

The Principle of Contradiction

When we endeavor to prove anything, there are certain things by means of which we arrive at our conclusion. Given certain things, we say, it follows that such and such. In any demonstration, that is, there are certain propositions which we call premisses from which we deduce a conclusion. Thus: All men are mortal; Socrates is a man; therefore, Socrates is mortal. Now obviously, the premisses of this argument are not self-evident; they too are susceptible of proof, and if someone demurs, we are forced to arrive at a demonstration of the premisses by means of other things which will be granted by our opponent. Now the striking thing about all this, is that we cannot proceed infinitely backwards in the proof of our premisses, for if we had to, no conclusion would be anything more than an hypothesis: if such and such is granted, then such and such follows. The thought is, that there must be certain first indemonstrable principles which are self-evident and do not have to be proven.

Moreover, if a man sets out to acquire the scientific knowledge that comes through demonstration, he must not only have a better knowledge of the basic truths and a firm conviction of them than of the connexion which is being demonstrated: more than this, nothing must be more certain or better known to him than these basic truths in their character as contradicting the fundamental premisses which lead to the opposed and erroneous conclusion. For indeed the conviction of pure science must be unshakable. (Aristotle, Posterior Analytics, Bk. I, cap. 2)

Aristotle goes on to note (cap. 3) that there are two erroneous views of science (which of course is had by demonstration). The first is that there is no way of knowing except by demonstration, and therefore an infinite regress is necessary in proof, for we must always prove our premisses by prior premisses. Secondly, it may be granted that there must be first indemonstrable premisses, but that these rest on mere supposition. (This is the view of Bertrand Russell).

Aristotle's position is this: our knowledge of the first premisses is independent of demonstration. We have certain knowledge of these premisses or principles - indeed our certainty of them is far greater than of proved conclusions - but this knowledge is not had by demonstration. We attain knowledge of these first principles by induction. Sense experience is basic for human knowledge, and having perception of material things, and retaining them in memory a certain experience is acquired. It is from such sense experience that we arrive at universal knowledge, and at knowledge of the first indemonstrable principles. (Cf. Ibid., Bk. II, cap. 19)

Why must the metaphysician consider the first indemonstrable principles? From our brief consideration, it appears that such principles will be presupposed in all our knowledge; and not merely in metaphysics. One answer will suffice for the nonce. That knowledge will be most certain which is of the most certain principles. But metaphysics is the most certain science, and must therefore

consider the most certain principles. Moreover, because none of the special sciences can consider these principles - such principles not being proper to these sciences, but common to all - that science which is the most common and universal must present and defend these principles.

What principle is the first of all? Obviously it must be one about which no one can be deceived, which is not proved by something prior and is not a mere supposition, i.e. not necessary. Such a principle is this: IT IS IMPOSSIBLE THAT A THING BE AND NOT BE AT THE SAME TIME AND IN THE SAME RESPECT. Someone can state verbally the contrary of this principle, but he cannot think its contrary. Note, that contrary opinions do not express contraries but contradictories, properly speaking. Examples of contrary opinions ~~inxxxxfirstxxxxxx~~ would be: Socrate is white; Socrates is black, but: Socrates is white; Socrates is not-white. Thus if someone thinks that contradictories can be true at the same time, he would think that they can be at the same time. But no one can be so deceived. Therefore, the first criterion is saved in this principle. And because all demonstrations are reduced to this principle and it is most necessary and certain, this is the principle we are looking for.

But have we not said beforehand that being is the first thing known by the intellect? Would not being, then, be the first principle? Yes and no. We must remember that there are two operations of the intellect, one which is called the understanding of indivisibles, and another by which it composes and divides. In both operations there is something which is first. In the first operation the first thing which the intellect conceives is being, nor can anything be conceived by this operation that is not being. And since this principle (It is impossible that something be and not be the same thing) depends on the understanding of being, just as the principle that the whole is greater than the part depends on it, it is the first principle in the second operation of the intellect, and without it nothing else can be understood.

We have already noted that this first principle cannot be demonstrated properly speaking. However, there is a certain way in which it can be demonstrated, i.e. by what is called an elenchus. This is by a reduction to absurdity. But this can only be put to use if he who denies the principle says something, that is, attempts to signify something by a word. Note that this kind of demonstration is not to demonstrate the principle absolutely speaking; to do this, it would be necessary to beg the question, for any statement would presuppose this principle. An elenchus can only be called into play when the adversary admits something which is actually less certain than the principle he is denying. Thus to begin from his admission could not produce a demonstration of the principle, for in demonstration we go from the more to the less certain.

The indirect proof of the principle would proceed in this manner. We must accept for a principle that a word signifies something, both to the one saying it insofar as he understands himself to be speaking, and to the one listening. If this is not conceded, there is nothing more to be done; the man is crazy. If he admits that a word signifies something, the principle is had, for what

is signified by the word will be distinct from its contradiction. Thus to say that the name signifies such and such will be true, and the contradictory which denies it will be false. Then we have at least had it admitted that not every affirmation and negation are simultaneously true. But can we have a more general proof?

A word signifies one thing. Thus, let us say that the word "man" signifies this unity which is a two-footed animal. If someone says that the word signifies many things, either it will signify finite or infinite number of things. If it signifies a finite number of things, there is no problem. We can assign different names to the different things. However, if it signifies an infinite number of things, there could be no definitions nor discourse. Why? Names signify concepts. If nothing is understood, nothing is signified. But if one thing is not understood, nothing is understood, for understanding implies knowing something as distinct from other things.

Secondly, the word "man" does not signify not to be a man. The one signified by the word must be one in definition, and not ~~just~~ one in subject. If the latter were true then musician and tall and man would signify the same thing, because all are in the same subject. Then it would follow that all things are one. For if tall were said of man and were one with the definition of man, and tall is also said of trees then man and tree would be one.