understanding, presents as beyond all limitations, either of present or flowing time. To fill up this outline a little, — we may say, appearsucces have construction in space and time, although without some other faculty than the sense they would come and go isolated and un-

¹ All who have been in the habit of confounding reason, design, and motive, as meaning about the same thing (and there are many such) will, of course, see no demand for any faculty distinct from the understanding.



remembered. Things and events are connected by the notions, cause and substance, into a system we call nature, but without some other faculty than the understanding, it would have only a scientific value, raising no question of a higher interest, and doing nothing to answer such a question when raised in some other way. But there is an operation of the soul, which, however obscure in some, and however limited in all of us, does to some extent comprehend sense and nature, or, at least, awaken the interest which demands such comprehension in order to give meaning and reason to appearances and things.

We might, to some advantage, vary the view by presenting it in the form of the three great questions in regard to the universe of being, — The what? The how? 1 and The why? The τ i, and the $\delta \tau \iota$, and the $\delta \iota \iota \tau \iota$. The sense and the understanding would try to find an answer to the first, understanding and reason to the second, and the reason (especially the moral reason) to the third. And this answer, in its most comprehending terms, would be given in the words, God, The Soul, and Immortality.

In regard to the first of these, or the Great Reason of Reasons, the scientific understanding might likewise attempt, and does attempt, the solution; but it would ever bring it under the how, the $\pi \omega s$, instead of the diors of the universe. It has ever been inquiring --whence came nature, and the world, and how do they exist, or trying to explain the fact (ori) that they do exist; but ever as questions of curious or scientific interest. Cosmogony was the earliest problem in philosophy; geological and nebular hypotheses furnish the favorite speculations of the most modern science. In such inquiries the understanding seeks its God, but it never gets anything more than a first cause, a first power, a first mover, a developing principle, taken, too, at last, as a necessary notion of the wearied mind, and although assumed as beginning nature, yet never in fact regarded as out of nature: in other words a scientific God in whom there is no ethical interest. There was no irreverence in the assertion of a most eloquent writer, that "such a belief in a great first cause" may have as little moral value for us as a belief in the existence of the great sea serpent.3

The true meaning of the universe is a question put by the moral reason. It is no question for the animal; it would hardly seem to be one (if we may judge by the animus they often display) for some

¹ Or the fact. ² Foot Prints of the Creator, by Hugh Miller, p. 42.



men of the highest scientific and even aesthètic attainment. There may be a great exhibition of designing intelligence, but ever as the adaptation of physical means to physical ends, which, after all, are never ends, or to artistic ends which never go out of the workmanship. But reason and conscience ask, what is the design of all designs, going clear out of nature into some acknowledged region beyand and above it. We may trace the long road, and the countless ages, from infusoria up to bimana; or we may hunt them backward until, for the mere satisfaction of the cause-tracing understanding, we bring into the chain the notion of a first Power, or a first Principle of development. We may find, too, all along our way, abundance of artistical design, an armory of means and contrivances for devouring and defence, a wondrous apparatus of life, and death, and reproduction. But what is the meaning of it all? Strange as may seem the paradox, yet in this respect, and without some higher teacher, and some higher text-book, the darker and darker grow the rocks the more they are scientifically understood. This must be so until they, together with all nature, are comprehended in relation to man and immortality, and, above all, to the supernatural creating power of Him to whom "a thousand years are but as one day, and one day is ms a thousand years." Here too even reason requires aid from above, and it is at last "by faith we know that the worlds were made by the word of God, so that the things that are seen were not made of things which do appear." And for His glory were they made. Unless this is seen, we are yet in the region of the mus, and all our science is valueless just in proportion as its objects are unmeaning. all-explaining word benevolence does but little to dissipate the mystory. It only calls up some awful facts, which, unless nature is more misinterpreted than ever Scripture was, can never find their explaastion in any mere happiness-theory that is not itself comprehended in some higher idea.

Thus may we say, by way of accommodation, that these two faculties have each their deity, but with this immense difference. In the judgment of the one, God is for the universe; in the à priori demand of the other, the universe is for God. In the one, the deity is needed as the first term in the infinite series, or as some assumed unknown quantity without which it could not be mathematically summed, or as some first mover, without which the dynamical problem cannot be solved. The pantheistic understanding, too, according to the one or the other aspect of its most ancient philosophy, requires a similar conception, either as the starting principle of the world's outgrowth,

or as its terminating development. In all these cases, when once brought in, it is needed no more for any moral or religious ends. God is for the universe. Reason and the conscience, on the other hand, reverse this entirely. They demand the idea of a God such as revelation more clearly presents, who is not only beginning, but end, who is alpha and omega, the first and the last, by whom, and through whom, and for whom are all things, and who, "for his own eternal glory, hath foreordained whatsoever comes to pass." It is only in the doctrine of à priori moral decrees that we escape that iron bound physical fatalism, which the superficial sciolist is so fond of charging upon the creed most opposed to his own. The reason finds refuge in the supernatural, not regarded as something away at the end of nature, and thus, in fact, a continuation of it, but as everywhere above, or as reigning high over nature in all its extent of time and space.

And thus, too, can the human soul alone truly comprehend itself. So far as humanity is nature and nothing more, it comes and goes like all other nature; it is pryróperor xal ànolléperor; it is born and perishes, just like all other physical powers. But as belonging also to the supernatural, it has immortality, and as thus connected with the Father of Spirits, all things are for it as one of the ends or rather as included in the great end for which nature and the world were made.

But we are too much drawn, at present, to those sublime topics on which the author, at the end of the volume, exhibits his chief strength, and which must, therefore, be deferred to some succeeding part of our review. Our first business is to give a rapid sketch of the contents of the work before us; and here, the utmost we can do is to present the merest outline of the author's views, and of his peculiar method. We commence by stating, that in his map of the human soul, the three great departments are, the Sense, the Understanding, and the Reason, each of which are considered, in a three-fold way, in respect to the idea, the objective law, and the ontological verity of its objects. This division, rigidly maintained, imparts to the work great scientific symmetry. Corresponding to these departments are the three chief characteristic operations: conjunction or rather construction in space and time, connection in cause and substance, comprehension in meaning and idea.

Part I., The Sense, is introduced by definitions which are marked by etymological clearness, and then maintained with mathematical strictness throughout. The sense includes the whole faculty for



bringing an object within the distinct light of consciousness. The intellectual agency which takes up appearances as distinct objects of knowledge, is apprehension; and this may be of the external sense, or of that inner state of the mind which may be justly called the internal sense. The completed process in the sense is perception, or the taking of the appearance as object through some medium. The appearance, as object perceived, is phenomenon; and this whether of the external or the internal sense. Phenomena have matter, that is, content given somehow in the sensibility, and form, or the modifications of the matter which permit it to be classified in relation to other phenomena. The capacity for receiving the content is sensibility; the affection induced is sensation. The faculty for giving form to the matter in the sensation, is the imagination, or the imaging faculty, which is the same essentially with that which constructs form in pure space without sensation, p. 118. See also p. 145.

An object void of all content in sensation is called pure; with sensation it is called empirical. Intuition is immediate beholding. Pure intuition is that of a pure object as above defined; empirical intuition

There may be sensation even here. In the empirical imaging process from without, the content in the sensibility, whilst in the last matter of the material sensorium, affects the inner or spiritual sensorium where the dark and formless sensation is envisaged in the spiritual light, and thus becomes perception. The pure imaging, to which the name imagination is most commonly given, may be regarded as the reversing of this order, or as proceeding first from the pure energy of the mind, by which it is directly envisaged in the spiritual sensorium; from whence, in our present embodied state, we have reason to believe, it also affects, or rather reaffects the material sensorium, or brain, or last matter, whatever and wherever it may be - thus producing in it an affection similar to that which came from the external process. This is weaker and less distinct, not from want of power in the spiritual action, but because the sensorium is at the same time filled with images crowding in from without, or with recollections of those images passing to and fro; which is ever more or less the case in our waking hours. In sleep, this internal imaging power is unobstructed, and then its pictures are as vivid as the external images in our waking state. Just as the reflection seen in ordinary window glass is dim and shadowy, because the objects from without are pressing through, and the thin and pale reflection appears like a mere ghost among them. Put quicksilver on the other side, or in other words, cut off the supply from the external, and the interior envisaging reflection stands out perfectly distinct. If this view be correct, then there is a point, or rather line of intersection, at which perception and imagination, though originating, the one from without and the other from within, are essentially the same affection of the sensorium.



¹ This might seem liable to the objection of being a mere tautology. Appearance is phenomenon. It might perhaps have done to have said, "Sensation, as object perceived, is phenomenon."

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of an empirical object. A judgment is a determined relationship between two or more cognitions. It is analytical, that is, obtained by an analysis of the conception in the consciousness,—or synthetical, that is, obtained in some other way, and added to it.

These definitions prepare for the specific method of the process of rational psychology for the faculty of the sense. First, there is to be obtained the "subjective idea" of how perception is possible; next, the "objective law" in the facts; and thirdly, the outline of "an ontological demonstration" of the valid being of the facts and objects.

1. The pure intuition (Ch. I. Division 1, Sec. 1.) This, though chronologically last, is logically first. By abstracting from the phenominal all that has come into consciousness through sensation, we find that which was prior to and conditional for the perception. Thus we have the pure form for all phenomena of an external sense. This remains as void place for the intellect alone, pure and indestructible; and for the intellect it is much, whilst it is nothing for the experience. This is pure space as given in the intuition, and this intuition of pure space is the primitive intuition. We know it through experience, yet that very knowledge is, at the same time, a knowing it as something independent of experience, prior to experience, and without which it is seen to be impossible that any experience should be.

In pursuing the same process of abstraction with the phenomena of the inner sense, whether contemplated as passing emotions or mere sensations, we get the conception of pure period, or pure time, which, in like manner, remains for the intellect pure and indestructible,—known chronologically from the experience, yet known from this very knowledge, as a knowledge prior to, and conditional for, all experience. It is real form for the content of thought that once filled it — it is the pure intuition of time.

From these à priori cognitions the author proceeds (Section II.) to state other à priori positions necessarily connected with them; such as — Space and time are no part of the phenomena which appear in them, — Phenomena are conditioned upon but not caused by these cognitions, — Space and time have a necessity of being, independent of phenomena, — They have no significancy in respect to any

¹ We are compelled, in this sketch, to mingle the author's language and our own. Sometimes a single sentence in his own words will give, at a glance, a sufficient outline of a chapter. At other times, condensation requires the use of other terms, which we have freely employed.



other cognitions than such as are phenominal,— Next in reference to each other. After we have the general cognitions, we know à priori such as these— Space has three dimensions— It must have three dimensions and can have no more— Time can have but one dimension— Space in respect to time has no significancy— Time in respect to space has significancy— The concurrence of both space and time is conditional for all determination of motion, etc.

Having obtained the cognitions, we now reverse the process (Section III.), and seek to construct real forms from the formless and limitless space and time as given in these primitive intuitions. This the primitive intuition cannot do. It is more beholding. An ab extra agency is required, and this is the imagination, to which allusion was before made, — the imaging, or as Coleridge calls it, the eisemplastic power. This agency is given here in its results, whilst there is reserved for future sections the more difficult work of attaining the à priori principles of the process. In getting an idea of the sense, or of a sense, let there be given, then, an intellectual agency which may come upon the field of the primitive intuition. In the as yet uncollected diversity of pure space a position is assumed. The void is no longer empty. A point stands out (quiverus, "becomes phenomenon") in the intuition. As the agency moves on, other points are attained. These are brought into conjunction as continuous contiguity. Here, then, is real form. The mathematical line appears. It has reality, but as yet only subjective reality. Nothing hinders the going forth of the intellectual agency, in this way, to the construction of all possible forms in pure space, through any conjunctions of points, and lines, straight and curved, with all possible angles, and hence all possible figure.

And so for the construction of pure forms in time. As time is for the internal sense, so all construction of period demands that the inner sense be, in some way, modified in its affection. This may be conceived by assuming a line as permanent in the space intuition, and also every point of that permanent line as, for this purpose, a permanent point. The intellectual agency moving along this line gives continual modification to the inner sense; and thus a definite period is constructed, in which the passing instants have been conjoined in unity, and limited on each side into totality. In this way

¹ It does so in the birth and change of the conceptions, here, there, away, from, to, etc., in the space of the phenomenal intuition, although the mov, the where in a whole of space, or in a nature of things, actual or ideal, is as yet a conception unknown to the sense.



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all possible period may be constructed, and in this way, too, all must be constructed, if constructed at all.

The author next proceeds (Section IV.) to remark on the Categories of Aristotle, and the twelve predicates of Kant, as preparatory to his own view. In this he finds that there are three distinct modes of intellectual agency demanded for the completion of the phenomenal in the experience, - that each of these three agencies has three elementary principles conditional for carrying on the process, and that these three principles are all that can possibly enter into the work. In making out this scheme, he is compelled to differ from Kant (whether rightly or not we do not now inquire) in giving to the department of the sense some things which the German philosopher brings under the understanding. Kant regards the sense as the receptivity merely of content for perception. The author includes in it an intellectual agency competent to complete the perception. might perhaps take some ground of exception here, rather to the arrangement than to the essence of the author's view, but for the present we pass on. Of these three, then, there are thus brought into the sense the two intellectual operations answering, the one to Kant's category for quantity, the other to his category of quality, whilst the third, or that of relation, is still allowed to keep its place, and is accordingly postponed to the second part of the work.

Next for the three elements in the operation of conjunction. The intellectual agency does not merely move in the primitive intuition but collects within itself what it takes up in passing,—in this way only being an intelligent agency (intus legens, ir-rowr). Hence we have unity. As the agency moves on, that which was taken up becomes a collection, a diversity in unity and this is multiplicity (multi-impliciti) "many united." As this proceeds, it is ever one, and more, and more, and more, and thus whilst the agency is in progress, it has ever within itself the second element plurality. In the termination of the agency, when it ceases to collect any more of the diversity in unity, and defines what has been united, we have the third element totality. These are the three elements of quantity. It is not possible that an intellect should give quantity in pure space and time in any other way.

But the intellectual agency cannot be conceived of as collecting in unity without having a higher unity in itself, and a still higher unity in that light in and by which it works. Before proceeding, therefore, to investigate the intellectual operation for the distinction of quality, which falls within the second division for empirical objects, the author



sees back a little, and introduces his views of consciousness (Sect. V.) as necessary to satisfy the question, What is conditional for the intellectual agency, that it may be competent to such conjoining and distinguishing operations? And here we can only rapidly state his positions. First, It must be more than the simple act. There must he a unity of the conjoining agency. There must be more than this. -a unity of self-consciousness. The agency must act, not now in one light, and then in another, but ever in one and the same. For consciousness the author is somewhat peculiar, and we think very happy, in regarding, not so much under the notion of a faculty, an energy, as of a light in which the intellectual agency stands as well as its object, and through which it sees, not only what it does, but also itself doing, although it cannot see the ultimate or personal self which stands behind both the intellectual agency and its doing. Thus the constructed product becomes an object. In the mirror of consciousness it is thrown face to face before the self in the intuition (obvius jacens). The object as pure only seems (dones), but when given as actual content in the sensibility, then it appears (quirerat). Both however are real. There is a real seeming, and a real appear-

Thus also it is manifest, why pure objects in space and time are incommunicable; although there may be, by symbols, the inducing the agency and the light in another self to construct and reveal similar pure objects in his subjective apprehension. A real communicableness would demand, not only a unity (of the two) in the revealing light, but also an invisaging of the very self, —all clairvoyant pretensions to the contrary notwithstanding. With some remarks on the distinction between knowing that a self is, and knowing what it is, and also on the manner in which we awake to self-consciousness (a subject on which we may make some comment in another part of this review) the author closes the first division in the idea of the sense — the attaining it in the pure intuition, in the proof that so it it, and so it must be.

The Second Division is the idea in the empirical intuition. The first requisite (Section I.) is the attaining a transcendental position for an \grave{a} priori examination. Here we cannot, as before, proceed by abstraction of all content in the sensibility; for this would be in contradiction to the idea to be obtained. We are driven, therefore, to an anticipation, a taking or assuming beforehand, or, as the Greek philosophers termed it, a $\pi \phi \delta \lambda \eta \psi \iota s$, of such content in its most generalized aspect. This prolepsis is of no one organ, or organism. It



may be for one sense, or for five, or for five hundred, if there should be so many ways of affecting the sensibility. It is mere matter for all possible phenomena, as affording the additional principles for any empirical intuition which may possibly be, and according to which alone it can possibly be. Such a prolepsis being given (Section II.) as mere content undistinguished, an intellectual agency broods over the chaos. As before, in the pure intuition, it conjoined in unity: now, it discriminates or distinguishes in an individuality. The intellectual agency in the mere apprehending of sensation (whatever, and of whatever degree the sensation may be) discriminates it first from non-sensation. There is thus a determination that the sensibility is not void, and hence there is born for the mind the first element - reality. We have the to or. The next discrimination excludes from this appearance all other possible appearances, thus affirming its own reality as distinguished from every other, and here we have the second element, particularity. It is not only or but or The Next, then, is found in it that which is not in any other reality, and thus it is separated positively, and not merely negatively, from all reality but itself. Here is born the third element, peculiarity. The appearance is not simply to, but notion to. The completed result is quality for all sensation, and of all kinds. The operation here, in reference to its result, is called distinction; as an intellectual work bringing the diverse sensation into a precise appearance in consciousness, it is termed observation.

There follows next, (Section III.) the à priori determination of what diversity must be in quality. This diversity may have two directions. First, the matter, as content in the sensibility, may be diverse. It may come through different organs of sense, and thus be diverse in kind; there may be colors, sounds, smells, etc. Or it may give different sensations in the same organ, and thus be diverse in variety; there may be red, blue — bitter, sweet, etc. Here in the reality there is difference in contrariety, and it may therefore be termed the heterogeneous. Again, there is diversity involving no contrariety in the reality which may possess similarity throughout. The redness of one place is a different redness from that of another, one coldness from another coldness, one pain from another pain. There is thus a diversity which may be termed homogeneous. And this again may be diverse in three ways. It may be diverse in degree, through any limitation from zero, or the absence of all reality,

¹ Kant's Negation.



upwards. This may be termed intensive diversity. It may be diverse in space, or extensive. Quality may also be homogeneous and yet diverse in respect to time; and this we may term *protensive*.

To get form, then, to the content in the sensibility, there must be, not only a distinction of the heterogeneous, but also a conjoining of the homogeneous diversity. Hence (Section IV.) we have not only the questions - What is the quantity absolutely? and then again, what is the quality? but also a third - What is the quantity of the quality? How much is the quality in extent, in intensity, and in protensity? In the pure intuition there is only quantity. In the empirical all quantity has its quality, and all quality has its quantity. The only quality of quantity is the extensive; and so the quantity and its quality are both given in the same constructing operation. But not so with quality. Here both operations are required. find the precise quality we distinguish; to find how much it is, we conjoin, and this demands a threefold construction in extent, in intensity, and in protensity. The operation before was called observation: now it is called attention. The one gives distinctness to quality, the other definiteness to quantity; one gives us the distinct matter, the other the definite form of the phenomenon. Thus we have intensity within the sensibility, extension without in space, and protensity both within and without. Without observation the consciousness would be "void;" without attention the matter would be "without form." Sensation is the chaos; the intellectual energy the spirit that broods over it. Consciousness is the light in which it moves.

Thus we have the field of the sense in its ideal possibility. The author pauses a moment (Section V.) in his straight forward scientific course, to review briefly the opinions of others who have, wholly or partially, traversed the same region. We cannot now follow him in that excursus, except to take notice that he regards Plato's famous cave (Repub. VII.) as a method of exhibiting the manner of phenomenal cognition, where the qualities of things perpetually occupy the attention, and the sense is forced to absorb its entire functions in attaining appearances, whilst an à priori philosophy alone can reach the living realities. Reid and Stewart regard this as employed simply to explain the process of sensation and perception. Coleridge denies that it can be limited to any such meaning at all, but assumes that it represents rather the incompetency of the understanding to attain the verities of the reason. The scholar who actually examines this most interesting passage in all its bearings, must be satisfied that our author is nearer to the truth than either. Notwithstanding Cole-

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ridge's very contemptuous criticism, the application which Reid and Stewart make of the passage is perfectly fair and legitimate, besides being sanctioned by good authority. It may, however, be legitimately extended, and is so extended by Plato, in what follows, to a higher contrast between all of our humanity that is in any way connected with the material, and all that is purely spiritual.

We next proceed to the sense in its objective law (Chap. II. Section I.). And first for the distinction between an hypothesis and an idea with its correlative law. An hypothesis is but an assumed circumscription of facts to be diminished or widened as the exigencies of the facts may demand, as the nebular theory in astronomy, or the hypothesis which explains the phenomena of the planets as being pieces knocked off the sun by the stroke of comets. An idea is a systematic unity necessary and universal for all possible facts that may come within it. It is seen in its own evidence, and is, therefore, wholly an à priori cognition. Yet still, it is but the knowledge of the possible, and must rise to science through its correlation to an actual law. There remains, then, to find the law in the facts of the sense as corresponding to the IDEA.

Here are two heads of investigation. There are first, facts closely bound up in the idea now taken as hypothesis for examination, and secondly, more remote facts which, although apparently disconnected, seem to "leap unexpectedly within the law," and thereby furnish a more striking if not a more conclusive proof. The one is styled the colliqation, the other the considerce of facts.

We can only briefly refer to them. Under the first head (Sect. II.) we have, 1st, Facts connected with obscure perception. This, in general, is shown to be always more or less in connection with the degree of freedom or hindrance to the above operations of distinction in quality and conjoining in quantity. 2nd, The relative capabilities of the different organs of sense. The organ which has the highest capability for the distinguishing and conjoining acts of the intellectual agency, or furnishes the best facilities for them, attains to the best perceptions whether of figure in space, of period in time, of intensity in degree. Hence the superiority of the eye and touch to the taste and smell. 3rd, Facts connected with deceptive appearances. Here an operation of conjunction has been effected, and form appears, but the agency in attention has been led astray by some imperfection in the condition of the sensation, producing just the effects that must result from what was shown à priori in the idea. Under each of these heads the author traces the law through a great variety of facts,



presented at great length with most convincing clearness, and forming to some readers one of the most interesting parts of the book.

Under the second head, of consilience (Sect. III.) are brought many facts from the art of painting and the science of perspective, all verifying the hypothetical law, and, as presented by the writer, possessing not only a deep scientific interest, but an exceeding beauty of thought and illustration.

The appendix, or third division, under this head of the sense, according to the author's admirably arranged scheme, is an ontological demonstration of the valid being of the phenomenal. It divides itself under three aspects: 1st, As against materialism, 2nd, Against idealism, and 3rd, Against universal Pyrrhonism. But as we wish to occupy a good part of our general review with an examination of the principal arguments under these heads, we pass on to the second grand department of the whole work, or the understanding.

Perception in the sense (Part II.) gives us phenomena,—fleeting, isolated, and standing wholly in one self. If we would know them otherwise, a higher faculty is necessary. Sense conjoins, or to embrace in one word both its operations, constructs; the understanding cannects. One is collocation; the other is an inner bond (nexus, a tying, binding, interweaving together by something which runs through all). The sense shows qualities in one place and one period; the understanding affirms a connection in one ground by the inner supersensual bend of substance, and a connection in one source, by the inner bond of causality. This of itself wholly separates it from the faculty of the sense.

But there are other wide and essential differences (Part II. Ch. I. Sect. I.). The conjunction, etc. is perceived; the connection, or dynamical bond is thought. In the one, we have phenomenon, in the other resuperor, which, for the want of a similarly formed English word we call notion (notio) - pure knowledge, that is, knowledge which is known without being perceived. Phenomena are conjoined with phenomena, but are connected by the notion. The notion stands under the phenomena, as their bond of connection. It is therefore understood; and hence the faculty, by an appropriate figure, is called the understanding. We perceive the collocation and succession of phenomena; we understand for them, or that they have, substance and cause. As there is pure and empirical sense, so there is pure and empirical thinking. The one gives a train of thought, the other an order of experience. When phenomena are thought as connected in their ground, the product is called a thing; when in their source,



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an event; when in both, a fact. Thus sense is intuitive, a direct beholding; understanding is discursive. It goes from phenomenon to phenomenon through the understood notion, and thus connects them by a supersensual bond, not perceived but thought. The judgments of the understanding are truly à priori as they are conditional for all experience. In the judgment—The sun warms me—there is assumed à priori, or understood, the notions both of ground and source; without which notions all sensation is isolated and all experience unconnected.

But how determine the validity of the notional? (Section II.) Hume resolves it into a habit of observation. Brown utterly annihilates it, and leaves only a collocation of phenomena, and an order of sequences. Reid jumps the difficulty with his dogmatic dictum of common sense. To give in full the striking illustration of the author, (p. 342,) "How shall we answer the sceptic who says that he has examined all these, and has satisfied himself that their whole induced conviction is a mere mist and fog bank deceptively rising over a stagnant understanding, and which is utterly dissipated into thin air whenever the sunlight strikes upon it from above, or the ebb and flow of active thought agitates it from beneath." We must give it up, or attain the operation of connection in its à priori elements. In this, if successful, we shall have the understanding, as we before had the sense, in its idea.

We can only determine (Section II.) how an objective experience is possible by taking some media which are common, both to the construction in the sense, and the connection of experience in the understanding. Such media are found in space and time, which are common to both, and are also \grave{a} priori or necessary conditions for both.

And now to find (Section III.) how such an experience may be determined in space and time. There are three, and only three, suppositions which can be employed for this purpose. The first is that of the sensationalist, and "constructs space and time from the phenomena." The objection to it is, that though for the sense, time and space may exist in continuity, yet when construction ceases, then conscious extension and duration cease; every phenomenon is isolated; there is no bridging the chasms, and thus attaining in this way,

² The author cannot mean here, that we get the conceptions of space and time, in any way, from the sense. A fuller view of this is taken in another part of our article.



¹ Yet understood or thought as a reality just as much as any phenomenon is seen as a real phenomenon.

to any whole of space, or any whole of time, to serve as connectives. The second supposition is, that of the idealist - "That space and time as thought in a whole of each may determine the connection of phenomena in experience." Here, to begin with, we have indeed the two all pervading and enduring connections perfectly thought in their only possible modes, namely, space in its one mode of permanency, and time in its three modes of perpetuity, succession, and simultaneousness. But the objection is, that though there might be the same space and time thought as a whole for each man, yet each one's perceptions of the same or of all phenomena, might differ, and so each one would have his own world, without anything to determine his experience to be objectively common to others, or to give it any ground of permanent and producing independence out of himself. Phenomena are perceived; space and time are only thought, and cannot be made to appear. The author's illustration here is so clear and apposite, that we give it in full, although desiring to be as brief as is in any way consistent with clearness. "I can determine the place of one phenomenon, rising in a lake and then sinking, compared with another phenomenon afterwards rising and sinking, and can tell their bearing and distance; but this is because the lake itself is perceived, and connects and determines the places of the appearance. But such is not space and time as a whole. They are thought -not perceived." The phenomena alone, whether coming from an objective world or not, can never give the thought; and the thought, merely as thought, cannot determine the phenomena objectively in their places and periods.

One only supposition remains. "We need a notional connective for the phenomena which may determine them in their places and periods in the whole of all space and time, and may give both the phenomenal and their space and time in an objective experience." In other words, we want something which shall be in itself pure notion, and yet be seen à priori to determine, when realized in an objective law, an objective experience. We want something in which we may use both the sense and the understanding, and combine perception and thought in one process. Something which shall be a pure notional, and yet prove an occasion for phenomena appearing in consciousness. For this alone, if attainable, can bridge the passage from one to the other. Again, sense, or the intellectual agency (the author might have said) in the field of the sense, may answer the question how much, but cannot say where in a whole of all space and time the phenomenon is. The assumed notional must, therefore, be connected,

not only for the phenomenal with other phenomenal, but also for the phenomenal with its place and period in such whole of space and time.

This required notional the author professes to have thought out, as it is given to us in the next section, (Section IV.) First, in respect to space. The position is so important, that we give it at length in his own words. "Let there be the conception of a force in a place which maintains its equilibrium about a central point, and completely fills a definite space, and which forbids all intrusion within its place, except in its own expulsion from it, and we will here call that conception the space-filling force. Its equilibrium every way upon its own centre secures that it must remain steadfast in its own place, unless disturbed by some interfering force ab extra, and thus constancy and impenetrability are the necessary à priori modes of its being," (p. 361.) The author would mean, that this space-filling force is something both thought and perceived; for though he says "it may be an occasion for phenomena in consciousness," yet he recognizes it as furnishing a content for the sensibility in an organ of touch, by opposing resistance to muscular pressure, and thus producing perception of hardness, figure, etc., as also for the other senses when certain requisite conditions are supplied, (p. 362.) He would thus maintain, that it has a mode of being in the understanding as that of a force constant and impenetrable, (which are purely thought,) whilst it has also a mode of being in the sense, as that of perceived quality. In other words, it is both rontor and aio ntor; it is both νούμενον and φαινόμενον, although the author says, it cannot itself become appearance. And yet he must mean, we think, that what as thought we call force, that as perceived in the content it furnishes to the sensibility, we call matter.1

It thus secures that its phenomena be objective to all. It determines its place the same for every self-conscious agent, as a constant in the understanding, remaining whether the sense is withdrawn or not—the same for every percipient, or for no percipient. Or to

Is it real solid matter? From some things the author has elsewhere said, especially p. 555, we infer that he would not he sitate to call it thus, after a supposed superinduction of other forces upon the original conception, and which would make it palpable to our grosser senses. He, however, seems here to regard it in its most abstract state, or as that which is left for the pure notion of the understanding, after everything which might modify is abstracted, just as in the sense by a similar abstraction, pure space is left for the pure intuition. He would doubtless hold, however, that this remote $d\varrho\chi\eta$ or beginning of matter might perhaps give its phenomena to some possible organ of sense.



give the author's own words, p. 865: "Only as space is filled with that which, as understanding conception, is competent to furnish constant occasion for that which, as sense conception, may constantly appear, is it possible that any determination of space should be given in experience?"

And here, for the present, we must arrest our sketch, to say, that in this prolepsis of a space-filling force we have reached that which, for some important matters, though not for the whole work, may be called the author's position. The careful reader, after he has once mastered the conception, will see that it is the keystone of his argument against the idealist. It is, however, not merely an attempt to bridge over the chasm which is supposed to yawn (objectively) between the understanding and the sense. The same conception is employed in the third department of the work, and on a large scale, as furnishing a ground in the reason for the belief of a comprehending agency in a real creation of the universe.

In short, his full meaning is, that this space-filling force is substance, whilst its phenomena are the sense modes of its manifestation. It is substantial entity in space as opposed to non-ens.

To a reflecting mind, thinking intensely on matter and substance, and occupied, perhaps, by some such theory as that of Boscovich, the idea may have often occurred, for a moment, that what we call by these names may be an energy, a constant force, space rendered impenetrable, or "the manifestation of the Divine power in space."1 There may have occurred something like the aneigor of Anaximander, or the hyle, the mother of matter of the Greek philosophers, which belonged to the ronrá rather than to the aiothrá; or there may have been some similar thought which more or less resembled our author's. But whether the same or not, it is, as here presented, emphatically his conception; because he has worked it out in a system of his own, which, whether true or not, is certainly remarkable, not only for its scientific beauty, but for the many interesting results the author seems to have drawn from it towards the building of an à priori natural philosophy in its conditioning principles. The fact that it can be made to harmonize well with the most general phenomena of a nature of things, and to give them an à priori interpretation of great simplicity and beauty, is alone an argument of weight in its favor. It is certainly enough to conciliate the reader to a favorable examination.

¹ If the reviewer may be pardoned in referring to some statements of his own in a work entitled Plato Contra Atheos, page 279.



Such has been its effect on the reviewer, although there are difficulties in the way of its full reception, which he has not yet been able The notion of substance is that of a simple unity, or rather one-ness; force, on the other hand, ever seems to imply a duality of opposition. The notion of substance, or at least of material substance, seems to be that of an ens not only wanting but excluding the conception of motion, or tendency to motion, unless as superinduced ab extra; force, on the other hand, ever seems to hold the idea of motion, or tendency to motion, or that resisted tendency which is equilibrium in distinction from the absolute rest of immobility. Again, there are the cravings of the understanding, which seems imperatively to demand a notion of something still back of the force, of which the force is, and thus to create the apprehension of falling into one of those amphibolics which arise from the attempt to sublimate a thought into an occasion for objective experience, and which the author has himself, in so masterly a manner, set forth in respect to the difficulties of other schools in Section VI. Part II. of this book. With respect to this last objection, he might perhaps resolve it into a bad habit of the understanding which has been so accustomed to regard the notion as ever lying back of, or under, phenomena, that it rejects it when at last it actually seems to make its appearance; but waiving all such difficulties we can only say, at present, that we have been deeply impressed with the author's view, and that, with some modifications and explanations, we might be prepared to accept it as containing a substantial verity. As we wish, however, to find room in the present article for a review of the argument against the sensationalist; all consideration of this interesting subject of the spacefilling force, and especially of the views to which it leads, of the supernatural and the absolute, as presented in the third part, must be necessarily deferred to another part of our examination. For more in reference to it, in the work itself, the reader is advised to study pages 383 and 555 in continuation. Our further sketch is also deferred in like manner, and for a similar reason; together with a discussion of those intensely interesting moral and theological topics which the author so ably treats in his third department, or, The Reason.

In the work before us, the examination of each faculty very appropriately closes with an argument to prove the valid being of the objects of which it takes cognizance. First, There are real phenomena, and there are real things, causes, events, etc. Secondly, There are



real intellectual operations, such as pure intuitions of time and space, conjunctions in quantity, collections in unity, plurality and totality, distinctions in quality, together with certain à priori cognitions, which cannot be created from sense, or come from any reflection on sense that does not bring them with it as the conditional means for the performance of its work; and there are also other real intellectual operations, such as the viewing of phenomena in one whole of space and time, and connecting them in the notions substance, cause, etc., which never could have come from any objective order of experience merely, had there not been, in the mind itself, and from the mind itself. such intuitions, notions, connections, etc., as conditional for all possible experience. The argument thus, in both departments, of the sense and of the understanding, divides itself into three partsagainst the materialist or sensationalist, - against the idealist, - and against the sceptic who makes use of the war and contradictions of the two, to deny all grounds for a true belief in the existence of anything either objective or subjective.

The argument against the first is comparatively easy. Some little confusion may arise from allowing him to use the word reflection, which has really no meaning in his scheme, and only serves as a delusive foil to turn away objections he cannot answer. Some slight difficulties, too, arise from confounding the sense as a field, or one of the fields, for the operation of the intellectual energy, with the sensitive powers that furnish the objects on which it energizes, and to which sensitive powers the name, the sense, truly belongs, when employed by itself to denote a department of our nature. Thus, leaving out the terms, sense and understanding, we may speak of the intellectual agency as constructing phenomena in form, in quantity, and quality, and of the same or another intellectual agency, as connecting things and events in substance and causality. Whether we regard them as two distinct faculties, or the same faculty energizing on two distinct fields, and in two distinct ways, must depend upon other parts of our psychological scheme; but on either view, it remains, with equal consistency, that the intellectual agency, with the constructions, connections, intuitions, and notions it brings with it as the light in which it works, are high above, that is, are distinct from and transcend all sensation and all experience. They are brought into the field of the sense, not found there.

There is, we think, some of the same confusion which may arise from the careless reading of our author, not from the want of the utmost clearness in the use of terms, for we think he has seldom been



surpassed in this respect, but because it may not be borne in mind that he departs from Kant and others of the kindred school, in bringing the notions of quantity and quality into the field of the sense, rather than of the understanding. The difference, however, we think, is more apparent than real. Kant restricts the sense to the first of the views we have taken of it, as furnishing content merely for perception. The author gives it a larger range, and "includes within it an intellectual agency competent to complete the perception," p. 158. How far this may be in itself correct, or how far this restricting of one field and enlarging of the other may be merely for the advantage it affords in presenting what is conceived to be a more symmetrical view of the mind's operation, we do not now inquire. Rather, however, than admit that these intuitions of time and space, these cognitions of unity, totality, etc., could be given by the mere sense, we should altogether prefer Kant's division, however ill proportioned it might seem to make the map of the mind. It is clear, however, that the author, although classifying these cognitions and intuitions under the sense, never intended to make them the product of sensation in the sense of Locke, nor of any barren reflection mirroring in a blank mind only what sense had given it. Proof abundant of this may be found in almost every part of his argument, and we should not at all have dwelt upon it, had it not been for the possibility that some might carelessly regard him as thus deriving from the sense whatever he treats of as being in the field of the sense.

The opposite view is justly styled materialism, from its inevitable tendency. Writers may differ much from what their systems would make them, and this because their souls have been formed under far different influences. Locke, although originating a philosophy identical with that which Condorcet carried to pure atheism and materialism, was a devout man, who feared the Lord and reverenced the Holy Scriptures. Cousin, who finds so much sensualism in Locke's philosophy, is, to say the least, in nowise distinguished for any of that true spirituality which comes from a hearty love of God's written revelation, and the Christianity which has ever been taught in the Church. Edwards may have carried Locke's doctrine of sensation and motive to the very borders of a physical fatalism, (although the reviewer is far from coinciding in any such opinion,) and yet who could doubt the high spirituality of Edwards, living as he did, ever in holy communion with "the things unseen and eternal," or even institute a comparison between it and that of the boasting German idealists, or of any even of those more serious minds among them who profess a form of evangelical mysticism.

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But whilst we cannot always judge men by their philosophical system, the system itself must manifest its tendency, and it is this alternate tendency which alone furnishes its most appropriate name. Says the pious author of the Horae Solitariae, "The false or heathen philosophy which derives all knowledge from sensation, naturally enough ends there." It cannot get above its source, and however much it may be buoyed up, for a time, by props drawn from an earlier and a better philosophy, must at last terminate in denying the reality of anything above sense, and, finally, of the sense or sentiency itself as having any true entity aside from the body that feels.

Thus viewed the argument against the sensationalist is clear and direct. It is simply throwing on him the whole onus probandi. Concede to him all the advantage of holding, in some way, to a blank spirituality (if he would not wish to rank with those who deny all but matter) and yet he is not essentially helped. He is to show how certain things can ever get into this capacity from the sense, unless put into the sense by the very mind that is to receive and reflect them back again. We meet him with the common sense argument (for if there can be an argument drawn wholly from sense this is one) that he is trying to get out of a thing what was never in it - a feat which no mere capacity, or faculty, or blank power of reflection, can ever accomplish. He is reversing the famous maxim of his older brethren, de nikilo nikil, in the very case where it is most applicable. trying to get something out of nothing; for he does this who attempts to bring more out of less. In other words, he is deducing very great effects from causes altogether inadequate. There is an immense range of the mind which can neither be originally extracted from sense, nor regarded as having grown out of it. It would comprehend in fact, all above mere feeling -- all that involves the conception of space and time.

Let us suppose such a blank spirituality slumbering in connection with a power of sensation which is to furnish it with its ideas, and which is itself as yet unawakened. The former is to receive, and reflect upon, only what it may derive from the latter. Nihil in intellectu quod non prius in sensu. It is not only the occasion, but the very containing and developing seed whence is to grow up all future knowledge! In these circumstances the sense is once aroused to sentiency; suppose by the puncture of some sharp instrument in the brain or material sensorium. It feels its first feeling, and transmits it to the blank intelligence above. We might speculate on this one feeling, and show that even here the awaking mind must receive, or



rather perceive, what could not have been in the sense. Here is change, here is ens and non-ens, here is unity, here is the diversity of being and not being. All this, too, might be fairly supposed of the pure inner sense, once, in some way aroused to a consciousness that But we pass on. The sensibility goes to sleep again, and is again aroused by a similar token from the objective world. It feels its second feeling, and transmits it to the blank spirituality above. Like causes must produce like effects. This second feeling is like the first, and can, therefore, only bring to the mind a like result. If there be a difference, either from excess or diminution in the second, or from the addition of something from the first still remaining in the sentiency, it can be no difference of kind, but only of degree, or intensity. It will be just the same sensation (in kind) over again, giving no other product in the soul, or at the utmost, only a plus or minus of sensation, such as might have been given by the first impression on the sensorium, had it been so proportioned in force and direction. But here we are met by the startling fact, that there is connected with this second feeling something which was not in the first. It is, too, not a mere difference of intensity, or even variety of sensation, but something radically distinct in kind. There is the cognition of something as past, or of pastness, if we may employ such a term. There is an intuition of time. The soul is awakened to find this within herself. She is aroused by the sensation, but it is of herself she knows she has been sleeping. It is from her own light, and not from any reflecting back on sense what sense has given, that she knows there has been a before, that there is a now, and that there is coming a hereafter. This intuition of time alone, thus coming from herself, though kindred from without, lights up far and wide the interior of her being, and shows her that it is no void place, but well supplied with goodly store of intuitions, cognitions, notions, ideas, ready instantaneously to give forth their own illumination, whenever the objects are presented which they are adapted to embrace in their beholding. We may be years in taking a full inventory of this spiritual house, raving the οίχίας τῆς ἀγειροποιήτου, but as neither sense, nor even consciousness gave them existence, so can neither, by its absence, detract aught from the constant reality of their being.

The same arguments might be applied to all our perceptions of space, of figure, of quantity, of quality. Sense cannot answer the question when, and it remains equally silent to the question where. We feel hardness, we see colors, we hear sounds, and these singly or



combined produce sensations of varying intensity, but it is only in the light which the pure spirituality sheds upon them that we perceive unity, or duality, or plurality, or totality, or number, or ratio, or figure even; for these can be only seen in the intuition of space which sense cannot give. And so, à fortiori, may we say, that it is by a still higher knowledge of the soul we know that phenomena must inhere in substance, and cohere in mutual causality.¹

Sense may draw its line upon the retina, or the brain, or the last matter that intervenes, but the spirit measures it by its own canon of straightness. So also it may protract its varied lines, but the soul surveys their relations by its own ideas of parallelism, angularity. rectangularity, ratio, equality,2 etc. If it be said, that these are manifestly furnished by sense, we appeal to the fact that they are nowhere found throughout the sensible world in their perfection. There are no perfectly straight lines lying, as the old Greek geometers defined them, & zoov, equally between their extreme points. There are no perfectly straight lines exactly parallel; there are no perfect circles. Sense and experience, the more minutely they are examined, are found never to come to the perfect ideal models which the mind has somehow got into its possession. They could, therefore, never have given us these ideal standards, because, without such previous ideal, we could never know how much the sensible imitations were below it, or, in fact, that they were below it at all. We may talk as we will of the association of ideas, but if the chain is not originally fastened to something permanently in the mind, and which regulates the whole association, how shall we ever mount up by it into the mind itself. It is maintained that though imperfect they are near enough to the truth to represent the perfect idea, and that so the mind reaches down and gets it from this representation? But what is meant? What is representation but a throwing back of what had been imparted. It ever of necessity implies an original; and by what does the mind correct the imperfect copy after it has thus got it in possession?

The mathematician may make his demonstration from a very ill

¹ Every time we read Plato's argument in the Phaedon respecting these "reminiscences" of the τὸ ἴσον, τὸ καλὸν, etc., we are the more and more convinced, that, instead of being the egregious quibble which some pronounce it, it is absolutely unanswerable.

² The idea of equality comes into that of straightness. Evenly — that is, nothing on one side that is not on the other. The modern definition substitutes a different and less simple notion.

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drawn diagram, because he easily rectifies it, in his mind's eye, from his own pure ideal; and so it is near enough for his purpose, though a clumsy obtuse angle may have to represent rectangularity. The accomplished musician can use a very imperfect instrument, and enjoy the intellectual pleasure of the harmony, notwithstanding some gratings on the sense, because he mentally brings up its jarring strings to the perfect attuning of his own mind. It is enough if it suggest the perfect chords which the musician's soul knows so well. But where would either of them be, if they had no other, and never could have any other, standard than could be obtained from the clumsy diagram, or the ill-tuned piano. In short, there cannot well be conceived a grosser hysteron proteron than that which derives the rule, or, in general, the accuracy of the rule, from the very imperfection whose deficiency it is brought to measure.

We see that the line is straight, and that the spaces are equal, because we à priori know what straightness and equality are. The seeing is determined by the knowing. Otherwise there would have been immeasurable diversity, and no unity, or approach to unity, either of name or idea. The word suggest will not remove the difficulty for the disciple of Mill and Locke. It is a term which belongs to the other school. The imperfect approach cannot create the ideal rule, but it may very well put the soul in mind (if we may use the familiar expression) of one it had before.

Nihil in intellectu quod non prius in sensu. We would not be so extravagant as to invert this famous maxim, and say that there is nothing in the sense which was not previously in the intellect; but in view of what has been said, we may maintain, that little or nothing in the sentiency, or which comes from the sentiency, would appear what it does appear, were it not for its connection with the intellect, or, in other words, the light giving spirituality above. Even the sense, says Aristotle, is not wholly alogal - ούγ ώς άλογον καί τὸ αίσθητιxòr đến ar τις ὁμδίως; by which he evidently means, that what the sense has in itself is rationalized, and made different from what it would be, by its connection with a higher or lower intellect. We see nothing as we should see it, if we had only sense and a blank spirituality,--- even admitting that that were possible. Every reader must be familiar with examples in which our intuitions, our notions, or, if any choose to call them such, our assumptions, be they original or acquired, do greatly vary our perceptions, and even, sometimes, the very

¹ It may seem a paradox, but in this way, a scientific musician might be less effended by a poor instrument, than one who had a good car and no science.



sensations themselves. Our perceptions of distance ever depend on an assumed size, and even here we get nothing absolute, because on the other hand our perceptions of size do ever depend on an assumed distance, either spontaneously taken, or given to us by circumstances. We speak of the real size of objects. But how shall we ascertain it as matter of sense? Not even the famous Auguste Compte, with all his parade of "experience" and "positive knowledge," could give us the mathematical formula for this apparently simplest of all problems. No man on earth can make a definition of it, that does not immediately involve something out of what might seem to be a direct perception of size itself, or, in other words, demand an ideal measure. I look out of my window in the evening, and behold what appears to be a great light. For some reason, I had fixed its locality across an extended valley. This was my notion, my understanding. It makes no difference now whence that understanding came, and whether original or acquired. It had its instantaneous effect upon the perception. Again, some cause modifies it, and I am convinced that the place of the phenomenon is just across the street. Not only the perception, but the very sensation is changed. There is a dwindling at once in brightness and size, and all that remains is the appearance of a dim candle in the window of a neighboring house.

This is a familiar case; and yet it might be shown that almost all the affirmations of our senses, instead of giving us the most direct knowledge, as some would say, do, in a similar manner, involve some hypothesis, and are liable to similar modifications. Unless rectified by a continual judgment, of which, in its intuitive rapidity and frequency we take no notice until revealed to us in the analysis of perspective science, the mere sensual revelations of our eyes would often be distorted and delusive pictures. Hardly anything appears to one sense exactly according to what another sense, or the understanding, judging according to another sense, would pronounce reality; and it may be unhesitatingly affirmed, that we never see anything of its true shape from whatever position it may be viewed. We talk of correcting one sense by another, as though that would help the present difficulty, or repair the broken arches of the materialist's crumbling bridge. We need again some plank from the other shore. We bring in again the thought of a rule or model out of sense. affirming that we correct one sense by another, there is of course implied some higher standard than either. Without it we have no means of determining which is most correct, and therefore best



entitled to be used as a measure for the other, or how far one or both fall below the standard of absolute correctness. Without this, it would be like measuring the yard by the foot, and then the foot by its assumed multiple the yard.

Education, arts, associations, do all, on the same principle, vary our perceptions, and make them to appear different from what they otherwise would have done. One man sees that in the picture which another does not see; and this too from no deficiency in the mere sense, or of vividness of painting on the retina, or on the brain. One man hears a voice in the music, the other cannot hear, although it may be endowed with even more correctness and power of the mere acoustic organ. Cicero in a most striking manner adverts to this dependence of perception on the inner state of the soul - "Quam multa vident pictores in umbris et in eminentia quae nos non videmus; quam multa quae nos fugiunt in cantu exaudiunt in eo genere exercitati. To use the language of the author, p. 244, though applied to a somewhat different purpose, "the intellect fills up the chasms which may have been truly voids in the sensation, and, by reconstruction, restores again the original, guided by the content which is given;" or, as we might say in the present cases, guided by its own ideal in supplying the defects of the content, or in correcting its perversities and redundancies.

These views are strongly confirmed by the examples which the author brings forward in his section entitled "Colligation of Facts" for the objective law of the sense. We are inclined, however, to suspect him of error when he says, p. 252, that "all conjoining into figure, or giving shape or outline of object, by the ear, is impracticable." If the general philosophy he has so clearly presented, be correct, the eye has doubtless a great superiority in awakening such perceptions, (and this is all that is necessary for the argument there) but not the exclusive power. We cannot easily decide how small an avenue may be wide enough for the soul's cognitions, not to come in, as the disciple of Mill would say, but to go forth to the shaping of the chaotic notices in the sensibility. Even the inner sense alone might awaken the ideas of number in all their immensely varied relations. Whatever suggests the à priori thought of distance, from

³ It would be the third in order of the elementary cognitions which the soul employs in giving form to the sensation,—ens, ex-istens, di-stans,—the first, the being of that which is perceived; the second, its being as distinct from the percipient; the third, its separation, away from the percipient.



¹ Acad. Prior. II. 7.

or towards, or, in other words, of separation from the percipient in space, may, in time, bring out all the other perceptions of figure. The fact of such perception being achieved through a low or obscure organ of sense, would strongly prove that, for the completion of the process in all, there is required a pure spiritual eisemplastic operation from the mind itself. The delusion which makes us believe that we not only feel, but perceive directly by the organ, has come from the ease and rapidity of construction through the finer feeling of the eye. In tracing the slower process through the other senses, in which we are distinctly conscious of almost every step the mind takes in completing the perception, we more readily admit the belief in a purely intellectual act, which, if necessary in one, is necessary in all, to give form to the content in sensation. There can be but little doubt, that had the whole human race been confined to the organ of hearing, there might in time have been suggested by it, distance, figure, size, hardness, etc. - that is, in a highly improved state; and this would consist, not merely in an increased sensual acuteness of the organ, but in a higher and readier facility of adapting to its sensitive notices the forth-going cognitions of the intelligence. There would be no extravagance in supposing this carried so far as to make it perfectly natural and proper to say, It sounds hard, and soft, or round, or square, or even to enable us to distinguish the presence and qualities of objects which we now think of as pertaining solely to the eye. And so in respect to the deficiency of sight. may all be said to vary in two ways - in distinctness, and in strength of impression. In the first of these, the eye is preëminent; in the second, it is the lowest in the organic scale. Yet, still there can hardly be a doubt, that if we had only the sense of seeing, without muscular feeling or the power of locomotion, there would be enough of force in the eye to call out of the mind its dynamical cognitions, and through these to introduce it to an acquaintance with the world of dynamical causation.

The common explanation of correcting one sense by another, strongly suggests an argument in the Theaetetus of Plato, that some might regard as involving mere verbal fallacies, but which, we think, will bear the closest examination into its substantial soundness. It is to show, that as each sense has its separate office for distinct sentiences, and that what we become sentient of by one sense, we cannot become sentient of by another; it therefore follows, that whatever notions or thoughts have reference alike to two or more senses, and may be equally predicated of the objects of each, could have come

from neither, but must have belonged to the spiritual mind, and have been seen by it in its own light, and not through the sense. We hope our readers will pardon us in giving a short extract from this interesting dialogue:—

Soc. 1 Sense you said was knowledge.

Theaet. Just so.

Soc. Should I ask you then, By what does a man see the white and the black, and by what does he hear the acute and the grave? You would say, I think, by the eyes and the ears.

Theaet. I certainly would.

Soc. The free and easy use of words without too strict a regard to the mere niceties of language is, in general, not only to be allowed but commended. Nevertheless we are sometimes compelled to take a contrary course. As now, for example, there is an absolute necessity that I should take a tight hold of your answer, my dear boy, in order to show wherein it is not exactly right. For look carefully now — which answer would have been most correct? to say that the eyes are that by^2 which we see, or through which we see? and so of the ears.

Theast. As it now appears to me, they are the means or organs through which we perceive their respective objects, rather than by which.

Soc. True, my boy, for it would be an awful thing, indeed, were it so that there sit within us many independent sentiences like the Greeks in the wooden horse, instead of their all tending together to one—call it soul or what you will—by which, yet through these senses, we become sentient of all sensibles. (Thus it is by the soul, through the organs of sense, that we become even sentient.) But more—could you also grant me this, that what you become sentient of through one sense, you cannot possibly become sentient of through another sense? As, for example, what you become sentient of through the hearing, you cannot become sentient of through the sight, and again, what you become sentient of through the sight, you cannot become sentient of through the hearing. Do you grant this?

Theaet. Most certainly.

Soc. If then you have any thought or notion in your mind about both sensations, you could not have become sentient of it either through the one or the other, seeing that it is a notion that belongs to both.

Theaet. It would seem impossible.

⁸ The objector would pronounce this a verbal fallacy. We do see and hear the same thing, he would say. But this is the very point in question. Do we hear and see, or hear or see, things at all? Or do we hear its sound, and see its figure, and taste its savor, and smell its odor, and feel its hardness? If there is any thought which belongs no more to one sense than to another, are we sentient of it by either, or by both, or are we sentient of it at all?



¹ Plato Theaetetus, 184, B.

² The distinction in the original is made by the use of the dative in the one case, and δd with the Genitive, in the other. The first denotes the agent, the second the organ.

Sec. Take sound and atom then — have you this thought, the same in respect to both, that they ARE?

Theast. I have.

Soc. And also the thought that each is (not simply different but) a different thing from the other, while it is the same with itself?

Theaet. Why surely.

Soc. And moreover that both are two, and each is one?

Theaet. That, too, beyond all doubt.

Soc. Through what, then, have you all these notions concerning the two? For neither through the hearing, nor the sight, is it possible to receive any such common thought. And now I will give you another proof in this. For suppose if such a case were conceivable, that in respect to both, that is, sound and color, we were examining this question, namely, whether they were salt or not, either one or both — you know very well by what you would make the examination, and that this would not be sight, nor hearing, but something else.

Theaet. It would be the sentient power that resides in the tongue.

Soc. Very well. Now tell me again. Through what does that power operate which manifests to you what relates to all the senses, as much as to these two just mentioned — I mean such common notions as those to which you give the names, (or of which you say) it is, or it is not, etc., besides the others of which we just now asked.

Theaet. It is substance and being you are now talking about, and not-being, and likeness and unlikeness, and identity, and diversity and moreover oneness and number generally. It is clear, too, that your question has respect to even and odd, together with all those notions of number that are involved in them. And you mean to ask—through what one of the bodily organs we become sentient of these, as we became sentient of the other first mentioned (namely, colors, sounds, etc.) through the organ of sense and by the soul.

Soc. Most admirably done, my boy Theaetetus—you take me well. That is just what I meant to ask.

Theaet. By Zeus, then, Master Socrates, I can give you no other answer than that there seems to me to be no such organ or organs at all for these as in the former cases, (that is, we are not sentient of them at all or derive them through sense) but the soul itself, as it seems, both by and through itself, sees all these notions which we have in common respecting them all.

Soc. Beautifully answered. You are indeed a beautiful boy now, Theaetetus, and not at all homely, as Theodorus represented you. And besides the beauty of it, you have done me a great favor in delivering me from the necessity of quite a long explanation; since to yourself it thus appears, that some things the soul looks at and sees, itself, and in and through itself, whilst the knowledge of others it derives through the organs of the body. But to what class would you assign these — beauty and the contrary, good and evil?

These. To the latter class most certainly. These, above all things, does the soul survey in their being, and in their mutual relations, ever, in so doing, calling up within herself, the past, the present, and the future."

In other words, color, and sound, and hard, and sweet, the soul becomes sentient of through the organs of sense, but unity and number, and identity and likeness, etc., together with the good and the beautiful, and their contraries, she sees both by and through herself, because these notions, or knowledges, are in herself, and never came out of sense, nor from any blank reflection of, or reflecting on, what was merely given by the sense.

The followers of Mill would claim to be the common sense school. Their explanations, they would say, are easy—their terms intelligible to the common mind. They involve none of that mystical jargon which belongs to the "exploded doctrine of innate ideas." But will this claim bear the test of careful examination? There has been already shown, we think, the utter barrenness of their word reflection. Another explanation in very common use with some is made by the still more notionless word capacity. There is no mystery in the mind's operations if we only suppose it to have a capacity for this, and for that. But pray—what is a capacity? It is a place for holding—dextinor to. When we say, moreover, the soul has a capacity, we only double the figure, and it makes it thus doubly unmeaning. It then becomes a capacity holding a capacity, or a capacity for a capacity, and so on ad infinitum.

But granting that there may be such a merely holding-place, or vacuum, in the soul,—the question still remains. We have not advanced a hair's breadth towards its solution. How do the intuitions, notions, ideas, aforesaid, ever get into it? If they are there à priori, then are they innate, or in-born, to use the better Saxon phrase, and then there would be good sense, as well as good reason, in saying, the soul has a capacity for them. If not, we are just where we were, and the unmystical psychologists must find room for them in the sensation, and this, it has been shown, they can never do.

There is the same barrenness in the word faculty, which others would employ in this common sense operation of getting something out of nothing. The term is all very well, if we do not take away all meaning for our present purpose, and reduce it to a blank agency, by attempting to conceive of a faculty (facilitas) without the distinct appropriate energies, means, supply (according to the best sense of the word) for doing what it was appointed to do,—having. moreover, no knowledge of what it is to do, or how to do it,—comparing without any previous rule of comparison, distinguishing without any known ground of distinction, combining without any à priori unity of aim, or aim of unity, to which, and by which, the combination is to be di-



rected. — and, above all things, remembering without any knowledge of time, and estimating motion without any knowledge of space; for these most inconceivable of all absurdities flow directly à posteriori atque à fortiori, from the common sense explanation, that we get this very knowledge, or the ideas of time and space by induction from the perception of motion and the exercise of memory. We relieve the term from absurdity, only by making it wholly unmeaning. culty for this, or that, becomes synonymous with possibility, a term which may be predicated of almost any one thing in rerum natura in respect to almost anything else. In this way, for all we know, the plant has a faculty, somewhere, that is a possibility to become an animal, and the animal has a faculty to become a man. We need only say, that nothing can be more opposite to all this barrenness, than the manner in which our author invariably employs the term, defining ever, with the most satisfactory clearness, the intuitions, notions, and comprehensions, it must carry along with it in all the operations it is appointed to perform. The same objections apply to the common use of the terms, belief, habit, association. All is contingent. There is no à priori ground for the belief, no starting principle by which the habit and the association may be originally determined, or that can give the law through which they subsequently cohere.

No writers are more apt to impose on themselves and their readers, in this way, than those of this school who have the most to say of experience and "positive knowledge" as the "fruit alone of sense and experience." Often when they think they have presented the more easy and intelligible explanation, they have only covered up a difficulty by giving it a name. We need only suppose the soul to have a capacity, or a faculty, or a power of reflection, or of memory, and all mystery is dissipated at once. With these as our machinery, and sense and sensible experience as the foundation, we can raise any superstructure we please. The school are ever fond of ridiculing the doctrine of occult qualities in the ancient physics, whilst they introduce it with all its darkness into the realm of mind. An example of this very ready way of explaining things occurs in a remark of Sir John Herschel as quoted by Prof. Davies in his late work on the Logic of Mathematics. His position is, that mathematical knowledge comes from experience and induction, in the same way as outward physical science; which is also a favorite position with Mill. They are the same he says, "only that in the one case the mind spontaneously presents the facts on which the induction rests," - as though this spontaneous presentation were a very non-essential affair, and did



not constitute the immense difference in the two cases, making, in fact, an impassable chasm between them!

If we must have a metaphor, the best that could be used would be the one the author has so happily employed in respect to consciousness, p. 169. Instead of a capacity, or rather, together with a capacity, which is a very good figure in its place, we may say the soul has a light which she sheds upon the opaque content in the sensibility, and which immediately brings form and distinctness out of chaos,—a light through which sensation becomes perception, and phenomena are known as representing things and events in a permanent and enduring nature of things. This light we may metaphorically suppose, either to be of the very essence of the soul itself, or to be generated by a spiritual energy, which, in its own working (above and aside from sense) gives birth to both light and heat,—or, in other words, the purely spiritual emotion of interest in knowledge, and the purely intellectual illumination by which it is seen.

It was held as a part of the ancient Greek physics, that in seeing, a real light went forth from the eye to meet that which was conveyed, through the diaphanous medium, from the object itself. Whatever modern science may object to this, there was, we believe, a substantial truth, if not in the optical theory itself, at least lying right behind We may take it as meaning, that even sense is not pure passivity. The soul sends forth an energy, even in sense-seeing, instinctive it may be, rather than voluntary, yet none the less its own spiritual act. She does something instead of simply receiving. She communicates to the eye a light without which it would be in darkness, and the pictures on the retina, or the brain, would never be read. And then, could we conceive of the eye as a separate existence, this infused light might be regarded as its spiritual principle. Ei yau 70 000θαλμὸς ζῶον ψυχὴ ἂν αὐτῷ ἦν ἡ ΟΨΙΣ—".If the eye were an animal," says Aristotle (De Anima, Lib. II. 1. 9), "vision would be its soul."

But why not at once call it knowledge, ideas, from the intellectual meaning and tenses of $si\partial\omega^1$ —a meaning which we have reason to regard as being no more metaphorical, and no less real, in the one case than in the other. Why not then call it knowledge (notio), since the moment it finds its object it knows it, and remembers it moreover as cognized by something which had an à priori being. It

¹ Some of these, it is well known, signify to see, others to know. eidulor (idol) would be from the one class, idea from the other. Both are alike literal—alike metaphorical.



is easy to anticipate the plausible objection, that it can be no knowledge until it become itself an object of consciousness, and thus sees itself seeing, and knows itself knowing, or that there is an absurdity in the conception of a dormant knowledge, - in other words, a knowledge unknown, and thoughts unthought. But have we not the same mystery, for we would not dare to style it absurdity, in respect to what we call our acquired knowledge? For, whether inborn or acquired makes no difference here. It is one of the most indubitable facts of our spiritual constitution, that there is a knowledge which we may be said to possess, and yet to have or hold it not, - xextño vas ἀλλά μη έγειν — according to Plato's well illustrated distinction, in his simile of the aviary, or spiritual pigeon-park, toward the close of the Theaetetus, 197. A. And so also Aristotle (De Anima, Lib. II. "It may be spoken of," says he, "in two ways, as knowledge (ἐπιστήμη) in itself, and as knowledge in actual spiritual beholding (2, 10 the soul itself there is a sleeping and an awaking.1 The awaking is analogous to the spiritual beholding; the sleep to the having and yet not energizing" — το έγειν και μη ένεργείν.

There is to each man a knowledge which is truly his knowledge, belonging to his being as it belongs not to another, and yet it may be truly said he knows it not; he thinks it not. It is as truly asleep within him, as when the whole soul, including the visual as well as the theoretical (70 Osmper) is buried in the profoundest slumber. Take then our acquired knowledge, we say again, and the mystery is not at all diminished. It is rather increased. Notwithstanding our familiarity with the fact, there are some elements in it, which, when we examine them closely, enhance the wonder. How very small a part of that immense store of intuitions, thoughts, feelings, facts, scenes, events, which go to make up the knowledge of one single man, (be he one of the most narrow information,) is at any one hour of his life in actual exercise, that is actually known or thought? How small the ratio of his waking being at any one time, to that far greater part which is sleeping, - much of it too, perhaps the most of it, having thus slept for many years.

But, where is it? What relation has it to his spiritual constitution? Does it truly enter into his very esse? so that he ever carries it with him, the past in the present, and is all that he is during every moment that he exists. Twenty years ago a thought was

¹ He means, doubtless, aside from the animal sleep which it has from its contaction with the body and the sentient nature:



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thought, an event was witnessed, a scene was beheld, a feeling was felt. Now it comes up again in my actual waking knowledge; but during all this time it has been unthought, unseen, unimaged, unfelt, and may we not say, as far as this argument is concerned, unknown? Some of it has fallen into so profound a slumber, that it will perhaps never awake until carried into the fixed and changeless state of another existence. But, where is it? We repeat the inquiry; for the question seems to involve some truths of most serious moment. Has it been all this time a non ens? If it has had a true being, can it be conceived of except as in relation to my soul, or (for no other preposition can suit the exigency of the thought) as in my soul, - in my spiritual being, as it is not in the spiritual being of any other personality? We say spiritual being, for we do not now argue with that lowest class of materialists who would think that an easy and sufficient explanation of this whole matter could be found in the supposition of ten thousand times ten thousand configurations of a material brain, moved by ten thousand times ten thousand material springs, touched by innumerable associations, themselves all strung together by material ligaments, and among which material configurations, each comes up, when, in the endlessly complicated movements of this machinery its own spring is touched, and the whole structure of every other part of the brain at once corresponds thereto. Even such obtuse men, artisvnot ardges, as Plato calls them, such hard-headed materialists as these, who resolve all knowledge into touch and resistance, might be puzzled by the question, What is to prevent, if perhaps one man's brain, amidst these endless convolutions, should get into a material state exactly corresponding to that of another, (a case by no mean's inconceivable,) what is to prevent that the one should immediately find himself endowed with all the knowledge, and all the experience of space and time, past and present, of the latter brain?

But our argument is with those who believe that man has an immaterial spirituality, whether they regard it as a mere capacity or not. We ask them to look intently at the difficulty, and then explain it. They may reply that they discover none. Some might be ready to ask, What do such inquiries mean? Does the interrogator himself know? There is surely no such difficulty in the case. The solution is plain enough even for a "child's book on psychology." The word memory explains it all. This knowledge about which there is vainly supposed to be something so occult, is simply remembered. When the soul wants to use it, she remembers it by a capaci-



ty, or faculty, she has for that express purpose. Should there be an attempt to go a little further, we are told of the association of ideas.

We "recall" it, too, it is said, as though it had flown away to some extra mundane region, and were not somewhere within the domain embraced by the personal we.

But this is only a name for the fact; it explains nothing. There is yet the deep "mystery of memory," as St. Augustine somewhere styles it. We may doggedly try to put up with the dogma of Reid, that "memory is an immediate knowledge of the past;" but in that word, the past, the difficulty all comes back again; and we ask ourselves—How can the past be in the present, unless we carry our whole being with us, and all the knowledge of the past is bound up in the present by those original notions, cognitions, intuitions, ideas, or knowledges, which were born in the soul, which ever abide in it irrespective of all time, out of the combinations of which all other or outward knowledge arises, and into which it may be ultimately analyzed as its constituting elements, without at the same time losing that distinct objective reality which it has obtained through their form-giving power.

If we reject, then, as exploded, the doctrine of inborn knowledge, or treat it as a mystery and an absurdity, we have yet, in some respects this deeper "mystery of memory"—the present knowledge of the past, the unknown and yet known, the for-gotten and yet gotten, or as the same is expressed in Plato's Greek, and with nearly the same idiomatic metaphor, the unheld and yet possessed.

We have dwelt the longer on this part of the argument, not to supply any deficiency in the author's treatment, but to present in the most familiar way we could, what the nature and plan of his work compelled him to give in a rigid scientific manner. We wish especially to draw attention to it as an important part of his general view, and as furnishing the best position for the proper appreciation of other parts of the work.

Of this we can only say, that it increases in interest on every page. Some of the discussions in the latter part of the book are of the profoundest moment. All readers who have suffered the comparatively dry details of statement and definition, in the first part of the volume, to deter them from the close study of the whole, may be assured that they have lost much which possesses not only a philosophical and a scientific, but also a high moral and religious value.

¹ Intellectual Powers, Essay III. Chap. I.