The Laws of Thought

The laws of logic are often called the laws of thought because, just as social laws make society possible, so logical laws make thought possible. Aristotle (384–322 B.C.) was the first to codify these laws. They include:

The law of noncontradiction: Nothing can both have a property and lack it at the same time. (No statement can be both true and false at the same time.)

The law of identity: Everything is identical to itself. (Everything is what it is and not another thing.)

The law of excluded middle: For any property, everything either has it or lacks it. (Every statement is either true or false.)

In order to think about the world, your thoughts must have a specific content; they must represent the world as being one way rather than another. If the law of noncontradiction didn't hold, however, that wouldn't be possible because every one of your thoughts would be both true and false. In such a situation, thinking would be impossible. Aristotle explains:

. . . if all are alike both wrong and right, one who is in this condition will not be able either to speak or to say anything intelligible; for he says at the same time both "yes" and "no." And if he makes no judgment but "thinks" and "does not think" indifferently, what difference will there be between him and a vegetable?[15]

What difference, indeed? Without the law of non-contradiction, you couldn't affirm or deny anything because every affirmation would also be a denial. But if you can't affirm or deny anything, you can't think at all.

Because the laws of thought are the basis for all logical proofs, they can't be directly proven by means of a logical demonstration. But they can be indirectly proven by showing that you cannot deny them without assuming them! Aristotle puts the point this way:

The starting point for all such proofs is that our opponent shall say something which is significant both for himself and for another; for this is necessary if he really is to say anything. For if he means nothing, such a man will not be capable of reasoning, either with himself or with another. But if any one says something that is significant, demonstration will be possible; for we shall already have something definite. The person responsible for the proof, however, is not he who demonstrates but he who listens; for while disowning reason he listens to reason. And again he who admits this has admitted that something is true apart from demonstration.[16]

The law of noncontradiction can't be demonstrated to someone who won't say something definite, for demonstration requires that our words mean one thing rather than another. On the other hand, the law of noncontradiction need not be demonstrated to someone who will say something definite, for in saying something definite, the speaker has already assumed its truth.