CHAPTER V.

OF THE IMPORT OF PROPOSITIONS.

Sec. 1. An inquiry into the nature of propositions must have one of two objects: to analyse the state of mind called Belief, or to analyse what is believed. All language recognises a difference between a doctrine or opinion, and the fact of entertaining the opinion; between assent, and what is assented to.

Logic, according to the conception here formed of it, has no concern with the nature of the act of judging or believing; the consideration of that act, as a phenomenon of the mind, belongs to another science. Philosophers, however, from Descartes downwards, and especially from the era of Leibnitz and Locke, have by no means observed this distinction; and would have treated with great disrespect any attempt to analyse the import of Propositions, unless founded on an analysis of the act of Judgment. A proposition, they would have said, is but the expression in words of a Judgment. The thing expressed, not the mere verbal expression, is the important matter. When the mind assents to a proposition, it judges. Let us find out what the mind does when it judges, and we shall know what propositions mean, and not otherwise.

Conformably to these views, almost all the writers on Logic in the last two centuries, whether English, German, or French, have made their theory of Propositions, from one end to the other, a theory of Judgments. They considered a Proposition, or a Judgment, for they used the two words indiscriminately, to consist in affirming or denying one *idea* of another. To judge, was to put two ideas together, or to bring one idea under another, or to compare two ideas, or to perceive the agreement or disagreement between two ideas: and the whole doctrine of Propositions, together with the theory of Reasoning, (always necessarily founded on the theory of Propositions,) was stated as if Ideas, or Conceptions, or whatever other term the writer preferred as a name for mental representations generally, constituted essentially the subject matter and substance of those operations.

It is, of course, true, that in any case of judgment, as for instance when we judge that gold is yellow, a process takes place in our minds, of which some one or other of these theories is a partially correct account. We must have the idea of gold and the idea of yellow, and these two ideas must be brought together in our mind. But in the first place, it is evident that this is only a part of what takes place; for we may put two ideas together without any act of belief; as when we merely imagine something, such as a golden mountain; or when we actually disbelieve: for in order even to disbelieve that Mahomet was an apostle of God, we must put the idea of Mahomet and that of an apostle of God together. To determine what it is that happens in the case of assent or dissent besides putting two ideas together, is one of the most intricate of metaphysical problems. But whatever the solution may be, we may venture to assert that it can have nothing whatever to do with the import of propositions; for this reason, that propositions (except sometimes when the mind itself is the subject treated of) are not assertions respecting our ideas of things, but assertions respecting the things themselves. In order to believe that gold is yellow, I must, indeed, have the idea of gold, and the idea of yellow, and something having reference to those ideas must take place in my mind; but my belief has not reference to the ideas, it has reference to the things. What I believe, is a fact relating to the outward thing, gold, and to the impression made by that outward thing upon the human organs; not a fact relating to my conception of gold, which would be a fact in my mental history, not a fact of external nature. It is true, that in order to believe this fact in external nature, another fact must take place in my mind, a process must be performed upon my ideas; but so it must in everything else that I do. I cannot dig the ground unless I have the idea of the ground, and of a spade, and of all the other things I am operating upon, and unless I put those ideas together.[17] But it would be a very ridiculous description of digging the ground to say that it is putting one idea into another. Digging is an operation which is performed upon the things themselves, though it cannot be performed unless I have in my mind the ideas of them. And in like manner, believing is an act which has for its subject the facts themselves, though a previous mental conception of the facts is an indispensable condition. When I say that fire causes heat, do I mean that my idea of fire causes my idea of heat? No: I mean that the natural phenomenon, fire, causes the natural phenomenon, heat. When I mean to assert anything respecting the ideas,

I give them their proper name, I call them ideas: as when I say, that a child's idea of a battle is unlike the reality, or that the ideas entertained of the Deity have a great effect on the characters of mankind.

The notion that what is of primary importance to the logician in a proposition, is the relation between the two *ideas* corresponding to the subject and predicate, (instead of the relation between the two *phenomena* which they respectively express,) seems to me one of the most fatal errors ever introduced into the philosophy of Logic; and the principal cause why the theory of the science has made such inconsiderable progress during the last two centuries. The treatises on Logic, and on the branches of Mental Philosophy connected with Logic, which have been produced since the intrusion of this cardinal error, though sometimes written by men of extraordinary abilities and attainments, almost always tacitly imply a theory that the investigation of truth consists in contemplating and handling our ideas, or conceptions of things, instead of the things themselves: a doctrine tantamount to the assertion, that the only mode of acquiring knowledge of nature is to study it at second hand, as represented in our own minds. Meanwhile, inquiries into every kind of natural phenomena were incessantly establishing great and fruitful truths on most important subjects, by processes upon which these views of the nature of Judgment and Reasoning threw no light, and in which they afforded no assistance whatever. No wonder that those who knew by practical experience how truths are arrived at, should deem a science futile, which consisted chiefly of such speculations. What has been done for the advancement of Logic since these doctrines came into vogue, has been done not by professed logicians, but by discoverers in the other sciences; in whose methods of investigation many principles of logic, not previously thought of, have successively come forth into light, but who have generally committed the error of supposing that nothing whatever was known of the art of philosophizing by the old logicians, because their modern interpreters have written to so little purpose respecting it.

We have to inquire, then, on the present occasion, not into Judgment, but judgments; not into the act of believing, but into the thing believed. What is the immediate object of belief in a Proposition? What is the matter of fact signified by it? What is it to which, when I assert the proposition, I give my assent, and call upon others to give theirs? What is that which is expressed by the form of discourse called a Proposition, and the conformity of which to fact constitutes the truth of the proposition?

Sec. 2. One of the clearest and most consecutive thinkers whom this country or the world has produced, I mean Hobbes, has given the following answer to this question. In every proposition (says he) what is signified is, the belief of the speaker that the predicate is a name of the same thing of which the subject is a name; and if it really is so, the proposition is true. Thus the proposition, All men are living beings (he would say) is true, because *living being* is a name of everything of which *man* is a name. All men are six feet high, is not true, because *six feet high* is not a name of everything (though it is of some things) of which *man* is a name.

What is stated in this theory as the definition of a true proposition, must be allowed to be a property which all true propositions possess. The subject and predicate being both of them names of things, if they were names of quite different things the one name could not, consistently with its signification, be predicated of the other. If it be true that some men are copper-coloured, it must be true--and the proposition does really assert--that among the individuals denoted by the name man, there are some who are also among those denoted by the name copper-coloured. If it be true that all oxen ruminate, it must be true that all the individuals denoted by the name ox are also among those denoted by the name ruminating; and whoever asserts that all oxen ruminate, undoubtedly does assert that this relation subsists between the two names.

The assertion, therefore, which, according to Hobbes, is the only one made in any proposition, really is made in every proposition: and his analysis has consequently one of the requisites for being the true one. We may go a step farther; it is the only analysis that is rigorously true of all propositions without exception. What he gives as the meaning of propositions, is part of the meaning of all propositions, and the whole meaning of some. This, however, only shows what an extremely minute fragment of meaning it is quite possible to include within the logical formula of a proposition. It does not show that no proposition means more. To warrant us in putting together two words with a copula between them, it is really enough that the thing or

things denoted by one of the names should be capable, without violation of usage, of being called by the other name also. If, then, this be all the meaning necessarily implied in the form of discourse called a Proposition, why do I object to it as the scientific definition of what a proposition means? Because, though the mere collocation which makes the proposition a proposition, conveys no more than this scanty amount of meaning, that same collocation combined with other circumstances, that *form* combined with other *matter*, does convey more, and much more.

The only propositions of which Hobbes' principle is a sufficient account, are that limited and unimportant class in which both the predicate and the subject are proper names. For, as has already been remarked, proper names have strictly no meaning; they are mere marks for individual objects: and when a proper name is predicated of another proper name, all the signification conveyed is, that both the names are marks for the same object. But this is precisely what Hobbes produces as a theory of predication in general. His doctrine is a full explanation of such predications as these: Hyde was Clarendon, or, Tully is Cicero. It exhausts the meaning of those propositions. But it is a sadly inadequate theory of any others. That it should ever have been thought of as such, can be accounted for only by the fact, that Hobbes, in common with the other Nominalists, bestowed little or no attention upon the *connotation* of words; and sought for their meaning exclusively in what they *denote*: as if all names had been (what none but proper names really are) marks put upon individuals; and as if there were no difference between a proper and a general name, except that the first denotes only one individual, and the last a greater number.

It has been seen, however, that the meaning of all names, except proper names and that portion of the class of abstract names which are not connotative, resides in the connotation. When, therefore, we are analysing the meaning of any proposition in which the predicate and the subject, or either of them, are connotative names, it is to the connotation of those terms that we must exclusively look, and not to what they *denote*, or in the language of Hobbes (language so far correct) are names of.

In asserting that the truth of a proposition depends on the conformity of import between its terms, as, for instance, that the proposition, Socrates is wise, is a true proposition, because Socrates and wise are names applicable to, or, as he expresses it, names of, the same person; it is very remarkable that so powerful a thinker should not have asked himself the question, But how came they to be names of the same person? Surely not because such was the intention of those who invented the words. When mankind fixed the meaning of the word wise, they were not thinking of Socrates, nor, when his parents gave him the name of Socrates, were they thinking of wisdom. The names *happen* to fit the same person because of a certain *fact*, which fact was not known, nor in being, when the names were invented. If we want to know what the fact is, we shall find the clue to it in the *connotation* of the names.

A bird or a stone, a man, or a wise man, means simply, an object having such and such attributes. The real meaning of the word man, is those attributes, and not Smith, Brown, and the remainder of the individuals. The word *mortal*, in like manner connotes a certain attribute or attributes; and when we say, All men are mortal, the meaning of the proposition is, that all beings which possess the one set of attributes, possess also the other. If, in our experience, the attributes connoted by *man* are always accompanied by the attribute connoted by *mortal*, it will follow as a consequence, that the class *man* will be wholly included in the class *mortal*, and that *mortal* will be a name of all things of which *man* is a name: but why? Those objects are brought under the name, by possessing the attributes connoted by it: but their possession of the attributes is the real condition on which the truth of the proposition depends; not their being called by the name. Connotative names do not precede, but follow, the attributes which they connote. If one attribute happens to be always found in conjunction with another attribute, the concrete names which answer to those attributes will of course be predicable of the same subjects, and may be said, in Hobbes' language, (in the propriety of which on this occasion I fully concur,) to be two names for the same things. But the possibility of a concurrent application of the two names, is a mere consequence of the conjunction between the two attributes, and was, in most cases, never thought of when the names were introduced and their signification fixed. That the diamond is combustible, was a proposition certainly not dreamt of when the words Diamond and Combustible first

received their meaning; and could not have been discovered by the most ingenious and refined analysis of the signification of those words. It was found out by a very different process, namely, by exerting the senses, and learning from them, that the attribute of combustibility existed in the diamonds upon which the experiment was tried; the number or character of the experiments being such, that what was true of those individuals might be concluded to be true of all substances "called by the name," that is, of all substances possessing the attributes which the name connotes. The assertion, therefore, when analysed, is, that wherever we find certain attributes, there will be found a certain other attribute: which is not a question of the signification of names, but of laws of nature; the order existing among phenomena.

Sec. 3. Although Hobbes' theory of Predication has not, in the terms in which he stated it, met with a very favourable reception from subsequent thinkers, a theory virtually identical with it, and not by any means so perspicuously expressed, may almost be said to have taken the rank of an established opinion. The most generally received notion of Predication decidedly is that it consists in referring something to a class, *i.e.*, either placing an individual under a class, or placing one class under another class. Thus, the proposition, Man is mortal, asserts, according to this view of it, that the class man is included in the class mortal. "Plato is a philosopher," asserts that the individual Plato is one of those who compose the class philosopher. If the proposition is negative, then instead of placing something in a class, it is said to exclude something from a class. Thus, if the following be the proposition, The elephant is not carnivorous; what is asserted (according to this theory) is, that the elephant is excluded, from the class carnivorous, or is not numbered among the things comprising that class. There is no real difference, except in language, between this theory of Predication and the theory of Hobbes. For a class *is* absolutely nothing but an indefinite number of individuals denoted by a general name. The name given to them in common, is what makes them a class. To refer anything to a class, therefore, is to look upon it as one of the things which are to be called by that common name. To exclude it from a class, is to say that the common name is not applicable to it.

How widely these views of predication have prevailed, is evident from this, that they are the basis of the celebrated *dictum de omni et nullo*. When the syllogism is resolved, by all who treat of it, into an inference that what is true of a class is true of all things whatever that belong to the class; and when this is laid down by almost all professed logicians as the ultimate principle to which all reasoning owes its validity; it is clear that in the general estimation of logicians, the propositions of which reasonings are composed can be the expression of nothing but the process of dividing things into classes, and referring everything to its proper class.

This theory appears to me a signal example of a logical error very often committed in logic, that of [Greek: hysteron proteron], or explaining a thing by something which presupposes it. When I say that snow is white, I may and ought to be thinking of snow as a class, because I am asserting a proposition as true of all snow: but I am certainly not thinking of white objects as a class; I am thinking of no white object whatever except snow, but only of that, and of the sensation of white which it gives me. When, indeed, I have judged, or assented to the propositions, that snow is white, and that several other things are also white, I gradually begin to think of white objects as a class, including snow and those other things. But this is a conception which followed, not preceded, those judgments, and therefore cannot be given as an explanation of them. Instead of explaining the effect by the cause, this doctrine explains the cause by the effect, and is, I conceive, founded on a latent misconception of the nature of classification.

There is a sort of language very generally prevalent in these discussions, which seems to suppose that classification is an arrangement and grouping of definite and known individuals: that when names were imposed, mankind took into consideration all the individual objects in the universe, distributed them into parcels or lists, and gave to the objects of each list a common name, repeating this operation *toties quoties* until they had invented all the general names of which language consists; which having been once done, if a question subsequently arises whether a certain general name can be truly predicated of a certain particular object, we have only (as it were) to read the roll of the objects upon which that name was conferred, and see whether the object about which the question arises is to be found among them. The framers of language (it

would seem to be supposed) have predetermined all the objects that are to compose each class, and we have only to refer to the record of an antecedent decision.

So absurd a doctrine will be owned by nobody when thus nakedly stated; but if the commonly received explanations of classification and naming do not imply this theory, it requires to be shown how they admit of being reconciled with any other.

General names are not marks put upon definite objects; classes are not made by drawing a line round a given number of assignable individuals. The objects which compose any given class are perpetually fluctuating. We may frame a class without knowing the individuals, or even any of the individuals, of which it may be composed; we may do so while believing that no such individuals exist. If by the *meaning* of a general name are to be understood the things which it is the name of, no general name, except by accident, has a fixed meaning at all, or ever long retains the same meaning. The only mode in which any general name has a definite meaning, is by being a name of an indefinite variety of things; namely, of all things, known or unknown, past, present, or future, which possess certain definite attributes. When, by studying not the meaning of words, but the phenomena of nature, we discover that these attributes are possessed by some object not previously known to possess them, (as when chemists found that the diamond was combustible), we include this new object in the class; but it did not already belong to the class. We place the individual in the class because the proposition is true; the proposition is not true because the object is placed in the class.

It will appear hereafter, in treating of reasoning, how much the theory of that intellectual process has been vitiated by the influence of these erroneous notions, and by the habit which they exemplify of assimilating all the operations of the human understanding which have truth for their object, to processes of mere classification and naming. Unfortunately, the minds which have been entangled in this net are precisely those which have escaped the other cardinal error commented upon in the beginning of the present chapter. Since the revolution which dislodged Aristotle from the schools, logicians may almost be divided into those who have looked upon reasoning as essentially an affair of Ideas, and those who have looked upon it as essentially an affair of Names.

Although, however, Hobbes' theory of Predication, according to the well-known remark of Leibnitz, and the avowal of Hobbes himself,[18] renders truth and falsity completely arbitrary, with no standard but the will of men, it must not be concluded that either Hobbes, or any of the other thinkers who have in the main agreed with him, did in fact consider the distinction between truth and error as less real, or attached less importance to it, than other people. To suppose that they did so would argue total unacquaintance with their other speculations. But this shows how little hold their doctrine possessed over their own minds. No person, at bottom, ever imagined that there was nothing more in truth than propriety of expression; than using language in conformity to a previous convention. When the inquiry was brought down from generals to a particular case, it has always been acknowledged that there is a distinction between verbal and real questions; that some false propositions are uttered from ignorance of the meaning of words, but that in others the source of the error is a misapprehension of things; that a person who has not the use of language at all may form propositions mentally, and that they may be untrue, that is, he may believe as matters of fact what are not really so. This last admission cannot be made in stronger terms than it is by Hobbes himself;[19] though he will not allow such erroneous belief to be called falsity, but only error. And he has himself laid down, in other places, doctrines in which the true theory of predication is by implication contained. He distinctly says that general names are given to things on account of their attributes, and that abstract names are the names of those attributes. "Abstract is that which in any subject denotes the cause of the concrete name.... And these causes of names are the same with the causes of our conceptions, namely, some power of action, or affection, of the thing conceived, which some call the manner by which anything works upon our senses, but by most men they are called *accidents*."[20] It is strange that having gone so far, he should not have gone one step farther, and seen that what he calls the cause of the concrete name, is in reality the meaning of it; and that when we predicate of any subject a name which is given *because* of an attribute (or, as he calls it, an accident), our object is not to affirm the name, but, by means of the name, to affirm the attribute.

Sec. 4. Let the predicate be, as we have said, a connotative term; and to take the simplest case first, let the subject be a proper name: "The summit of Chimborazo is white." The word white connotes an attribute which is possessed by the individual object designated by the words "summit of Chimborazo;" which attribute consists in the physical fact, of its exciting in human beings the sensation which we call a sensation of white. It will be admitted that, by asserting the proposition, we wish to communicate information of that physical fact, and are not thinking of the names, except as the necessary means of making that communication. The meaning of the proposition, therefore, is, that the individual thing denoted by the subject, has the attributes connoted by the predicate.

If we now suppose the subject also to be a connotative name, the meaning expressed by the proposition has advanced a step farther in complication. Let us first suppose the proposition to be universal, as well as affirmative: "All men are mortal." In this case, as in the last, what the proposition asserts (or expresses a belief of) is, of course, that the objects denoted by the subject (man) possess the attributes connoted by the predicate (mortal). But the characteristic of this case is, that the objects are no longer *individually* designated. They are pointed out only by some of their attributes: they are the objects called men, that is, possessing the attributes connoted by the name man; and the only thing known of them may be those attributes: indeed, as the proposition is general, and the objects denoted by the subject are therefore indefinite in number, most of them are not known individually at all. The assertion, therefore, is not, as before, that the attributes which the predicate connotes are possessed by any given individual, or by any number of individuals previously known as John, Thomas, &c., but that those attributes are possessed by each and every individual possessing certain other attributes; that whatever has the attributes connoted by the subject, has also those connoted by the predicate; that the latter set of attributes *constantly accompany* the former set. Whatever has the attributes of man has the attribute of mortality; mortality constantly accompanies the attributes of man.[21]

If it be remembered that every attribute is *grounded* on some fact or phenomenon, either of outward sense or of inward consciousness, and that to *possess* an attribute is another phrase for being the cause of, or forming part of, the fact or phenomenon upon which the attribute is grounded; we may add one more step to complete the analysis. The proposition which asserts that one attribute always accompanies another attribute, really asserts thereby no other thing than this, that one phenomenon always accompanies another phenomenon; insomuch that where we find the one, we have assurance of the existence of the other. Thus, in the proposition, All men are mortal, the word man connotes the attributes which we ascribe to a certain kind of living creatures, on the ground of certain phenomena which they exhibit, and which are partly physical phenomena, namely the impressions made on our senses by their bodily form and structure, and partly mental phenomena, namely the sentient and intellectual life which they have of their own. All this is understood when we utter the word man, by any one to whom the meaning of the word is known. Now, when we say, Man is mortal, we mean that wherever these various physical and mental phenomena are all found, there we have assurance that the other physical and mental phenomenon, called death, will not fail to take place. The proposition does not affirm *when*; for the connotation of the word *mortal* goes no farther than to the occurrence of the phenomenon at some time or other, leaving the precise time undecided.

Sec. 5. We have already proceeded far enough, not only to demonstrate the error of Hobbes, but to ascertain the real import of by far the most numerous class of propositions. The object of belief in a proposition, when it asserts anything more than the meaning of words, is generally, as in the cases which we have examined, either the co-existence or the sequence of two phenomena. At the very commencement of our inquiry, we found that every act of belief implied two Things: we have now ascertained what, in the most frequent case, these two things are, namely two Phenomena, in other words, two states of consciousness; and what it is which the proposition affirms (or denies) to subsist between them, namely either succession or co-existence. And this case includes innumerable instances which no one, previous to reflection, would think of referring to it. Take the following example: A generous person is worthy of honour. Who would expect to recognise here a case of co-existence between phenomena? But so it is. The attribute which causes a person to be termed generous, is ascribed to him on the ground of states of his mind, and particulars of his conduct: both are phenomena: the former are facts of internal consciousness; the latter, so far as distinct from the former, are

physical facts, or perceptions of the senses. Worthy of honour admits of a similar analysis. Honour, as here used, means a state of approving and admiring emotion, followed on occasion by corresponding outward acts. "Worthy of honour" connotes all this, together with our approval of the act of showing honour. All these are phenomena; states of internal consciousness, accompanied or followed by physical facts. When we say, A generous person is worthy of honour, we affirm co-existence between the two complicated phenomena connoted by the two terms respectively. We affirm, that wherever and whenever the inward feelings and outward facts implied in the word generosity have place, then and there the existence and manifestation of an inward feeling, honour, would be followed in our minds by another inward feeling, approval.

After the analysis, in a former chapter, of the import of names, many examples are not needed to illustrate the import of propositions. When there is any obscurity, or difficulty, it does not lie in the meaning of the proposition, but in the meaning of the names which compose it; in the extremely complicated connotation of many words; the immense multitude and prolonged series of facts which often constitute the phenomenon connoted by a name. But where it is seen what the phenomenon is, there is seldom any difficulty in seeing that the assertion conveyed by the proposition is, the co-existence of one such phenomenon with another; or the succession of one such phenomenon to another: their *conjunction*, in short, so that where the one is found, we may calculate on finding both.

This, however, though the most common, is not the only meaning which propositions are ever intended to convey. In the first place, sequences and co-existences are not only asserted respecting Phenomena; we make propositions also respecting those hidden causes of phenomena, which are named substances and attributes. A substance, however, being to us nothing but either that which causes, or that which is conscious of, phenomena; and the same being true, *mutatis mutandis*, of attributes; no assertion can be made, at least with a meaning, concerning these unknown and unknowable entities, except in virtue of the Phenomena by which alone they manifest themselves to our faculties. When we say, Socrates was cotemporary with the Peloponnesian war, the foundation of this assertion, as of all assertions concerning substances, is an assertion concerning the phenomena which they exhibit,--namely, that the series of facts by which Socrates manifested himself to mankind, and the series of mental states which constituted his sentient existence, went on simultaneously with the series of facts known by the name of the Peloponnesian war. Still, the proposition does not assert that alone; it asserts that the Thing in itself, the *noumenon* Socrates, was existing, and doing or experiencing those various facts during the same time. Co-existence and sequence, therefore, may be affirmed or denied not only between phenomena, but between noumena, or between a noumenon and phenomena. And both of noumena and of phenomena we may affirm simple existence. But what is a noumenon? An unknown cause. In affirming, therefore, the existence of a noumenon, we affirm causation. Here, therefore, are two additional kinds of fact, capable of being asserted in a proposition. Besides the propositions which assert Sequence or Coexistence, there are some which assert simple Existence; and others assert Causation, which, subject to the explanations which will follow in the Third Book, must be considered provisionally as a distinct and peculiar kind of assertion.

Sec. 6. To these four kinds of matter-of-fact or assertion, must be added a fifth, Resemblance. This was a species of attribute which we found it impossible to analyse; for which no *fundamentum*, distinct from the objects themselves, could be assigned. Besides propositions which assert a sequence or co-existence between two phenomena, there are therefore also propositions which assert resemblance between them: as, This colour is like that colour;--The heat of to-day is *equal* to the heat of yesterday. It is true that such an assertion might with some plausibility be brought within the description of an affirmation of sequence, by considering it as an assertion that the simultaneous contemplation of the two colours is *followed* by a specific feeling termed the feeling of resemblance. But there would be nothing gained by encumbering ourselves, especially in this place, with a generalization which may be looked upon as strained. Logic does not undertake to analyse mental facts into their ultimate elements. Resemblance between two phenomena is more intelligible in itself than any explanation could make it, and under any classification must remain specifically distinct from the ordinary cases of sequence and co-existence.

It is sometimes said, that all propositions whatever, of which the predicate is a general name, do, in point of fact, affirm or deny resemblance. All such propositions affirm that a thing belongs to a class; but things being classed together according to their resemblance, everything is of course classed with the things which it is supposed to resemble most; and thence, it may be said, when we affirm that Gold is a metal, or that Socrates is a man, the affirmation intended is, that gold resembles other metals, and Socrates other men, more nearly than they resemble the objects contained in any other of the classes co-ordinate with these.

There is some slight degree of foundation for this remark, but no more than a slight degree. The arrangement of things into classes, such as the class *metal*, or the class *man*, is grounded indeed on a resemblance among the things which are placed in the same class, but not on a mere general resemblance: the resemblance it is grounded on consists in the possession by all those things, of certain common peculiarities; and those peculiarities it is which the terms connote, and which the propositions consequently assert; not the resemblance: for though when I say, Gold is a metal, I say by implication that if there be any other metals it must resemble them, yet if there were no other metals I might still assert the proposition with the same meaning as at present, namely, that gold has the various properties implied in the word metal; just as it might be said, Christians are men, even if there were no men who were not Christians. Propositions, therefore, in which objects are referred to a class because they possess the attributes constituting the class, are so far from asserting nothing but resemblance, that they do not, properly speaking, assert resemblance at all.

But we remarked some time ago (and the reasons of the remark will be more fully entered into in a subsequent Book[22]) that there is sometimes a convenience in extending the boundaries of a class so as to include things which possess in a very inferior degree, if in any, some of the characteristic properties of the class,--provided they resemble that class more than any other, insomuch that the general propositions which are true of the class, will be nearer to being true of those things than any other equally general propositions. For instance, there are substances called metals which have very few of the properties by which metals are commonly recognised; and almost every great family of plants or animals has a few anomalous genera or species on its borders, which are admitted into it by a sort of courtesy, and concerning which it has been matter of discussion to what family they properly belonged. Now when the class-name is predicated of any object of this description, we do, by so predicating it, affirm resemblance and nothing more. And in order to be scrupulously correct it ought to be said, that in every case in which we predicate a general name, we affirm, not absolutely that the object possesses the properties designated by the name, but that it *either* possesses those properties, or if it does not, at any rate resembles the things which do so, more than it resembles any other things. In most cases, however, it is unnecessary to suppose any such alternative, the latter of the two grounds being very seldom that on which the assertion is made: and when it is, there is generally some slight difference in the form of the expression, as, This species (or genus) is *considered*, or *may be ranked*, as belonging to such and such a family: we should hardly say positively that it does belong to it, unless it possessed unequivocally the properties of which the class-name is scientifically significant.

There is still another exceptional case, in which, though the predicate is the name of a class, yet in predicating it we affirm nothing but resemblance, the class being founded not on resemblance in any given particular, but on general unanalysable resemblance. The classes in question are those into which our simple sensations, or other simple feelings, are divided. Sensations of white, for instance, are classed together, not because we can take them to pieces, and say they are alike in this, and not alike in that, but because we feel them to be alike altogether, though in different degrees. When, therefore, I say, The colour I saw yesterday was a white colour, or, The sensation I feel is one of tightness, in both cases the attribute I affirm of the colour or of the other sensation is mere resemblance--simple *likeness* to sensations which I have had before, and which have had those names bestowed upon them. The names of feelings, like other concrete general names, are connotative; but they connote a mere resemblance. When predicated of any individual feeling, the information they convey is that of its likeness to the other feelings which we have been accustomed to call by the same name. Thus much may suffice in illustration of the kind of propositions in which the matter-of-fact asserted (or denied) is simple Resemblance.

Existence, Coexistence, Sequence, Causation, Resemblance: one or other of these is asserted (or denied) in every proposition which is not merely verbal. This five-fold division is an exhaustive classification of matters-of-fact; of all things that can be believed, or tendered for belief; of all questions that can be propounded, and all answers that can be returned to them. Instead of Coexistence and Sequence, we shall sometimes say, for greater particularity, Order in Place, and Order in Time: Order in Place being the specific mode of coexistence, not necessary to be more particularly analysed here; while the mere fact of coexistence, or simultaneousness, may be classed, together with Sequence, under the head of Order in Time.

Sec. 7. In the foregoing inquiry into the import of Propositions, we have thought it necessary to analyse directly those alone, in which the terms of the proposition (or the predicate at least) are concrete terms. But, in doing so, we have indirectly analysed those in which the terms are abstract. The distinction between an abstract term and its corresponding concrete, does not turn upon any difference in what they are appointed to signify; for the real signification of a concrete general name is, as we have so often said, its connotation; and what the concrete term connotes, forms the entire meaning of the abstract name. Since there is nothing in the import of an abstract name which is not in the import of the corresponding concrete, it is natural to suppose that neither can there be anything in the import of a proposition of which the terms are abstract, but what there is in some proposition which can be framed of concrete terms.

And this presumption a closer examination will confirm. An abstract name is the name of an attribute, or combination of attributes. The corresponding concrete is a name given to things, because of, and in order to express, their possessing that attribute, or that combination of attributes. When, therefore, we predicate of anything a concrete name, the attribute is what we in reality predicate of it. But it has now been shown that in all propositions of which the predicate is a concrete name, what is really predicated is one of five things: Existence, Coexistence, Causation, Sequence, or Resemblance. An attribute, therefore, is necessarily either an existence, a coexistence, a causation, a sequence, or a resemblance. When a proposition consists of a subject and predicate which are abstract terms, it consists of terms which must necessarily signify one or other of these things. When we predicate of anything an abstract name, we affirm of the thing that it is one or other of these five things; that it is a case of Existence, or of Coexistence, or of Causation, or of Sequence, or of Resemblance.

It is impossible to imagine any proposition expressed in abstract terms, which cannot be transformed into a precisely equivalent proposition in which the terms are concrete; namely, either the concrete names which connote the attributes themselves, or the names of the *fundamenta* of those attributes; the facts or phenomena on which they are grounded. To illustrate the latter case, let us take this proposition, of which the subject only is an abstract name, "Thoughtlessness is dangerous." Thoughtlessness is an attribute, grounded on the facts which we call thoughtless actions; and the proposition is equivalent to this, Thoughtless actions are dangerous. In the next example the predicate as well as the subject are abstract names: "Whiteness is a colour;" or "The colour of snow is a whiteness." These attributes being grounded on sensations, the equivalent propositions in the concrete would be, The sensation of white is one of the sensations called those of colour,--The sensation of sight, caused by looking at snow, is one of the sensations called sensations of white. In these propositions, as we have before seen, the matter-of-fact asserted is a Resemblance. In the following examples, the concrete terms are those which directly correspond to the abstract names; connoting the attribute which these denote. "Prudence is a virtue:" this may be rendered, "All prudent persons, *in so far as* prudent, are virtuous:" "Courage is deserving of honour," thus, "All courageous persons are deserving of honour *in so far* as they are courageous:" which is equivalent to this--"All courageous persons deserve an addition to the honour, or a diminution of the disgrace, which would attach to them on other grounds."

In order to throw still further light upon the import of propositions of which the terms are abstract, we will subject one of the examples given above to a minuter analysis. The proposition we shall select is the following:--"Prudence is a virtue." Let us substitute for the word virtue an equivalent but more definite expression, such as "a mental quality beneficial to society," or "a mental quality pleasing to God," or whatever else we adopt as the definition of virtue. What the proposition asserts is a sequence, accompanied with

causation; namely, that benefit to society, or that the approval of God, is consequent on, and caused by, prudence. Here is a sequence; but between what? We understand the consequent of the sequence, but we have yet to analyse the antecedent. Prudence is an attribute; and, in connexion with it, two things besides itself are to be considered; prudent persons, who are the *subjects* of the attribute, and prudential conduct, which may be called the *foundation* of it. Now is either of these the antecedent? and, first, is it meant, that the approval of God, or benefit to society, is attendant upon all prudent *persons*? No; except *in so far* as they are prudent; for prudent persons who are scoundrels can seldom on the whole be beneficial to society, nor can they be acceptable to a good being. Is it upon prudential *conduct*, then, that divine approbation and benefit to mankind are supposed to be invariably consequent? Neither is this the assertion meant, when it is said that prudence is a virtue; except with the same reservation as before, and for the same reason, namely, that prudential conduct, although in *so far as* it is prudential it is beneficial to society, may yet, by reason of some other of its qualities, be productive of an injury outweighing the benefit, and deserve a displeasure exceeding the approbation which would be due to the prudence. Neither the substance, therefore, (viz. the person,) nor the phenomenon, (the conduct,) is an antecedent on which the other term of the sequence is universally consequent. But the proposition, "Prudence is a virtue," is an universal proposition. What is it, then, upon which the proposition affirms the effects in question to be universally consequent? Upon that in the person, and in the conduct, which causes them to be called prudent, and which is equally in them when the action, though prudent, is wicked; namely, a correct foresight of consequences, a just estimation of their importance to the object in view, and repression of any unreflecting impulse at variance with the deliberate purpose. These, which are states of the person's mind, are the real antecedent in the sequence, the real cause in the causation, asserted by the proposition. But these are also the real ground, or foundation, of the attribute Prudence; since wherever these states of mind exist we may predicate prudence, even before we know whether any conduct has followed. And in this manner every assertion respecting an attribute, may be transformed into an assertion exactly equivalent respecting the fact or phenomenon which is the ground of the attribute. And no case can be assigned, where that which is predicated of the fact or phenomenon, does not belong to one or other of the five species formerly enumerated: it is either simple Existence, or it is some Sequence, Coexistence, Causation, or Resemblance.

And as these five are the only things which can be affirmed, so are they the only things which can be denied. "No horses are web-footed" denies that the attributes of a horse ever coexist with web-feet. It is scarcely necessary to apply the same analysis to Particular affirmations and negations. "Some birds are web-footed," affirms that, with the attributes connoted by *bird*, the phenomenon web-feet is sometimes co-existent: "Some birds are not web-footed," asserts that there are other instances in which this coexistence does not have place. Any further explanation of a thing which, if the previous exposition has been assented to, is so obvious, may here be spared.