ARISTOTLE

# THE ORGANON

# The Organon

## ARISTOTLE

*The Organon, Aristotle*
*Jazzybee Verlag Jürgen Beck*
*86450 Altenmünster, Loschberg 9*
*Deutschland*

*Translator: Octavius Frere Owen*

*ISBN: 9783849648367*

*www.jazzybee-verlag.de*
*www.facebook.com/jazzybeeverlag*
*admin@jazzybee-verlag.de*

CONTENTS

## INTRODUCTORY.

The investigation of the science of Mind, especially as to its element, Thought, is of so interesting a character as in great measure to reconcile the inquirer to the abstruseness of formal reasoning. The beauty of the flower, whilst concealing the ruggedness, is apt to withdraw our attention from the utility, of the soil on which it grows; and thus in like manner the charms of Idealism, ending but too frequently in visionary speculation, have obstructed the clear appreciation of the design and use of Logic. Not that we deny the connexion which must ever subsist between Logic, as the science of the laws of reasoning, and psychology; indeed the latter is constantly introduced in several topics of the Organon; but if we would derive real practical benefit from logical study, we must regard it as enunciative of the universal principle of inference, affording a direct test for the detection of fallacy, and the establishment of true conclusion.

Wherefore, while primarily connected with the laws of Thought, Logic is secondarily and practically allied to language as enunciative of Thought. To enter into the mental processes incident thereto, though so tempting a theme as already to have seduced many from the direct

subject of the science, would far exceed the limits of this Introduction. We shall therefore content ourselves with a few observations upon the utility of the study connected with the Organon itself.

It is a quaint remark of Erasmus, that the human understanding, like a drunken clown lifted on horseback, falls over on the farther side the instant he is supported on the nearer; and this is the characteristic of human praise and censure. From an ignorant and exaggerated notion of its purport, Logic, instead of being limited to its proper sphere, was supposed commensurate with the whole investigation of abstract truth in relation to matter, cause, and entity,—in fact, the substance of a folio volume, describing every phase of human life, compressed into a few pages of Boethius and Aldrich. Thus, not having effected what nothing short of a miraculous expansion of the understanding could effect, it sunk into insignificance, until recently vindicated, and placed upon its proper footing, by Whately, Hansel, and others.

It is true that, whether viewed as an art or a science, Logic does not solve the origin of mental conception; but it furnishes the rules on which all reasoning is constructed; and it would be strange indeed if we refused the practical assistance of surgery because it does not exhibit in theory the operation of will upon matter. We may learn Logic and yet not be able to think; but the science cannot be blamed for the imperfection of the element worked upon, any more than the artificer for the inferiority of the only material within his reach. It is sufficient that Logic, without entering into all the phenomena of mind, provides certain forms which an argument, to be legitimate, must exhibit, certain tests by which fallacy may be detected, and certain barriers against ambiguity in the use of language.

Hence, the utility of a science which enables men to take cognizance of the travellers on the mind's highway, and excludes those disorderly interlopers verbal fallacies, needs

but small attestation. Its searching penetration by definition alone, before which even mathematical precision fails,[1] would especially commend it to those whom the abstruseness of the study does not terrify, and who recognise the valuable results which must attend discipline of mind. Like a medicine, though not a panacea for every ill, it has the health of the mind for its aim, but requires the determination of a powerful will to imbibe its nauseating yet wholesome influence: it is no wonder therefore that puny intellects, like weak stomachs, abhor and reject it. What florid declaimer can endure that the luxuriant boughs of verdant sophistry, the rich blossoms of oratorical fervour, should be lopped and pared by the stern axe of a syllogism, and the poor stripped trunk of worthless fallacy exposed unprotected to the nipping atmosphere of truth?

Like the science of which it treats, not only has the term "Logic" been variously applied,[2] but even the Organon, as a whole, presents no great claim to unity. The term is neither found, as belonging to an art or science, in Aristotle, nor does it occur in the writings of Plato, and the appellation "Organon," given to the treatises before us, has been attributed to the Peripatetics, who maintained against the Stoics that Logic was "an instrument" of Philosophy. The book, according to M. St. Hilaire, was not called "Organon" before the 15th century,[3] and the treatises were collected into one volume, as is supposed, about the time of Andronicus of Rhodes; it was translated into Latin by Boethius about the 6th century. That Aristotle did not compose the Organon as a whole, is evident from several portions having been severally regarded as logical, grammatical, and metaphysical, and even the Aristotelian names themselves, Analytic and Dialectic, are applicable only to certain portions of the Organon. Still the system is so far coherent in the immediate view taken of Logic, as conversant with language in the process of reasoning, that

any addition to the structure of the Stagirite can never augment the compactness with which the syllogism, as a foundation, is built. The treatises themselves are mentioned under distinct titles by their author, and subsequent commentators have discussed the work, not as a whole, but according to its several divisions. It is remarkable also, that no quotations from the Categories, de Interpretatione, or Sophistical Elenchi, are found in the extant writings of Aristotle, since those given by Ritter[4] of the first and last must be considered doubtful.

In the present Translation my utmost endeavour has been to represent the mind and meaning of the author as closely as the genius of the two languages admits. The benefit of the student has been my especial object; hence in the Analysis, the definitions are given in the very words of Aristotle, and the syllogistic examples, introduced by Taylor, have been carefully examined and corrected. In order also to interpret the more confused passages, I have departed somewhat from the usual plan, and in addition to foot-notes have affixed explanations in the margin, that the eye may catch, in the same line, the word and its import. Wherever further elucidation was necessary, I have referred to standard authorities, amongst whom I would gratefully commemorate the works of Mr. Mansel and Dr. Whately, not forgetting my solitary predecessor in this laborious undertaking, Thomas Taylor, whose strict integrity in endeavouring to give the meaning of the text deserves the highest commendation. For books placed at my disposal I have especially to express my sincere acknowledgments to the Rev. Dr. Hessey, Head Master of Merchant Tailors' School, and John Cuninghame, Esq. of Lainshaw.

By an alteration in the original plan, it has been found requisite, in order to equalize the size of the volumes, to

place Porphyry's Introduction at the close, instead of at the commencement, of the Organon.

O. F. O.

*Burstow, June* 23, 1853.

1. Prior Analyt. ii. 16.
2. Scotus super Univ. Qu. 3.
3. Cf. Waitz, vol. ii. p. 294.
4. Vol. iii. p. 28.

# Categories

## Chapter 1

Things are termed homonymous, of which the name alone is common, but the definition (of substance according to the name) is different; thus "man" and "the picture of a man" are each termed "animal," since of these, the name alone is common, but the definition (of the substance according to the name) is different: as if any one were to assign what was in either, to constitute it "animal," he would allege the peculiar definition of each. But those are called synonyms, of which both the name is common, and the definition (of the substance according to the name) is the same, as both "a man" and "an ox" are "animal," for each of these is predicated of as "animal" by a common name, and the definition of the substance is the same, since if a man gave the reason of each as to what was in either, to constitute it "animal," he would assign the same reason. Again, things are called paronyms which, though differing

in case, have their appellation (according to name) from some thing, as "a grammarian" is called so from "grammar," and "a courageous man" from "courage."

## Chapter 2

Of things discoursed upon, some are enunciated after a complex, others after an incomplex, manner; the complex as "a man runs," "a man conquers," but the incomplex as "man," "ox," "runs," "conquers." Likewise also some things are predicated of a certain subject, yet are in no subject, as "the man" is predicated of a subject, i. e. of "some certain man," yet is in no subject. Others, again, are in a subject, yet are not predicated of any subject, (I mean by a thing being in a subject, that which is in any thing not as a part, but which cannot subsist without that in which it is,) as "a certain grammatical art" is in a subject, "the soul," but is not predicated of any; and "this white thing" is in a subject, "the body," (for all "colour" is in "body,") but is predicated of no subject. But some things are both predicated of and are in a subject, as "science" is in a subject—"the soul," but is predicated of a subject, namely, "grammar." Lastly, some are neither in, nor are predicated of, any subject, as "a certain man" and "a certain horse," for nothing of this sort is either in, or individuals predicated of, a certain subject. In short, individuals, and whatever is one in number, are predicated of no subject, but nothing prevents some of them from being in a subject, for "a certain grammatical art" is amongst those things which are in a subject, but is not predicated of any subject.

## Chapter 3

When one thing is predicated of another, as of a subject, whatever things are said of the predicate, may be also said of the subject, as "the man" is predicated of "some certain

man," but "the animal" is predicated of "the man," wherefore "the animal" will be predicated of "some certain man," since "the certain man" is both "man" and "animal." The differences of different genera, and of things not arranged under each other, are diverse also in species, as of "animal" and "science". For the differences of "animal" are "quadruped," "biped," "winged," "aquatic," but none of these, forms the difference of "science," since "science," does not differ from "science," in being "biped." But as to subaltern genera, there is nothing to prevent the differences being the same, as the superior are predicated of the genera under them; so that as many differences as there are of the predicate, so many will there also be of the subject.

## Chapter 4

Of things incomplex enunciated, each signifies either Substance, or Quantity, or Quality, or Relation, or Where, or When, or Position, or Possession, or Action, or Passion. But Substance is, (to speak generally,) as "man," "horse;" Quantity, as "two" or "three cubits;" Quality, as "white," a "grammatical thing;" Relation, as "a double," "a half," "greater;" Where, as "in the Forum," "in the Lyceum;" When, as "yesterday," "last year;" Position, as "he reclines," "he sits;" Possession, as "he is shod," "he is armed;" Action, as "he cuts," "he burns;" Passion, as "he is cut," "he is burnt." Now each of the above, considered by itself, is predicated neither affirmatively nor negatively, but from the connexion of these with each other, affirmation or negation arises. For every affirmation or negation appears to be either true or false, but of things enunciated without any connexion, none is either true or false, as "man," "white," "runs," "conquers."

## Chapter 5

Substance, in its strictest, first, and chief sense, is that which is neither predicated of any subject, nor is in any; as "a certain man" or "a certain horse." But secondary substances are they, in which as species, those primarily-named substances are inherent, that is to say, both these and the genera of these species; as "a certain man" exists in "man," as in a species, but the genus of this species is "animal;" these, therefore, are termed secondary substances, as both "man" and "animal." But it is evident, from what has been said, that of those things which are predicated of a subject, both the name and the definition must be predicated of the subject, as "man" is predicated of "some certain man," as of a subject, and the name, at least, is predicated, for you will predicate "man" of "some certain man," and the definition of man will be predicated of "some certain man," for "a certain man" is both "man" and "animal;" wherefore both the name and the definition will be predicated of a subject. But of things which are in a subject for the most part, neither the name nor the definition is predicated of the subject, yet with some, there is nothing to prevent the name from being sometimes predicated of the subject, though the definition cannot be so; as "whiteness" being in a body, as in a subject, is predicated of the subject, (for the body is termed "white,") but the definition of "whiteness" can never be predicated of body. All other things, however, are either predicated of primary substances, as of subjects, or are inherent in them as in subjects; this, indeed, is evident, from several obvious instances, thus "animal" is predicated of "man," and therefore is also predicated of some "certain man," for if it were predicated of no "man" particularly, neither could it be of "man" universally. Again, "colour" is in "body," therefore also is it in "some certain body," for if it were not

in "some one" of bodies singularly, it could not be in "body" universally; so that all other things are either predicated of primary substances as of subjects, or are inherent in them as in subjects; if therefore the primal substances do not exist, it is impossible that any one of the rest should exist.

But of secondary substances, species is more substance than genus; for it is nearer to the primary substance, and if any one explain what the primary substance is, he will explain it more clearly and appropriately by giving the species, rather than the genus; as a person defining "a certain man" would do so more clearly, by giving "man" than "animal," for the former is more the peculiarity of "a certain man," but the latter is more common. In like manner, whoever explains what "a certain tree" is, will define it in a more known and appropriate manner, by introducing "tree" than "plant." Besides the primary substances, because of their predicates; subjection to all other things, and these last being either predicated of them, or being in them, are for this reason, especially, termed substances. Yet the same relation as the primary substances bear to all other things, does species bear to genus, for species is subjected to genus since genera are predicated of species, but species are not reciprocally predicated of genera, whence the species is rather substance than the genus.

Of species themselves, however, as many as are not genera, are not more substance, one than another, for he will not give a more appropriate definition of "a certain man," who introduces "man," than he who introduces "horse," into the definition of "a certain horse:" in like manner of primary substances, one is not more substance than another, for "a certain man" is not more substance than a "certain ox." With reason therefore, after the first substances, of the rest, species and genera alone are termed secondary substances, since they alone declare the primary substances of the predicates; thus, if any one were

to define what "a certain man" is, he would, by giving the species or the genus, define it appropriately, and will do so more clearly by introducing "man" than "animal;" but whatever else he may introduce, he will be introducing, in a manner, foreign to the purpose, as if he were to introduce "white," or "runs," or any thing else of the kind, so that with propriety of the others, these alone are termed substances. Moreover, the primary substances, because they are subject to all the rest, and all the others are predicated of, or exist in, these, are most properly termed substances, but the same relation which the primary substances bear to all other things, do the species and genera of the first substances bear to all the rest, since of these, are all the rest predicated, for you will say that "a certain man" is "a grammarian," and therefore you will call both "man" and "animal" "a grammarian," and in like manner of the rest.

It is common however to every substance, not to be in a subject, for neither is the primal substance in a subject, nor is it predicated of any; but of the secondary substances, that none of them is in a subject, is evident from this; "man" is predicated of "some certain" subject "man," but is not in a subject, for "man" is not in "a certain man." So also "animal" is predicated of "some certain" subject "man," but "animal" is not in "a certain man." Moreover of those which are, in the subject, nothing prevents the name from being sometimes predicated of the subject, but that the definition should be predicated of it, is impossible. Of secondary substances however the definition and the name are both predicated of the subject, for you will predicate the definition of "a man" concerning "a certain man," and likewise the definition of "animal," so that substance, may not be amongst the number, of those things which are in a subject.

This however is not the peculiarity of substance, but difference also is of the number of those things not in a subject; for "pedestrian" and "biped" are indeed predicated

of "a man" as of a subject, but are not in a subject, for neither "biped" nor "pedestrian" is in "man." The definition also of difference is predicated of that, concerning which, difference is predicated, so that if "pedestrian" be predicated of "man," the definition also of "pedestrian" will be predicated of man, for "man" is "pedestrian." Nor let the parts of substances, being in wholes as in subjects, perplex us, so that we should at any time be compelled to say, that they are not substances; for in this manner, things would not be said to be in a subject, which are in any as parts. It happens indeed both to substances and to differences alike, that all things should be predicated of them univocally, for all the categories from them are predicated either in respect of individuals or of species, since from the primary substance there is no category, for it is predicated in respect of no subject. But of secondary substances, species indeed is predicated in respect of the individual, but genus in respect to species and to individuals, so also differences are predicated as to species and as to individuals. Again, the primary substances take the definition of species and of genera, and the species the definition of the genus, for as many things as are said of the predicate, so many also will be said of the subject, likewise both the species and the individuals accept the definition of the differences: those things at least were univocal, of which the name is common and the definition the same, so that all which arise from substances and differences are predicated univocally.

Nevertheless every substance appears to signify this particular thing: as regards then the primary substances, it is unquestionably true that they signify a particular thing, for what is signified is individual, and one in number, but as regards the secondary substances, it appears in like manner that they signify this particular thing, by the figure of appellation, when any one says "man" or "animal," yet it is not truly so, but rather they signify a certain quality, for the subject is not one, as the primary substance, but "man"

and "animal" are predicated in respect of many. Neither do they signify simply a certain quality, as "white," for "white" signifies nothing else but a thing of a certain quality, but the species and the genus determine the quality, about the substance, for they signify what quality a certain substance possesses: still a wider limit is made by genus than by species, for whoever speaks of "animal," comprehends more than he who speaks of "man."

It belongs also to substances that there is no contrary to them, since what can be contrary to the primary substance, as to a certain "man," or to a certain "animal," for there is nothing contrary either at least to "man" or to "animal?" Now this is not the peculiarity of substance, but of many other things, as for instance of quantity; for there is no contrary to "two" cubits nor to "three" cubits, nor to "ten," nor to any thing of the kind, unless some one should say that "much" is contrary to "little," or "the great" to "the small;" but of definite quantities, none is contrary to the other. Substance, also, appears not to receive greater or less; I mean, not that one substance is not, more or less, substance, than another, for it has been already said that it is, but that every substance is not said to be more or less, that very thing, that it is; as if the same substance be "man" he will not be more or less "man;" neither himself than himself, nor another "man" than another, for one "man" is not more "man" than another, as one "white thing" is more and less "white" than another, and one "beautiful" thing more and less "beautiful" than another, and "the same thing" more or less than "itself;" so a body being "white," is said to be more "white" now, than it was before, and if "warm" is said to be more or less "warm." Substance at least is not termed more or less substance, since "man" is not said to be more "man" now, than before, nor any one of such other things as are substances: hence substance is not capable of receiving the greater and the less.

It appears however, to be especially the peculiarity of substance, that being one and the same in number, it can receive contraries, which no one can affirm of the rest which are not substances, as that being one in number, they are capable of contraries. Thus "colour," which is one and the same in number, is not "white" and "black," neither the same action, also one in number, both bad and good; in like manner of other things as many as are not substances. But substance being one, and the same in number, can receive contraries, as "a certain man" being one and the same, is at one time, white, and at another, black, and warm and cold, and bad and good. In respect of none of the rest does such a thing appear, except some one should object, by saying, that a sentence and opinion are capable of receiving contraries, for the same sentence appears to be true and false; thus if the statement be true that "some one sits," when he stands up, this very same statement will be false. And in a similar manner in the matter of opinion, for if any one should truly opine that a certain person sits, when he rises up he will opine falsely, if he still holds the same opinion about him. Still, if any one, should even admit this, yet there is a difference in the mode. For some things in substances, being themselves changed, are capable of contraries, since cold, being made so, from hot, has changed, for it is changed in quality, and black from white, and good from bad: in like manner as to other things, each one of them receiving change is capable of contraries. The sentence indeed and the opinion remain themselves altogether immovable, but the thing being moved, a contrary is produced about them; the sentence indeed remains the same, that "some one sits," but the thing being moved, it becomes at one time, true, and at another, false. Likewise as to opinion, so that in this way, it will be the peculiarity of substance, to receive contraries according to the change in itself, but if any one admitted this, that a sentence and opinion can receive contraries, this would not

be true. For the sentence and the opinion are not said to be capable of contraries in that they have received any thing, but, in that about something else, a passive quality has been produced, for in that a thing is, or is not, in this, is the sentence said to be true, or false, not in that itself, is capable of contraries. In short, neither is a sentence nor an opinion moved by any thing, whence they cannot be capable of contraries, no passive quality being in them; substance at least, from the fact of itself receiving contraries, is said in this to be capable of contraries, for it receives disease and health, whiteness and blackness, and so long as it receives each of these, it is said to be capable of receiving contraries. Wherefore it will be the peculiarity of substance, that being the same, and one in number, according to change in itself, it is capable of receiving contraries; and concerning substance this may suffice.

## Chapter 6

Of Quantity, one kind is discrete, and another continuous; the one consists of parts, holding position with respect to each other, but the other of parts, which have not that position. Discrete quantity is, as number and sentence, but continuous, as line, superficies, body, besides place and time. For, of the parts of number, there is no common term, by which its parts conjoin, as if five be a part of ten, five and five, conjoin at no common boundary, but are separated. Three, and seven, also conjoin at no common boundary, nor can you at all take a common limit of parts, in number, but they are always separated, whence number is of those things which are discrete. In like manner a sentence, for that a sentence is quantity is evident, since it is measured by a short and long syllable; but I mean a sentence produced by the voice, as its parts concur at no common limit, for there is no common limit, at which the syllables concur, but each is distinct by itself. A line, on the

contrary, is continuous, for you may take a common term, at which its parts meet, namely, a point, and of a superficies, a line, for the parts of a superficies coalesce in a certain common term. So also you can take a common term in respect of body, namely, a line, or a superficies, by which the parts of body are joined. Of the same sort are time and place, for the present time is joined both to the past and to the future. Again, place is of the number of continuous things, for the parts of a body occupy a certain place, which parts join at a certain common boundary, wherefore also the parts of place, which each part of the body occupies, join at the same boundary as the parts of the body, so that place will also be continuous, since its parts join at one common boundary.

Moreover, some things consist of parts, having position with respect to each other, but others of parts not having such position; thus the parts of a line have relative position, for each of them lies some where, and you can distinguish, and set out, where each lies, in a superficies, and to which part of the rest, it is joined. So also the parts of a superficies, have a certain position, for it may be in like manner pointed out where each lies, and what have relation to each other, and the parts of a solid, and of a place, in like manner. On the contrary, in respect of number, it is impossible for any one to show that its parts have any relative position, or that they are situated any where, or which of the parts are joined to each other. Nor as regards parts of time, for not one of the parts of time endures, but that which does not endure, how can it have any position? you would rather say, that they have a certain order, inasmuch as one part of time is former, but another latter. In the same manner is it with number, because one, is reckoned before two, and two, before three, and so it may have a certain order, but you can, by no means, assume, that it has position. A speech likewise, for none of its parts endures, but it has been spoken, and it is no

longer possible to bring back what is spoken, so that there can be no position of its parts, since not one endures: some things therefore consist of parts having position, but others of those which have not position. What we have enumerated are alone properly termed quantities; all the rest being so denominated by accident, for looking to these, we call other things quantities, as whiteness is said to be much, because the superficies is great, and an action long, because its time being long, and motion also, is termed, much. Yet each of these is not called a quantity by itself, for if a man should explain the quantity of an action, he will define it by time, describing it as yearly, or something of the sort; and if he were to explain the quantity of whiteness, he will define it by the superficies, for as the quantity of the superficies, so he would say is the quantity of the whiteness; whence the particulars we have mentioned are alone properly of themselves termed quantities, none of the rest being so of itself, but according to accident. Again, nothing is contrary to quantity, for in the definite it is clear there is nothing contrary, as to "two cubits" or to "three," or to "superficies," or to any thing of this kind, for there is no contrary to them; except indeed a man should allege that "much" was contrary to "little," or the "great" to the "small." Of these however, none is a quantity, but rather belongs to relatives, since nothing, itself by itself, is described as great or small, but from its being referred to something else. A mountain, for instance, is called "little," but a millet seed "large," from the fact of the one being greater, but the other less, in respect of things of the same nature, whence the relation is to something else, since if each were called "small" or "great" of itself, the mountain would never have been called "small," nor the seed "large." We say also that there are "many" men in a village, but "few" at Athens, although these last are more numerous, and "many" in a house, but "few" in a theatre, although there is a much larger number

in the latter. Besides, "two cubits," "three," and every thing of the kind signify quantity, but "great" or "small" does not signify quantity, but rather relation, for the "great" and "small" are viewed in reference to something else, so as evidently to appear relatives. Whether however any one does, or does not, admit such things to be quantities, still there is no contrary to them, for to that which cannot of itself be assumed, but is referred to another, how can there be a contrary? Yet more, if "great" and "small" be contraries, it will happen, that the same thing, at the same time, receives contraries, and that the same things are contrary to themselves, for it happens that the same thing at the same time is both "great" and "small." Something in respect of this thing is "small," but the same, in reference to another, is "large," so that the same thing happens at the same time to be both "great" and "small," by which at the same moment it receives contraries. Nothing however appears to receive contraries simultaneously, as in the case of substance, for this indeed seems capable of contraries, yet no one is at the same time "sick" and "healthy," nor a thing "white" and "black" together, neither does any thing else receive contraries at one and the same time. It happens also, that the same things are contrary to themselves, since if the "great" be opposed to the "small," but the same thing at the same time be great and small, the same thing would be contrary to itself, but it is amongst the number of impossibilities, that the same thing should be contrary to itself, wherefore the great is not contrary to the small, nor the many to the few, so that even if some one should say that these do not belong to relatives, but to quantity, still they will have no contrary.

The contrariety however of quantity seems especially to subsist about place, since men admit "upward" to be contrary to "downward," calling the place toward the middle "downward," because there is the greatest distance from the middle, to the extremities of the world; they

appear also to deduce the definition of the other contraries from these, for they define contraries to be those things which, being of the same genus, are most distant from each other.

Nevertheless quantity does not appear capable of the greater and the less, as for instance "two cubits," for one thing is not more "two cubits" than another; neither in the case of number, since "three" or "five" are not said to be more than "three" or "five," neither "five" more "five" than "three" "three;" one time also is not said to be more "time" than another; in short, of none that I have mentioned is there said to be a greater or a less, wherefore quantity is not capable of the greater and less.

Still it is the especial peculiarity of quantity to be called "equal" and "unequal," for each of the above-mentioned quantities is said to be "equal" and "unequal," thus body is called "equal" and "unequal," and number, and time, are predicated of as "equal" and "unequal;" likewise in the case of the rest enumerated, each one is denominated "equal" and "unequal." Of the remainder, on the contrary, such as are not quantities, do not altogether appear to be called "equal" and "unequal," as for instance, disposition is not termed entirely "equal" and "unequal," but rather "similar" and "dissimilar;" and whiteness is not altogether "equal" and "unequal," but rather "similar" and "dissimilar;" hence the peculiarity of quantity will especially consist in its being termed "equal" and "unequal."

## Chapter 7

Such things are termed "relatives," which are said to be what they are, from belonging to other things, or in whatever other way they may be referred to something else; thus "the greater" is said to be what it is in reference

to another thing, for it is called greater than something; and "the double" is called what it is in reference to something else, for it is said to be double a certain thing; and similarly as to other things of this kind. Such as these are of the number of relatives, as habit, disposition, sense, knowledge, position, for all these specified are said to be what they are, from belonging to others, or however else they are referrible to another, and they are nothing else; for habit is said to be the habit of some one, knowledge the knowledge of something, position the position of somewhat, and so the rest. Relatives, therefore, are such things, as are said to be what they are, from belonging to others, or which may somehow be referred to another; as a mountain is called "great" in comparison with another, for the mountain is called "great" in relation to something, and "like" is said to be like somewhat, and other things of this sort, are similarly spoken of, in relation to something. Reclining, station, sitting, are nevertheless certain positions, and position is a relative; but to recline, to stand, or to sit, are not themselves positions, but are paronymously denominated from the above-named positions.

Yet there is contrariety in relatives, as virtue is contrary to vice, each of them being relative, and knowledge to ignorance; but contrariety is not inherent in all relatives, since there is nothing contrary to double, nor to triple, nor to any thing of the sort.

Relatives appear, notwithstanding, to receive the more and the less, for the like and the unlike are said to be so, more and less, and the equal and the unequal are so called, more and less, each of them being a relative, for the similar is said to be similar to something, and the unequal, unequal to something. Not that all relatives admit of the more and less, for double is not called more and less double, nor any such thing, but all relatives are styled so by reciprocity, as the servant is said to be servant of the master, and the

master, master of the servant; and the double, double of the half, also the half, half of the double, and the greater, greater than the less, and the less, less than the greater. In like manner it happens as to other things, except that sometimes they differ in diction by case, as knowledge is said to be the knowledge of something knowable, and what is knowable is knowable by knowledge: sense also is the sense of the sensible, and the sensible is sensible by sense. Sometimes indeed they appear not to reciprocate, if that be not appropriately attributed to which relation is made, but here he who attributes errs; for instance, a wing of a bird, if it be attributed to the bird, does not reciprocate, for the first is not appropriately attributed, namely "wing" to "bird," since "wing" is not predicated of it so far as it is "bird," but so far as it is "winged," as there are wings of many other things which are not birds, so that if it were appropriately attributed, it would also reciprocate; as "wing" is the wing of "a winged creature," and "the winged creature" is "winged" by the "wing." It is sometimes necessary perhaps even to invent a name, if there be none at hand, for that to which it may be properly applied: e. g. if a rudder be attributed to a ship, it is not properly so attributed, for a rudder is not predicated of a ship so far as it is "ship," since there are ships without rudders; hence they do not reciprocate, inasmuch as a ship is not said to be the ship of a rudder. The attribution will perhaps be more appropriate, if it were attributed thus, a rudder is the rudder of something ruddered, or in some other way, since a name is not assigned; a reciprocity also occurs, if it is appropriately attributed, for what is ruddered is ruddered by a rudder. So also in other things; the head, for example, will be more appropriately attributed to something headed, than to animal, for a thing has not a head, so far as it is an animal, since there are many animals which have not a head.

Thus any one may easily assume those things to which names are not given, if from those which are first, he assigns names to those others also, with which they reciprocate, as in the cases adduced, "winged" from "wing," and "ruddered" from "rudder." All relatives therefore, if they be properly attributed, are referred to reciprocals, since if they are referred to something casual, and not to that to which they relate, they will not reciprocate. I mean, that neither will any one of those things which are admitted to be referrible to reciprocals, reciprocate, even though names be assigned to them, if the thing be attributed to something accidental, and not to that to which it has relation: for example, a servant, if he be not attributed as the servant of a master, but of a man, of a biped, or any thing else of the kind, will not reciprocate, for the attribution is not appropriate. If however that, to which something is referred, be appropriately attributed, every thing else accidental being taken away, and this thing alone being left, to which it is appropriately attributed, it may always be referred to it, as "a servant," if he is referred to "a master," every thing else accidental to the master being left out of the question, (as the being "a biped," and "capable of knowledge," and that he is "a man,") and his being "a master" alone, left, here the "servant" will always be referred to him, for a "servant" is said to be the servant of a "master." If again, on the other hand, that to which it is at any time referred is not appropriately attributed, other things being taken away, and that alone left, to which it is attributed, in this case it will not be referred to it. For let a "servant" be referred to "man," and a "wing" to "bird," and let the being "a master" be taken away from "man," the servant will no longer refer to man, since "master" not existing, neither does "servant" exist. So also let "being winged" be taken away from "bird," and "wing" will no longer be amongst relatives, for what is "winged" not existing, neither will "wing" be the wing of any thing.

Hence it is necessary to attribute that, to which a thing is appropriately referred, and if indeed a name be already given to it, the application is easy; but if no name be assigned, it is perhaps necessary to invent one; but being thus attributed, it is clear that all relatives are referred to reciprocals.

Naturally, relatives appear simultaneous, and this is true of the generality of them, for "double" and "half" are simultaneous, and "half" existing, "double" exists, and "a master" existing, the "servant" is, and the "servant" existing, the "master" is, and other things are also like these. These also are mutually subversive, for if there is no "double" there is no "half," and no "half" there is no "double"; likewise as to other things of the same kind. It does not however appear to be true of all relatives, that they are by nature simultaneous, for the object of "science" may appear to be prior to "science," since for the most part we derive science from things pre-existing, as in few things, if even in any, do we see science and its object originating together. Moreover, the object of science being subverted, co-subverts the science, but science being subverted, does not co-subvert the object of science, for there being no object of science, science itself becomes non-existent, (since there will be no longer a science of any thing); but on the contrary, though science does not exist, there is nothing to prevent the object of science existing. Thus the quadrature of the circle, if it be an object of scientific knowledge, the science of it does not yet exist, though it is itself an object of science: again, "animal" being taken away, there will not be "science," but still it is possible for many objects of science to be. Likewise also do things pertaining to sense subsist, since the sensible seems to be prior to the sense, as the sensible being subverted co-subverts sense, but sense does not co-subvert the sensible. For the senses are conversant with body, and are in body, but the sensible being subverted, body also is subverted,

(since body is of the number of sensibles,) and body not existing, sense also is subverted, so that the sensible co-subverts sense. Sense on the other hand does not co-subvert the sensible, since if animal were subverted, sense indeed would be subverted, but yet the sensible will remain; such for instance as "body," "warm," "sweet," "bitter," and every thing else which is sensible. Besides, "sense" is produced simultaneously with what is "sensitive," for at one and the same time "animal" and "sense" are produced, but the "sensible" is prior in existence to "animal" or "sense," for fire and water, and such things as animal consists of, are altogether prior to the existence of animal or sense, so that the sensible will appear to be antecedent to sense.

It is doubtful however whether no substance is among the number of relatives, as seems to be the case, or whether this happens in certain second substances; for it is true in first substances, since neither the wholes, nor the parts, of first substances are relative. "A certain man" is not said to be a certain man of something, nor "a certain ox" said to be a certain ox of something; and so also with respect to the parts, for a "certain hand" is not said to be *a certain* hand of some one, but *the* hand of some one; and some head is not said to be *a certain* head of some one, but *the* head of some one, and in most secondary substances the like occurs. Thus man is not said to be the man of some one, nor an ox the ox of some one, nor the wood the wood of some one, but they are said to be the possession of some one; in such things therefore, it is evident, that they are not included amongst relatives. In the case of some secondary substances there is a doubt, as "head," is said to be the head of some one, and "hand," the hand of some one, and in like manner, every such thing, so that these may appear amongst the number of relatives. If then the definition of relatives has been sufficiently framed, it is either a matter of difficulty, or of impossibility, to show that no substance is

relative; but if the definition has not been sufficiently framed, but those things are relatives, whose substance is the same, as consists with a relation, after a certain manner, to a certain thing; somewhat, perhaps, in reply to this, may be stated. The former definition, however, concurs with all relatives, yet it is not the same thing, that their being, consists in relation, and that being what they are, they are predicated of other things. Hence it is clear, that he who knows any one relative, definitely, will also know what it is referred to, definitely. Wherefore also from this it is apparent, that if one knows this particular thing to be among relatives, and if the substance of relatives is the same, as subsisting in a certain manner, with reference to something, he will also know that, with reference to which, this particular thing, after a certain manner, subsists; for if, in short, he were ignorant of that, with reference to which, this particular thing, after a certain manner, subsists, neither would he know, whether it subsists, after a certain manner, with reference to something. And in singulars, indeed, this is evident; for if any one knows definitely, that this thing is "double," he will also forthwith know that, definitely, of which it is the double, since if he knows not that it is the double, of something definite, neither will he know that it is "double," at all. So again, if a man knows this thing, to be more beautiful than something else, he must straightway and definitely know that, than which, it is more beautiful. Wherefore, he will not indefinitely know, that this, is better, than that which is worse, for such is opinion and not science, since he will not accurately know that it is better than something worse, as it may so happen that there is nothing worse than it, whence it is necessarily evident, that whoever definitely knows any relative, also definitely knows that, to which it is referred. It is possible, notwithstanding, to know definitely what the head, and the hand, and every thing of the sort are, which are substances; but it is not necessary to know that to which

they are referred, since it is not necessary definitely to know whose, is the head, or whose, is the hand; thus these will not be relatives, but if these be not relatives, we may truly affirm no substance to be among relatives. It is, perhaps, difficult for a man to assert assuredly any thing of such matters, who has not frequently considered them, yet to have submitted each of them to inquiry, is not without its use.

## Chapter 8

By quality, I mean that, according to which, certain things, are said to be, what they are. Quality, however, is among those things which are predicated multifariously; hence one species of quality is called "habit" and "disposition," but habit, differs from disposition, in that it is a thing more lasting and stable. Of this kind too, are both the sciences and the virtues, for science appears to rank among those things, which continue more stable, and are hardly removed, even when science is but moderately attained, unless some great change should occur from disease, or from something of the sort; so also virtue, as justice, temperance, and so forth, does not appear capable of being moved or changed with facility. But those are termed dispositions, which are easily moved and quickly changed, as heat, cold, disease, health, and such things; or a man is disposed, after a manner, according to these, but is rapidly changed, from hot becoming cold, and from health passing to disease, and in like manner as to other things, unless some one of these qualities has, from length of time, become natural, immovable, or at least difficult to be moved, in which case we may term it a habit. But it is evident that those ought to be called habits, which are more lasting, and are with greater difficulty removed, for those persons who do not very much retain the dogmas of science, but are easily moved, are said not to possess a

scientific habit, although they are in some manner disposed as to science, either worse or better; so that habit differs from disposition in the one being easily removed, but the former is more lasting, and less easily removed. Habits are dispositions also, but dispositions not necessarily habits, for those who have habits are also, after a manner, disposed according to them, but those who are disposed are not altogether possessed of the habit.

Another kind of quality is, that, according to which, we say that men are prone to pugilism, or to the course, or to health, or to disease, in short, whatever things are spoken of according to natural power, or weakness; for each of these is not denominated from being disposed after a certain manner, but from having a natural power or inability of doing something easily, or of not suffering; thus, men are called pugilistic, or fitted for the course, not from being disposed after a certain manner, but from possessing a natural power of doing something easily. Again, they are said to be healthy, from possessing a natural power of not suffering easily from accidents, but to be diseased, from possessing a natural incapacity to resist suffering easily from accidents: similarly to these, do hard and soft subsist, for that is called "hard" which possesses the power of not being easily divided, but "soft," that which has an impotence as to this same thing.

The third kind of quality consists of passive qualities and passions, and such are sweetness, bitterness, sourness, and all their affinities, besides warmth, and coldness, and whiteness, and blackness. Now that these are qualities, is evident from their recipients being called from them, "qualia," as honey from receiving sweetness, is said to be sweet, and the body white, from receiving whiteness; in like manner in other things. They are called passive qualities, not from the recipients of the qualities suffering any thing, for neither is honey said to be sweet from suffering any thing, nor any thing else of such a kind. In

like manner to these are heat and cold called passive qualities, not from the recipients themselves suffering any thing, but because each of the above-mentioned qualities produces passion in the senses, they are denominated passive qualities; for as sweetness, produces a certain passion in the taste, and warmth, in the touch, so also do the rest. Whiteness, and blackness, and other colours are, on the contrary, not called passive qualities in the same manner with the above-mentioned, but from themselves being produced from passion; for that many changes of colours spring from passion is evident, since when a man blushes he becomes red, and when frightened, pale, and so every thing of this sort. Whence also if a man naturally suffers a passion of this nature, he will probably have a similar colour, since the disposition which is now produced about the body when he blushes, may also be produced in the natural constitution, so as that a similar colour should naturally arise. Whatever such symptoms then originate from certain passions difficult to be removed and permanent are called passive qualities. For whether in the natural constitution, paleness, or blackness, be produced, they are called qualities, (for according to them we are called "quales;") or whether through long disease or heat, or any such thing, paleness or blackness happens, neither are easily removed, or even remain through life, these are called qualities, for in like manner, we are called "quales" in respect of them. Notwithstanding, such as are produced from things easily dissolved, and quickly restored, are called passions, and not qualities, for men are not called "quales" in respect of them, since neither is he who blushes, in consequence of being ashamed, called red, nor he who turns pale, from fear, called pale, they are rather said to have suffered something, so that such things are called passions, but not qualities. Like these also are passive qualities, and passions denominated in the soul. For such things as supervene immediately upon birth from

certain passions difficult of removal, are called qualities; as insanity, anger, and such things, for men according to these are said to be "quales," that is, wrathful and insane. So also as many other mutations as are not natural, but arise from certain other symptoms, and are with difficulty removed, or even altogether immovable, such are qualities, for men are called "quales" in respect of them. Those which, on the other hand, arise from things easily and rapidly restored, are called passions, as for instance, where one being vexed becomes more wrathful, for he is not called wrathful who is more wrathful in a passion of this kind, but rather he is said to have suffered something, whence such things are called passions, but not qualities.

The fourth kind of quality is figure and the form, which is about every thing, besides rectitude and curvature, and whatever is like them, for according to each of these a thing is called "quale." Thus a triangle or a square is said to be a thing of a certain quality, also a straight line or a curve, and every thing is said to be "quale" according to form. The rare and the dense, the rough and the smooth, may appear to signify a certain quality, but probably these are foreign from the division of quality, as each appears rather to denote a certain position of parts. For a thing is said to be "dense," from having its parts near each other, but "rare," from their being distant from each other, and "smooth," from its parts lying in some respect in a right line, but "rough," from this part, rising, and the other, falling.

There may perhaps appear to be some other mode of quality, but those we have enumerated are most commonly called so.

The above-named therefore are qualities, but "qualia" are things denominated paronymously according to them, or in some other manner from them; most indeed and nearly all of them are called paronymously, as "a white man" from "whiteness," "a grammarian" from "grammar," a "just man"