To speak next of the premises. Our assurance of their truth, whether they be generalities or individual facts, is grounded, in Mr. Spencer's opinion, on the inconceivableness of their being false. It is necessary to advert to a double meaning of the word inconceivable, which Mr. Spencer is aware of, and would sincerely disclaim founding an argument upon, but from which his case derives no little advantage notwithstanding. By inconceivableness is sometimes meant, inability to form or get rid of an idea; sometimes, inability to form or get rid of a belief. The former meaning is the most conformable to the analogy of language; for a conception always means an idea, and never a belief. The wrong meaning of "inconceivable" is, however, fully as frequent in philosophical discussion as the right meaning, and the intuitive school of metaphysicians could not well do without either. To illustrate the difference, we will take two contrasted examples. The early physical speculators considered antipodes incredible, because inconceivable. But antipodes were not inconceivable in the primitive sense of the word. An idea of them could be formed without difficulty: they could be completely pictured to the mental eye. What was difficult, and as it then seemed, impossible, was to apprehend them as believable. The idea could be put together, of men sticking on by their feet to the under side of the earth; but the belief would follow, that they must fall off. Antipodes were not unimaginable, but they were unbelievable.

On the other hand, when I endeavour to conceive an end to extension, the two ideas refuse to come together. When I attempt to form a conception of the last point of space, I cannot help figuring to myself a vast space beyond that last point. The combination is, under the conditions of our experience, unimaginable. This double meaning of inconceivable it is very important to bear in mind, for the argument from inconceivableness almost always turns on the alternate substitution of "each" of those meanings for the other.

^dIn which of these two senses does Mr. Spencer employ the term, when he makes it a test of the truth of a proposition that its negation is inconceivable? Until Mr. Spencer expressly stated the contrary, I inferred from the course of his argument, that he meant unbelievable. He has, however, in a paper published in the fifth number of the *Fortnightly Review*, disclaimed this meaning, and declared that by an inconceivable proposition he means, now and always, "one of which the terms cannot, by any effort, be brought before

length of the process, as quite to vitiate the doctrine that the "test of the relative validities of conflicting conclusions" [*ibid.*, p. 435,] is the number of times the fundamental postulate is involved. On the contrary, the subjects on which the trains of reasoning are longest, and the assumption, therefore, oftenest repeated, are in general those which are best fortified against the really formidable causes of fallacy; as in the example already given of mathematics.

~~~56 one

 $d=d^{270}56$, 62 Mr. Spencer leaves us in no doubt which of the two senses he intends, when ... its negation is inconceivable. He means unbelievable.

269

consciousness in that relation which the proposition asserts between them-a proposition of which the subject and predicate offer an insurmountable resistance to union in thought."[*] We now, therefore, know positively that Mr. Spencer always endeavours to use the word inconceivable in this, its proper, sense: but it may yet be questioned whether his endeavour is always successful; whether the other, and popular use of the word does not sometimes creep in with its associations, and prevent him from maintaining a clear separation between the two. When, for example, he says, that when I feel cold, I cannot conceive that I am not feeling cold, [+] this expression cannot be translated into "I cannot conceive myself not feeling cold," for it is evident that I can: the word conceive, therefore, is here used to express the recognition of a matter of fact-the perception of truth or falsehood; which I apprehend to be exactly the meaning of an act of belief, as distinguished from simple conception. Again, Mr. Spencer calls the attempt to conceive something which is inconceivable, "an abortive effort to cause the non-existence"[1] not of a conception or mental representation, but of a belief. There is need, therefore, to revise a considerable part of Mr. Spencer's language, if it is to be kept always consistent with his definition of inconceivability. But in truth the point is of little importance; since inconceivability, in Mr. Spencer's theory, is only a test of truth, inasmuch as it is a test of believability. The inconceivableness of a supposition is the extreme case of its unbelievability.⁴ This is the very foundation of 'Mr. Spencer's' doctrine. The invariability of the belief is with him the real guarantee. The attempt to conceive the negative, is made in order to test the inevitableness of the belief. It should be called, an attempt to believe the negative. When Mr. Spencer says that while looking at the sun a man cannot conceive that he is looking into darkness,[§] he 'should have said that' a man cannot believe that he is doing so. For ^oit is surely^g possible, in broad daylight, to imagine oneself looking into darkness.* As Mr. Spencer himself^h says, speaking of the belief of our own existence: "That he might not exist, he can conceive well enough; but that he does not

[*Herbert Spencer, "Mill versus Hamilton—The Test of Truth," Fortnightly Review, I (15 July, 1865), pp. 534–5.]

[†See Principles of Psychology, 1st ed., p. 28.]

[‡*Ibid.*, p. 27.]

[§Ibid., p. 28.]

*[68] Mr. Spencer makes a distinction between conceiving myself looking into darkness, and conceiving *that I am* then and there looking into darkness. [See letter to Mill (11 Oct., 1865), in David Duncan, *The Life and Letters of Herbert Spencer*. London: Methuen, 1908, p. 121.] To me it seems that this change of the expression to the form I am, just marks the transition from conception to belief, and that the phrase "to conceive that I am," or "that anything *is*," is not consistent with using the word conceive in its rigorous sense.

| e-e56, | 62 his | | 1-156, 62, 65 | means, |
|----------------|--------|------------------------|---------------|--------|
| <i>9–</i> 956, | 62, 65 | he is aware that it is | h-h56, 62, 65 | he |

exist, he finds it impossible to conceive,"[*] i.e. to believe. So that the statement resolves itself into this: That I exist, and that I have sensations, I believe, because I cannot believe otherwise. And in this case every one will admit that the 'impossibility' is real. Any one's present sensations, or other states of subjective consciousness, that one person inevitably believes. They are facts known per se: it is impossible to ascend beyond them. Their negative is really unbelievable, and therefore there is never any question about believing it. Mr. Spencer's theory is not needed for these truths.

But according to Mr. Spencer there are other beliefs, relating to other things than our own subjective feelings, for which we have the same guarantee-which are, in a similar manner, invariable and necessary. With regard to these other beliefs, they cannot be necessary, since they do not always exist. There have been, and are, many persons who do not believe the reality of an external world, still less the reality of extension and figure as the forms of that external world; who do not believe that space and time have an existence independent of the mind-nor any other of Mr. Spencer's objective intuitions. The negations of these alleged invariable beliefs are not unbelievable, for they are believed ^j. It may be maintained, without obvious^j error, that we cannot imagine tangible objects as mere states of our own and other people's consciousness; that the perception of them irresistibly suggests to us the *idea* of something external to ourselves: and I am not in a condition to say that this is not the fact (though I do not think any one is entitled to affirm it of any person besides himself). But many thinkers have believed, whether they could conceive it or not, that what we represent to ourselves as material objects, are mere modifications of consciousness; complex feelings of touch and of muscular action. Mr. Spencer may think the inference correct from the unimaginable to the unbelievable, because he holds that belief itself is but the persistence of an idea, and that what we can succeed in imagining we cannot at the moment help apprehending as believable. But of what consequence is it what we apprehend at the moment, if the moment is in contradiction to the permanent state of our mind? A person who has been frightened when an infant by stories of ghosts, though he disbelieves them in after years (and perhaps knever believed themk), may be unable all his life to be in a dark place, in circumstances stimulating to the imagination, without mental discomposure. The idea of ghosts, with all its attendant terrors, is irresistibly called up in his mind by the outward circumstances. Mr.

[*Principles of Psychology, 1st ed., p. 19.]

456, 62, 65, 68 necessity

4-356, 62 : and the only colour which Mr. Spencer has for representing them as inconceivable, is derived from the other meaning of the word. He may maintain, without being obviously in

k-k56, 62, 65, 68 disbelieved them at first

271

Spencer may say, that while he is under the influence of this terror he does not disbelieve in ghosts, but has a temporary and uncontrollable belief in them. Be it so; but allowing it to be so, which would it be truest to say of this man op the whole—that he believes in ghosts, or that he does not believe in them? Assuredly that he does not believe in them. The case is similar with those who disbelieve a material world. Though they cannot get rid of the idea; though while looking at a solid object they cannot help having the conception, and therefore, according to Mr. Spencer's metaphysics, the momentary belief, of its externality; even at that moment they would sincerely deny holding that belief: and it would be 'incorrect' to call them other than disbelievers of the doctrine. The belief therefore is not invariable; and the test of inconceivableness fails in the only cases to which there could ever be any occasion to apply it.

That a thing may be perfectly believable, and yet may not have become conceivable, and that we may habitually believe one side of an alternative, and conceive only in the other, is familiarly exemplified in the state of mind of educated persons respecting sunrise and sunset. All educated persons either know by investigation, or believe on the authority of science, that it is the earth and not the sun which moves: but there are probably few who habitually *conceive* the phenomenon otherwise than as the ascent or descent of the sun. Assuredly no one can do so without a prolonged trial; and it is probably not easier now than in the first generation after Copernicus. Mr. Spencer does not say, "In looking at sunrise it is impossible not to conceive that it is the sun which moves, therefore this is what everybody believes, and we have all the evidence for it that we can have for any truth." Yet this would be an exact parallel to his doctrine about the belief in matter.

The existence of matter, and other Noumena, as distinguished from the phenomenal world, remains a question of argument, as it was before; and the very general, but neither necessary nor universal, belief in them, stands as a psychological phenomenon to be explained, either on the hypothesis of its truth, or on some other. The belief is not a conclusive proof of its own truth, unless there are no such things as *idola tribûs*;^[*] but, being a fact, it calls on antagonists to show, from what except the real existence of the thing believed, so general and apparently spontaneous a belief can have originated. And its opponents have never hesitated to accept this challenge.* The amount of their success in meeting it will probably determine the ultimate verdict of philosophers on the question.

[*See Bacon, Novum Organum, pp. 163-4 (Bk. I, Aph. xli).]

*[65] I have "myself" accepted the contest, and fought it out on this battleground, in the eleventh chapter of An Examination of Sir William Hamilton's Philosophy.

1-156 false

m-m+68, 72

^a§ 4. [Objections answered] In a revision, or rather reconstruction, of his Principles of Psychology, as one of the stages or platforms in the imposing structure of his System of Philosophy, Mr. Spencer has resumed what he justly terms* the "amicable controversy that has been long pending between us;" expressing at the same time a regret, which I cordially share, that "this lengthened exposition of a single point of difference, unaccompanied by an exposition of the numerous points of concurrence, unavoidably produces an appearance of dissent very far greater than that which exists." I believe, with Mr. Spencer, that the difference between us, if measured by our conclusions, is "superficial rather than substantial;" and the value I attach to so great an amount of agreement, in the field of analytic psychology, with a thinker of his force and depth, is such as I can hardly overstate. But I also agree with him that the difference which exists in our premises is one of "profound importance, philosophically considered;" and not to be dismissed while any part of the case of either of us has not been fully examined and discussed.

In his present statement of the Universal Postulate, Mr. Spencer has ex-changed his former expression, "beliefs which invariably exist," [*] for the following: "cognitions of which the predicates invariably exist along with their subjects." And he says that "an abortive effort to conceive the negation of a proposition, shows that the cognition expressed is one of which the predicate invariably exists along with its subject; and the discovery that the predicate invariably exists along with its subject, is the discovery that this cognition is one we are compelled to accept."[+] Both these premises of Mr. Spencer's syllogism I am able to assent to, but in different senses of the middle term. If the invariable existence of the predicate along with its subject, is to be understood in the most obvious meaning, as an existence in actual Nature, or in other words, in our objective, or sensational, experience, I of course admit that this, once ascertained, compels us to accept the proposition: but then I do not admit that the failure of an attempt to conceive the negative, proves the predicate to be always coexistent with the subject in actual Nature. If, on the other hand (which I believe to be Mr. Spencer's meaning) the invariable existence of the predicate along with the subject is to be understood only of our conceptive faculty, i.e. that the one is inseparable from the other in our thoughts; then, indeed, the inability to separate the two ideas proves their inseparable conjunction, here and now, in the mind which has failed in the attempt; but this inseparability in thought does

^{*[72] [2}nd ed.,] Chap. xi [Vol. II, p. 406n-407n]. [The passage quoted also appears in Spencer's "Mill versus Hamilton," p. 550.] [*Principles of Psychology, 1st ed., p. 29.] [†Ibid., 2nd ed., Vol. II, p. 425.] •-a276+72

not prove a corresponding inseparability in fact; nor even in the thoughts of other people, or of the same person in a possible future.

"That some propositions have been wrongly accepted as true, because their negations were supposed inconceivable when they were not," does not, in Mr. Spencer's opinion, "disprove the validity of the test;" not only because any test whatever "is liable to yield untrue results, either from incapacity or from carelessness in those who use it," but because the propositions in question "were complex propositions, not to be established by a test applicable to propositions no further decomposable."[*] "A test legitimately applicable to a simple proposition, the subject and predicate of which are in direct relation, cannot be legitimately applied to a complex proposition, the subject and predicate of which are indirectly related through the many simple propositions implied."[+] "That things which are equal to the same thing are equal to one another, is a fact which can be known by direct comparison of actual or ideal relations. . . . But that the square of the hypothenuse of a right angled triangle equals the sum of the squares of the other two sides, cannot be known immediately by comparison of two states of consciousness: here the truth can be reached only mediately, through a series of simple judgments respecting the likenesses or unlikenesses of certain relations."[1] Moreover, even when the proposition admits of being tested by immediate consciousness, people often neglect to do it. A schoolboy, in adding up a column of figures, will say "35 and 9 are 46," though this is contrary to the verdict which consciousness gives when 35 and 9 are really called up before it; but this is not done. And not only schoolboys, but men and thinkers, do not always "distinctly translate into their equivalent states of consciousness the words they use."[§]

It is but just to give Mr. Spencer's doctrine the benefit of the limitation he claims—viz. that it is only applicable to propositions which are assented to on simple inspection, without any intervening media of proof. But this limitation does not exclude some of the most marked instances of propositions now known to be false or groundless, but whose negative was once found inconceivable: such as, that in sunrise and sunset it is the sun which moves; that gravitation may exist without an intervening medium; and even the case of antipodes. The distinction drawn by Mr. Spencer is real; but, in the case of the propositions classed by him as complex, consciousness, until the media of proof are supplied, gives no verdict at all: it neither declares the equality of the square of the hypothenuse with the sum of the squares of the sides to be inconceivable, nor their inequality to be inconceivable. But in all the three

[**Ibid.*] [†*Ibid.*, p. 410.] [‡*Ibid.*, pp. 411–12.] [§*Ibid.*, p. 413; the illustration is Spencer's.] cases which I have just cited, the inconceivability seems to be apprehended directly; no train of argument was needed, as in the case of the square of the hypothenuse, to obtain the verdict of consciousness on the point. Neither is any of the three a case like that of the schoolboy's mistake, in which the mind was never really brought into contact with the proposition. They are cases in which one of two opposite predicates, *mero adspectu*, seemed to be incompatible with the subject, and the other, therefore, to be proved always to exist with it.*

As now limited by Mr. Spencer, the ultimate cognitions fit to be submitted to his test are only those of so universal and elementary a character as to be represented in the earliest and most unvarying experience, or apparent experience, of all mankind. In such cases the inconceivability of the negative, if real, is accounted for by the experience: and why (I have asked) should the truth be tested by the inconceivability, when we can go further back for proof—namely, to the experience itself? To this Mr. Spencer answers, that the experiences cannot be all recalled to mind, and if recalled, would be of unmanageable multitude. To test a proposition by experience seems to him to mean that "before accepting as certain the proposition that any rectilineal figure must have as many angles as it has sides," I have "to think of every triangle, square, pentagon, hexagon, &c., which I have ever seen, and to verify the asserted relation in each case."[*] I can only say, with surprise, that I do not understand this to be the meaning of an appeal to experience. It is enough to know that one has been seeing the fact all one's life, and has never remarked any instance to the contrary, and that other people, with every opportunity of observation, unanimously declare the same thing. It is

*[72] In one of the three cases, Mr. Spencer, to my no small surprise, thinks that the belief of mankind "cannot be rightly said to have undergone" the change I allege. Mr. Spencer himself still thinks we are unable to conceive gravitation acting through empty space. "If an astronomer avowed that he could conceive gravitative force as exercised through space absolutely void, my private opinion would be that he mistook the nature of conception. Conception implies representation. Here the elements of the representation are the two bodies and an agency by which either affects the other. To conceive this agency is to represent it in some terms derived from our experiences—that is, from our sensations. As this agency gives us no sensations, we are obliged (if we try to conceive it) to use symbols idealized from our sensations—imponderable units forming a medium." [*Ibid.*, p. 409n.]

If Mr. Spencer means that the action of gravitation gives us no sensations, the assertion is one than which I have not seen, in the writings of philosophers, many more startling. What other sensation do we need than the sensation of one body moving towards another? "The elements of the representation" are not two bodies and an "agency," but two bodies and an effect; viz. the fact of their approaching one another. If we are able to conceive a vacuum, is there any difficulty in conceiving a body falling to the earth through it?

[**İbid.*, p. 417.]

true, even this experience may be insufficient, and so it might be even if I could recal to mind every instance of it; but its insufficiency, instead of being brought to light, is disguised, if instead of sifting the experience itself, I appeal to a test which bears no relation to the sufficiency of the experience, but, at the most, only to its familiarity. These remarks do not lose their force even if we believe, with Mr. Spencer, that mental tendencies originally derived from experience impress themselves permanently on the cerebral structure and are transmitted by inheritance, so that modes of thinking which are acquired by the race become innate and à priori in the individual, thus representing, in Mr. Spencer's opinion, the experience of his progenitors, in addition to his own. All that would follow from this is, that a conviction might be really innate, *i.e.* prior to individual experience, and yet not be true, since the inherited tendency to accept it may have been originally the result of other causes than its truth.

Mr. Spencer would have a much stronger case, if he could really show that the evidence of Reasoning rests on the Postulate, or, in other words, that we believe that a conclusion follows from premises only because we cannot conceive it not to follow. But this statement seems to me to be of the same kind as one I have previously commented on, viz. that I believe I see light, because I cannot, while the sensation remains, conceive that I am looking into darkness. Both these statements seem to me incompatible with the meaning (as very rightly limited by Mr. Spencer) of the verb to conceive. To say that when I apprehend that A is B and that B is C, I cannot conceive that A is not C, is to my mind merely to say that I am compelled to believe that A is C. If to conceive be taken in its proper meaning, viz. to form a mental representation, I may be able to conceive A as not being C. After assenting, with full understanding, to the Copernican proof that it is the earth and not the sun that moves, I not only can conceive, or represent to myself, sunset as a motion of the sun, but almost every one finds this conception of sunset easier to form, than that which they nevertheless know to be the true one.^a

^a§ 5.^a [Hamilton's opinion on the Principles of Contradiction and Excluded Middle] Sir William Hamilton holds as I do, that inconceivability is no criterion of impossibility. "There is no ground for inferring a certain fact to be impossible, merely from our inability to conceive its possibility." "Things there are which may, nay must, be true, of which the understanding is wholly unable to construe to itself the possibility."* Sir William Hamilton is however a firm believer in the à priori character of many axioms, and of the sciences deduced from them; and is so far from considering those axioms to rest on the evidence of experience, that he declares certain of them to be

*[56] Discussions, p. 624. a-a56, 62, 65, 68 §4. true even of Noumena—of the Unconditioned—of which it is one of the principal aims of his philosophy to prove that the nature of our faculties debars us from having any knowledge. The axioms to which he attributes this exceptional emancipation from the limits which confine all our other possibilities of knowledge; the chinks through which, as he represents, one ray of light finds its way to us from behind the curtain which veils from us the mysterious world of Things in themselves,—are the two principles, which he terms, after the schoolmen, the Principle of Contradiction, and the Principle of Excluded Middle: the first, that two contradictory propositions cannot both be true; the second, that they cannot both be false. Armed with these logical weapons, we may boldly face Things in themselves, and tender to them the double alternative, sure that they must absolutely elect one or the other side, though we ^bmay be^b for ever precluded from discovering which. To take his favourite example, we cannot conceive the infinite divisibility of matter, and we cannot conceive a minimum, or end to divisibility: yet one or the other must be true.

As I have hitherto said nothing of the two axioms in question, those of Contradiction and of Excluded Middle, it is not unseasonable to consider them here. The former asserts that an affirmative proposition and the corresponding negative proposition cannot both be true; which has generally been held to be intuitively evident. Sir William Hamilton and the Germans consider it to be the statement in words of a form or law of our thinking faculty. Other philosophers, not less deserving of consideration, deem it to be an identical proposition; an assertion involved in the meaning of terms; a mode of defining Negation, and the word Not.

I am able to go one step with these last. An affirmative assertion and its negative are not two independent assertions, connected with each other only as mutually incompatible. That if the negative be true, the affirmative must be false, really is a mere identical proposition; for the negative proposition asserts nothing but the falsity of the affirmative, and has no other sense or meaning whatever. The Principium Contradictionis should therefore put off the ambitious phraseology which gives it the air of a fundamental antithesis pervading nature, and should be enunciated in the simpler form, that the same proposition cannot at the same time be false and true. But I can go no farther with the Nominalists; for I cannot look upon this last as a merely verbal proposition. I consider it to be, like other axioms, one of our first and most familiar generalizations from experience. The °original foundation° of it I take to be, that Belief and Disbelief are two different mental states, excluding one another. This we know by the simplest observation of our own minds. And if we carry our observation outwards, we also find that light and darkness, sound and silence, motion and quiescence, equality and inequality,

b-b56, 62, 65 are

c--c56 meaning

preceding and following, succession and simultaneousness, any positive phenomenon whatever and its negative, are distinct phenomena, pointedly contrasted, and the one always absent where the other is present. I consider the maxim in question to be a generalization from all these facts.

In like manner as the Principle of Contradiction (that one of two contradictories must be false) means that an assertion cannot be both true and false, so the Principle of Excluded Middle, or that one of two contradictories must be true, means that an assertion must be either true or false: either the affirmative is true, or otherwise the negative is true, which means that the affirmative is false. I cannot help thinking this principle a surprising specimen of a so-called necessity of Thought, since it is not even true, unless with a large qualification. A proposition must be either true or false, provided that the predicate be one which can in any intelligible sense be attributed to the subject; (and as this is always assumed to be the case in treatises on logic, the axiom is always laid down there as of absolute truth). "Abracadabra is a second intention" is neither true nor false. Between the true and the false there is a third possibility, the Unmeaning: and this alternative is fatal to Sir William Hamilton's extension of the maxim to Noumena. That Matter must either have a minimum of divisibility or be infinitely divisible, is more than we can ever know. For in the first place, Matter, in any other than the phenomenal sense of the term, may not exist: and it will scarcely be said that a non-entity must be either infinitely or finitely divisible. ^d In the second place, though matter, considered as the occult cause of our sensations, do really exist, yet what we call divisibility may be an attribute only of our sensations of sight and touch, and not of their uncognizable cause. Divisibility may not be predicable at all, in any intelligible sense, of Things in themselves, nor therefore of Matter in itself; and the assumed necessity of being either infinitely or finitely divisible, may be an inapplicable alternative.

^eOn this question I am happy to have the full concurrence of Mr. Herbert Spencer, from whose paper in the *Fortnightly Review* I extract the following passage.^[*] The germ of an idea identical with that of Mr. Spencer may be found in the present chapter, about a page back, but in Mr. Spencer it is not an undeveloped thought, but a philosophical theory.

When remembering a certain thing as in a certain place, the place and the thing are mentally represented together; while to think of the non-existence of the thing in that place implies a consciousness in which the place is represented, but

[*"Mill versus Hamilton," p. 533.]

⁴⁵⁶, 62, 65, 68 [footnote:] *If it be said that the existence of matter is among the things proved by the principle of Excluded Middle, that principle must prove also the existence of dragons and hippogriffs, because they must be either scaly or not scaly, creeping or not creeping, and so forth.

e-e+65, 68, 72