

## FIVE

Language and Signs  
in Aristotle

## 5.0 INTRODUCTION

With Aristotle certain major changes and developments occurred which had a lasting influence on the history of the sign. The first of these was the vast and far-reaching work of normalization which Aristotle operated on the vocabulary of science and the professions where signs and conjectural thought in general had been used. Aristotle took the vast semantic field in which strong and weak uses of terms such as *sēmeion*, *tekmērion*, *aitia*, *próphasis* and *eikós* oscillated through the fifth century in medical, historical and philosophical writings and reduced it to the terms of a strict system of classification and definition, fixing precise uses of the terminology and setting the bounds of the different fields of knowledge.

As Lanza (1979, p.107) has shown, this operation had only a partial practical success, however, for Aristotle only really achieved a rigid division and classification within the theoretical sphere. A passage in *Prior Analytics* and another in *Rhetoric*<sup>1</sup> set out these theoretical distinctions. On the practical level, however—even within the language of the *Rhetoric* itself, and generally in others of Aristotle's scientific works, as Le Blond (1939/1973, p.241) has pointed out—the use of the various terms which make up the semiotic-gnoseological vocabulary remains loose, and the terms are often used without any special distinctive shades of meaning. Nonetheless, the revision of terminology which Aristotle achieved on the theoretical level was profound and became the basis for a tradition which continued through later treatises up to the Roman school of rhetoric in the first century A.D.

However, the effects of this theoretical distinction went beyond a mere normalization of the vocabulary and inevitably entered into the dynamics of the thought and conceptions formulated around the notion of conjectural thought.

We have already seen how the question of time was central both in the non-scientific sphere of divination and in the proto-scientific sphere of medicine. In both of these fields of knowledge, simultaneous awareness of the past, present and future, although treated in very different ways, formed an essential element. Aristotle took up this question and

conceptualized it, forcing it to meet the requirements of theoretical classification.

In the classification of the types of speech set out in his *Rhetoric*, Aristotle identified two categories of intended receiver of speech: the observer (*theōrós*) and the decider (*kritēs*). The former operates within the present and is represented by the kind of audience which receives a celebratory or epideictic speech. The latter, in contrast, operates in the other two dimensions of time, which belong to the other two types of speech. The judge (*dikastēs*), for example, decides on the past, and the member of the Assembly (*ekklēsiastēs*) decides on the future.<sup>2</sup> As Lanza (1979, p.102) notes, this classification is completely extraneous to the object considered but clearly demonstrates Aristotle's attempt to link the traditional division of the types of speech to the three dimensions of time which had been associated, from the age of Homer, with the esoteric or technical realms of the manifestation of knowledge.

5.1 THEORY OF LANGUAGE AND  
THEORY OF THE SIGN

## 5.1.1 THE SEMIOTIC TRIANGLE

The second important factor in Aristotle's consideration of the questions relating to signs was the separation, and consequent separate treatment, of the theory of language from the theory of the sign. This may seem surprising to modern scholars and merits careful attention precisely because modern semiological theories assume *a priori* that the terms which make up verbal language are "signs". Indeed, according to one particular brand of structuralism, they are the signs *par excellence*, and many scholars have actually gone so far as to propose that the terms of verbal language can provide a model for all other types of sign. However, Aristotle distinguished the elements which go to make up a theory of language with the name *sýmbola*, while the other elements of a theory of signs he termed *sēmeia* or *tekméria*.<sup>3</sup>

As will be seen below, the theory of signs in fact forms part of the theory of syllogism and has both logical and epistemological features of interest. The sign lies at the center of the problem of how knowledge is acquired, whereas the linguistic symbol is principally connected to the problem of relationships between linguistic expressions, conceptual abstracts and states of the world.

Aristotle sets out his theory of the linguistic symbol in *De Interpretatione*, expressing it in a model made up of three terms: *spoken sounds*, which are "symbols" of the *affections of the soul*, which are themselves images of external things:

Now spoken sounds (*tà en têi phōnēi*) are symbols (*sýmbola*) of affections in the soul (*tôn en têi psychēi pathēmátōn*), and written marks (*graphómēna*) symbols of spoken sounds. And just as written marks are not the same for all peoples,

neither are spoken sounds. But what these are in the first place signs (*sēmēia*) of—affections of the soul—are the same for all; and what these affections are likenesses (*homoíōmata*) of—actual things (*prágmata*)—are also the same.

(16 a, 3-8)

It must be stated, first of all, that the appearance here of the term *sēmēia* apparently as a synonym of *symbola* should not be taken to mean that the two expressions are interchangeable. In this passage, Aristotle is using the term *sēmēion* in a weak meaning, which confirms the tendency we have already noticed toward a certain blurring of the edges of expressions belonging to the semiotic vocabulary whenever one is not talking of a strictly theoretical demarcation. Aristotle is also using *sēmēia* here to show that the existence of sounds and letters can be considered the proof of the parallel existence of affections of the soul.

Nonetheless, leaving aside the graphological level, it is possible to construct a semiotic triangle of the type shown in Figure 5.1. As the figure

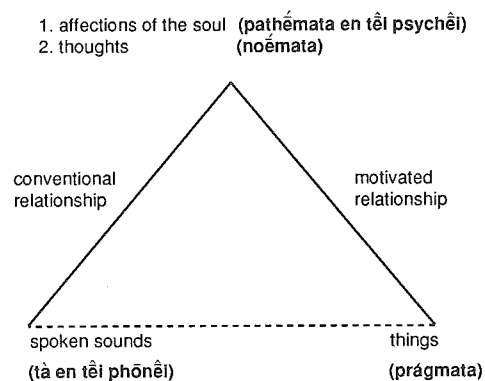


Figure 5.1

shows, there is a different relationship between the different pairs of terms which form the triad. Between sounds and affections of the soul, the relationship is unmotivated and conventional since, according to Aristotle, affections of the soul are the same for everyone but are expressed in different ways according to different languages and cultures, as also occurs for written forms.<sup>4</sup> However, between affections of the soul and things there is a motivated relationship which is practically iconic since the former are images of the latter. It would be a mistake, however, to equate the concept of conventionality of the elements of language which Aristotle propounds with the concept of the arbitrariness of the linguistic sign developed by Saussure. In Saussure's theory, in fact, there is an arbitrary relationship between two entities which belong exclusively to the realm of language; the signifier and the signified are the two sides of the sign as a linguistic unity.

In Aristotle, however, the conventional relationship exists between elements of language (nouns, verbs, *lógos*) and elements which do not belong strictly to language in that they are psychic entities. It should be remembered too that Aristotle's theory of language is not expressed solely in the context of works dealing mainly with logic, such as *De Interpretatione*, but appears and is developed also in works dealing with aesthetics. In these, where the poetic function of language is primarily being dealt with, the importance of the principle of conventionality is to a certain extent reduced (cf. Belardi, 1975, p.75 ff.).

### 5.1.2 "SPOKEN SOUNDS"

The terms at the corners of the triangle have interesting and problematical aspects. We can start by asking what precisely Aristotle meant by the expression *tà en têi phōnêi*. Different critics have suggested different answers to this question.

Donatella Di Cesare (1981, p.161), for example, claims that Aristotle gives the same value to this expression as Saussure gives to the term "signifier" in his explanation of the nature of the linguistic sign. Belardi (1975, p.198), on the other hand, states that *tà en têi phōnêi* must refer not to the signifiers but to "linguistic expressions" understood in their full form of *ónoma* (noun), *rhēma* (verb) and *lógos* (speech) and in the form of *katáphasis* (affirmation) and *apóphasis* (negation). He justifies this interpretation by the fact that these elements, which form part of Aristotle's analytical method, are defined as "symbols" of the affections of the soul (*Prior Analytics*, 16 a, 25; 24 b, 2).

There is no doubt whatsoever that Aristotle intended the expression "spoken sounds" to indicate something which emphasized clearly both the phonic nature and the nature of "signifier". However, it must not be forgotten that Aristotle's point of view when examining facts of language, at least in his *Organon*, is very different from that of Saussure.

In the *Organon*, Aristotle is interested in assaying the possibilities and trustworthiness of the use of language in the analysis of reality. There would appear to be a trustworthiness when there is a reciprocal relationship between the realms of the real and of language. For Aristotle, the symbolic nature of language with respect to the real world is a symbolism at two removes, since the name stands for an image which is itself an image of a thing; therefore (according to the rules of logical organization followed in *De Interpretatione*), the item at the left corner of the triangle must be interchangeable with what stands at the apex.

It is from this fact that Aristotle's use of the notion of *symbolon* stems, a use which he takes from a tradition which goes back to Democritus (D-K, 668, B 5, 1). This term became part of linguistic terminology to indicate conventional linguistic expressions thanks to its etymology. In Greek, the term *symbolon* indicates each of the two halves into which an object (such as a medal or a coin) is intentionally broken in order to serve later as a sign of identity or as proof of something (cf. Belardi, 1975, p.198; Eco, 1984a,

p.130). When the two halves are later put together and seen to match perfectly, this is taken as indicating the existence of a previously established relationship (such as a relationship of hospitality, or friendship or pater-nity) the proof of which had been specifically entrusted to the perfect matching of the two *sýmbola*. The situation is thus set up that each of the two parts can be exchanged for the other without any resulting loss of the value as proof. Thus, since in this way each part presupposes the other, or has an absolute correspondence with the other, the expression *sýmbolon* could take on the meaning of "that which stands for something else". However, the fact that Aristotle prefers to use the word *sýmbolon* rather than the word *sēmeíon* (which can also indicate "stands for") in the context of his theory of language leads us to hypothesize that the reference set up by the symbol is of a very particular nature. In fact, in the case of the sign, the two terms in the reference (which, as we shall see later, is an implication) are not always reciprocal. The first term can refer to the second term without the second term necessarily referring to the first. In the case of the symbol, however, the two terms are completely reciprocal. It is no coincidence that the term *sýmbolon* was also used (from the third century B.C. to the third century A.D.) in the sense of a "receipt", often made out in two copies, the two parts of which thus have the same value.

It is this etymological sense which is important in Aristotle's special use of the expression *sýmbolon* in *De Interpretatione*. Names are symbols of affections of the soul in the precise sense that there occurs between them, in accordance with a previously established agreement (*synthēkē*), a perfect matching and a complete interchangeability which guarantee the correctness of the name (cf. Belardi, 1975, p.199).

As *sýmbolon*, the name is no longer, as it was for Plato, *dēlōma* ("revelation"). For Aristotle, the name is the "spoken sound significant by conventions" (*phōnē sēmantikē katà synthēkēn*) (*De Interpretatione*, 16 a, 19). This can be taken as marking the passage from a linguistics with a certain semiotic nature, such as Plato's linguistics displayed, to a linguistics which no longer talks of signs and which is intrinsically non-semiotic. Whereas Plato thought of linguistic expressions as signs which "revealed" something that was not perceptible (the essence of the object, or the *dýnamis*), for Aristotle linguistic expressions are rather symbols which establish conventionally a pure relationship of *equivalence*<sup>5</sup> between two objects in relation, without any concern that one of the terms "reveals" the other.

### 5.1.3 ANIMAL LANGUAGE

The *conventional/natural* opposition<sup>6</sup> makes it possible to distinguish between human language and sounds made by animals,<sup>7</sup> which are also, after all, equally (i) vocal and (ii) interpretable.

The concept of "voice" (*phōnē*) has in itself several interesting features. *De Anima* states that a sound can be defined as a voice when (i) it is emitted by an animate being (II, 420 b, 5) and (ii) when it has meaning (*sēmantikós*) (II, 420 b,

29-33). Now, even though the noises made by animals are defined as *psóphoi* ("noises") they nonetheless have both of the above-mentioned characteristics. What distinguishes animal sounds from human voices is the fact that (i) they are not conventional (and consequently can be neither symbols nor names) but are rather "by nature" (cf. *De Interpretatione*, 16 a, 26-30) and that (ii) they are *agrámmatoi*, that is, they cannot be broken down into letters and they are "non-combinable" (*ibid.*; *Poetics*, 1456 b, 22-24).

The concept of "combinableness", as Morpurgo-Tagliabue demonstrate (1967, p.33 ff.), is central to the semantic nature of human language, the simple sounds of which (*adiaíretoí*, "invisible things") can be put together into larger units which then have meaning.<sup>8</sup> Animals, on the other hand, make only sounds which are indivisible and non-combinable (cf. *Poetics*, 1456 b, 22-24).

Table 5.1 illustrates the characteristics of human language in comparison with sounds made by animals. It is worth pointing out that the semantic nature of animal sounds is expressed in the verb *dēlōúsi* ("reveal", *De Interpretatione*, 16 a, 28). This demonstrates once again that for Aristotle, when convention is not in question, as with animal language, the semiotic nature of an expression is emphasized. Animal sounds are symptoms which reveal their cause.

human language	animal sounds
— by convention	— by nature
— combinable indivisible elements and divisible elements	— non-combinable indivisible elements
— letters	— no letters
— elements which have meaning	— elements which reveal ( <i>dēlōúsi</i> ) something
— symbols	— not symbols
— names	— not names

### 5.1.4 THE "AFFECTIONS OF THE SOUL"

Returning to Aristotle's triangle of signification, the next term which is worth analyzing more deeply is the expression *pathémata en têi psychêi*. It will be noted that where we might expect to find the idea of "meaning", what we actually find is a psychic entity, something located not within language but within the very minds of the language users. In addition, while Aristotle sees the "affections of the soul" as psychic events, he by no means sees them as being individual. As he says, they are elements which are identical for everyone, and this statement links theory of language with a sort of social psychology, or with a universal, rather than individual, psychology (cf. Todorov, 1977, p.16).

It should also be noted that there is a certain ambiguity to be seen in this term. Aristotle says that the *pathémata en têi psychêi* are likenesses or images (*homoiōmata*) of external objects. In this way he seems to be saying that the

same relationship exists between objects and psychic entities as between an original and a copy. However, he later uses the expression *noēma* ("thought", "notion" [16 a, 10]) to indicate mental representation. Here, though, he stresses that under certain conditions thoughts can be true or false. It would thus follow that *noēmata* are conceived of as forms of judgement.

These two ideas seem to be completely different from one another, and the fact that they were both used in relation to the same linguistic expressions seemed to suggest that these were synonymous, a situation which was contradictory and confusing. However, as Belardi (1975, p.109) has pointed out, neither of these two ideas completely covers the area of psychic representation, and they in fact refer to two different faculties of the soul. The *pathēmata* call into play the *passive* faculty of the soul to receive impressions from objects of the outside world, and the *noēmata* reflect the *active* faculty of the soul in forming judgements. This relationship of the two ideas is confirmed by the reference Aristotle makes to *De Anima*, a treatise in which *pathēmata* are discussed along with other faculties of the soul.

#### 5.1.5 SEMANTIC AND APOPHANTIC

It is necessary at this point to turn our attention, albeit briefly, to a distinction in Aristotle's linguistic thought: the distinction between the categories of "semantic" and "apophantic". *De Interpretatione* (16 a, 9 ff.) introduces the problems relating to the difference between *phásis* ("what is said") and *katáphasis* (an "affirmation"). Names or nouns (but also verbs in this case) on their own constitute "something which is said", but they cannot alone constitute an affirmation or a negation. As a consequence, two types of mental representation (*noēmata*) are distinguishable: (1) that "which is not concerned with true or false" and (2) that "which must be either true or false".

What is being set in opposition here is the notion of *meaning* and the notion of *truth conditions*. The first type of mental representation includes names (and verbs) taken on their own; these can have a meaning, but they cannot be true or false. Aristotle proves this by looking at the term "hirco-cervus" or goat-stag (*tragēlaphos*). This term "certainly means something" (that is, a monstrous mixture of a goat and a stag), but it cannot be stated to be true or false. The "something" which Aristotle refers to here focuses on the purely semantic dimension, which is governed by rules which are very different from those of referentiality.

The second type of mental representation covers those linguistic entities which can be considered to be propositions. It is when we come to affirmative or negative statements that it becomes possible to speak of truth or falsehood. It is therefore only in this case that it becomes possible to speak of the qualities of being true or false ("apophantic") as a dimension which goes beyond (rather than being opposed to) the dimension of having meaning or not ("semantic").

The question remains, however, as to what specific means can be used

to pass from the semantic dimension to the apophantic dimension. Here it is quite clear that Aristotle intends the use of the verb *as a predicate* to supply this means. Aristotle draws attention to the predicative function of the verb when, in talking about judgement, he reduces the verb to copula + predicate: "There is no difference", he says, "between saying that a man walks and saying that a man is 'walking'" (cf. *De Interpretatione*, 21 a, 38). Here the verb is seen as a noun taken in a predicative function (cf. Morpurgo-Tagliabue, 1967, p.62).

However, in order for the verb to carry out this function it must be attached to something else (that is, a noun); on its own, when its predicative function cannot be put into effect, it cannot affirm anything (*De Interpretatione*, 16 b, 19-25).

Aristotle demonstrates the impossibility for the verb on its own to affirm the existence of anything (that is, to make assertions) through the example of the verb "to be": not even the verb "to be", on its own, is able to state that something is. In this respect it is perhaps worth quoting Umberto Eco's comment on this situation:

(Aristotle's) line of thought is the following: a) outside the sentence, no verb can state that something really exists or actually does something; b) verbs can perform this function only in a completely assertive sentence; c) not even *to be* and *not to be*, uttered in isolation, assert the existence of something; d) however, when they are inserted into a sentence, they are signs . . . that the existence of something is asserted.

(Eco, 1984a, p.28)

## 5.2 THE THEORY OF THE SIGN

### 5.2.1 DEFINITION

For Aristotle, the theory of the sign is completely distinct from the theory of language and may be located rather at the point of intersection between logic and rhetoric. Signs are dealt with therefore both in *Prior Analytics* and *Rhetoric*.

The idea of the sign simultaneously has two fundamental aspects. First of all it has an epistemological and ontological interest in that it is an instrument of knowledge which serves to guide the attention of knowing subjects to operate the passage from one fact to another (cf. Todorov, 1977, p.19; Simone, 1969, p.91). Equally important, however, is the strictly logical nature of the sign, stemming from the fact that it has a formal mechanism which regulates its function.

The general definition of the sign (*sēmeion*) is given in *Prior Analytics* (II, 70 a, 7-9). There are many translations of this passage, but it would seem to me that the one which best identifies both the meaning and significance of Aristotle's passage is that made by Preti in 1956 (here translated from the Italian):

When, a thing being, is another thing, or when a thing becoming, becomes another thing before or after, *these latter things* are signs of becoming or being.<sup>9</sup>

I have italicized to call attention to the feature of Preti's version of this passage which distinguishes it from other versions and faithfully reproduces the very problematical and complex nature of Aristotle's definition which later developments in the theory of signs made in various schools of philosophical thought emphasized even more.

First of all it is worth pointing out that all the interpretations of this passage concur in stating that the idea of the sign proposed by Aristotle involves the setting up of a relationship of implication. The sign is seen as reflecting the implicative relationship "*p* implies *q*", an understanding of the sign which is, as we have seen, fairly common and which operated also in other fields apart from philosophy.

On closer examination, however, and even more so in this definition, the sign may be seen to coincide with one of the terms of implication. Preti's version suggests that the sign coincides with the *second* term of implication, and therefore Aristotle's definition should be read as saying that "*q* is the sign of *p*". If this is the case, the definition represents the sign relationship as "if *q*, then *p*", and leads, when applied to inferential arguments, to the inversion of "*p* implies *q*" to give "*q* implies *p*".

It is this aspect in particular which led to the problematic nature of the idea of the sign and which gave rise to a fierce and complex debate among the post-Aristotelian schools of philosophy, even though no later explicit reference was made to Aristotle.

This type of inversion also seems to be present at the basis of the requirement, in order for the sign to be valid, of a more rigid implication between *p* and *q* than that given by material implication, for example. It would seem that Aristotle's definition already requires the condition "if not-*q*, not-*p*" ("*q*, or not-*p*"), which is precisely the kind of rigid implication which the Stoics later considered necessary for the sign to be valid.

Apart from the difficulty outlined above, it cannot be denied that both in the definition of the sign and the entire treatment of the sign made by Aristotle, there is an underlying ambiguity in the way of conceiving the two terms of the implicative relationship. On the one hand, the two terms are *facts* (or *properties*) (it is by no means coincidental that one of the central words of the definition is *tò prâgma*—"fact"). Aristotle's examples indeed seem to be the expression of facts or properties, for example: "A woman may be shown to be pregnant by the fact that she has milk in her breasts", where the sign is "having milk".

On the other hand, the sign is conceived of as a proposition in that it can be the premiss on which a syllogism is developed: "A sign, however, means a demonstrative premiss which is necessary or based on opinion" (*Prior Analytics*, II, 70 a, 6-7). In fact, the definition of the sign as proposition, which can form the premiss in an inferential argument, is central in

Aristotle. The basic role which he attributes to the *sēmeîon* is that of being one of the elements which furnish premisses for the type of syllogism known as enthymeme.

### 5.2.2 ENTHYMEME AND SIGNS

There are two complementary aspects present in the concept of enthymeme, and indeed post-Aristotelian tradition has often developed each of these separately. First of all, the enthymeme can be considered to be a reduced syllogism, since one of its premisses is not stated because it is held to be well-known or obvious.<sup>10</sup> The second important aspect of the enthymeme is that it was considered to be a syllogism which tended towards persuasion rather than demonstration. As such, it was not necessary for its premisses to be true; it was sufficient for them to be merely probable (*hōs epì tò poly*). Aristotle explicitly develops the second aspect of the enthymeme in *Prior Analytics* (II, 70 a, 9-10) and in *Rhetoric* (I, 1357 a, 30-32).

The sign, therefore, has its principal application in the context of persuasive discourse, that is rhetoric, where, in the form of a proposition, it is involved in the mechanisms of the enthymeme in which it carries out the role of "protasis", or premiss. Here, however, we find a first distinction between the idea of *sēmeîon* and that of *eikós* ("likely" or "probable"); these two terms are linked by the fact that each can figure as a premiss in enthymemes. What distinguishes the idea of *eikós* is essentially its character of probability, which links it firmly to opinion, thereby removing it and isolating it to a particularly fragile area of knowledge, beyond the possibility of scientific proof.

### 5.2.3 INFERENCE FROM THE CONSEQUENT

The situation of the idea of *sēmeîon* is quite different and much more complicated, for *sēmeîon* is not a simple category but a composite class which covers types having very different characteristics one from another. Before looking at these internal differences, it is perhaps useful to point out that there is a unifying factor for the various types of sign in contrast to the idea of *eikós*. In the case of the sign, "following" rather than probability forms the center of interest. Inferential reasoning, when based on signs, typically proceeds *ek tōn hepoménōn*, "by what follows", that is, it tends to infer cause from effect. It is for this reason that both correct and misleading applications of this type of reasoning are possible.

Aristotle develops the theory of reasoning by what follows in the *Sophistici Elenchi* (167 b, 1-5). It can lead to misleading conclusions, as when someone, having observed once that the ground was wet after it had rained, concluded that in general, if the ground is wet, then it has rained. Another example involves properties rather than events, as in the rain example: if someone, having discovered that honey had the property of being yellow, concludes that you can know something is honey from its being

yellow; in this case there would be the risk of mistaking gall for honey (*ibid.*, 167 b, 6-8). Aristotle here decisively identifies this type of inference with the specific type of inference by signs: "In rhetorical discourse, in the same way, demonstrations taken from signs are based on what follows" (*ibid.*, 167 b, 8-9).

We can now go back to *Prior Analytics* and be in a better position to understand why Aristotle first of all proceeds to make a basic distinction between two types of sign: the *tekmērion*, a "necessary" or "irrefutable" sign,<sup>11</sup> and the general *sēmeion*, which has the opposite characteristics.

This distinction (which, as we shall see later, involves not merely two but three types of entity, for there are two types of not-necessary signs) in fact functions as an attempt on Aristotle's part to establish a typology of signs in order to establish the forms of the possible developments of the syllogism. There are three different ways that the syllogism can use the premiss which a sign expresses, each way corresponding to the possible position of the middle term in the different figures. In this way it is possible to have inferences which start from a sign in the first, second or third figure.

### 5.3 THE LOGICAL MECHANISM

#### 5.3.1 THE *TEKMÉRION* AS SIGN IN THE FIRST FIGURE OF THE SYLLOGISM

Before going into the technical details of this distinction, it is important to note that the epistemological value which Aristotle assigns to the sign appearing in the first figure of a syllogism (that is, the *tekmērion*) is very different from that assigned to signs in the second and third figures (that is, the generic *sēmeion*).

What happens in the two latter cases is that the typical illusion reported in the *Sophistici Elenchi* (167 b, 1-5) occurs. One believes that a possibility of conversion exists between the reason and the consequent, without this in fact being justified. In such cases, then, inference from consequences to causes is extremely hypothetical and dangerous.

In the first case, that of *tekmērion*, there is also a type of inference which begins with the consequence, as shown in the example "If a woman has milk in her breasts, then she is pregnant". Here "having milk" is both a consequence of being pregnant and a sign that a woman is pregnant. However, the important distinction here, with respect to the other two cases, is that there does indeed seem to be the possibility of conversion between cause and effect. Or rather, as Preti observes (1956, p.6), it seems that Aristotle is taking into account, in this case, a stricter type of implication than material implication.

Let us now look at how Aristotle develops the technical aspects of the three types of sign, beginning with the sign in the *first figure*:

For example, the proof that a woman is pregnant, because she has milk in her breasts, is by the first figure; for the middle term is "having milk". A stands for "being pregnant", B for "having milk", and C for "woman".

(*Prior Analytics*, II, 70 a, 12-16)<sup>12</sup>

If we translate Aristotle's reasoning into the standard illustrative scheme of the syllogism, we find:

- |    |                  |                  |                        |
|----|------------------|------------------|------------------------|
| 1. | A                | is predicated of | B                      |
|    | "being pregnant" |                  | "a woman who has milk" |
| 2. | B                | is predicated of | C                      |
|    | "having milk"    |                  | "a woman"              |
| 3. | A                | is predicated of | C                      |
|    | "being pregnant" |                  | "a woman"              |

In this example, the sign "having milk" is not only the middle term in the syllogism scheme as shown above, but it is also the intermediate term from the point of view of the extension of the syllogism. Thus the relationships between the terms of the syllogism can be expressed in a diagram (Figure 5.2).

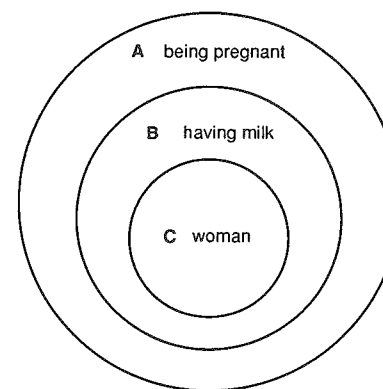


Figure 5.2

#### 5.3.2 THE SECOND AND THIRD FIGURES OF THE SYLLOGISM AND *SĒMEION*

In the second and third figures, the middle term constitutes the link which enables the inference, but it does not occupy the central position either in the formula or in the extension. This means that, as Allan has said, the label "major" or "minor" is arbitrary in the second or third figure since either of the two terms can be called major or minor (Allan, 1970, Chapt.10).

It is, however, quite certain that Aristotle adopts the point of view of