

(ORIGINAL.)

## THEME ON LOGIC.

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THE term Logic is derived from the Greek verb *lego*, which signifies to collect, to gather, as in reasoning we collect the ideas we have acquired in order to form conclusions; as an art, it is called the art of thinking or reasoning justly.

Logic has been called the history of the human mind, as it traces our knowledge from simple notions through all their different stages to the conclusions we draw from comparing them together. The end of Logic, therefore, is to explain the structure of the human mind, with its powers and faculties, and the means of improving them, so that we may arrive at truth and knowledge, free of the errors and mistakes into which we are apt to fall.

The first step in the attainment of knowledge, is to acquire ideas, so that they may be easily remembered and communicated to others. For gaining this point, certain rules are given, called rules of Definition, Division, Distinction, and Classification.

The rules of Definition express the essential qualities of objects in such a manner that we may obtain a better knowledge of them. Rules of Division are used when the parts of an object are so numerous that we cannot comprehend them all at once, but when we make a separation between them in our own mind, we are enabled to view them leisurely one by one, and thus arrive at the knowledge of the whole. Division differs from Distinction in as far as the former is the method we employ to obtain more distinct notions of objects when things of a similar nature require to be separated; the latter is used when we separate objects according to the difference made by nature. Rules of Classification are used when our ideas, or the objects of our ideas, are very numerous, and therefore it is not only necessary to separate them, but also to arrange them into classes according to their essential qualities, that we may be enabled to extend our knowledge to a greater variety of objects.

After having obtained ideas, the mind next proceeds to form judgments by comparing these ideas together. Rules are laid down for enabling us to draw these conclusions rightly, and also to express them in words. When a judgment is thus expressed, it is called a proposition, or a sentence expressing the agreement or disagreement of two or more ideas. When we cannot immediately discern the agreement or disagreement between the two ideas, we must have recourse to a third, which is calculated to shew the relation between them, and this train of reasoning is called a Syllogism.

Aristotle claims the sole merit of the invention of the Syllogism; and his claims have been generally recognised; for though the Syllogistic mode of reasoning had been long known and much practised

before his time, yet he had the merit of reducing those principles to a system, which till then had lain as a mass of indigested materials.

As there are three distinct judgments in every act of reasoning, so there must be three distinct propositions in every regular Syllogism. Syllogisms have been divided into various classes called Figures, which are four in number, and arise from the position of the middle term of the Syllogism, for it may be placed in four different ways.

There is also a farther division of the Syllogism, according to its quantity and quality, which is called the Mood. These Moods are sixty-four in number, but only ten or eleven of them will give just conclusions. Rules are given for reducing the unconcluding to the concluding Moods.

The certainty or probability, and the falsity of a Syllogism, are called its matter. A certain proposition is either Intuitive or Demonstrative. They are called Intuitive propositions, because it is only necessary to look at them to be convinced of their truth. Demonstrative are those which are deduced from clear proofs.

Syllogism was the primitive instrument of the Aristotelian system, and therefore Aristotle was at great pains to make it as perfect as possible. For this purpose, he laid down certain Rules for the construction of Syllogisms, for reducing them from unconcluding to concluding Moods, and for discovering sophisms or false Syllogisms, so as to prevent the errors and mistakes into which they would lead us.

The knowledge we obtain by intuition and demonstration relates only to ideas, but many of our judgments relate to facts, and here we must have recourse to Experience and Testimony.

By Experience we obtain a knowledge of objects, which come within the observation of our senses; but as the life of man is short, and his opportunities of enjoying this observation are very limited, much of his information must be obtained from others. It is, therefore, highly necessary that he should be able to judge on what grounds this testimony should be received, and for guiding him in this matter, Rules are laid down, some of which will be briefly observed.

In receiving the testimony of a witness, we should consider, whether he is qualified to judge of the matter; i. e. whether he has paid proper attention to it, so as to be able to form a regular judgment upon it; and, whether he has been in such a state of mind as to be able to examine into it.

The second rule is, that the witness should have no intention to deceive. Here we must attend to the character of the witness, whether he has no interest in the case, and, whether his account is confirmed by others.

Logic likewise comprehends rules for composing themes in communicating our knowledge to others,