

MATTER OF THE SYLLOGISM

The syllogism is not studied for its own sake. It is studied for the sake of reasoned-out knowledge, where and when such knowledge of things is possible. Where such knowledge is not possible or before it is possible, the syllogism is useful for a reasonable guess about the universal. (Enthymeme and example are used to make a reasonable guess about a singular.)

Sometimes the premisses or statements laid down in a syllogism are necessarily true and seen by reason to be necessarily true. When we syllogize from such statements, the conclusion is also necessarily true. Such a syllogism is called a demonstration in logic for a statement has been shown to be true. The effect of demonstration is reasoned-out knowledge. This is knowledge in the strict sense. Reason is sure or certain of its conclusion.

The three clearest examples of reasoned-out knowledge are geometry, the reasoned-out knowledge of numbers, and logic. It is also possible to achieve some reasoned-out knowledge of natural and human things, at least in general. The highest achievement of reason has been some reasoned-out knowledge of God, but very many things must be reasoned-out before this can be attempted.

Reasoned-out knowledge comes to be in us by syllogism from statements known through themselves. We must first reason-out conclusions from statements known through themselves and then from these conclusions we can reason-out further conclusions and so on.

Some statements are known through themselves by all men; for example: a whole is larger than one of its parts. Such statements are common beginnings of all reasoned-out knowledge. Other statements are known through themselves by those who have a foundation in some reasoned-out knowledge; as, for example, the statement all right angles are equal. Such statements are private beginnings of one reasoned-out knowledge, such as geometry. Statements known through themselves about things ultimately require definitions and divisions of things or proportions seen among them

Reasoned-out knowledge is the highest end of the art about the syllogism. But the syllogism can also be found in premisses that are only probable or which are seen by reason as probable. A probable premiss is a statement accepted by all men or by most men or by all or most men in a given art or science or the most famous of them (in a matter pertaining to that art or science). When reason syllogizes from statements that are probable or, at least, one of which is only probable, the conclusion is not necessarily true (even though it follows necessarily from the premisses). Since the premisses were only probable, the conclusion can only be probable. Such a syllogism is called a dialectical syllogism. The effect of a dialectical syllogism is a reasonable guess about the universal. (Induction is also used to make a reasonable guess about a universal.)

Reasoned-out knowledge is better than a reasonable guess, but often a reasonable guess is all that is possible for our reason and is better than complete ignorance. Moreover, reasonable guesses sometimes

prepare the way for reasoned-out knowledge at a later stage. We tend to guess the truth before we know it.

THE FOUR TOOLS OF DIALECTIC

Dialectic is the ability to syllogize from probable statements about general problems. A statement is considered probable if all or most men hold it; or if all or most men in an art or science or the most famous of them hold it (in a matter pertaining to that art or science).

The first tool of dialectic is the selection of probable statements as defined above, but divided according to logical or natural or ethical (and political matter) and ordered from the general to the particular.

Since the above probable statements are stated in words and words often have more than one meaning, the second tool of the dialectic is the distinction of the senses of a word. There are many places to look and see if a word has more than one meaning. The first places to look are the opposites of the word. Other places to look are the genera of the things which the word is said of, and the word in combination with different things.

The second tool is necessary for clarity in a dialectical discussion and so that those involved in a discussion will be talking about the same thing. It is also necessary to avoid the most common mistake in thinking which comes from not distinguishing the senses of a word.

The third tool of dialectic is seeing the differences between things, and especially between things that are close together. Reason is especially exercised in trying to see the differences between things much alike.

The third tool is useful for reasoning which things are the same or different. It is also useful for definitions of things because a definition is completed or perfected by differences. Definitions are the beginnings of many syllogisms.

The fourth tool of dialectic is the ability to see the likeness not only of things close together (as those in the same species or genus), but also of things far apart whose likeness is one only of proportion. Reason is exercised more in seeing the likeness between things far apart (while it was the opposite in seeing differences).

The fourth tool is useful for inductions which are from many like things. It is also useful for if-then syllogisms based on proportions. And it is useful for definitions which began in genera for many things are alike in one genus.

COMMON KINDS OF MISTAKE

The mistake of mixing up the senses of a word

The most common mistake in reasoning comes from mixing up diverse senses or meanings of a word. If someone reasoned that Chianti is not wet because it is a dry wine and what is dry is not wet, he would clearly be deceived by mixing up two diverse senses of the word dry. This deception takes place because of our dependence upon the senses. Where there is one word to be sensed and reason cannot or has not distinguished the senses, it can be easily deceived into thinking there is one thing or one thought behind the one word. Does the following argument involve the mistake of mixing up the senses of a word?:

A part is sometimes larger than its whole. For example: since man is an animal with reason, animal is only part of what man is. And yet this part, animal, contains much more than man, such as dog, cat, horse and so on.

The mistake of mixing up the as such and what happens

What belongs to a thing as such or through itself is sometimes confused or mixed up with what happens to it.

It was thought once that marsh air causes malaria because only those exposed to marsh air caught malaria. But it is not marsh air as such that causes malaria. Marsh air, through being marsh air, does not cause malaria. The mosquitoes in the marsh air may carry something that causes malaria.

If the house-builder happens to be a pianist, we can say that a pianist built the house. But it is not as pianist that he built the house.

If man is an animal and animal is said of dog, it does not follow that man is said of dog. For animal is said of man insofar as animal signifies a living body with sensation, not by reason of what happens to animal in the mind where it is a genus said of many species.

Where is the mistake in the following reasoning:

The young never become old. For becomes means comes to be and the young never can be old. This would be a contradiction for the same thing would be young and not young, old and not old. Hence, you will remain young forever.

The mistake of mixing-up what is so simply or without qualification and what is so in some respect or in a qualified way.

What belongs fully or completely to a thing belongs to it without qualification or simply while what belongs to a thing in an imperfect and diminished way belongs to it in some particular respect or in a qualified way. A man is said, for example, to be white or black by reason of the color of his skin. We would not say that a black man is white without a qualification, but that he is white in the outer part of his eyes and we would not say that a white man is black simply or without a qualification, but that he is black in the center of his eyes.

Human beings are always making this mistake when they choose to do what is bad because it is good in some respect or when they choose not to do what is good because it is bad in some respect. Robbing the bank is bad because it is unjust, taking what does not belong to you. But someone robs the bank because it is good in some respect or in a qualified way - it does increase the amount of money in your pocket (if you don't get caught). Murder is bad because it is taking the life of another. But murder can be good in some very imperfect way. It can gain you an inheritance or it can remove an annoyance in your life. Abortion is bad because it is taking the life of an innocent human being in his or her mother's womb. But someone might commit or consent to an abortion because it is good in some respect - it is profitable to the abortionist or relieves one of an embarrassment or enables one to continue one's career or education without interruption. Likewise, one chooses not to do what is good because it is in some respect bad. Nothing is so good that it does not prevent one from doing something else that may be good. People are always using this kind of mistake to justify their wretched lives.

What is wrong with Meno's objection in the dialogue?:

You cannot look for something if you do not know what you are looking for. Hence, it is impossible to investigate what you do not know.