# THE CATEGORIES

O F

A R I S T O T L E.

## INTRODUCTION.

THE design of Aristotle's Categories, says Simplicius, appears to have been a subject of doubt to many of his interpreters. For that he speaks about ten certain simple things, which they call the most universal genera is evident. Some however say that these are words; that the intention of Aristotle is to speak of simple terms; and that this treatise is the first part of logic. Hence, say they, as the treatise immediately subsequent to this, On Propositions, is concerning composite words, and not concerning things, thus also the present treatise, since it is concerning the parts of a proposition, will consist in the discussion of words. Others however refute this opinion. For say they, it is not the business of a philosopher to make words the subject of his contemplation, but rather of a grammarian who considers the passive qualities, formations, properties, and formulæ of words. Hence they assert that the intention of Aristotle in this treatise is to discuss things which are signified by words. In opposition to this opinion however, it must be observed, that this treatise is a part of logic, and that to consider beings so far as they are beings belongs to metaphysics, and is entirely the province of the first philosophy. Again, others assert that Aristotle's design, is neither to discuss significant words, nor things signified, but simple conceptions, because he here speaks of ten genera; and since these are of posterior origin, and are the conceptions of the mind, he may be very properly said to make conceptions the subject of discus-In opposition to this opinion however, it is necessary to consider, that to speak of conceptions, so far as conceptions are the progeny

of the mind, does not pertain to logic, but to a treatise on the soul. Each of these opinions therefore, imperfectly presents us with the intention of Aristotle.

Since all these opinions therefore are erroneous, let us in the next place direct our attention to those who have more accurately and perfectly developed the design of Aristotle. Among these, in the first place, we may rank Alexander Aphrodisiensis, who says that this book is the beginning of the logical treatise, because the first parts of speech are significant, and there are certain things which are signified by the first and simple parts of speech. He adds, because Aristotle therefore was willing to indicate and unfold conceptions, he divides being, not into particulars, because these cannot be comprehended or known on account of their multitude, and various mutation, but into these ten supreme genera, which he calls indeed Categories, as being most general, and subject to nothing, but predicated of other things. Hence, says he, the intention of Aristotle, is to speak of the simple, and most general parts of speech, which signify simple things, and simple conceptions of simple things. Of the same opinion also was Alexander Ægeus. But Porphyry in the Commentary to his disciple Gedalius, and in his brief explanation of the Categories by way of question and answer, says, that Aristotle's intention is concerning things which are predicated, and these are simple words significant of things, so far as they are significant, but not so far as they are simple terms. For a word so far as it is significant is determined and defined by the genera of things. And a word indeed is called a predicament, because it is predicated of a thing, and a thing is promulgated, or that is asserted of which the predication is made. Since therefore, a predicament is either of a thing together with the word signifying the thing, or is significative, predication indeed, so far as it is significant, contains both words and things; and since particulars are infinite and incomprehensible, Aristotle has reduced their infinity to tengenera, collecting all essences into one supreme essence, of which the term essence is significant; for it signifies either the essence which is in things, or that subsistence which has its being in intellect.

For as to predication there is no difference between these, since things are not signified by predication or predicament, so far as they subsist, but so far as they are conceived by the mind, whether they really exist, or are considered as existing. After the same manner also particular quantities when they are reduced to one most general quantity, form another category, that of quantity, which is predicated of a supreme thing quantity. And in a similar manner with respect to quality, and the other categories. Afterwards Porphyry adds the words of Boethus\* which are replete with much sagacity, and have the same tendency with what Porphyry himself asserts. For Boethus also says, that the division of speech into its elements is made according to noun and verb, but the division of it according to predicaments is made, so far as words have a certain habitude and relation to the things of which they are significant. Hence, he adds, conjunctions cannot become the subject of predication, because they do not signify any thing which exists; since they neither denote substance, nor quality, nor any thing else of this kind.

From what has been said therefore, it appears that according to these philosophers, the intention of Aristotle in the categories, is neither to speak of mere words, nor of things so far as they are things, nor of conceptions alone, but of simple terms, so far as they are significant of primary and simple things. It is evident, however, that since Aristotle here treats of words so far as they are significant, it is also necessary to connect the things signified, and the conceptions which are formed through the significations. Hence he teaches us the signification of each of the terms, and definitely considers things themselves according to each predicament. But he does not here treat of significative words which are entirely separated from the nature of things, nor of things which are separated and foreign from these appellations which are adapted to signify them, nor of conceptions which are beyond the nature of things. In intellect indeed things themselves, which are the ob-

<sup>\*</sup> The reader must be careful not to confound this Boethus, who was a celebrated Grecian Peripatetic, with Boethius the Roman, author of the Consolation of Philosophy, and other works.

jects of intelligence and knowledge, are the same with the conceptions of them, on account of the indivisible union between intelligibles and intellect. And the soul indeed when she is converted to intellect possesses this union of conceptions and the things conceived in a secondary degree, since she contains in herself not only gnostic reasons, but also those reasons by which she is able to generate and produce. But when she departs from this union with intellect, and separates the reasons of things in herself, and on this account fashions resemblances of primary forms, then she separates intelligence from things, and this in proportion as she departs from a similitude to intellect. Afterwards she endeavours to frame and accommodate conceptions conformable to things themselves. Besides this, when she falls into generation, or the sublunary region, and becomes filled with oblivion, she requires the sight and hearing, that she may recall those things to her memory which she knew before. For she now stands in need of voice, or articulate sound, by which she may be able to perceive the truth; since voice proceeds from the conceptions of the soul, and moves the intellect already replete with these conceptions. Hence, by the assistance of voice, the soul now recalls them to memory. For voice strives to be proximately and immediately adapted to conceptions, and through conceptions to things themselves, with which it has a certain natural conjunction; since its intention is not rashly to utter unmeaning words, and fictitious names, but rather to move and excite intelligence in the hearer, through those motive conceptions which he contains. For conceptions and intentions proceed from things conceived and intentions, and proximately move and conjoin the intentions of the disciple with those of the preceptor. Again, articulate sound is the boundary of the energy of the soul, and it is the province of boundaries to convert things to their Hence articulate sound leads souls that are remote and foreign from intellect and things, and separated from each other, into concord and consent; causes intellect and its conceptions to accord with things themselves; recalls and reduces all things to intellect; and shows that human souls are not only unwilling to be without voice, but that

that they also do not wish to have any other conceptions of things than those which articulate sounds excite. After this manner therefore soul divides those things which are united in intellect, preserving at the same time in the division, their mutual habitude. From what has been said, therefore, it is evident, that the proper intention of this logical treatise is to discuss simple, primary, and general words, so far as they are significant of things; and that at the same time, it instructs us in things and conceptions, so far as they are signified by words. With this opinion Alexander Aphrodisiensis, Herminus, Boethus, Porphyry, and the divine Iamblichus accord, and the great Syrianus unfolds and indicates it; to which also not only Simplicius but his preceptors assent.

Simplicius farther observes; that since the intention of Aristotle in this treatise is to discuss words, and of words some are simple, but others are composite, the intention is to consider simple and primary terms, which signify the first and most general things, through the media of simple and primary conceptions. But the Pythagoreans reduced simple conceptions into ten genera, as is evident from the treatise of Architas (with whom also Plato accords) On Universal Terms, the doctrine contained in which is adopted by Aristotle, and even in the same words; the difference between the two according to some consisting only in this, that Aristotle does not first consider and con-numerate the one which Plato says contains the ten genera, nor admits it according to the nature of names\*.

Again, the doctrine of these categories is useful as an introduction to the whole of philosophy, and the whole of logic. For it is evident that simple things are necessary and adapted to the constitution of such as are composite. Hence the geometrician begins from things of a more simple nature, then proceeds to triangles and squares, and afterwards considers pentagons, and multangular figures. Those also who

<sup>\*</sup> As Aristotle considers the categories as subsisting in sensibles, he appears very properly to have omitted to co-arrange the one with them; because the ineffable principle of things which the Pythagoreans and Plato indicated by the one, is super-essential.

accurately discuss numbers, endeavour to know in the first place, what the even and the odd number are, and afterwards what are the numbers which partake both of the even and the odd. That to begin however from simple terms is useful to logic will appear as follows: Contemplation and action proceed in a contrary course. For contemplation receiving its beginning from the end, proceeds to the principle; but action on the contrary proceeds from the principle to the end. in building a house, contemplation immediately understands the purpose for which a house is built; that it is in order to protect us from wind and rain, and extreme heat. Beginning therefore from the end, it considers how this is to be accomplished, and discovers that a house cannot protect us, unless a covering and roof are placed upon the walls; that walls cannot be raised unless a foundation is laid; and that a foundation cannot be laid unless the earth is previously dug. Here therefore contemplation ends, and here action begins. For it first digs the earth, afterwards lays the foundation, then raises the walls, and lastly, places on them the roof. In a similar manner, as we stand in need of a house, in order to prevent the destruction which often arises from wind, from rain, and from immoderate heat, thus also we require demonstration, in order to prevent the corruption arising from the false in contemplation, and from evil in action, which are properly called corruptions. For as in contemplation the false is opposed to the true, thus also in practical philosophy evil is opposed to good. Hence we require some instrument by which we may be able to distinguish these, lest we should mistake falsehood for truth, and evil for good. This instrument is demonstration which distinguishes every thing, and does not suffer us to be deceived by any involved and slender vestige of truth or good, but unfolds, denudes, examines, and rightly explores all things. As therefore, in considering after what manner a house should be built, we end at that conception by which we understand that the earth is to be dug, thus also we proceed in considering the origin of demonstration. For demonstration says that something is inherent, or is not inherent, in a certain thing, though not simply, but adding the cause on account of which

which it is or is not inherent. It is evident also that a sentence is not simple, but is a collection of many things, viz. of that which is inherent, and of that in which it is inherent; and it appears that the cause is at least contained in two propositions. For he who shows that the soul is immortal, and concludes that it is through this medium that it moves itself, reasons as follows: The soul moves itself: That which moves itself, is immortal: The soul therefore is immortal. monstration is a demonstrative syllogism. But how can we know what a demonstrative syllogism is, unless we have first learnt what syllogism is simply, and from what it is composed? It is composed however from propositions, which also are composed from nouns and verbs; and of these some are subjects, but others predicates. The knowledge of these therefore is necessary. But the analysis does not stop here; since the contemplation of simple words precedes these, according to which all names subsist, because the first position of words is that of names. For as it became necessary to men to signify things to each other, in consequence of deviating from a common intellection, and often entertaining discordant opinions, they gave different names to different things. The contemplation therefore of simple words, very properly precedes, and he who wishes to frame a demonstration must begin from Hence we begin from the categories, because through these we are introduced to a sentence, and to things signified, as from things more simple to such as are more composite. For after simple terms, we should learn what a noun and verb are; in the next place what affirmation and negation are, and in what the differences of these consist, which we are taught in the treatise On Interpretation; afterwards, what a term, a proposition, and a syllogism are, what are the species of syllogisms, how many there are according to each figure, and how many modes each figure contains, which we are taught in the PRIOR Analytics, and thus we shall arrive at the art of demonstrating, and at the treatise On Demonstration, which Aristotle inscribes Poste-TRIOR ANALYTICS. Very properly therefore do we begin from the treatise On the Categories, as the principle of logic and all philosophy.

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In the next place, it is requisite to show the cause of the inscription of this treatise, and, in the first place, in how many ways it is inscribed, and which of the inscriptions is to be preferred to the rest. Some therefore have inscribed it Antetopica, others, On the Genera of Being, others, ON THE TEN GENERA, others, ON THE TEN CATEGORIES, and others On the Categories, the title which it at present bears. Those however who entitled it Antetopica acted absurdly. For it not only precedes the Topics, but all the other logical treatises of Aristotle. in a similar manner, in the speculation pertaining to things, the tradition of such as are simple precedes all philosophy, since it instructs us in whatever is especially of an elementary nature. Since however he who arranged the Topics of Aristotle immediately after the Categories was no common man, but one of the most famous among the Peripatetics, being no other than the celebrated Adrastus, it will be requisite to adduce the reasoning by which he was led to make this arrangement. He says then, that because it is requisite the knowledge of simple terms should precede, but prior to the method of demonstrating, and the discipline of syllogisms and propositions, it is necessary to deliver that method which reasons about probabilities, and the objects of opinion, hence in the Topics, because he there treats of syllogism, Aristotle first teaches us what a common syllogism is, in the same manner as he also does in his Prior Analytics. For if it is requisite to proceed from objects of opinion, to those things which are known by the assistance of demonstration, and from probabilities to things perfectly true, the Topics which treat of the places of arguments, ought to precede the treatise On Demonstration, and those things which must necessarily be assumed prior to demonstration. Simplicius however justly observes, that plausible as this reasoning may appear, yet it is absurd to entitle this treatise Antetopica. For simple words or terms, immediately and proximately precede the propositions which are formed from them, and those syllogisms which consist from those propositions.

But those who inscribe this treatise On the Genera of Being, or On the Ten Genera, as Plotinus thought it should be inscribed in

that part of his works, where he adduces certain contradictions against these Categories,—these alone direct their attention to things, and by no means to the scope and intention of the logical art. For the genera of being are things themselves; but that the intention of this treatise is not to consider beings, but words signifying things, so far as those words are significant, has been already observed. And indeed Aristotle himself indicates this, when he says, "Each of those things which are predicated, alone indeed, and by itself, is not asserted of any thing, but affirmation arises from the conjunction of these with each other." For if affirmation is conversant with words and a sentence, the intention of the treatise will not be concerning things, because affirmation is not a combination and conjunction of things, but a conjunction of significant words. And if it should be said that each of the things which are here discussed, either signifies essence, or quantity, or quality, &c. certainly the terms which signify them are not things but words; for things are signified. It is evident therefore, that this treatise is not a discussion of things, but of significant words.

Since, however, it is generally inscribed Categories, it is necessary to enquire the cause of this inscription; as the word categories or predicaments signifies accusations pertaining to judicial processes, and to which defence is opposed; and we are not taught in this treatise how such accusations ought to be made. Porphyry says, that to treat of things publicly according to any signification, is to predicate them, and that, in short, to assert any word of a thing is to predicate. Hence, says he, every simple significant word, when it is treated, pronounced, and asserted of any thing, may be called predication, and a predicament. Simplicius however, justly observes, that if this be admitted, Socrates, and every simple word signifying any particular or singular thing, may be called a predicament, and thus this treatise will not be concerning the most general, but concerning simple words. But others more appropriately say, that the treatise is inscribed Categories or Predicaments, because it is concerning the most general things which are always adapted to predicate. For of an enunciative sentence in which truth

truth and falsehood consist, one thing is the subject of which the sentence is asserted, and another thing is that which is asserted of the subject, which is called the predicate, as being said of the subject, Thus in the sentence, Socrates is a man, the subject is Socrates, but the predicate is man. And the subject indeed ought to be that which is more particular, but the predicate that which is more universal. Hence in predicates, properly so called, a conversion cannot be made; since it cannot be said that man is Socrates, nor that animal is man. there are some things which are only predicates, as are those most general genera which Porphyry speaks of in his Introduction; and some things are only subjects, as individuals. For some things participate of those most general genera, and therefore are asserted of those things by which they are participated, but the most general genera themselves do not participate of other things, and therefore are not the subject of any thing which may be predicated of them. Individuals, however, participate of those things which are placed above them, and on this account are their subjects. Hence, they are not participated by any thing, as that which is more common, and therefore are not predicated of any thing. If then the intention of this treatise is concerning the supreme genera, it is very properly inscribed predicaments.

Architas also, who had the same intention, inscribed his treatise, On Universal Terms, i.e. On Universal Predicates, which are always predicated of those things that are placed under them, and never become subjects. Nor is it wonderful if the appellation categories or predicaments, should appear to be extraneous, incongruous, and contrary to custom. For since names are less numerous than things, philosophers, who not only desire to know things which are not perceived by others, but also to exhibit and unfold them to the learner, are sometimes compelled to invent words; as was the case with Aristotle when he invented the word entelechia\*. Sometimes however it is lawful to use

<sup>\*</sup> This word signifies form which is being in energy, so far as, according to this, it is an assumption of one end; or it is an assumption of one perfect essence, or is a continuance of the perfect, i. e. a habit according to the perfect.

words in a sense different from what they properly signify, by transferring them to our own purpose, as in the present instance of the word categories.

That this treatise also is the genuine production of Aristotle is evident from the obscurity and difficulty of the sentences, and its involved diction; this mode of writing being generally adopted by the Stagirite. To which may be added, that Aristotle himself frequently mentions this treatise, which he also denominates The Ten Categories. Either therefore it must be said that those writings in which mention is made of this work, are not the legitimate productions of Aristotle, or it must not be denied that this was composed by him. Simplicius also adds, that the most intimate associates of Aristotle, have admitted this treatise to be genuine; and that if it were not written by Aristotle, all his philosophy, and especially his logic, would be without a beginning, and without a head.

Should it be asked why, if this treatise is about the ten categories, Aristotle does not begin from these, but from things homonymous, synonimous, and paronymous? We reply with Porphyry\*, that Aristotle discusses these first, neither superfluously, nor as forgetful of his design; but in order that he might previously explain what was necessary to the doctrine of the categories; lest he should be compelled to digress in the middle of the discussion, by unfolding these terms, and thus break its continuity. As geometricians, therefore, first adduce certain definitions and axioms, postulates and divisions, which must be previously learnt, as useful to the evidence of the theorems; thus also Aristotle first speaks of things homonymous, synonimous, and paronymous, and all that follows, as most useful to the knowledge of the categories.

Lastly, if any one should desire to know under what part of the philosophy of Aristotle this treatise should be arranged, we reply, that it

must be ranked under that part which is the instrument of the other parts. For it has been shown, that the first part of logic consists of the doctrine which treats of simple terms. But the whole of logic is the organic or instrumental part of philosophy, in the same manner as rules and perpendiculars are the instruments of carpenters and builders \*.

\* As I have been anxious in all my translations, to preserve as much as possible of the *intellectual theory* of the ancients, the reader who is not an adept in the intellectual philosophy, is desired to pass over the more profound part of the notes On the Categories, till his proficiency in that philosophy enables him to understand it.

## C A T E G O R I E S

OF

# ARISTOTLE.

#### CHAPTER I.

THINGS are said to be homonymous of which the name alone is common, but the definition of essence according to the name is different. Thus man and the picture of a man, are each of them said to be an animal. For of these, the name alone is common, but the reason of essence according to the name is different. Thus if any one explains

It is well observed by the great Syrianus, that the reason why things which are polyonymous, or called by many names, and heteronymous, or called by different names, are omitted by Aristotle, is because these rather pertain to the ornament of diction, than to the consideration of things; on which account these are more properly discussed by him in his Rhetoric and Poetics, where it becomes necessary to give many names to the same thing, and different names to different things. But here he treats of things synonymous and homonymous which possess a real difference.

in what the being an animal in each of these consists, he will assign the peculiar definition of each? But those things are said to be synonymous of which the name is common, and the reason (i. e. the definition and description) of essence according to the name is the same. Thus man is said to be an animal, and also an ox. For each of these is called by the common name animal; and the reason of essence is the same. Thus if any one gives the reason of each, and explains in what the being an animal in each of these consists, he will assign the same reason. And those things are called paronymous which have their appellation according to name, from something, yet so as to differ in case. Thus

2 It is necessary that definition should be of an equal ambit with the name of the thing defined, that it may not exceed the name, nor be imperfect, and contain less than the name comprehends. Indeed, it then happens that definition is superfluous and imperfect, when it is not assigned according to the name; and it then especially exceeds, when it is framed according to some one of those things which are superior. Thus if any one wishes to define animal, and should not frame his definition according to the name of animal, but according to some one of those things which are more universally inherent in animal, such as animated, he will then say that animal is an essence, which is excited by inward motion, or is nourished, or increased, and produces beings similar to itself. This however, will be a true description of animal, yet will not be a definition of it, because it is not adequate to the thing defined. For if any thing is animal, it certainly is nourished, increased, and produces beings like itself. The converse, however, is not true; for plants are not animals, and yet they exert these energies. It happens also that a definition is imperfect when it is assumed according to something more particular than the thing defined; as if when defining animal we should say, that it is a rational, mortal essence, which is the definition of man. For that indeed which is such is an animal, but not every thing which is an animal answers to this definition. Every definition therefore, should be so framed according to name and the thing defined, that it may be converted with the name.

But when Aristotle says, "the reason of essence according to the name, is different," Simplicius farther observes, that 20705, reason, signifies calculation and reasoning; likewise a certain interior affection according to intelligence, which we usually call discursive; also a certain productive and seminal principle; and lastly, that which is indicative and definitive of any thing. Aristotle therefore uses the word reason and not definition, that he may also comprehend description; for this likewise pertains to the supreme genera and individuals which cannot be explained by one definition, because the genus of the supreme genera cannot be obtained, nor the essential differences of individuals. Description, however, since it delivers the peculiarity of essence, unfolds these.

a grammarian

a grammarian is denominated from grammar, and a valiant man from valour 3.

#### CHAPTER II.

Or things which are the subject of discourse, some are enunciated according to connection, but others without connection. Those therefore which are enunciated according to connection are such as, the man runs, the man is victorious; but those without connection are such as, man, ox, runs, conquers 4. Of things likewise, some are predicated of a certain subject, but are not in any subject. Thus man is predicated of a subject, viz. of a certain man, but is not in any subject. But other things are indeed in a subject, yet are not predicated of any subject. By being in a subject, however, I mean that which subsisting in something not as a part, cannot exist without that in which it is. Thus a certain grammatical art is in a subject, viz. in the soul, but is not predicated of any subject; and this white thing is in a subject indeed, viz. in a body, (for all colour is in body) but is not predicated of any sub-

3 Simplicius informs us that Architas omits this doctrine of names in his treatise On Universal Terms, because the Pythagoreans assert that names are from nature and not from position. Hence they reject the words polyonymous and homonymous, as if one name should signify one thing according to nature.

4 By things which are the subject of discourse, Aristotle means words significant so far as they are significant; because the predicaments are neither things nor conceptions, nor words simply so far as words, but they are words significant of things, through the media of conceptions, which being disseminated in each genus, procure for, and deliver to us the predicaments. Simplicius farther observes, that Architas, in the beginning of his treatise On Universal Terms, in the first place discourses about speech, which he considers as subsisting in the reasoning power and in voice. He also says that the speech which is in voice is significant, but that which is in the reasoning power is signified. He likewise defines and unfolds simple, composite, perfect and imperfect things; among which it is requisite to admit those which subsist according to connection and without connection.

ject. But some things are both predicated of a subject, and are in a subject. Thus science is in the soul as in a subject, and is predicated of grammar as of a subject. And some things are neither in a subject, nor are predicated of a certain subject; as for instance, a certain man, and a certain horse. For nothing of this kind is either in a subject, or is predicated of a certain subject. And, in short, individuals, and things

5 That which is in something, says Simplicius, has a manifold predication, and at least comprehends eleven modes. For a thing is in something as in place, as in the Lyceum; or as in a vessel, as wine in amphora; or as in time, as the transactions and expeditions of the Greeks and their enemies in Peloponnesus, were in this Olympiad; or as a part in the whole, as the hand is in the whole body; or as the whole in its parts; or as species in genus, as man in animal, for man is contained in it; or as genus in species, for species participates of genus, as man participates of animal; or as in the end, as all things consist in the good; or as form in matter, as the form of the statue in the brass; or as in the mover; or as in the governor the affairs of the governed. What kind of signification therefore of that which is in something belongs to a subject? The divine lamblichus says, that a subsistence as in matter, is the peculiarity of subsisting in a subject. But he says this, in consequence of apparently agreeing with Aristotle, who in the fourth book of his Physics indicating the significations of that which is in something, conjoins that which is in matter together with that which is in a subject. For Aristotle there says: "Also as health in things hot and cold, and, in short, as form in matter;" Aristotle asserting this at it would seem, according to one common power of giving form to that which is subjected, which Iamblichus considers as one and the same. This however is the eleventh signification of that which is in something. For there is a great difference between that which is in a subject, and that which is as in matter. For that which is in a subject, is in essence, which is a composite from matter and form; but form is in matter, as in that which is formless, and a part of essence. Farther still, that which is in a subject, receives essence and existence from the subject; but form gives to matter its being or essence. That also which is in a subject, does not give completion to the essence of the composite, as its definition evinces; but that which is in matter gives completion to matter. To this may be added, that a thing which is in a subject, is an accident, and is under some one of the nine predicaments; but we conceive form and morphe, to be a composite and subject. Again, since Aristotle assumes that to be in a subject which is sensible, and this particular thing, he certainly would not say that a thing which is in a subject, is that which is in matter; for he does not think that a particular sensible thing accords with matter. For though he says in his Physics that matter is essence, yet he does not say that it is properly essence. But in this treatise, he calls the first essence, a composite, and a subject. What occasion however is there to be prolix? For Iamblichus himself in the course of his Commentary observes, that there is one signification of that which is as in matter, and another things which are one in number, are indeed predicated of no subject, yet nothing hinders but that some of them may be in a subject. For a certain grammatical art, is among the number of things which are in a subject, but is not predicated of any subject.

### CHAPTER III.

When one thing is predicated of another as of a subject, as many things as are asserted of that which is predicated, so many may also be asserted of the subject. Thus man is predicated of a certain man, but

of that which is as in a subject. It is also requisite to know, that Aristotle in the fourth book of his Physics, divides a subsistence in something into eight modes, and does not make any mention of that which is, as in time. Perhaps, however, he omits this, because he had not yet said any thing about time. Likewise conjoining that which is in a subject with that which is in matter, he also conjoins that which is in a vessel, and that which is in place, because he had not yet unfolded the difference between them.

Simplicius farther observes, that Aristotle in this place considering a subject as a composite, and an individual essence, which is neither in a subject, nor predicated of any subject, very properly asserts, that every thing which is not predicated of a subject essentially, but after the manner of an accident, is in a subject; as for instance, heat in iron. And if it should be said, that those things which give completion to the essence of any thing, are parts of that thing, as the heat of fire is a part of fire, yet these also are in a subject which is void of quality, and is the first matter. Though the peculiarity therefore of subsisting in a subject, is not a subsistence as in matter, yet things which subsist in matter subsist as in a subject. For we are informed by Porphyry that there is a twofold subject, not only according to the followers of the Stoics, but those of higher antiquity. For, says he, matter void of quality, which Aristotle calls being in capacity, is the first signification of a subject, and the second, is that which in common possesses a certain quality, or which properly subsists; since brass and Socrates, are the subjects of those things which accede to them, and are predicated of them.

In the last place, it deserves to be remarked, that Aristotle here considers universals as having a subsistence, as for instance, universal science, which it is evident is universally in the soul. And a little before this, he divided things which have a subsistence, into universals and particulars. Perhaps in this he follows the Pythagoreans, from whom he received the doctrine of the Categories.

animal is predicated of man; and therefore animal is also predicated of a certain man. For a certain man, is both man and an animal. Of things heterogeneous, and which are not arranged under each other, the differences are also different in species; as for instance, of animal and science. For the differences of animal are, the pedestrious, the biped, the winged, and the aquatic; but no one of these is the difference of science. For science does not differ from science in the being a biped. Of the subaltern genera however, nothing hinders but there may be the same differences; for the superior are predicated of the genera which are under them. Hence, as many differences as there are of that which is predicated, so many also will there be of the subject.

CHAP.

Porphyry says that difference in most things and for the most part is predicated of many species, yet not always. But Iamblichus says, that though certain differences are not predicated of many species, yet their subsistence is such, that as far as pertains to themselves they may be predicated of many. Difference however, he adds, is more peculiar and more allied to a material nature, which is predicated of one particular species. Yet though it is thus disposed, it has a power according to its own nature, of imparting itself to many species. And if a certain other event of things which are adapted to receive extension into multitude, does not permit this to take place, yet nothing hinders difference itself, so far as pertains to its own nature, from insinuating and accommodating itself into many things.

But the genera, species, and differences are different which differ by the predicaments; and hence in each predicament, there are genera, species, and differences. Those genera too, have a mutual arrangement, one of which is under the other, as flying under animal; but those are not mutually arranged, one of which is not ranked under the other, as animal and science. For of genera and species, some are genera only, as those which have not a genus above themselves, as for instance, essence; others are species only, as those which have not species under themselves, as for instance, eagle; and others subsist between these, as animal and bird, which are both genera and species. For they are species, with relation to those things which are prior to themselves, but genera with relation to those things which are posterior to themselves. Thus bird is a species of animal, but the genus of eagle. They are called however subaltern, not because each is under another third, for thus the same thing would be both species and genus of the same thing, but because the one is under the other. But when neither is under the other, then they are not subaltern; as for instance, animal and science; for each is a genus; nor is. science a species of animal, nor animal a species of science. Since therefore, there are different genera, and different media, between the supreme genus, and the lowest species, and there are different supreme genera of the predicaments, when Aristotle says " of things heterogenous,"

#### CHAPTER IV.

Or the things which are enunciated without any connection, each of them either signifies essence, or a quantity, or a thing possessing quality, or a relative, or where, or when, or to be situated, or to have, or to act, or to suffer. But essence (that I may use as it were a rude delineation) is such as, man and horse. A quantity is such as, a thing of two or three cubits. A thing possessing quality is such as, that which is white, or a grammarian. A relative is such as, that which is double, the half, greater. Where, is such as, in the Forum, in the Lyceum. When, is such as, yesterday, in the former year. But to be situated, is such as, he lies,

the supreme genera also are to be assumed, the intermediate genera existing as different genera, when they are not subaltern, as in the instance of animal and science. For animal in the predicament of essence, is arranged after essence, and science in the predicament of quality, is arranged after quality. Hence, since they are different, and not subaltern genera, he says that divisive are different from constitutive differences. For the divisive differences of animal, are rational and irrational, or flying and pedestrous; but the constitutive differences are the animated and sensitive, which are not the differences of science, of which the one is not arranged under the other. Indeed the differences of the superior, are entirely constitutive of the inferior; for they are synonymously predicated. But of the divisive differences of the superior, some indeed are constitutive of the inferior genus, as, of animal flying constitutes a bird, yet does not constitute the pedestrious. There are certain differences, however, which are at the same time divisive and constitutive. For of animals, some are graminivorous, others seminivorous (or feeding on seed) and others are carnivorous; which differences indeed, are also the differences of the genus of birds. Besides, he does not simply say different differences, but different in species, since there are often seen to be the same differences of different genera, as of animal and a vessel. For of animals, some have feet, and others are without feet; and in a similar manner, of vessels\*, some have feet, such as a bed, a table, and a tripod, but many are without feet. But these differences are not the same in species, but according to equivation. For the foot of an animal, and the foot of a bed, are not the same in species, the one being metaphorically denominated from the other, since they only agree in the name, and not in the thing. 1.6

he sits. To have, is such as, to be shod, to be armed. But to act, is such as, to cut, to burn. And to suffer, is such as, to be cut, to be burnt. Each however of the above-mentioned categories, itself considered by itself, is not enunciated in any affirmation or negation; but by the connection of these with each other, affirmation or negation is produced. For every affirmation or negation appears either to be true or false; but of things which are enunciated without any connection, no one is either true or false; such for instance as, man, white, runs, conquers 7.

CHAP.

7 Architas, says Simplicius, after he has instructed us in the name, and given an example of each of the categories, adds also and subjoins the property of each. Thus after he has explained the name, and given an example of essence, he adds, that all things which subsist by themselves are essences. For the first knowledge of essence, thus presents itself to us, as being itself first known by itself. Again, in explaining the name, and giving an example of quality, because qualities are twofold, some about the soul, and others about the body, he does not omit their peculiarity, by informing us of such things as are at one and the same time inherent in certain things. For together with quality, as at the same time existing and giving perfection to essence we understand and conceive these. Having also explained the name, and given an example of quantity, according to all the genera, as according to quale, according to inclination or tendency, and according to the discreet, he facilitates our knowledge of it by adding whatever happens to number, or signifies according to number. To relation also, he adds those things, of which one is simply predicated with reference to the other, and one cannot be understood, nor signified without the other. To the verb to act, likewise, he simply adds action, by signifying that which is produced about any thing. And to the verb to suffer, he adds that which is naturally adapted to be changed by any thing. Again, to the verb to have, he adds those things which simply cannot be simultaneous, and which are not adapted to subsist together. Adducing likewise those things which have position, he says, that they simply signify the formation of the body subsisting after a certain manner. Where also, according to him, simply determines place; and when, simply signifies time. It is evident therefore, that Architas not only unfolds the categories according to sense, but also gives a description of them according to intellect.

If any one also is desirous of a division which may comprehend the ten genera, let him attend to the following, from Simplicius: All things which are, are either essences, or powers, or energies. But powers, since they have a middle subsistence, are rather beheld together with essences. Again, we must first make a twofold division into active or passive essences, and into energies. And the predicament of action indeed contains all energies, and the predicament of passion all passions. But of things in existence or essences, some have being by themselves, all which essence comprehends; but others have their subsistence in other things. And of these, some are beheld according

### CHAPTER V.

Essence\* however, which is most properly, primarily, and especially so called, is that which is neither predicated of any subject, nor is any subject; such for instance as, a certain man, and a certain horse.

according to habitude, and some are without habitude. Again, of those things which are without habitude, some are considered according to the designation, and as it were form of corporeal existence, as are all those things which are bounded according to quality, but others are considered according to dimension, or extension and multiplication; as are those things which are according to quantity. For these two differences which are without the habitude of those things that subsist in others, are considered according to the existence of genera. But of the things according to habitude, some are beheld according to a habitude to bodies, but others according to a habitude to incorporeal natures. And of these, some are according to a habitude to place, which the predicament where contains; but others are according to a habitude to time, which are contained in the predicament when. But of those things which are according to a habitude to bodies, some are according to a habitude to those things in which we are placed, either standing, or sitting, or reclining, all which are reduced to the predicament position. Others again, are according to a habitude to things placed about us, which are comprehended by the predicament to have, or habit. For bodies to which there is such a habitude, so subsist after a certain manner, as if we were established and placed in them, or they in us. The divine Iamblichus also endeavours to give an enumeration of the ten genera, neither mutilated, nor imperfect. And first he arranges a subject in which pre-existing, those things are produced and accede, which alone subsist in a subject. Afterwards, those things are considered which exist together with a subject; and these are quality and quantity, of which the one multiplies and extends the subject, but the other forms it. But habitudes are beheld about the subject, according to which the other predicaments are considered. Archytas, however, investigating the cause of the number of the genera after the manner of the Pythagoreans, reduces them to all the principles of things. For he says that every art and science, is one arranged definite thing, that it has a limitation in number, and that the whole of number is the decad. Hence all things are very properly divided into ten, and all species or forms and specific numbers are ten. He also adds, that the extremities of the body have ten parts, and that the elements of all speech are ten, as may also be shown by induction.

<sup>\*</sup> In the Preface to Porphyry's Introduction, I have assigned the reason why I prefer the word essence to substance.

It

horse 8. But second essences are called species, in which species those that are denominated primary essences are inherent; viz. both these, and

It is also necessary to observe, that it belongs to Aristotle to proceed analogously from sensibles to intelligibles. For considering matter and form as principles, both in intelligibles and sensibles, he again asserts, that they are analogously the same and different in these, according to the mode of subsistence. The ten genera therefore may possess an identity together with diversity, both in intelligibles and sensibles, according to analogy; viz. considered as proceeding from one cause, and with reference to one. For by the connecting power of media, there is one continued series of the first and last genera, which does not confound immaterial with material natures. For each of these is established in its proper boundaries, and subordinate are always suspended from superior essences. Hence Plato in the Parmenides distributes the one through all the hypotheses of that dialogue whether he discusses deity, intellect, soul, or body\*, according to that communion which in various ways proceeds to all things.

8 Archytas, says Simplicius, in the same manner as Aristotle, arranges essence prior to the other predicaments, and in the course of his work, instructs us in the cause of this. For all other things are, either essences, or in essences. If therefore essence subsists from itself, and is not in want of any thing else, but other things are in want of essence, which also is seen to impart being to other things, essence is deservedly honoured, and placed before the rest. For other things which are said to be accidents to essence, exist through the aid of essence, but essence is sufficient to its own subsistence, independent of the aid of other things. Hence, when it is subverted, other things are also subverted, but, on the contrary, other things being subverted, essence is not also subverted. Archytas likewise writes concerning the order of the predicaments as follows: Essence is arranged in the first place, because this alone is the subject of the other predicaments, and it can be conceived by itself separate from the rest. But the rest cannot exist without essence. For either through essence, or as subsisting in essence, they are predicated of it. Plotinus, however, and Nicostratus, doubt how essence is one genus. For if there were any thing common to an intelligible and sensible essence, that something common would be prior to both, and would be predicated of each. And it is evident indeed, that this common nature will be neither body, nor incorporeal, lest body should become incorporeal, or that which is incorporeal, body. In answer to this however it may be said, that the present treatise is of a sensible and natural essence, and of that intelligible essence, which subsists by participation in natural essences. This also is asserted by Archytas, who assuming the beginning of his doctrine from sensibles, says: "Every sensible and natural essence, either in these categories, or through these, or at least not without these, is adapted to present itself to the human intellect." It does not therefore belong to the present treatise to doubt about that essence which is common to sensibles and intelligibles, though what that essence is, deserves to be known. But Plato establishes and supposes the intelligible genus of essence. The first intelligible essence, however, causes all es-

<sup>\*</sup> See this copiously unfolded in the notes to my translation of the Parmenides.

and the genera of these species. Thus, a certain man is inexistent in man as in species; but the genus of the species is animal. These therefore are called second essences, such for instance as man and animal 9.

It

sences, as well intellectual as sensible, to subsist; of which the intellectual are proximate to it, and others are nearer, or more remote. It is evident likewise that such an essence is not the genus only, but also the principle of all the essences posterior to it, and which do not equally participate of the first intelligible essence. Hence such an essence is not properly a genus, which he who doubted previously assumed as granted. But Aristotle in his Metaphysics asserts, that there are two essences, the intelligible and the sensible, and also a third, the mathematical, or psychical (i.e. belonging to the soul). Archytas also calls every essence, natural, sensible, and motive. And he says indeed, that the natural essence is matter and form; that the sensible is composite; and that the motive essence is intelligible and incorporeal; as the cause of that motion by which every life specifically subsists. Hence also it is evident, that it comprehends many essences in one order. If therefore the first essence is considered, not as simply a genus, but as the principle of all essences, it is not rightly urged, that it must either be incorporeal, or corporeal. For the principle of essences produces such as are incorporeal proximate to itself, but such as are corporeal, more remote from its nature. But it may be said, is it not necessary that every essence should be either body or incorporeal, and that every animal should be either mortal or immortal? To this it may be replied, that the incorporeal is twofold, one subsisting as that which is defined by nature, and opposite to body, but the other as the cause of corporeal negation, and of an incorporeal essence, which is opposed to the same. After the same manner also, rational and irrational are twofold. Hence if it is necessary to say that animal is either rational or irrational, it ought rather to be said, that if it is irrational according to negation, this is not the irrational which is opposite to rational. Boethus however thinks that these questions should be excluded, and passed over in silence, because the present treatise is not concerning an intelligible essence.

9 It has been already observed, that the predicaments are concerning significant words. But significant words are first employed about individuals; for we first meet with these in the energies of sense, and afterwards we ascend to species and genera, betaking ourselves from sense to intellect. Species therefore are in the second rank, in the order of our progressions. Again, if we do not entirely consider species and genera by themselves, and separate, but in individuals according to the custom of the Peripatetics, these, since they are parts of individual essences, will be second in the rank of essences, since because they are parts of, they are also essences. Yet, since they do not subsist from themselves, they are not entirely essences. Alexander Aphrodisiensis however is of opinion, that individual essences are prior by nature to such as are common. For he says that individuals not existing, none of the other categories can exist. Simplicius however justly observes, that though a common essence has its being together with individuals, yet existing by itself, it contributes to the essence of its subject. It is better therefore to say, that universal possessing a most principal essence by itself, imparts itself also to particulars; and

It is however evident from what has been said, that of things which are predicated of a subject, it is necessary that both the name and the de. finition should be predicated of the subject. Thus man is predicated of a certain man as of a subject; and the name also is predicated of it; for you predicate man of a certain man. The definition also of man is predicated of a certain man; for a certain man is both man and animal; so that both the name and the definition are predicated of the subject. But with respect to things which are in a subject, of the greater part, neither the name, nor the definition is predicated of the subject; but of some, nothing hinders but that the name may sometimes be predicated of the subject, though it is impossible that this should be the case with the definition. Thus whiteness, which is in body as in a subject, is predicated of the subject; for the body is said to be white. But the definition of whiteness can never be predicated of body. All other things, however, are either predicated of the first essences, as subjects, or are in them, as in subjects. This however is evident from the particulars which are obvious to all men. Thus animal is predicated of man; and therefore is also predicated of a certain man. For if it were predicated of no one of particular men, neither, in short, would it be predicated of man. Again, colour is in body; and therefore it is also in a certain body. For if it is not in some one of particular bodies, neither, in short, is it in body. Hence all other things, are either predicated of the first essence, as subjects; or are in them as in subjects.

thus universal is more principal, and prior to individuals in the order of nature. But Alexander says, that which is common cannot be without individual, but individual can be without that which is common, as is evident in the sun, the moon, and the world. In answer to this however it may be said, that the nature of these is such, that if many could receive the same form, each of these would impart itself to an appropriate multitude, and would extend itself into multitude. A gain, second essences are similar to the first essences. For as the latter are the subjects of all the others, thus also do second essences subsist with reference to other things. For all other things are predicated of them, either paronymously, as a grammarian is not only a certain man, but man; or homonymously, as a white thing, since not only that which is white is a body, but also a body is simply thus denominated.

The

The first essences therefore not existing, it is impossible that any one of other things should exist.

But of second essences, species is more essence than genus; for it is nearer to the first essence. Thus if any one explains what the first essence is, he will explain it in a manner more known and appropriate, by introducing species than genus. For instance, he who explains what a certain man is, will explain it in a manner more known, by introducing man, than animal; for the former is more the peculiarity of a certain man; but the latter is more common. He also who explains what a certain tree is, will explain it in a manner more known and appropriate, by introducing tree than plant. Farther still, the first essences because they are placed under every thing else, and every thing else is predicated of these, or is in these, on this account are especially called essences. But as the first essences are to all other things, so is species to genus; since species is placed under genus. For genera are predicated of species; but species are not reciprocally predicated of genera. Hence species is more essence than genus.

With respect to species themselves however, no one of such of them as are not genera, is more essence than another. For he will not at all explain more appropriately, who introduces man in the explanation of a certain man, than he who introduces horse in the explanation of a certain horse. After the same manner also in the first essences, one of them is not more essence than another; for a certain man is not more essence than a certain ox. Reasonably therefore after the first essences, species and genera alone among the rest, are said to be second essences; since these alone of the things which are predicated, manifest the first essence. For if any one explains what a certain man is, by introducing species or genus, he will appropriately explain it; and he will make it to be more known, by introducing man or animal; but whatever else he

When Aristotle says, that "the first essences not existing, it is impossible that any one of other things should exist," this must be understood of the things which the first essences participate, so far as those things from their union with matter are inseparable from the subjects in which they reside; for being merged in, they are co-extended with body.

may introduce among all other things, will be introduced foreign from the purpose; such, for instance, as that he is white, or that he runs, or any thing else of this kind. Hence these things alone among others are very properly said to be essences. Again, the first essences because they are placed under all other things, and all other things are either predicated of these, or are in these, are said to be most properly essences. But as is the relation of the first essences to all other things, such also is the relation of the species and genera of the first essences to all the rest, since of these all the rest are predicated. For you say that a certain man is a grammarian; and therefore you also say that a man and an animal are a grammarian. And the like also takes place in other things<sup>2</sup>.

It is common however to every essence, not to be in a subject. For the first essence is neither in a subject, nor is predicated of a certain subject. And with respect to second essences, that no one of them is in a subject is evident as follows: Man indeed is predicated of a certain man as of a subject, but is not in a subject; for man is not in a certain man. In a similar manner also animal is predicated of a certain man as of a subject, but animal is not in a certain man. Farther still, of

<sup>&</sup>lt;sup>2</sup> Archytas, the Pythagorean, says Simplicius, does not admit the division of essences now proposed, but in the place of it adopts another. For, says he, there are three differences of essence; for one is matter, another form, and another that which is composed from both these. But this division is made according to the condition of essence, and extends itself to all things. Archytas also uses this division of essences, according to nature, and not as is the division of Aristotle, which alone adheres to usual significations, as Aristotle himself testifies in those treatises which he composed with the greatest accuracy, and in which he employs the division of Archytas. as in his Physical Auscultation, and Metaphysics. No Pythagorean however would admit this division of first and second essences, because they assert the former of these to be primarily inherent in universals, and they leave the latter in particulars; and because they place the first and proximate essence in the most simple things, and not as it is now said, that the first and most proper essences are sensible and composite natures. And in the third place, they would not admit this division because they thought genera and species to be beings, and not certain things summarily collected in separate notions, or abstract conceptions. Aristotle therefore, though he knew this division of essence which Archytas delivers, yet did not use it, because that which he employs is more adapted to a logical discussion. those

those things which are in a subject, nothing hinders but that the name may sometimes be predicated of the subject, but it is impossible that the definition should be predicated of it. Of second essences, however, both the definition and the name are predicated of a subject; for you predicate the definition of a man of a certain man, and in a similar manner the definition of animal. Hence essence will not be among the number of things which are in a subject. This however is not the peculiarity of essence; but difference also belongs to things which are not in a subject. For pedestrious and biped, are predicated indeed of man as a subject, but are not in a subject; for neither is biped, nor pedestrious in man. The definition also of difference is predicated of that of which difference is predicated. Thus if pedestrious is predicated of man; for man, the definition also of pedestrious will be predicated of man; for man is pedestrious<sup>3</sup>. Nor ought we to be disturbed, lest we should be

3 It is well observed by Simplicius, that Aristotle in what is now said proposes to investigate principally, those things which essence has in common with the other predicaments, that from things more common and peculiar, a more accurate description may be made of the object of enquiry. Archytas also indicates this, who not only investigates peculiarities, but also explains whatever is common to the other predicaments. Iamblichus also observes on these words of Aristotle, as follows: Certain things are at the same time common to the predicaments, and some are peculiar. Thus it is common to essences, not to receive the more and the less. For it is not possible that man should be more and less man, nor god, nor plant; and in a similar manner it is common to them to have no contrary. For man is not contrary to man, nor god to god, nor to other essences. But to subsist from itself, and not to be in another, as an azure and a yellow colour are in the eyes, is the peculiarity of essence. For every essence is by itself one certain thing; but those things which are at the same time inherent, and are accidents, are either in these essences, or are not without these. Afterwards, Iamblichus speaking of those things which quantity has in common, observes as follows: Many things indeed, happen to quantity, which also belong to essence; as not to receive the more and the less. In a similar manner he mentions what is common to essence, and the predicament of relation. But that which is peculiar, says he, to every essence is this, that remaining one and the same in number, it is capable of receiving contraries. Thus therefore Iamblichus is of opinion, that Aristotle delivers what is common to essence with the other predicaments, and what is peculiar to it. phyry says, that the peculiarity of each genus is assigned by Aristotle, and not simply what is common with other predicaments, and what is peculiar. And since peculiarity is triply predicated,

at any time compelled to confess that the parts of essences are not essences, because they are in their wholes as in subjects; for things which are in a subject were not said to be so, as parts which are inexistent in any thing. It also belongs to essences and differences, that all things are synonymously predicated from them. For all the categories from these, are either predicated of individuals, or of species. Thus from the first essence there is no category; for it is predicated of no subject. But of second essences, species indeed is predicated of individuals; but genus is predicated both of species and individuals. In like manner also differences are predicated of species and of individuals. And the first essences receive the definition of species and genera; and species receives the definition of genus. For as many things as are asserted of that which is predicated, so many may also be asserted of the subject. In a similar manner species and individuals receive the definition of dif-

cated, one which is inherent in all and not alone, as biped in man; another which is inherent alone, but not in all, as to be a grammarian is inherent in man; and another which is inherent alone, and in all, which is properly peculiarity, as risibility in man,—hence those things which are not inherent alone, are common to essence and the other genera, since they are inherent in all, and not alone.

Some one however may doubt how essence will not be in a subject, since intellect is in soul, and soul is in body, and ideas according to Plato are in intellect. In answer to this it may be said, that these are not as in a subject, nor are they assimilated to the participation of accidents, but these are as essence in another essence. They also are not inherent as a part in the whole, but as energy and essence in the receptacle capable of containing them. They are, in short, as the pilot is in a ship, and as that which uses is in that which is used, and is present to it; or as an united essence which contains in itself a multiplied essence; just as the centre embraces and comprehends in itself the circle. For thus the presence of essence in other essences may be explained, from which no absurdity will ensue. Again, since a sensible essence is a certain concourse of matter and qualities, all which, when they are at once connected, produce one sensible essence, we must not think it strange that a sensible essence should be composed from non-essences. For neither is the whole composite true essence, but is an imitation of the true, which possesses being about itself without other things, and in a similar manner other things which proceed from it, because it is true and real being. But in a sensible and composite essence, the being which is added to it, is barren and insufficient, because the things from which it is composed are insufficient. Hence it adumbrates real essence, as the picture of an animal and a shadow.

But those things were synonymous of which the name is common and the definition the same. Hence all things which are predicated from essences and differences, are predicated synonymously 4. Every essence, however, appears to signify this particular thing. the first essences, therefore, it is indubitable and true, that they signify this particular thing; for that which is signified is an individual and one in number. But in second essences though they appear indeed by the figure of appellation similarly to signify this particular thing, when any one says man or animal, yet this is not true, but they rather signify a thing with a certain quality. For the subject is not one, as the first essence, but man and animal are predicated of many things. Nor do they simply signify a thing with a certain quality, as that which is white. For that which is white signifies nothing else than a thing with a certain quality. But species and genus determine quality about essence; for they signify what quality a certain essence possesses. The limitation, however, is more extended in genus than in species;

4 Should it be enquired whether to be predicated synonymously, belongs to second essences only, or to all the other predicaments? For in these also genera and species are synonymously predicated of all their individual accidents. Thus science is synonymously predicated of grammar, and grammar of Aristarchus. In answer to this Simplicius observes, that this is common to the other genera and species of the other predicaments, but that it is the peculiarity of the genera and species of essence, to be synonymously predicated of their individuals, and that nothing is common to essence with the other predicaments of accidents. Unless, perhaps, it is the peculiarity of essence to be synonymously predicated, and thus is primarily inherent in the genus and species of essence, from which it is afterwards communicated and imparted to the other predicaments, so far as after a certain manner they also have the relation of essence. Hence in these likewise we confess that genera and species are essentially inherent in their individuals, and are predicated of them; as colour and whiteness are predicated of a certain white thing, and are in a certain white thing. For as certain things accidentally pertain to essences, so this essentially pertains from accident to the accidents of essences. But it may be said, why does not Aristotle assume the peculiarities of essence, as useful to the knowledge of essence; as, for instance, not to be in a subject? Perhaps, because it contributes to a knowledge of essence to know, that though it belongs to essence not to be in a subject, yet it does not belong to it alone, though it appears to belong to it most eminently. for

for he who says animal comprehends to a greater extent than he who says man 5.

It also belongs to essences, to have nothing contrary to them. For what can be contrary to the first essence, as, for instance, to a certain man, or to a certain animal? For there is nothing contrary to these; since nothing is contrary either to man or to animal. This however is not peculiar to essence, but is also found in many other things, as, for instance, in quantity. For nothing is contrary to two cubits, or three cubits, or to ten, or any thing of this kind. Unless some one should say that much is contrary to few; or the great to the small. But among definite quantities no one is contrary to another 6. Essence also appears not to receive the more and the less. I do not say that one essence is

According to what do we say that an individual essence is this particular thing? Is it according to form, or according to matter, or according to that which is composed from both? Perhaps according to all these; but according to matter so far as it is a subject, and passes into energy by receiving form; according to both, so far as it does not degenerate, nor depart from its proper nature; and according to form, so far as it is definite, and one in number. But if it should be said, that matter because it is indefinite and boundless, is by no means this particular thing, it must be recollected that the present treatise, is not concerning formless matter, but of that matter which is already fashioned by certain habitudes to the reception of form. But a composite, is indeed that which is an individual, and receives the appellation of this particular thing.

6 Some, says Simplicius, doubt how there is not contrariety in essence. For is not rational animal contrary to irrational animal? In answer to this doubt however, Simplicius justly replies, that rational is not contrary to irrational. For whether irrational is a negation of rational, negation is certainly not contrary, or whether it has a power of affirming a certain species, indicating that it is different from rational, neither thus is irrational contrary to rational, from which it is deduced, and has its arrangement; nor indeed is any other species contrary to species. But since all contrarieties are seen to be about qualities and differences, hence against those who doubt how Aristotle says, that fire is contrary to water, and air to earth, we may easily say, that these are contraries according to qualities and differences. For Aristotle says, that the hot and the dry are contrary to the moist and the cold, and the hot and the moist, to the cold and the dry. But other essences have not contrariety among themselves. Again, how is that true, which Aristotle asserts in the first book of his Physics, that form is contrary to privation? For if form is essence, essence therefore receives contrariety. The answer is, that form is partly essence, and partly habit, and that form so far as it is habit is contrary to privation, but not so far as it is essence,

not more or less essence than another; for it has been already said that it is; but I say that every essence is not said to be more or less that very thing which it is. Thus if this essence is 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; in the same manner as one white thing is more or less white than other; and one beautiful thing is more or less beautiful than another. The same thing also is said to be more or less than itself. Thus a body which is white, is said to be more white now than formerly; and when hot is said to be more or less hot. But essence is not said to be more or less essence. For neither is man said to be more man now than formerly, nor any one of such other things as are essences. Hence essence will not receive the more and the less?.

7 Not to receive the more and the less is not the peculiarity of essence. For neither in discrete quantity is there the more and the less. Thus three things are not more three than themselves, nor than another three of the same species. For they are not changed from themselves, since they are definite in quantity; nor will they be more than four; for neither are they more than themselves. And, in short, every addition and ablation of quantity, produces a total diversity; but the intension is with the addition of the similar to itself, and not with that addition by which any thing causes a change in species. Of relatives also, some do not receive the more and the less; as the double, equal, father, and the like. In quality likewise, figures do not receive the more and the less. Some one however may doubt, whether a man who is more rational than other men is not more a man. In the first place, perhaps, that which is more rational, is not so according to essence, but according to habit, or according to energy. In the next place, there is no absurdity if qualities which concur in species, as rational in man, and heat in fire, should receive the more and the less, but by no means the species itself. Thus when a man is said to be worthy, he is not said to be so, so far as he is a man, but so far as being thus disposed, he suffers an intension. This however does not signify essence but quality. And it is by no means wonderful, that the being worthy, since it is not an affection according to essence, should have the more, and admit of intension, according to an externally acceding quality. But man is rational, and fire is hot, not according to adventitious and external quality, but according to essential quality which gives completion to species. Hence, if this quality received the more and the less, it would also be necessary, that the whole species should receive it, and therefore essence would receive the more and the less. Perhaps, therefore, if the difference which is rational is specific, it will not be considered according to the more and the less; as, for instance, in man and dæmon. For less of man will not by intension possess the perfection of a dæmon. But if rational is conIt appears, however, to be especially the peculiarity of essence, that being one and the same in number it is capable of receiving contraries; nothing of which kind can be adduced in other things which are not essences; viz. that being one in number they can receive contraries. Thus colour, which is one and the same in number, is not white and black; nor is an action, which is one and the same in number, both depraved and worthy: and the like also takes place in other things which are not essences. But essence being one and the same in number, is capable of receiving contraries. Thus a certain man being one and the same, at one time becomes white, and at another black; likewise hot and cold, depraved and worthy. But in other things nothing of this kind is seen 8. Unless perhaps some one should object by saying

sidered according to habit and energy, such difference will no longer be the difference of essence. Again, however, it may be asked, how matter, since it is essence, is said to be more and less, and appears to be great and small, and entirely contraries? To this it must be replied, that matter itself, by itself, in no respect differs. For it is all things in capacity, and receives an equal representation and participation of essence, being as it were spread under all beings; but such a variation accedes to it from its habitude to form.

8 When Aristotle says that essence is capable of contraries, it must be understood, that it is not at one and the same time capable of them. For this can only take place when one of the contraries departs, and the other accedes; which Aristotle himself insinuates in the examples which he adduces. But here, the interpreters, says Simplicius, introduce an intellectual essence, as that essence which does not receive contraries. In answer to this, however, it must be observed, that Aristotle is not now speaking of an intellectual, but of a sensible essence, and those universals which subsist in a sensible essence. The interpreters also subjoin that the sun is not capable of any contrary, who perpetually and invariably subsists in one species. For nothing is contrary to its motion; since it is demonstrated in the treatise On the Heavens, that nothing is contrary to the motion in a circle. Indeed, how can it be true in perpetual essences, that they receive contraries in a divided manner? For the heavens never stand still, and rest is contrary to motion. Fire also which is corruptible, is capable of heat, but not of cold; and snow on the contrary is capable of cold, but not of heat. In answer however to the objection concerning perpetual essences, it must be observed, that Aristotle here delivers the peculiarity of every essence which has its existence in mutation, and has the capacity of existing, and not of that essence which subsists according to immutability. In the next place, in answer to the objections about fire and snow, it must be observed, that Aristotle says, essence is capable of contraries, but does not say that it has its essence in contraries. Fire, therefore, does not receive heat, but heat that a sentence and opinion are capable of receiving contraries. For the same sentence appears to be both true and false. Thus if the sentence

is in its essence, and nothing receives itself. That however which is external to fire, as water, receives heat, which is adventitious to water, and an extrinsical quality; but it by no means receives humidity, for that is con-natural to it. In a similar manner the celestial bodies have their being in circulation, and do not possess a certain vicissitude of a contrary. Hence if such properties are not qualities, but essential differences, and such as give completion to essence, when any thing remains the same, it will not be deprived of these things which are essentially inherent in it. But those things in which one of them is inherent, neither naturally nor inseparably, are capable of receiving contraries. On account of this peculiarity also it is plainly shown, that essences, and especially an individual essence is every where the subject of all things; that other things subsist about, and are inherent in it; and that it does not belong to any one of the other predicaments to be capable of contraries, because accidents are not of themselves sufficient to their own subsistence. Hence they are not the subjects of any thing, but require something else as a foundation or seat; and on this account, neither do they receive contraries. Thus body remaining the same becomes black and white, and the whiteness recedes and departs, when blackness accedes. But animal and man because they remain, receive contraries, so far as they are in some individual man; but colour does not remain, and therefore it does not receive contraries. For when whiteness departs, colour also departs together with it, and is no longer; and when blackness accedes, colour also is together with it present.

Simplicius farther informs us, that Archytas also admits this to be the peculiarity of essence. For he says, "The peculiarity of essence is this, that remaining one and the same in number, it is capable of contraries. Thus vigilance is contrary to sleep, slowness to swiftness, and disease to health, of all which one and the same man is capable. For he wakes, he sleeps, he is moved swifter and slower, and he becomes ill and well. Though however being one and the same, he is capable of these, yet he is not capable of them at one and the same time." But Iamblichus, after the manner of the Pythagoreans, extends this peculiarity to every essence, according to a certain analogy. For he says, that an intellectual essence, motion, permanency, sameness, and difference, subsist together with essence, and the contrariety here in essence is not divided and successive, but simultaneous; and to be susceptible and capacious, is asserted of intellectual essences in one way, and is beheld and considered in composite natures in another way. For in composite essences, where there is dimension, one thing is a subject, and another that which accedes to the subject. But in the most simple essence, one thing is not as a subject, and that which accedes another thing, nor is there any variation in the mode of subsistence, but all things are there one. In an essence likewise which is perpetually moveable, such as that of the celestial bodies, the comprehension, and as it were conjunction and copulation of a universal nature are beheld by means of the heaven itself; not only because it contains all things, and there is nothing beyond itself, but because no other moveable nature, which is moved by any in-

tence is true, that some one sits, when he rises from his seat, this very same sentence will be false. In a similar manner also in opinion. For if any one truly opines that a certain person sits, when that person rises from his seat, he will opine falsely, if he has the same opinion about him. If however some one should admit this, yet it differs in the mode. For things which are in essences, the essences being changed, become the recipients of contraries. For that which from being hot becomes cold is changed; for it is changed in quality. This is also the case with that which from being white becomes black, and from being depraved, worthy. In a similar manner in other things, each of them receiving mutation, is capable of receiving contraries. A sentence and opinion, however, remain indeed themselves entirely immoveable; but the thing being moved, that which is contrary is produced about them. sentence, that some one sits, remains the same; but the thing being moved, it becomes at one time true, and at another false. In like manner also in opinion. Hence in this way it will be the peculiarity of essence, to be capable of receiving contraries, according to the mutation of itself. But if any one should admit these things, viz. that a sentence and opinion can receive contraries, this is not true. For a sentence and opinion are not said to be capable of receiving contraries, because they receive something, but because a passive quality is produced about something else. For because a thing is or is not, a sentence is said to be true or false, and not because the sentence can re-For, in short, neither a sentence, nor opinion is ceive contraries. moved by any thing. Hence, neither will they be capable of receiving contraries; since no contrary passive quality is produced in them. essence, in consequence of receiving contraries, is said to be capable of receiving contraries; for it receives disease and health; and whiteness

clination, election, or will, whether it be animated, or inanimate, can at one and the same time sustain two opposite motions, and be moved, for instance, before and behind, or to the right hand and to the left, upward and downward. But the heaven alone is seen to obtain this prerogative, that it can not only be moved with one motion, or with only two or three, but with all motions at one and the same time.

and blackness; and since it receives each of things of this kind, it is said to be capable of receiving contraries. Hence, the peculiarity of essence will be this, that being one and the same in number, it can receive contraries according to the mutation of itself. And thus much concerning essence 9.

9 A prior is not one and the same in number with a posterior sentence, according to Aristotle. For he says, that which is once said, cannot be again assumed, because speech is among the number of things which are moved by succession; and on this account, a sentence is ranked among those things which have not position. Hence a prior is the same with a posterior sentence in species, and a true with a false sentence, but is not the same in number, as it was aserted of essence. And since opinion is a discourse in the soul, it also is conversant with succession; and consequently the same things which are said of a sentence, may also be said of opinion.

Simplicius farther observes, that this also is worthy of animadversion, how it is said that essence by the mutation of itself is capable of receiving contraries. For neither is matter, (according to their opinion who say that matter is void of passive quality) transmuted, nor does it suffer contraries, but mutations are produced about it. Likewise if form is always immoveable, and always abiding receives contraries according to quality, neither will it receive contraries by the mutation of itself. If therefore any essence receives contraries, a composite alone will receive contraries by being changed, and thus this will be the peculiarity of a composite and individual essence alone. Simplicius adds, if however we may accommodate the opinions of certain Peripatetics to our own use, we must assert indeed that matter suffers. For how is it possible that matter, since it is simple, and exists in capacity alone, when changed from that which it is, and brought into energy, should not receive the mutation which is corruption? For a simple nature, which has not its being in something else, and is changed according to something else, if it wholly degenerates from itself and fails, will have the mutation which is corruption. If however some one should not admit this, but should assert that contrariety is produced about matter, not because it suffers any thing, or is changed, but because it has from accident contraries about itself, there will also be the same reasoning about form. For if intellectual qualities remain the same, and the contrary qualities of form happen about sensible differences, form indeed will be every way immoveable, and that which is changed will be something else; or in other words, every thing will be changed according to the condition of its nature. Matter also will be transmuted, when it receives another and another form, just as if such a reception of form were the mutation of matter. For matter is a certain receptacle, but form receives mutation according to quality. Perhaps too, Aristotle has previously removed such ambiguities, by saying, "remaining one and the same in number." For it is evident, that it is necessary to investigate such a mutation.

## CHAPTER VI.

OF QUANTITY, one kind is continuous, but another discrete. And the one consists from parts which have position with reference to each other, but the other from parts which are without position. And discrete quantity, indeed, is such as number, and a sentence; but continued quantity, is such as line, superficies, body; and besides these, place and time. For of the parts of number, there is no common boundary, through which the parts of it are conjoined. Thus if five is a part of ten, five and five are conjoined by no common boundary, but are separated. Three and seven also, are conjoined by no common boundary; and, in short, you cannot obtain a common boundary of the parts in number, but they are always separated; so that number belongs to things which are discrete. In a similar manner also a sentence [belongs to discrete quantity]. For that a sentence is quantity is evident, since it is measured by a short and long syllable. But I mean a sentence produced in conjunction with voice. For the parts of it are conjoined by no common boundary; because there is not a common boundary by which syllables are conjoined, but each of them is separated by itself. But a line is continuous; for a common boundary may be assumed, viz. a point through which the parts of it are conjoined. The common boundary also of a superficies, is a line; for the parts of a superficies are conjoined through a certain common boundary. In a similar manner also in a body you may assume as a common boundary, a line or a superficies, through which the parts of the body are conjoined. also and place are things of this kind; for the present time is conjoined to the past and future. Again, place is among the number of things continuous; for the parts of a body possess a certain place, which are conjoined through a certain common boundary. Hence also the parts of the place which each of the parts of the body possesses, are conjoined through the same boundary, as the parts of the body. So that place also will be continued; for the parts of it are conjoined through one common boundary 1.

Farther

After essence, Aristotle proposes to instruct us in quantity. And, in the first place, says Simplicius, it is worth while to discover the cause, why after essence, quantity is arranged in the second place. Some therefore say, that the cause is, because quantity subsists together with being. For being is a certain thing, and immediately after, it is necessary that it should be one or many. Likewise because many things are common to essence and quantity, as not to have a contrary, and not to receive the more and the less. Again, dimension void of quality precedes quality, which accedes to the said dimension. Other things also being subverted, essence is not subverted, if only dimension is left in essence; otherwise that being subverted a corporeal essence would be subverted. Quantity therefore, has a greater affinity to, and is nearer to essence. Aristotle also arranges quantity prior to the other categories, because among other motions, the motion which is according to quantity, i. e. increase and diminution, is nearer to the motion of essence, i. e. to generation and corruption, than alliation is, which is a motion according to quality.

Archytas, however, ranks quality immediately after essence. For thus he writes: "The order of the categories is as follows: Essence is arranged in the first place, because this alone is the subject of other things, and it can be conceived by itself, but other things cannot be conceived without this. For according to this, or for this reason, they are predicated of a subject. But quality will be arranged in the second place; for without that which is quid, quale quid cannot exist \*." Here, however, it may be enquired to what Aristotle and Archytas directed their attention, when the latter arranged quality immediately after essence, and the former quantity. It should seem, therefore, that Archytas, by supposing intelligible being subsisting by itself to be prior, which truly gives completion to all the genera, is indivisibly present to all things, and is participated by them, assigned an order to the genera, according to an approximation to this. He also arranges essence prior to all things, and to the other predicaments, because since it is the subject of other things, it of itself imparts being to all things. He likewise says, that essence subsists by itself, and that it is the object of intellectual perception, but that other things are not without this. But since we no otherwise obtain a knowledge of intelligible essences than through forms, and if we ought to know sensible essences by referring them to these intelligible essences, we shall perceive them from the peculiarities which are about essence; and since these are surveyed according to . quality, after essence quality will be deservedly arranged prior to the other predicaments. Again, if quality being subverted, every peculiarity and description, both of an intellectual and sensible essence, are subverted, but quantity being taken away, that which is a composite and sensible is

<sup>\*</sup> Viz. Quality, or quale quid, cannot exist without essence, which is predicated in answer to the question quid, alone or what a thing is.

Farther still, some things consist from parts which have position with respect to each other; but others consist from parts which have not position.

alone taken away, it is evident that quality differs not a little from quantity, as to its vicinity and approximation to an intelligible and intellectual essence. But if any one should not admit that an intelligible has any habitude to a sensible essence, he may be willing to assign an order to the other predicaments as follows: Since essence which is form is the most proper essence, and that which is proximate to form is quality, hence since that which is nearer to the most proper essence, ought to precede the other predicaments, quality will be deservedly arranged immediately after essence. Farther still, if quality is impartible, indivisible, and void of dimension, but quantity is divisible with dimension and partible, quality has very properly a prior arrangement, as being more peculiar and allied to incorporeal principles. To this also it may be added, that as essence precedes quantity, because essence imparts being to quantity, thus also quantity will be posterior to quality, because from quality, quantity possesses its character and peculiarity. In opposition to this, however, others say, that quantity subsists together with being; for being is immediately either one, or more than one. Unless perhaps quality subsists together with being prior to quantity, as the character of being, by which it is said to be one; since both the one and the many subsist according to the character of quality. The divine Iamblichus however says, that if many common properties are inherent in essence and quantity, it is not fit to reason about the order of them from accidents, and those things which follow in a different manner. But perhaps it must be said, that those things which are more distant, often indicate a more evident dissimilar similitude; as indivisible unity in number, appears to be similar to the unity which is prior to number. Hence some say, that matter is dissimilarly similar to the first cause. For it is similar so far as a negation of all things pertains to both; but it is dissimilar, because matter is worse than all things, and the first cause is better than all things. Archytas, therefore, looking to these, or to certain things of this kind, perhaps arranged quality prior to quantity. But Aristotle considering the first essence as a composite, and corporeal, because this is more known in common language, very properly arranges quantity immediately after essence, as more peculiar and known, and as that which is co-existent with the interval of such an essence. Nor is it wonderful, if both Archytas and Aristotle have adopted arrangements conformable and appropriate to their fundamental positions.

Simplicius farther observes, that when Aristotle says a sentence (100706) is discrete quantity, it must be understood as subsisting in voice, and not in intellect; since the sentence which is in voice is a quantity. For every sentence consists of a noun and verb; every element of speech consists of syllables, and every syllable is measured either by a long or a short time. Farther still, long have to short syllables the ratio of two to one; but one and two are numbers, and number is discrete quantity. Hence also a sentence is discrete quantity.

But Plotinus in his first book On the Genera of Being says, that if the continued is quantity, the discrete is not quantity; and that if both are quantities, it must be shown what it is which

Thus the parts of a line have position with reference to each sition. other. For each of them is situated somewhere, and you can explain

is common to both. And he solves the question by saying, that it is common to them to be a boundary and a measure, so far as by these every quantity is known. The nature of the continued indeed is a certain magnitude, according to the union and conjunction of two or many things; but the nature of the discrete is called multitude itself, according to aggregation and apposition. For the world is one, is spherical, allied to itself, and connected by an intimate conjunction, according to the essence of magnitude; but according to multitude it is a co-ordination, and a digested and elegant arrangement of many things. If therefore these are thus separated in resemblances, they will be so by a much greater priority in the predicaments themselves considered as subsisting in the soul; and still prior to these discrete and continued quantity will be essentially distinct, in essentially immaterial forms, possessing, as we have observed, a common measure and bound.

Simplicius adds, that some likewise, as Archytas, and afterwards Athenodorus, and Ptolemy the mathematician, condemn the division of quantity into two kinds, because after number and magnitude, a third species ought to be arranged, which is gravity, or tendency, or momentum. In answer to this, however, it may be said, that gravity is a quality, in the same manner as density and crassitude, which are not according to quantity, but according to quality, and the contraries to these, rarity and tenuity. Where however shall we arrange a mina and a talent, which are said to be heavy! For if we reduce them to the above-mentioned qualities, we must by no means say that they are quantities. And if we say that they are quantities from accident, we shall very much deviate from the truth, since they cannot simply be called quantities separately, either according to number, or according to magnitude. May it not however be said, that as a white thing is quantity from accident, because the superficies in which it is, is perceived to be quantity, thus also tendency or momentum is a quantity, because by itself it receives the peculiarity of quantity, which is the equal and the unequal, as other things receive excess and defect. For it is necessary to attend to Archytas, who triply divides quantity, when he thus writes: "There are three differences of quantity. For one difference of it is in momentum, as a talent; another in magnitude, as a dimension which is of two cubits; and another in multitude, as ten." This division also Iamblichus admits, as being made according to the most perfect measure of quantity, and as being congruous and consonant to things. For quantity according to momentum, is neither in magnitude, nor multitude, but is rather found to be conversant with motion, and has quantity according to gravity and levity. The division therefore says he, that of quantities, some have a momentum, and others have not, is omitted; which division, as it appears, is neither the same with continued, nor with discrete quantities, nor with those things which have, nor with those which have not position. This division also, he says, is manifest in the universe, since the four elements have a momentum, or tendency; but the heavens are without a momentum inclining hither or thither. And among motions, some which proceed in a right line, are conversant with a moand show where each of them is situated in a superficies, and with which of the remaining parts it is conjoined. In a similar manner also the parts of a superficies have a certain position; for in like manner it may be explained where each of them is situated, and through what they are conjoined to each other. Thus also the parts of a solid, and the parts of a place are conjoined. In number, however, no one can show that the parts of it have a certain position with respect to each

mentum tending to places, having a beginning and an end, and their motions interrupted by intermediate rest. But the motion which is in a circle, being continued without beginning and end, as being always moveable, is without momentum and tendency. In a similar manner also, he says, that such a difference is manifest in incorporeal quantities. For if any one should consider the soul as a quantity by itself, or essentially; so far as it tends to body, it will have a momentum downward, but so far as it rises from inferior natures, and tends to that which is intellectual, it will have an inclination upward. Intellect, however, he says, is an incorporeal quantity, without momentum and tendency. But, he says, why do we admit the intervals and extensions of voice to be quantities, but do not say that the intervals of tendency, or momentum are quantities? Moreover, Iamblichus in answer to Cornutus and Porphyry, who assert that momentum, considered according to gravity and levity, is quantity, observes, that momentum is neither gravity nor levity, but the measure of gravity and levity. For heavy or light bodies would of themselves proceed to infinity, considered as merely heavy or light; but since the power of momentum inserts from measures order and bound in things heavy and light, they have an arrangement which is good and right.

In the last place, the divine Iamblichus, conformably to his intellectual theory, indicates as follows, the first principles of the two species of quantity, and of the one in which both are contained. The power of the one from which every quantity emanates, is extended through all things, and flowing from itself terminates every thing. So far therefore as it penetrates all things indivisibly, it gives subsistence to continued quantity; but so far as it gives limitation to every thing, and causes it to be one, it produces discrete quantity. According however, to one most principal cause containing at once these two energies, it produces these two species of quantity. And according to its own identity and total nature, it every where in the several parts of things and in all things produces continued quantity. But according to the similitude of each of these to itself, (i. e. to the one) and because it is wholly in each, it produces discrete quantity. According likewise to the union of intelligible quantities with each other, it produces continued; but according to the separate union of them with each other, it gives subsistence to discrete quantity. Likewise according to its abiding energy, it produces discrete, and according to its flowing energy, continued quantity. And since it at the same time both abides and proceeds, it produces the two species; for the power of intelligible measures, at the same time, or at once contains both, abiding in one and the same.

other, or that they are situated any where, or which of the parts are conjoined to each other. Nor can any one show this in the parts of time; for no one of the parts of time endures; and how can that have any position which does not endure? But you may rather say that the parts of time have a certain order; because one part of time is prior, but another posterior. The like also takes place in number; because one is numerated prior to two, and two prior to three; and thus numbers may have a certain order, but you can by no means assume that they have any position. In a similar manner likewise in speech; for no one of its parts endures, but it is spoken, and what is said, can be no longer assumed. Hence there will not be a position of its parts, since no one of them endures. Some things therefore consist from parts which have position, but others from parts which have not position. Those things, however, which have been mentioned are alone properly said to be quantities; but all the rest are so denominated from accident. For looking to these, we say that other things also are quantities. Thus the whiteness is said to be much, because the superficies is great; and an action is said to be long, because the time [in which it was performed] is much; and for the same reason motion is much. Thus, if any one of these is not said to be a quantity by itself. should explain what the quantity of an action is, he will define it by time, and say, that it was accomplished in a year, or will explain its quantity in some such way. And explaining what the quantity is of whiteness, he will define it by superficies; for such as is the quantity of the superficies, such also he will say is the quantity of the white-So that the particulars which we have mentioned, are alone properly called quantities essentially; but of other things, no one is so called essentially, but from accident 2.

Again,

<sup>&</sup>lt;sup>2</sup> What order is, says Simplicius, in discrete, that position is in continued quantities. For as discrete quantities on account of their distance, and elongation from the one, require order, that through this they may be near to the one, and may not be confounded by being inordinately scattered; thus also continued quantities, since they fall from the impartible nature of the one, in

Again, nothing is contrary to quantity. For in definite quantities, it is evident that nothing is contrary; as for instance, to two cubits, or three cubits, or to superficies, or to any thing of this kind. For nothing is contrary to them. Unless perhaps some one should say that the much is contrary to the few, or the great to the small. No one of these, however, is a quantity, but rather belongs to relatives. For nothing, itself considered by itself, is said to be great or small, but in conse-

in which all things subsisted as in sameness, require position by which some parts are conjoined to others, that they may not be heaped together like an indigested mass.

Number indeed has not position, because it is not continued; for those things which have position, must be continued and extended; since thus the position of the parts will be seen to conjoin some parts to others. For in the number three, it must not be said, that such a unity is conjoined with such a unity, as in a line it is evident that one part is copulated to another. But it may be asked, why did not Aristotle as evidently take away position from number, as he does from speech and time? Perhaps, because, as the interpreters say, number seems to receive position, on account of the things numbered. And perhaps also because this is especially indicative of things having position, viz. that the parts remain; and since speech and time evidently have not parts which remain, but number has, hence, if number had continuity, it would also be among the number of things having position. On this account, Aristotle is silent as to number. However, though speech, time, and number have not position, yet as we have already observed, they obtain order instead of position. Order, indeed, is properly considered in discrete quantities, so far as prior and posterior are assumed in them; and hence also it is in time, so far as the past precedes the present time, and the present the future time. But in number, order is not in each of the unities; since, for instance, there is not order in the unities of the number three; but order is in the extent of numbers, because one precedes two, and two precedes three, and so on in succession. In a similar manner also, there is order in speech, so far as some parts precede others, and some syllables come before others.

Plotinus, however, and Iamblichus, doubt against what is here said by Aristotle, and assert that nothing has position in reality. For if those things are said to have position, the parts of which remain, since among sensible natures nothing remains in consequence of their perpetual flux, neither will any thing sensible properly have position. In answer to this, however, Simplicius with his usual acuteness observes, that though it should be granted that matter continually flows, and that bodies have additions and ablations to infinity, by the continual accession of some things, and the departure of others, yet there is something which evidently remains, whether it be according to the subject as some say, or it is that which is properly quality according to the opinion of others, or it is specific essence, or an individual and composite essence, or whether it be something else of this kind, which remains in mutations, and is known from the beginning to the end. For Aristotle speaks of things manifest, and not of such as are occult, and dubious.

quence of being referred to something else. Thus a mountain is said indeed to be small, but a grain of millet seed to be large; because the one is greater than things homogeneous, but the other is less than things homogeneous. The reference therefore is to something else; for if they were said to be small or great by themselves, the mountain could never be said to be small, but the grain of millet seed large. Again, we say that there are many men in the village, and but few in Athens, though there is a far greater multitude in the latter than in the former. We also say that there are many in the house, and but few in the theatre, though the multitude in the latter far exceeds that in the former. Farther still, two cubits, three cubits, and every thing of this kind signify quantities; but the great or the small, does not signify quantity, but rather relation; for the great and the small are surveyed with reference to something else. And hence it is evident that they are among the number of relatives, Again, whether any one admits, or does not admit that things of this kind are quantities, there is not any thing contrary to them. For how will any thing be contrary to that which cannot be assumed itself by itself, but is referred to another thing? Farther still, if the great and the small are contraries, it will happen that the same thing will at the same time receive contraries, and that the same things will be contrary to themselves. For it happens that the same thing is at the same time both great and small. Thus something with reference to this thing is small, but the very same thing with reference to something else is great. Hence it happens that the same thing, is at the same time both great and small; so that at one and the same time it receives contraries. Nothing, however, appears at one and the same time to receive contraries; as, for instance, in essence. For this indeed appears to be capable of receiving contraries. No one, however, is at the same time ill and well; nor is any thing at the same time white and black; nor does any thing else at one and the same time receive contraries. It will happen also that the same things will be contrary to themselves. For if the great is contrary to the small, but the same thing is at the same time great and small; the same thing also will

will be contrary to itself. It is, however, among the number of things impossible, that the same thing should be contrary to itself. The great therefore is not contrary to the small, nor the much to the few. Hence, though some one should say that these do not belong to relatives, but to quantity, yet they will have nothing contrary.

But

3 As in the predicament of essence after the division of its species and differences, Aristotle proceeded to consider those things which are the peculiarities of it, and which are consequent to it, he also adopts the same method in the predicament of quantity. And, in the first place, he unfolds those things which are common to quantity, and the other predicaments, and afterwards thus considers its peculiarities. He says, therefore, that nothing is contrary to quantity. It will be requisite however to see after what manner every species of quantity has not a contrary, and how the contraries which appear to exist in every species of quantity, are not inherent in it, so far as it is quantity, but so far as it is referred to some other predicament. A line indeed, so far as it is a line, has no contrariety, but so far as it is such a line, it is considered, and is allotted such properties, according to rectitude and curvature. A superficies also, so far as it has a twofold extension, has no contrariety; but if roughness and smoothness are considered about it, these indeed are said to be inherent in it, not so far as it is a superficies, but so far as it is such a superficies, according to the quality of it, just as we say that whiteness and blackness are in a line, not so far as it is a line, but so far as it is such a line. Again, a body also, so far as it is body, i. e. so far as it has three dimensions, has no contrary. For the incorporeal is not contrary to body, as Iamblichus also says, because contraries are placed under the same genus, but the incorporeal and body are not under the same genus. And perhaps nothing hinders essence from being the genus of them. For we say that of essence one kind is body, but another the incorporeal. Hence if contraries consist in affirmation and are positive, the incorporeal is either something better than body and the cause of it, or something worse, which also is in body; but in neither way will the corporeal and the incorporeal be contraries. Farther still, neither is any thing contrary to time, so far as it gives limitation to motion by a proper measure. Hence, if any one should think that day is contrary to night, he who thus thinks will certainly not produce a contrariety in time, so far as time; for it is the same; since when it is day in one place, it is night in another: but so far as the air is illuminated in one place, and obscured in another, which is not so far as the air is a quantity, but so far as it possesses a certain quality, it is allotted such contrarieties. Farther still, neither is any thing contrary to number; for every thing discrete is one certain thing, and according to this receives no excess nor defect, like the equal and the unequal, which receive the more and the less, and on this account are indefinite. What however shall we say, if some one should assert that the even and the odd are the contraries of number, by considering them as two species? And in like manner, if it should be said that the continuous and the discrete are the contraries of quantity? In answer to this, it may be said, that the division in esBut the contrariety of quantity especially appears to subsist about For they admit that the upward is contrary to the downward, asserting

sence is through opposites. For of animal one kind is rational and another irrational. One kind also is mortal and another immortal, and yet we admit that nothing is contrary to essence. For it is one thing to consider contrariety about essence and about quantity, when directing our attention to the qualities which happen to them, and another to consider that there is no contrary to essence itself, or to quantity itself. Speech also, so far as it is quantity, has no contrary. For the true and the false are in speech so far as it is significant, but not so far as it is extended and measured by a short and long syllable. It now remains among the number of quantities to speak of place, concerning which also it may be doubted whether it receives contrariety with the upward and the downward, which appear to be the species or parts of place. Some, however, think that the upward and downward have not a subsistence in nature, but according to habitude considered with reference to us; as when it is said, that what is above our head is upward, and what is under our feet is downward. Hence those who are of this opinion, consider the upward and downward as subsisting according to different habitudes; and after this manner they are evidently not contraries, since contraries cannot be in the same according to the same. If however, the upward and downward are considered, not according to habitude, but according to the interval of the universe from the middle to the extremity, and on the contrary from the extremes to the middle, then the upward and downward will be distant and different from each other according to nature. To these, however, Simplicius adds, it must be said, that the upward and downward do not signify place, but the predicament where; just as yesterday and to-day, do not signify time, but the predicament when. And this also was the opinion of Andronicus. Perhaps, however, the upward and the downward are the differences of place, and yesterday and to-day of time, yet not so far as place and time are quantities; but place has such differences according to position and local peculiarity, which are assigned in the predicament where; and time obtains such differences as yesterday and to-day, according to measures derived from motion. For place and time in quantity, are assigned according to extension alone; yet according to a proper character or designation, place is in the predicament where, and time in the predicament when. Hence place, so far as it is quantity, has not the upward and downward, but so far as it is a quantity with a certain quality.

But the divine Iamblichus, treating of quantity with his usual sagacity and accuracy, says, that the common conception of every quantity is as follows: Quantity is divisible into inexistent parts; for this property is similarly extended to multitude and magnitude. One thing also belonging to it is numerable, but another measurable, and each of these is predicated definitely and indefinitely. Thus length is predicated definitely, because it subsists with boundaries, and indefinitely, because it is uncertain how far the boundaries may be extended. Hence, if all things are definite according to the communion of quantity, it is of no consequence if one thing has one boundary, another two, and another three boundaries. Iamblichus, however, must be consiasserting that the place towards the middle is downward; because there is the greatest interval from the middle to the extremities of the world. They also appear to derive the definition of other contraries from these; for they define contraries to be those things which being in the same genus are most distant from each other 4. But quantity does not appear to receive the more and the less; as for instance, the quantity of two cubits; for one thing is not more two cubits than another. Nor is there the

dered in what he here says, as determining quantity according to the divisible, and not according to that by which it is alone distributed into parts. For it is divisible into parts, not as a whole only, but it is also divided, as one thing into many, which indeed is inherent in quantity so far as quantity.

4 As the straight and the curved are contraries, not so far as they are quantities, but being quantities something else accedes to them, thus also the upward and downward happen about place. And as animal itself, having no contrary, is distributed and divided according to contrary differences, thus also place is divided by contrary differences. Hence, contrariety is not produced so far as place is quantity, but according to certain other things which accede to place, which is quantity. And because contrariety happens about other quantities, hence Aristotle especially assigns a contrary to place, among other things, because other contraries also have their designation, on account of the interval which is in place. For those things are called contraries which are very much distant from each other. But in quality the distance is formal and specific; and in quantity it is dimensive, which also is said to be the more principal distance, and from this the others proceed and are denominated.

Simplicius farther observes, that there was no small difference of opinion among the ancients about place. For some said that it was to be defined according to relation. For as place it is conceived to be that which contains body; and that which contains is said to subsist with reference to the thing contained, as a relative. But others asserting that place is space, said that it was quantity, and not a relative. Some also dismiss the upward and downward, and consider them as contraries. Others say, that these are among the number of relatives, in the same manner as the right hand and the left hand. But the Pythagoreans say that place is the boundary of every thing which exists. And these indeed, though in words they assert the same thing as Aristotle, yet in reality differ most widely from him. For Aristotle says, that place is the boundary of that which contains, so far as it contains the thing contained, and therefore he denies that the ultimate heaven is in place. But the Pythagoreans assert that place is the boundary of every form and of every thing, in which it is placed, and by which it is contained. Place, therefore, being thus more universally assigned, the upward is to be considered as surpassing in purity and power according to a transcendency of essence; and the downward must be said to be that which is lower than, and subordinate to, all such opposites. Hence it is evident, that the upward and

the more and the less in number. Thus three or five [of one thing] are not said to be more than three or five [of another thing], nor is five more five, than three is three. Nor is one time said to be more time than another. And, in short, in the above-mentioned [species of quantity] no one of them is said to be more or less. It is, however, especially the peculiarity of quantity, to be said to be equal and unequal. For each of the above-mentioned quantities are said to be equal and unequal. Thus body is said to be equal and unequal; and also number and time are said to be equal and unequal. In a similar manner too in the rest of the above-mentioned particulars, each of them is said to be equal and unequal. Of the residue, however, such as are not quantities do not entirely appear to be called equal and unequal. Thus, for instance, disposition, is not entirely said to be equal and unequal, but rather similar and dissimilar. Whiteness also is not entirely said to be equal and unequal, but rather similar or dissimilar. Hence it will be especially the peculiarity of quantity, to be said to be equal and unequal 5.

the downward may be after this manner considered in all things, universally and absolutely, and according to the proper nature of every thing. For on this account the power which sustains and embraces every thing in the universe, is placed in the heavens, according to the transcendency of a limit, which is the boundary of all things.

5 That to be said to be equal and unequal is the peculiarity of quantity, may be shown as follows: Quantity so far as quantity is measurable; but the measurable is sometimes adapted to be measured by the same measures, and sometimes by more or fewer. Hence that which is measured by the same measures is equal; but that which is measured by more or fewer is unequal. Quantity, therefore, so far as quantity, is said to be equal and unequal; since so far as quantity, it is measurable, and so far as measurable, the equal and unequal are inherent in it. Archytas also having asserted that the equal and unequal are the peculiarity of quantity, confesses that quantity is beheld in multitude and magnitude, and in momentum, or inclination, since no one of these is the attendant on essence or quality. Whence also, he divides the equal and unequal triply, according to the three differences of quantity.

## CHAPTER VII.

Those things are said to be RELATIVES that are said to be that which they are from belonging to other things, or in whatever other way they may be referred to something else. Thus the greater is that which it is, by being so called with reference to something else; for it is said to be greater than a certain thing. And the double is that which it is by being so called with reference to something else; for it is said to be the double of a certain thing. And in a similar manner with respect to other things of this kind. Such things, however, are among the number of relatives, such as habit, disposition, sense, science, position. For all that we have enumerated are that which they are, by being so called from belonging to other things, or in whatever other manner they may be referred to something else; nor are they any thing else. For habit is said to be the habit of some one; science the science of something; and position the position of something; and in a similar manner with respect to other things. Relatives, therefore, are such things as are said to be what they are, from belonging to other things, or in whatever other manner they may be referred to something else. Thus the mountain is said to be great with reference to something else; for with relation to something, the mountain is said to be great. The similar also is said to be similar to something; and other things of this kind are in like manner said to be what they are with relation to something. clining, however, standing still, and sitting, are certain positions; and position is among the number of relatives. But to recline, or to stand still, or to be seated, are not indeed themselves positions, but are paronymously denominated from the above-mentioned positions 6. Contrariety,

<sup>6</sup> Again, says Simplicius, it must be enquired why, since Archytas arranges quality prior to quantity, Aristotle not only arranges quantity, but also the predicament of relation prior to quality.

riety, however, is inherent in relatives. Thus virtue is contrary to vice, each of them being a relative; and science is contrary to ignorance.

But

lity. Unless, says he, Archytas, as we have before observed, as being the friend of intelligible forms, after essence immediately arranges quality, by which the peculiarity of forms is determined, who also immediately after quality subjoins quantity, as that which is implanted in essence, and is the principle of those things which subsist by themselves. Hence he arranges quality and quantity after essence, and after quantity ranks the common and innate habitude to something, which also he arranges prior to other adventitious habitudes. But Aristotle, since in the present treatise he directs his attention principally to a corporeal essence, arranges quantity prior to quality, because it is more corporeal. After quantity also, he subjoins the predicament of relation, because of quantity one kind is by itself, but another with reference to something else. The discussion of relatives also is in continuity with the discussion of quantity, because excesses, defects, and proportions are considered in multitude and magnitude, to which the more and the less accede, and in which certain relative habitudes subsist. Hence relatives are very properly arranged after quantity. Again, since multitude accedes to essence on account of quantity, and habitude at the same time appears, by which the communion and difference of those things which have a mutual comparison with each other are considered, hence the predicament of relation, according to a natural order, follows the predicament of quantity.

Simplicius farther observes, that Plotinus and Iamblichus doubt whether the habitude pertaining to things related is a certain subsistence, or nothing more than a mere name. For it is necessary either that there should be no habitude of things, or that certain habitudes should subsist, and some habitudes should be without subsistence. But that not all habitude is to be taken away, is evident from this consideration, that as essence, quantity, and each of the other genera have a subsistence, it is necessary also to place habitude among the number of things, since the advantages arising from it are great. For neither would genera, nor the things which are under genera have any communion among themselves, unless there were some ratio of habitude in things. But it is absurd to subvert the communion of things which differ from each other. For it is absurd to take away harmony, not only that which is vocal, nor that which is comprehended in numbers, but also that which subsists in all essences, powers, and energies, and which collects things into sameness, and causes them to have a habitude to each other. Besides, if the habitude of things were subverted, the commensurable, the equal, the object of science, and science, would also be subverted. Hence if geometry and music are conversant with habitudes, and these habitudes were without subsistence, those sciences would be ridiculous and despicable, since they would be conversant with things which have no subsistence. Again, how could it be said that divinity is the object of desire to all things, if there were no habitude of the thing desiring to the object of desire? Farther still, since some things are prior, and others posterior, if habitude were taken away, there would be no relation of things prior to posterior, and of the posterior to the prior; and this not existing there would be no communion between

But contrariety is not inherent in all relatives; for to the double nothing is contrary, nor to the triple, nor to any thing of this kind 7. Relatives, however, appear to receive the more and the less. For the similar and the dissimilar are said to be so more and less; and the equal and the unequal are said to be so more and less; each of them being a relative.

them. For body, soul, intellect, and deity, have not the same essence with each other, nor the same nature, but it is necessary that these should subsist according to the habitude alone of things thus differing, which communicate with each other. Hence the genus of habitude is most opportune, not only in sensible, but also in intellectual natures, and in those incorporeal which are posterior to intellectual natures. To which may be added, that those who take away habitude, subvert also sameness; not perceiving that same and different, without which we cannot speak of any thing, have properly a relative habitude, and being ignorant that composites, which are formed from the conjunction and agreement of different things, subsist on account of habitude.

7 Aristotle says that virtue and vice, science and ignorance, are relatives, because according to the relation which they have to their genus, viz. according to habit, they will be relatives. For habit is among the number of relatives. It may, however, be enquired, how Aristotle afterwards ranks science and virtue, and the opposites to these, among qualities? Perhaps because the same thing according to different things may be placed in a different predicament. Hence science and virtue, and their opposites, so far as they cause their subjects to possess certain qualities, will be qualities, but so far as they indicate habitude to something else, they will be relatives. Aristotle also subjoins that contraries are not inherent in all relatives, since contrariety is not inherent in the double, nor in the triple, nor in any other of such like relatives. Why, however, is contrariety partly inherent in relatives and partly not? Perhaps because they cannot be understood without another predicament. Indeed, they always subsist together with other things; and hence when they are assumed, and are in a predicament possessing contrariety, they also will have contrariety. In a similar manner, if they should be in predicaments not possessing contrariety, neither would they possess contrariety. For whatever things are inherent in the genus which is the subject of relatives, the same things also happen for the most part to the relatives themselves. Hence, when they are considered in habit, or universally in quality, they receive contrariety, because quality also receives contrariety; but when they are in the double, or the triple, or universally in quantity, they will no longer be subject to contrariety, because quantity does not receive contrariety. The like also takes place when they are inherent in essence, as in a father and son; for then they do not receive contrariety, because neither does essence receive it. On this account it is evident, that so far as relation receives contrariety, it has also something common with those genera which receive the same; and that so far as it does not receive it, it accords with those genera which do not receive contrariety; because relation also, according to each mode, accords with all the genera. Hence to receive a contrary is not the peculiarity of relatives, since contrariety is neither inherent in all relatives, nor in relatives alone.

For the similar is said to be similar to something; and the unequal, unequal to something. All relatives, however, do not receive the more and the less. For the double is not said to be more and less double, nor any one of things of this kind. But all relatives are referred to things which reciprocate. Thus, a servant is said to be the servant of a master; and a master the master of a servant. The double also is the double of the half; and the half is the half of the double. The greater is greater than the less; and the less is less than the greater. The like also takes place in other things; except that they sometimes differ in diction by case. Thus, knowledge is said to be the knowledge of that which is knowable; and that which is knowable is knowable by knowledge. Sense also is the sense of that which is sensible; and that which is sensible is sensible by sense. Sometimes, however, they do not appear to reciprocate, if that is not appropriately attributed to which a thing is referred but he who attributes errs. Thus wing, if it is attributed to bird does not reciprocate, nor can we say the bird of a wing; for the first is not appropriately attributed, viz. wing to bird. For wing is not predicated of it so far as it is bird, but so far as it is winged; since there are wings of many other things which are not birds. Hence, if it is appropriately attributed, it also reciprocates. Thus, wing is the wing of that which is winged; and that which is winged is winged by wing. Sometimes, however, it is, perhaps, necessary to invent a name if a name is not given to that to which it may be appropriately attributed. Thus, a rudder, if it is attributed to a ship, is not appropriately attributed. For a rudder is not predicated of a ship so far as it is a ship, since there are ships without rudders; and hence they do not reciprocate. For a ship is not said to be the ship of a rudder. But, perhaps, the attribution will be more appropriate, if it is thus attributed; a rudder is the rudder of that which is ruddered; or in some other way; for a name is not assigned. And a reciprocation takes place, if it is appropriately attributed; for that which is ruddered is ruddered by a rudder. In a similar manner also in other things. Thus, head will be more appropriately attributed to that which is headed,

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.

And perhaps some one may thus easily assume those things to which a name is not given, if from those things which are first, he assigns names to those also with which they reciprocate; as in the instances above adduced, from wing winged, and from rudder ruddered. All relatives, therefore, if they are appropriately attributed, are referred to things with which they reciprocate. For if they should be attributed to any thing casual, and not to the things to which they are referred, they will not reciprocate. But, I say, that neither will any one of things which are acknowledged to be referred to things which reciprocate, though names are assigned to them, reciprocate, if it is attributed to any thing accidental, and not to that to which it is referred. Thus, a servant, if he is not attributed as the servant of a master, but of a man, or a biped, or any thing else of this kind, will not reciprocate; for the attribution is not appropriate. If, however, that to which a thing is referred, is appropriately attributed, every thing else which is accidental being taken away, and this thing alone being left, to which it is appropriately attributed, it will always be referred to it. Thus a servant, if he is referred to a master, every thing else being taken away which is accidental to the master, as the being a biped, the being capable of science, and the being a man, and his being a master, is alone left; in this case the servant will always be referred to him. For a servant is said to be the servant of a master. But if that to which it is at any time referred is not appropriately attributed; other things being taken away, and that alone being 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; for servant will no longer be referred to man; since master not existing, neither does servant exist. In a similar manner also, let the being winged be taken away from bird; and wing will no longer be in the number of relatives; for that which 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 is assigned, the attribution becomes easy; but if it is not assigned, it is perhaps necessary to invent a name. But being thus attributed, it is evident that all relatives are referred to things which reciprocate 8.

Relatives, however, appear to be naturally simultaneous; and in most of them, it is true that they are. For the double and the half are simultaneous; and the half existing, the double is; the master existing, the servant is; and the servant existing, the master is. Other things also are similar to these. These likewise co-subvert each other. the double not existing, the half is not; and the half not existing, the double is not. The like also takes place in other things which are of this kind. It does not, however, seem to be true in all relatives, that they are simultaneous by nature. For the object of science may appear to be prior to science; since for the most part, things pre-existing, we obtain the sciences of them. For in few things, or in nothing, can any one see science originating together with the object of science. Farther still, the object of science being subverted, co-subverts science; but science does not co-subvert the object of science. For the object of science not existing, science is not; but science not existing, nothing hinders but that the objects of science may exist. Thus, in the quadrature of the circle, if it is 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 it will happen that there will still be many objects of scientific knowledge. Things also pertaining to sense subsist similarly to these; since the sensible appears to be prior to sense. For the sensible being subverted cosubverts sense; but sense does not co-subvert the sensible. For the

<sup>8</sup> Simplicius informs us, that Archytas, though he no less accurately discusses the predicaments than Aristotle, yet passes over in silence the property of relatives, that they are referred to things which reciprocate. The reason of this, Simplicius adds, was, perhaps, because since Archytas admits relatives to be simultaneous, and asserts one to be the cause of the other, he affirms their essential alternate conversion, and neglects that conversion which is according to predication. Perhaps too, he omits it because the conversion according to predication appears to abe the same time introduced with that which is essential.

senses are conversant with body, and are in body; but the sensible being subverted, body also is subverted; since body is among the number of sensibles; and body not existing, sense also is subverted. Hencethe sensible co-subverts sense. But sense does not co-subvert the sensible. For animal being subverted, sense indeed is subverted, but there will still be the sensible, such, for instance, as body, the hot, the sweet, the bitter, and all such other things as are sensible. Farther still, sense is produced together with that which is sensitive; for at one and the same time animal and sense are produced. But the sensible is prior to the existence of animal or sense. For fire and water, and things of this kind from which the animal consists, are, in short, prior to the existence of animal or sense; so that the sensible will appear to be prior to sense?

Aristotle now assigns that which is especially the peculiarity of relatives, viz. that they are by nature simultaneous. For it is more adapted, and more peculiar to science that the gates of them should be opened through those things which are properly inherent in the objects of science. Indeed, this is especially necessary in the first genera, since after this manner only can we speculate each of them. Hence Archytas also assigns the simultaneous existence of relatives, and one of them being alternately the cause of the other, as the peculiarity of relatives. For if the double is, it is also necessary that the half should exist; and, on the contrary, if the half is, it is also necessary that the double should exist, since the double is the cause of the existence of the half, and the half is the cause of the existence of the double. Aristotle, however, Simplicius adds, uses the word appear, either because it was the opinion of the ancient philosophers, that relatives are simultaneous, or on account of the variety of opinions about it. That it was the opinion of the ancient philosophers, indeed, is evident from this, that Archytas, as has been before observed, admits a simultaneous existence to be the peculiarity of relatives, to which also Plato appears to assent.

It deserves also to be noticed, that there are some few things in which science is the same with the object of science. For those things which are without matter are certainly at the same time present with that science which always abides and is permanent in energy; whether there is any such thing in us, which perpetually remains in the intelligible world, as it appeared there is to Plotinus and Iamblichus, or whether it is in that intellect, which always understands in energy, if only any one is willing to call the intelligence of such an intellect science.

But that the object of science being subverted, science also is subverted, and that science being subverted does not destroy the object of science, is evident. For if the objects of science should be taken away, there would not be a science of any thing, and therefore science would have no existence 3

It is, however, dubious, whether no essence is among the number of things which are relatives, as seems to be the case, or whether this happens in certain second essences. For it is true, indeed, in first essences; since neither the wholes, nor the parts of first essences are relatives. Thus, a certain man is not said to be a certain man of something; nor is a certain ox said to be a certain ox of something. In a similar manner also with respect to the parts of these. For a certain hand is not said to be a certain hand of some one, but the hand of some one; and a certain head is not said to be a certain head of some one, but the head of some one. The like also takes place in most second essences. 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 things of this kind, therefore, it is evident that they are not among the number of relatives. In some of the second essences there is, however, a doubt; for instance, head is said to be the head of some one; hand is said to be the hand of some one; and in like manner other things of this kind; so that these may appear to be among the number of relatives. If, therefore, the definition of re-

existence; but though science should be taken away, yet the object of science will remain. Simplicius adds, for if ever through sloth or indolence we cast off the knowledge of things, yet, nevertheless, those things remain which are the objects of knowledge. Thus in music we formerly used to hear the quarter-tone, but now we have no sensation of this interval. But, that this is the case, Aristotle shows by adducing as an instance the quadrature of the circle. For as it was not discovered in his time, he says, if it is an object of knowledge the science of it does not yet exist, though it is itself an object of science. According to Iamblichus, however, the quadrature of the circle was known to the Pythagoreans, as appears from the assertions and demonstrations of Sextus Pythagoricus, who received by succession the art of demonstration; and after him Archimedes succeeded, who discovered the quadrature of a circle by a line which is called the line of Nicomedes. Likewise, Nicomedes attempted to square the circle by a line which is properly called the quadratrix. And Apollonius by a certain line which he calls the sister of the curve line, similar to a cockle, or tortoise, and which is the same with the quadratrix of Nicomedes. Carpus also attempted to square the circle by a certain line which, he says, is formed from a twofold motion. And many others, according to Iamblichus, have solved this problem in various ways. Simplicius, however, justly observes, that perhaps this theorem has been discovered organically, (i. e. by the assistance of curves which the moderns call mechanical) but not demonstratively; or in other words, with strict geometrical accuracy. latives

latives has been sufficiently framed, it is among the number of things very difficult, or among the number of things impossible to show that no essence ranks among relatives. But if the definition has not been sufficiently framed, but those things are relatives, the essence of which is the same as the being referred after a certain manner to a certain thing; something may perhaps be said in answer to these things. former definition, however, is consequent to all relatives; yet it is not the same thing, for the very being of them to consist in relation, and that being what they are, they are referred to other things. And from hence it is manifest, that he who definitely knows any one of relatives, will also definitely know that to which it is referred. It is also, therefore, evident from these things, that if any one knows that this particular thing is among the number of relatives; and if the essence 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 does not know that with reference to which this particular thing after a certain manner subsists; neither will he know whether it subsists after a certain manner with reference to something. particulars, indeed, a thing of this kind is evident. Thus, if any one definitely knows that this particular thing is double, he will also immediately definitely know that of which it is the double. For if he does not know that it is the double of something definite, neither, in short, will he know that it is double. In like manner, if any one knows that this particular thing is better than something else, it is necessary from what has been said, that he should immediately definitely know that than which it is better. But he will not indefinitely know that this is better than that which is worse: for a knowledge of this kind is opinion and not science; since he will not accurately know that it is better than something worse. For it may so happen that nothing is worse than it. Hence it is evidently necessary, that he who definitely knows any relative, should also definitely know that to which it is referred. It is possible, however, definitely to know what the head and the hand are, and

every

every thing of this kind, which are essences; but it is not necessary to know that to which they are referred. For it is not necessary to know definitely of whom this is the head, or of whom this is the hand. hence these will not be among the number of relatives. But if these are not among the number of relatives, it will be true to say, that no essence is a relative. Perhaps, however, it is difficult for him to assert any thing very clear about things of this kind, who has not made them the subject of frequent consideration. And to have doubted about each of these is not useless.

## CHAPTER VIII.

I DENOMINATE QUALITY that according to which certain things are said to be such1. But quality is among the number of things which are multifariously

It is a question among the interpreters, says Simplicius, why Aristotle inscribes this predicament concerning quale and quality, and whether the same thing is signified by both these words? Unless quality signifies the peculiarity itself, and that which is possessed, but quale, that which participates. Thus whiteness signifies the colour itself, and a white thing that which is coloured. If this, however, be admitted, which of these will be the predicament? Will it be some simple and incomposite form, or will it be a certain composite from subject and form? since these differ from each other. And if some one should contend that both these are two predicaments, there will be the same thing of quantity, and of relation, and they will be partly simple, and partly composites; so that there will not be only ten, but at least twenty predicaments. But, perhaps, because quality itself is called quale, and not only that is called quale which participates (for the ancients call whiteness a white thing), hence Aristotle inscribes the predicament concerning quality and quale. For whiteness is called a white thing, but a white thing, viz. that which participates, is not called whiteness. Simplicius farther observes that this inscription does not appear to have been assigned by Aristotle, since he does not similarly inscribe the other predicaments, but Achaicus and Alexander think that it is the fault of the transcriber who thus inscribed it. If, however, he adds, any one should contend that the inscription is proper, he may say that quality and quale signify the same thing with Aristotle, as may be shown from his Metaphysics.

With respect to the term quality, Plato in his Theætetus insinuates that he was the author of it. Hence, some of the ancients entirely subverted qualities, admitting that quale alone had an existence. This was the case with Antisthenes, who once said to Plato, I see a horse, yet I canmultifariously predicated. One species of quality, therefore, is called habit and disposition. But habit differs from disposition in this, that it is a thing more lasting and stable. And of this kind are the sciences and the virtues. For science appears to rank among the number of things which are more stable, and are with difficulty removed, when science is even but moderately possessed, unless a great mutation should be produced from disease, or any other casuality of this kind. In like manner virtue, such as justice and temperance, and every thing of this nature, does not appear to be easily removed or easily changed. But dispositions are said to be things, which are easily moved and rapidly changed; such as heat and cold, disease and health, and other things

not see equinity. But Plato said in reply, you have that by which a horse is seen, viz. a sensible eye, but you do not yet possess that by which quality is beheld and considered. Hence, of the ancients, some entirely subverted certain qualities, but left others; and all those which they admitted to have an existence, and to be the causes of existence to other things, they thought to be incorporeal. But others, as the Stoics, thought the qualities of incorporeal natures were incorporeal, and of bodies corporeal.

<sup>2</sup> Qualities, says Simplicius, are powers, and on that account are active, yet they are not primarily active, nor alone active. Hence, if quality is not every thing active, yet it is something active. In like manner also, power is not simply said to be quality, but a certain power; so that if there is a certain quality, it will also be a power, but the converse is by no means true, viz. that some power will always be a quality. Being, therefore, so far as it is being, will possess power in itself, but not from the participation of quality, since there is also a certain other power which is not quality. Hence being is very properly said to be most powerful, because it possesses the most principal and first power. Such essences also as are the same in energy, i.e. whose essence is the same with their energy, are not indigent of any quality, although they are powers, because they have received a power more ancient than qualities. Hence some powers have a subsistence by themselves. For the cause of power descends from on high, proceeding through all beings, and filling and containing all things, even as far as to such as are last, or in other words, terminating its progression in privations. If, however, we determine quality according to its proper and peculiar character, how will the conception of it be conjoined with the conception of power? Perhaps because its peculiarity is not repugnant to power. For every thing can do that which it does according to the peculiarity of itself. In short, it is the peculiarity of quality to distinguish essences from each other, to insert in them a proper character and energy about the participant of quality, and at the same time to extend their character; just as quantity energizes about that which is a quantum alone, and essence is conversant with essential form.

of this kind. For a man is disposed after a manner according to these, but is rapidly changed, from being hot becoming cold, and passing from health to disease. The like also takes place in other things: unless some one through length of time has become naturalized to these, and the disposition is incurable, or cannot without great difficulty be removed; in which case it may be called a habit. But it is evident that those things ought to be called habits which are more lasting, and are with greater difficulty removed. For those are not said to possess a scientific habit, who do not very much retain the dogmas of science, though they are disposed after a certain manner according to science, either worse, or better. Hence, habit differs from disposition in this, that the latter is easily removed, but the former is more lasting, and is with more difficulty removed.

Habits are also dispositions; but dispositions are not necessarily habits. For those who have habits, are also after a manner disposed according to them; but those who are disposed are not also entirely in the possession of habit. Another kind of quality is that according to which

3 Since Aristotle, says Simplicius, has delivered the division of qualities through four members, which also insinuates the duad prior to the tetrad, it is requisite to indicate the consequent order of division, which proceeds from the duad, just as Plato orders that a thing should first be divided as much as possible according to the lesser number. Of qualities, therefore, it must be said, that some are natural, but others adventitious. And the natural, indeed, are always internal, and inserted in things; but the adventitious operate externally, and may be rejected. And of these some are habits and dispositions, which differ by a longer and shorter time, by easy mutation, and difficult omission. But of natural qualities, some are according to capacity, and others according to energy. And the qualities according to capacity are those by which we are said to be adapted to effect any thing. But of those qualities which are according to energy, one kind is that which operates profoundly, which also is predicated in a twofold respect according to passive qualities. For either by the assistance of passion something is inserted in the senses, or because qualities accede from passion, such as sweetness, heat, whiteness, and the like. For these are qualities, and their possessors are very properly called qualia. But they are also called passive, so far as they insert passion in the senses, or so far as they accede according to passion. For some one under the influence of shame becomes red, timid, and pale. There is also another kind of qualities, viz. of those whose energy is in superficies, such as figure, and the form which is the resemblance of an animated form, and colour, not so far as it is simply colour, but so far

which we say that men are pugilistic, or adapted to the course, or healthy, or diseased; and, in short, whatever is said to take place according

as it gives completion to figure and resemblance. The same thing also may be said of every thing, which is seen in superficies according to lineament and representation. It is requisite, however, to know, as Iamblichus also remarks, that Aristotle admits figure to be an adventitious quality. For the same area, may at one time become a triangle, and at another a square, when transformed by art. And this is also the case with colour which is not natural, as the paleness of those who are afraid. There is also a certain disposition naturally, and not adventitious, as health and disease. And there are likewise habits of this kind, since they are possessed naturally. But Aristotle says, that science is among the number of things which are more stable, and are with difficulty removed, when science is even but moderately possessed. On which Simplicius observes, that the word moderately here does not signify that which is superficially known, since of such knowledge there is neither habit nor science; but Aristotle says moderately, because there are some sciences which are not very demonstrative, and on this account are not properly sciences; as Plato also shows that there are certain disciplines of this kind. Perhaps also in science there is a certain intension and remission, just as there is in habit and disposition; and hence, if some one should not have arrived at the summit of science, but only have made a moderate proficiency in it, as he possesses science, so it will be removed with difficulty, unless a great change is effected by disease, or something else of this kind. For some, Simplicius adds, through severe illness have lost all scientific knowledge. Thus, in Palestine, a certain person who excelled in the liberal disciplines, from disease forgot all that he had learned, so that after the recovery of his health, he was under the necessity of returning to the rudiments of grammar. The same thing also happens from another cause. Thus, it sometimes happens that he who is struck on the head, or who has drunk poison, will forget every thing, as happened to be the case, from eating a certain herb, to the soldiers who fought against the Parthians with Antonius \* the general of the Roman army, as Arrian narrates in his treatise On the Transactions of the Parthians. These soldiers, however, at length recovered their recollection, by drinking a mixture of wine and oil. Afterwards, Aristotle says, that in like manner the virtues are not easily removed, not because the virtues are similarly firm with, and as difficult to be removed as the arts and sciences; for the virtues are firmer and more tenacious than these; but he says in like manner, because the use of these virtues is every where requisite, and their energy is in every place, in every time, in every action, and in every circumstance of life. He also subjoins the example of disposition, adducing as an instance, heat, not natural heat, such as that of fire, but adventitious, such as that of heated water. And in a similar manner he adduces cold, not natural, as that of snow, but that which accedes to bodies that are made cold, and which also sometimes departs. Sickness and health, likewise, are easily removed. For these rapidly change to the contrary, unless they are so long retained by some one, as to be changed into his nature;

cording to natural power or imbecility. For each of these is not denominated from being disposed after a certain manner, but from possessing a natural power or imbecility of doing something easily, or of suffering nothing. Thus men are said to be pugilistic, or adapted to the course, not because they are disposed after a certain manner, but from possessing a natural power of doing something easily. And they are said to be healthy, from possessing a natural power of suffering nothing easily from casual circumstances; but to be diseased, from possessing a natural imbecility of suffering nothing easily from any thing casual. The hard and the soft have a subsistence similar to these. For a thing is said to be hard from possessing a power of not being easily divided; and that is said to be soft, which has an imbecility with respect to this very thing 4. The third genus of quality consists of passive qualities

and this takes place when disease cannot be cured, and health is with difficulty lost, otherwise they are not dispositions, but it is proper to call such qualities habits.

It is requisite to observe, however, that the habit pertaining to those intellectual natures, which are entirely separate from body, must not be assimilated to the habits which are here, but rather to those simple and unmingled forms which intellect contains in itself; just as the wisdom pertaining to intellect is different from that which pertains to soul. For the wisdom which is in soul, is a habit, but that which is in intellect is essence. Hence, it must not be enquired, if any quality here is common and synonymous with quality in the intelligible world. For in the latter all things, because they are separate and sufficient from themselves, are not indigent of the participation of any thing, on which account also they alone are denominated true beings. No quality, therefore, will be common to these corporeal, and those divine natures.

4 Aristotle now passes on to the second species of quality, which is predicated, as he says, according to natural power or imbecility. For since power has a multifarious signification, it now signifies natural aptitude, which also is predicated in a twofold respect, since one kind is simply predicated, but the other is considered with reference to the promotion, according to which aptitude is now perspicuous and prepared.

Simplicius farther observes, that this natural power is more universal, being as it were a certain genus, pertaining to every thing which is perfected in any manner whatever. For it is not possible that any thing should proceed from the imperfect to the perfect, unless intermediate power is present, leading the imperfect to perfection, which power receives its completion from the most perfect itself which accedes the last of all. Power, therefore, is that which brings together extremes, affords a path by which they may proceed from a worse to a better condition, and

passions. And things of this kind are such as sweetness, bitterness, sourness, and every thing allied to these; and farther still, heat and cold, whiteness and blackness. That these, therefore, are qualities is evident. For the recipients of them are called from them qualia. Thus honey from receiving sweetness, is said to be sweet; and a body from receiving whiteness, is said to be white. The like also takes place in other things. But they are called passive qualities, not because the recipients of the qualities suffer any thing. For neither is honey said to be sweet, from suffering any thing; nor any thing else among other things of this kind. Similarly to these also, heat and cold are said to be passive qualities, not from the recipients themselves suffering any thing; but because each of the above-mentioned qualities is productive of passion in the senses, they are called passive qualities. For sweetness produces a certain passion according to taste, and heat according to the touch. And in a similar manner the rest. But whiteness and blackness, and other colours, are not called passive qualities after the same manner with the above-mentioned, but in consequence of being produced from passion. That many mutations, therefore, of colours are produced through passion is evident. For a man when he blushes becomes red; and when he is terrified, pale; and every thing else of this kind. Hence, if any one naturally suffers a passion of this kind, it is likely that he will have a similar colour. For the disposition which is now produced about the body when he blushes, may also be produced in the natural constitution; so that a similar colour will be naturally

prepares them for, and furnishes them with an occasion of arriving at perfection. In our soul also, when the intellect of it is perfected by a separate intellect, viz. by an intellect of an order superior to that which is participated by the human soul, then this natural power leads our intellect to intellectual form, and intellection in energy. But this power is especially evident in the works of nature. For these are conversant with motion, which proceeds from natural power or capacity into energy, and cannot be received in any thing else than that which is adapted to receive it; since every form does not accede to every thing, but to that alone which can be perfected, so far as it has an aptitude to receive it. In a similar manner also in the soul, inasmuch as it is far distant from that intellect which is in energy, and is proximate to nature, it is considered according to natural power.

produced. Such symptoms, therefore, of this kind as receive their beginning from certain passions which are difficult to be moved, and are permanent, are called passive qualities. For whether in the natural constitution paleness or blackness is produced, they are called qualities; for according to these we call them quales; or whether through long disease or heat, paleness or blackness happens to the same person, and he is not easily restored to his former condition, or these remain through the whole of life; these also are called qualities; for in a similar manner from these we call them quales. But such symptoms as are produced from things which are easily dissolved, and rapidly restored to their former condition, are called passions, and not qualities; for they are not called according to them certain quales. For neither is he who blushes in consequence of being ashamed called red; nor is he who is pale through being terrified called pale; but they are rather said to have suffered something. Hence things of this kind are indeed called passions, but not qualities.

Similarly to these also passive qualities and passions are denominated in the soul: For such things as immediately, from the birth of any one, are produced from certain passions difficult to be removed,—these are called qualities; such as insanity, anger, and things of this kind. For men are said to be quales according to these, viz. wrathful, and insane. In a similar manner also, such other mutations of a thing from its proper condition as are not natural, but are produced from certain other symptoms, which are with difficulty removed, or which are, in short, immoveable;—these also, and things of this kind are called qualities; for those who possess them are called quales according to them. But such as are produced from things which are easily and rapidly restored to their former condition, are called passions; as, for instance, if any one being afflicted becomes more angry. For he is not called angry, who in a passion of this kind is more wrathful, but he is rather said to have suffered something. And hence things of this kind are, indeed,

said to be passions, but are not called qualities 5. The fourth genus of quality is figure, and the morphe \* which is about every thing; and besides these, rectitude and curvature, and whatever else is similar to these. For according to each of these, a thing is said to be quale, or to possess a certain quality. For to be a triangle or a square is said to be a certain quale, and also a right line or a curve. According to morphe also, every thing is said to be quale. The rare and the dense likewise, the rough and the smooth may appear to signify a certain quale. It seems, however, that these are foreign from the division of quality; since each of them rather appears to manifest a certain position of parts. For a thing is said to be dense from having its parts near to each other; but a thing is said to be rare, from having its parts distant

5 Some one perhaps may enquire why Aristotle before described disposition and habit by the easily moveable and the difficultly moveable, and now distinguishes passions and passive qualities by the same characteristics. The answer is, because before he considered habits and dispositions which are produced from learning, and extrinsically, as perfections difficult or easy to be removed; but here he considers the passive qualities and passions, which according to nature are easily, or with difficulty removed. And if this answer is not deemed sufficient, it may be farther observed, that heat so far as it disposes a subject in some way or other is called disposition, and so far as it has a permanent disposition is called habit; which also, so far as it is superficially effected by some agent, is called passion; and so far as the passion is produced permanently and intrinsically, it is called passive quality. Both these also, viz. that any thing is produced by passion, and that it occasions passion in the senses, are considered according to passion.

Simplicius farther observes, that Archytas appears to have arranged the species of quality according to passion, prior to the species of quality which is according to natural power. And perhaps this is more reasonable, because that which is in energy ought to precede that which is in capacity. Archytas also asserts, that the whole of this species of quality is properly conversant with, and receives its specific distinction in passion. He likewise unfolds this common element of it, comprehending at the same time in a common definition passive qualities and passions, by which means he escapes many doubts, and at the same time definitely comprehends their nature. For this species of quality is not pure, nor without matter and body, nor is it fixed in form, but appears to be a certain nature between forms and bodies, which is assimilated to bodies according to passion.

<sup>\*</sup> Morphe per ains to the figure, colour, and magnitude of superficies. See the Physics.

from each other. And a thing is smooth, indeed, from its parts being. situated in a certain respect in a right line; but it is rough, because one part exceeds, and another is deficient. Perhaps, therefore, there may appear to be a certain other mode of quality; but those we have enumerated are nearly such as are mostly adopted. The above-mentioned, therefore, are qualities. But those things are qualia which are paronymously denominated according to them; or which in some other manner are denominated from them. Most, therefore, and nearly all of them are called paronymously; as for instance, a white man from whiteness, a grammarian from grammar, and a just man from justice; and in a similar manner in the rest. Some things, however, because names are not given to qualities, cannot be paronymously denominated from them. Thus a racer or a pugilist, who is so called according to natural power, is not paronymously denominated from any quality. For names are not given to the powers, according to which these are called quales; as names are given to sciences, according to which men are said to be pugilists, or wrestlers, from disposition. For there is said to be a pugilistic and palæstric science; and from these those who are disposed to them are paronymously denominated quales.

Sometimes, however, the name being assigned [to quality] that which is called quale according to it is not paronymously denominated. Thus from virtue a worthy man derives his appellation; for from possessing virtue, he is said to be worthy, but he is not paronymously denominated from virtue. A thing of this kind, however, does not take place in many things. Those things, therefore, are called qualia which are paronymously denominated from the above-mentioned qualities, or which are in some other manner denominated from them 6. But contrariety is inherent

<sup>6</sup> Form is considered by Aristotle in a twofold respect; for it is either essential, or is a quality of superficies; the latter of which is called by him morphe. Form, therefore, is now considered by him, not as essential, since such a form is not quality, but it is considered so far as according to essential forms, it appears about superficies, according to which we say that some things are beautiful, and others deformed. For such forms are qualities, and these qualities are conversant with colour and figure.

But

inherent in quality. Thus justice is contrary to injustice, whiteness to blackness, and other things in a similar manner. Things also which subsist according to them are denominated qualia. Thus the unjust is contrary to the just, and the white to the black. A thing of this kind, however, does not happen in all things. For nothing is contrary to the yellow, or the pale, or to such like colours, though they are qualities. Farther still, if one of contraries is a quality, the other also will be a quality. And this is evident from particulars, to any one who directs his attention to the other categories. Thus, if justice is contrary to

But Iamblichus observes concerning this fourth species of quality, that according to Plato figures precede the constitution of bodies, as being the causes of their existence, and that from the differences of figures, he infers the differences of qualities. For Plato says, that the hot is that which is composed from figures of acute angles, such as pyramids are; and that the cold is that which is composed from figures less acute, such as the icosaedron, and in a similar manner in other things. Plato, however, does not assume mathematical figures, since these are neither material, nor natural, nor are considered in motion, but he admits such planes as are material and natural, and are conversant with motion \*. But Aristotle neither supposes with Plato, that figures are the principles of the elements, nor that they are immoveable, incorporeal, and immaterial, with mathematicians; but he considers them as material, consisting in bodies, and giving limitation and form to the superficies of bodies. Neither is the opinion of the Stoics, who assert that figures are bodies, in the same manner as other qualia, consonant to that of Aristotle. For body, indeed, is considered in quantity, but quality is different from quantity. The opinion, therefore, of Aristotle is a medium between those who assert that figures are entirely incorporeal, and those who assert that they are corporeal. Simplicius adds, but Archytas rightly explains such an opinion; for he says, that such a quality does not consist in figure, but in figuration; by which he insinuates that the subsistence of this kind of quality is with bodies, and that such qualities are present to bodies now formed and figured. Archytas also indicates that figures are not received through the whole of a body, but are only superficially present with it. For things figured, since they are not figures, have figure externally placed around them. He likewise insinuates, that such qualities sufficiently subsist, not according to their own energy, but so far as they are received by something else, and which indeed indicates that they are things figured, and not such as impart figure. It is also evident from Archytas, that such qualities do not consist according to termination, but according to a perfection reduced into something else. Indeed, as figure is the boundary of dimension, so the termination of the whole of form as far as to superficies produces morphe (μορφη), which is the apparent vestige of form (ειδος), and is the extreme extension of the procession of reason (i.e. of productive principle) as far as to exteriors.

injustice,

<sup>\*</sup> See this unfolded in the Introduction to my translation of the Timæus of Plato, and in the notes to my translation of Aristotle's treatise On the Heavens.

injustice, but justice is a quality, injustice also is a quality. For no one of the other categories accords with injustice, neither quantity, nor relation, nor where, nor, in short, any one of things of this kind, except quality. The like also takes place in the other contraries according to quality?. Qualia also receive the more and the less. For one thing is said to be more or less white than another; and one thing is said to be more or less just than another. The same thing likewise receives an accession. For a thing which is white, is capable of becoming still more white. This, however, is not the case with all, but with most things. For some one may doubt whether justice can be said to be more or less justice; and in a similar manner in other dispositions. For some doubt about things of this kind; and assert that justice is not entirely said to be more or less than justice, nor health than health. But they say that one person has more of health than another, and that one person has less of justice than another; and in a similar manner with respect to grammar, and other dispositions. The things, however, which are denominated according to these, indubitably receive the more and the less. For one man is said to be more a grammarian than another, and to be more just and healthy than another; and in a similar manner in other things. But triangle and square do not appear to receive the more and the less, nor any other figure. For those things which receive the definition of a triangle, and the definition of a circle, are all of them similarly triangles, or circles. But of things which do not receive the same definition, one is not said to be more [a certain quality than another. For a square is not more than an oblong, a circle; since neither of them receives the definition of the circle. In short, unless both receive the definition of the thing proposed, the one

<sup>7</sup> It is well observed by Simplicius, that Aristotle says, "if justice is contrary to injustice," because he has not yet unfolded what are contraries, and because in reality these are not opposed as contraries, but as habit and privation, on which account also Archytas speaks more accurately when he says, that not only contrariety is inherent in quality, but also privation. For the words of Archytas are as follow: "Certain contraries are conjoined to quality, as if it received a certain contrariety and privation."

cannot be said to be more [a certain quality] than the other. All qualities, therefore, do not receive the more and the less. Hence, of the above-mentioned particulars, no one is the peculiarity of quality. Things, however, are said to be similar or dissimilar according to qualities alone. For one thing is not similar to another according to any thing else than so far as it is quale. Hence it will be the peculiarity of quality, to be called similar or dissimilar according to it. It is not, however,

Aristotle having investigated in all the predicaments, whether the more and the less belong to them or not, says that in quality qualia receive the more and the less, where by qualia he means qualities, as the examples indicate. For in the place of an example, he assumes justice, though before he had said the just. And he again proves the thing proposed by induction, and adduces the white as an instance of corporeal qualities, and the just as an instance of the qualities of the soul. But each of these compared to another thing of the same species, and to itself, is said to receive intension and remission. For snow is said to be whiter than milk. Likewise, whiteness in the bodies of men, and justice in animals, in process of time, receive intension and remission; yet this is not the peculiarity of quality, since neither do these alone receive the more and the less, because it was before observed, that relatives also receive the more and the less. Again, neither does it belong to all quality to receive the more and the less, since neither figure which is quality, nor triangularity, nor the quality of the circle, receives the more and the less. Likewise, neither perfect virtue, nor perfect art, receives these; nevertheless, many qualities receive the more and the less. Hence, there are four sects concerning the intension and remission of qualities. For some are of opinion, that all qualities and qualia receive the more and the less, as Plotinus and other Platonists seem to assert; since every thing material receives the more and the less, and matter receives these on account of its natural infinity. But there is another opinion the contrary to this, which says, that in qualities, as in justice and whiteness, there is neither the more nor the less, since each is a certain whole, and consists according to one reason; on which account, as they say, intension and remission is in the participants. For the participations have an extent, because some things participate more, but others less, and on this account also, they think that habits receive the more and the less, because the recipients are qualia. This opinion also Aristotle appears to notice, when he says, "Some one may doubt whether justice can be said to be more or less justice." And he immediately subjoins, "For some assert that justice is not entirely said to be more or less than justice." In which place, he doubtless considers those things which are called by the authors of this opinion qualia, as receiving the more and the less. For he says, that one grammarian is more or less a grammarian than another, and that one thing is more just and more sane than another. Hence, when he says, "And in a similar manner with respect to grammar, and other dispositions," he calls habits in common dispositions, as also in what precedes, he calls them qualities. But the third sect is that

however, necessary to be disturbed, lest any one should say, that we, proposing to speak of quality, con-numerate many things which are relatives; for we said that habits and dispositions are among the number of relatives. For nearly in all things of this kind, the genera are said to be relatives; but of particulars no one is a relative. Thus science being a genus, that which it is, it is said to be with reference to some-

that of the Stoics, who say that the virtues neither suffer intension nor remission; but habits and qualities, according to them, partly receive intension and remission, and partly do not. There is also a fourth opinion which asserts, that immaterial qualities, and those which subsist by themselves, do not receive the more and the less, but that material qualities suffer intension and remission. Porphyry, however, opposes this opinion, because it does not rightly consider immaterial qualities. For these, as he says, are essences, and on this account, they neither receive intension nor remission, as neither do other essences.

Simplicius farther observes, that Iamblichus objects to the opinion of Plotinus, which changes qualities, and in a similar manner quale, into intensions and remissions. For, he says, it is absurd that quality, which is participated, should be changed in quality with the mutations with which the composite is changed. For how will that which is participated differ from its participants? Whence also, at the same time, the axiom respecting incorporeal natures is destroyed, viz. that they are impassive and unchangeable. Afterwards, Iamblichus adds the most true contemplation of the dogma, and says, that when an incorporeal essence gives itself to its recipients, and produces quale in body, it, nevertheless, abides according to itself in body, and though merged in body, yet does not lose its own proper essence. Hence it is attended with a certain impressed form, which receives intension. In a similar manner also, there is an incorporeal essence of quality, which is not capable of abiding in the same form, and on that account is not immaterial but material; yet it is not entirely material and separated from the whole of its nature, but after a certain manner abiding in itself, it is abstracted from a remoteness and infinity contrary to itself. Archytas also briefly insinuates the cause of receiving the more and the less as follows: " Certain common things are conjoined to quality, such as to receive contrariety and privation, and to receive the more and the less, as in passions." For since passions participate of a certain infinity, on that account they receive a certain indefinite intension, according to the more and the less; and thus quality, according to its own nature, will have the more and the less, and not on account of its participants. Iamblichus also enquires how the similar and the dissimilar are the peculiarity of quality? To this it may be replied, that if impression and character especially produce similitude, and quality consists in character, it will justly have its peculiarity according to the similar and dissimilar. Archytas also insinuates the same thing when he says, "But the peculiarity of quality is the similar and the dissimilar; for we say that all those things are similar in colour which have the same colour, and the same idea of character; but those are dissimilar which subsist in a contrary manner."

thing else; for it is said to be the science of a certain thing. But of particulars, no one is said to be that which it is, with reference to something else. Thus grammar is not said to be the grammar of something; nor music the music of something; unless perhaps according to genus these also are said to be relatives. For instance, grammar is said to be the science of something, not the grammar of something; and music is the science of something, not the music of something. So that particular sciences are not among the number of relatives. We are said, however, to be quales from particular sciences; for we possess these. And we are said to be scientific from possessing certain particular sciences. Hence these are particular qualities according to which we are sometimes said to be quales; but these are not among the number of relatives. Again, if the same thing should be a particular quality and a relative, there is no absurdity that it should be numerated in both genera.

## CHAPTER IX.

To ACT and TO SUFFER receive contrariety, and the more and the less. For to heat is the contrary of to refrigerate, to be heated is the contrary of to be refrigerated, and to be pleased is the contrary of to be pained; so that they receive contrariety. They also receive the more and the less. For it is possible to heat more and less, to be heated more and less, and to be pained more and less. To act and to suffer, therefore, receive the more and the less. And thus much we have said of these things. But we have spoken of the being situated in what we said about relatives, and have observed, that it is paronymously denominated from positions. And with respect to the other categories, viz. when, where, and to have, because they are manifest, nothing else can be said of them, than was said in the beginning; that to have, signifies, indeed,

indeed, to be shod, to be armed; that where signifies, for instance, in the Lyceum, in the Forum; and such other things as are asserted of these. What has been said, therefore, of the proposed genera is sufficient 9.

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• Since there are ten genera, four of which have been considered, as they are more universal, and receive a more extended contemplation, Aristotle very properly thought they should be copiously discussed, but that the rest should be treated with brevity. And with respect to the predicament of position, Aristotle refers the reader to the predicament of relation. For we say that position, since it is the position of something posited, is among the number of relatives. It will be useful, however, to learn what Porphyry and Iamblichus have discussed about the remaining three predicaments, since they are neglected by Aristotle. They say, therefore, that where and when, are as those things which are relatives, which are not principally considered in things, but are among the number of accessories. For quantity being supposed, those things which are in time and place accede, as where and when, as also such things as are relatives. Where, indeed, is not place, nor is when time; but time and place having a prior existence, these afterwards accede; so that a thing which is in place is said to be somewhere, and that which is in time to be when. Thus Socrates yesterday was in the Lyceum. But where seems to be of one species, and not to receive differences; but, nevertheless, this indeed is indefinitely said of those things which are in place, as of those which are in a city, and it is also said definitely, as of those which are in a porch, or in this part of a porch. It likewise receives all the differences of place, since where is said to be both upward and downward; and it may also be predicated according to peculiar and common place, and according to place essentially and accidentally. In a similar manner also, when is not time, but time pre-existing, when is predicated of a certain thing. Thus the festival of Bacchus is said to be in the past year, or in the present, or in the future. When also receives the differences of time. For the past is called formerly, the present is called now, and the future hereafter. In like manner the predicament of having, signifies something acquired, and separate from the essence of an existing thing, at the same time that it exists together with it. The predicament to have, therefore, is a habitude of certain acquired things. For to be cloathed is nothing else than to have a garment, and to be shod is nothing else than to have shoes. And these, indeed, are divided from the possessor, and separate from his essence, neither belonging to him as essence, nor as accident. Hence the predicament to have or habit does not possess in itself specific differences, but is capable of receiving a division according to the differences of those things which are possessed. And these, indeed, are animated, as a stag, and an ox, but those inanimate, as a garment, and armour. It can likewise receive a division according to the difference of those things which are possessed; as when some one has apt habits in the soul, and corporeal habits in the body; yet according to the having, or being had, there is no difference. But because Porphyry and Iamblichus say, that what is had or possessed in the soul, is among the number of acquired habits, it deserves to be considered whether or not those habits are qualities, and those things which are denominated from them are qualia; just as bodies

also

## CHAPTER X.

LET us now speak concerning opposites, and in how many ways it is usual to be opposed. One thing, therefore, is said to be opposed to another quadruply; either as relatives; or as contraries; or as privation and habit; or as affirmation and negation. And thus speaking according to a rude delineation each of things of this kind is opposed; as relatives, as the double to the half; as contraries, as evil to good; as privation and habit, as blindness and sight; and as affirmation and negation, as he sits, he does not sit. Such things, therefore, as are opposed as relatives, are said to be that which they are with reference to opposites, in whatever way they may be referred to them. Thus the double of the half, is said to be that which it is with reference to something else; for it is said to be the double of something. Science also is opposed to the object of science as a relative; and science is said to be that which it is with reference to the object of science. The object of science likewise is said to be that which it is, with reference to an opposite, viz. science; for the object of science is said to be an object of science to something, viz. to science. Such things, therefore, as are opposed as relatives, are said to be what they are with reference to opposites, or in whatever manner they may be referred to each other. But things which are opposed as contraries, are by no means said to be that which they are with reference to each other, but are said to be contrary to each other. For neither is good said to be the good of evil, but the contrary to evil; nor is white said to be the white of black, but the contrary to it. So that these oppositions differ from each

also participating of blackness, are said to have blackness. For the habits of the soul are not placed about the soul in the same manner as garments about the body, but they are certain dispositions about it, causing it more or less to be changed in quality.

other 1. Such contraries, however, as are of that kind, that it is necessary one of them should be inherent in those things, in which it is naturally adapted to be inherent, or of which it is predicated;—such as these have nothing intermediate. But those contraries in which it is not necessary that one of them should be inherent, have something intermediate. Thus, for instance, health and disease are naturally adapted to subsist in the body of an animal; and it is necessary that either health or disease should subsist in the body of an animal. The odd and the even also are predicated of number; and it is necessary that either the odd or the even should subsist in number. Nor is there any thing intermediate in these, neither between disease and health, nor between the odd and the even. But those contraries in which it is not necessary that one of them should be inherent, have something intermediate. Thus black and white are naturally adapted to be in body; and it is not necessary that one of these should be inherent in body; for not every body is either black or white. Vileness and worth also are predi-

Aristotle, says Simplicius, appears to have derived what he here discusses about opposites from the treatise of Archytas ON OPPOSITES; which Archytas does not co-arrange with his treatise On the Ten Genera, but has thought proper to consider them separately. For he delivers the division of them as follows: "Opposites are partly according to custom, and partly according to nature. And those things, indeed, are said to be mutually opposed, which are contrary, as good is contrary to evil, health to sickness, and truth to falsehood. Some things also are opposed as habit and privation; as life is opposed to death, sight to blindness, and science to oblivion. Some things likewise are opposed as relatives; as the double is opposed to the half, the governor to the governed, and the master to the servant. And some things are opposed as affirmation and negation; as to be a man, is opposed to this, not to be a man; and to be worthy, to not to be worthy." Aristotle, therefore, defines that to be the first of the other oppositions, which is according to the genus of relation, because this opposition has something peculiar, viz. that things which are thus opposed are mutually simultaneous. But Archytas adduces the three above mentioned opposites as relatives, as subsisting according to habitude, and says as follows concerning relative opposition: "It is necessary that relatives should at one and the same time be generated and corrupted. For it is impossible that the double should be, and the half not have an existence, or, on the contrary, that the half should have an existence, and the double not. In like manner, as often as the double is generated, at the same time the half is generated, and as often as the double is corrupted, together with it also the half is corrupted."

cated of man, and of many other things; yet it is not necessary that one of these should be in those things of which it is predicated. For not all things are either vile or have worth. There is also something between these. Thus, between the white and the black, there is the dark brown and the pale, and such other colours; but between vileness and worth, that which is neither vile nor has worth is the medium. In some things, therefore, names are given to the intermediate natures. Thus the dark brown, the pale, and such other colours, are the media between white and black. But in some things it is not easy to assign a name to that which is intermediate; but that which is intermediate is defined by the negation of each of the extremes; as, for instance, that which is neither good, nor bad, neither just, nor unjust<sup>2</sup>. Privation, however,

<sup>2</sup> The difference of contraries is unfolded by Archytas as follows: "Oppositions are divided into species mutually different. For of contraries some are without, but others have a medium. Thus between health and disease there is no medium; and, in a similar manner, we must not admit that there is any other contrariety between rest and motion, him who is awake, and him who is asleep, the straight and the curved. But between the much and the few, the intermediate is the measured and the moderate; between a sharp and a flat voice that which is concordant; between the swift and the slow, that which proceeds with an equable motion; and between the more and the less, that which is equal. Whence universally, among things especially necessary, it is necessary that there should be one contrariety which does not receive a medium. For between health and disease there is no medium, since it is necessary that every animal should be ill or well. Nor has sleep and wakefulness any medium, since it is necessary that every animal should either be awake or asleep. In like manner, there is no medium between rest and motion, since it is necessary that every animal should either be at rest, or in motion. But though these things are especially necessary, it is not necessary that both or either of these contraries should subsist about its recipient, when they receive a medium. For the medium between white and black is the dark brown, and it is not necessary that every animal should be black or white. Thus also between the great and the small, the medium is the equal, and it is not necessary that every animal should be either great or small. Between the hard and the soft, the medium is that which is well perceived by the sense of touch; and it is not necessary that every animal should be hard or soft. Of contraries also, there are yet three differences, because some things are opposed, as good to evil, as health to sickness; some are opposed, as evil to evil, as avarice to prodigality; and some as neither of these to the other, as the black to the white, and the heavy to the light. Farther still, of contraries, some accede to the genera of genera; for good is contrary to evil, and good is the genus of the virtues, and evil of the vices; but others accede to the genera of species. however, and habit are predicated of something which is the same. Thus sight and blindness are predicated of the eye. And universally, each of these is predicated of that in which habit is naturally adapted to be produced. But we then say that each of the things which are capable of receiving habit, is deprived of it, when it by no means is inherent in that in which it is naturally adapted to be inherent, or when it is naturally adapted to possess it. For we say that a man is toothless, not because he has not teeth; and we say that he is blind, not because he has not sight; but because he has not these, when he is naturally adapted to have them. For some persons have neither sight nor teeth from their birth; yet they are neither called toothless, nor blind. To be deprived, however, and to possess habit, are not privation and habit. For the sight is habit, but blindness privation. But to possess sight is not sight, nor is to be blind blindness. For blindness is a certain privation; but to be blind is to be deprived, and is not privation. For if blindness were the same with to be blind, both might be predicated of the same person. But a man, indeed, is said to be blind, yet he is by no means said to be blindness. To be deprived also, and to possess habit, appear to be opposed in the same manner as privation and habit; since the mode of opposition is the same. For as blindness is opposed to sight, so likewise to be blind is opposed to the possession of sight3. That.

species. Thus virtue is the genus of prudence and temperance, but vice of imprudence and intemperance; and these are contrary in species. For prudence is contrary to imprudence, and temperance to intemperance. And if prudence and temperance are species of virtue, imprudence and intemperance are species of vice. The first genera, therefore, are also those which we denominate the genera of genera. But they likewise receive a division, because there are certain extreme species, and referred to sense, which are not only species, but also genera. Thus triangle is a species of angle, but the genus of the right-angled, equilateral, and scalene triangle." Simplicius adds, that in what is here said by Archytas, some things accord with what is delivered by Aristotle; but that the ultimate difference, through which some things are contraries in the genera of genera, others in the genera of species, and others in species, are perhaps here omitted by Aristotle, as not pertinent to the present discussion.

3 According to Iamblichus, the opposition of privation is not to be considered according to any one signification of habit, but according to all the significations of it. For thus there will

That, however, which falls under affirmation and negation, is not For affirmation is an affirmative sentence, affirmation and negation. and negation is a negative sentence; but nothing which falls under affirmation or negation is a sentence, but a thing. These, however, are said to be opposed to each other, as affirmation and negation; since in these also there is the same mode of opposition. For as affirmation is sometimes opposed to negation; as, for instance, he sits, is opposed to, he does not sit; thus also the thing which is under each sentence is opposed; for instance, that some one sits, is opposed to, some one does But that privation and habit are not opposed as relatives is evident; since that which a thing is, is not asserted of its opposite. For sight is not the sight of blindness, nor is it in any other way referred to it. In like manner, neither is blindness said to be the blindness of sight; but blindness, indeed, is said to be the privation of sight, but is not said to be the blindness of sight. Farther still, all relatives are referred to things which reciprocate; so that blindness also, if it was among the number of relatives, would reciprocate with that to which it is referred. But it does not reciprocate; for sight is not said to be the sight of blindness. That things also which are predicated according to privation and habit, are not opposed as contraries, is from these things manifest. For of contraries between which there is nothing intermediate, it is always necessary that one of them should be inhe-

be a perfect opposition of all privations to all habits, and thus there will be opposites in common to every species; as, for instance, the opposition of this privation to this habit, according to its own proper mode. For, in short, if any one has not that which he is naturally adapted to have, and when he is naturally adapted, he is said to be in privation. Since, therefore, habit is said to be multifariously, non-habit also and privation will have a multifarious subsistence.

Archytas also, (Simplicius adds) triply divides privation. For he says, that privation and to be deprived, are predicated triply; either because a thing by no means possesses, as a blind man has not sight, a dumb man has not voice, and a man without discipline has not science. A thing also is said to be deprived, when it does not well possess any thing. Thus, he who has not a good hearing, hears with difficulty, and he who has dim eyes sees with difficulty. And according to a third mode, when the quality of a thing is not possessed; as that which has small feet, and that which has a slender voice.

rent in those things in which it is naturally adapted to be inherent, or of But between these there is nothing intermediwhich it is predicated. ate, of which it was necessary that the one should be inherent in that which is capable of receiving it; as is evident in disease and health, and in the odd and the even number. Of those things, however, between which there is something intermediate, it is never necessary that one of them should be inherent in every thing [which is capable of receiving For it is not necessary that every thing which is capable of receiving should be either white or black, either hot or cold; since nothing prevents there being a certain medium between these. Again, of these also there was a certain medium, of which it was not necessary that one of them should be inherent in that which is capable of receiving it; unless in those things in which one of them is naturally inherent; as in fire to be hot, and in snow to be white. In these, however, it is necessary that one of them should be definitely inherent, and not in whatever way it may happen; for neither does it happen that fire is cold; nor that snow is black. Hence it is not necessary that one of them should be inherent in every thing which is capable of receiving it, but in those things alone in which one of them is naturally inherent, and in these, that which is definitely, and not casually one. In privation and habit, however, neither of the above-mentioned particulars are true. For it is not always necessary that one of them should be inherent in that which is capable of receiving it; since that which is not yet naturally adapted to have sight, is neither said to be blind, nor to have sight. Hence these things will not be among the number of such contraries as have nothing intermediate. Neither will they be among the number of things which have something intermediate; since it will be some time or other necessary that one of them should be inherent in every thing capable of receiving it. For when a man is now naturally adapted to have sight, then he is said either to be blind, or to have sight; nor has he one of these definitely, but either of them as it may happen. But in contraries in which there is something intermediate, it is never necessary that one of them should be inherent in every thing [which is capable

pable of receiving it], but in certain things [only], and in these one of them definitely, and not either of them casually. Hence it is evident that things which are opposed according to privation and habit, are not in either of these ways opposed as contraries.

Farther still, in contraries indeed, the recipient existing, it is possible that the change of the contraries into each other may be effected, unless one of them is naturally inherent in something; as, for instance, it is naturally inherent in fire to be hot. For it is possible for that which is well to be ill; for that which is white to become black; for the cold to become hot; and the hot to become cold. It is also possible for the worthy to become depraved, and the depraved to become worthy. For he who is depraved being led to better pursuits and discourses, advances though but a little to a better condition. If, however, he once makes a proficiency, though but in small degree, it is evident that he will become at length perfectly changed, or will have made a great proficiency; for he will always become more disposed to virtue, if he has made any progress whatever from the beginning. Hence it is likely that he will receive a greater increase, and this always taking place, that he will at length be perfectly restored to a contrary habit, unless he is prevented by time. But in privation and habit, it is impossible that a mutation into each other should be effected. For a mutation may take place from habit to privation; but it is impossible there should be a mutation from privation to habit; since neither can he who has become blind again see; nor being bald again possess hair; nor being toothless again have teeth. It is evident, however, that such things as are opposed as affirmation and negation, are opposed according to no one of the abovementioned modes; for in these alone it is always necessary, that one of them should be true, but the other false. For neither in contraries is it always necessary that one of them should be true, but the other false; nor in relatives; nor in habit and privation. Thus, for instance, health and disease are contraries; and neither of them is either true or false. In a similar manner also, the double and the half are opposed as relatives; and neither of them is either true or false. Neither in things which

which are predicated according to privation and habit [is one of them true, and the other false]; as, for instance, sight and blindness. And, in short, no one of things which are predicated without any conjunction is either true or false; but all the above-mentioned particulars are predicated without conjunction. Nevertheless, a thing of this kind may especially appear to happen in those contraries which are predicated according to conjunction. For, that Socrates is well is the contrary of Socrates is ill. But neither in these is it always necessary, that one of them should be true, and the other false. For Socrates existing, one of them will be true, but the other false; but Socrates not existing, both will be false. For Socrates, in short, not existing, neither is it true that Socrates is ill, nor that he is well. But in privation and habit, [the subject] in short, not existing, neither of them is true; and [the subject] existing, the one is not always true, but the other false. For that Socrates sees is opposed to Socrates is blind, as privation and habit. And Socrates existing, it is not necessary that one of them should be true or false; for when he is not naturally adapted to have them, both are false. But Socrates, in short, not existing, thus also both are false, viz. that he sees, and that he is blind. In affirmation and negation, however, whether Socrates is or is not, one of them will always be false, and the other true. For it is eveidnt, with respect to these two, Socrates is ill, and Socrates is not ill, that when he exists one of them is true, but the other false. And in a similar manner, when he does not exist. For when he does not exist, that he is ill is false; and that he is not ill is true. Hence, in those things alone which are opposed, as affirmation and negation, it will be the peculiarity, that one of them is always either true or false 4.

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<sup>\*</sup> The discussion of Aristotle concerning opposites, says Simplicius, being finished, it will be useful to write what Archytas says of them in his treatise On Opposites, because the divine Iamblichus has not inserted any thing from it in his treatise; and probably he never saw it; for if he had seen it, it would not have been unnoticed by him. Archytas, therefore, says as follows: "Things are said to be mutually opposed, according to law and nature, some indeed as contraries;

### CHAPTER XI.

EVIL is necessarily contrary to GOOD; and this is manifest from an induction of particulars. Thus disease is contrary to health, injustice to justice, and fortitude to timidity. And in a similar manner in other things. But to evil, sometimes good is contrary, and sometimes evil.

For

contraries; as good to evil, health to sickness, and truth to falsehood. Some also are opposed as habit to privation; as life to death; sight to blindness; and science to oblivion. Some, again, are opposed as being after a certain manner relatives; as the double to the half; the governor to the governed; and the master to the servant. But some are opposed as affirmation and negation; as to be a man to that which is not to be a man, and to be worthy to that which is not to be worthy." Archytas also, having thus explained the four oppositions, adds as follows concerning the difference of them: "These, however, differ from each other, because contraries do not necessarily subsist together at one and the same time, nor are they at one and the same time corrupted. For health is contrary to disease, and rest to motion; but neither is health simultaneous with sickness, nor rest with motion, nor are both these generated or corrupted at one and the same time. But the habits of generation and privation differ from these, because contraries are naturally adapted to be changed into each other; as health into sickness, and sickness into health, the sharp into the flat, and the flat into the sharp. Privation and habit, however, subsist differently, because habit is changed into privation, but privation is not changed into habit, Thus an animal dies, but a dead animal does not return to life. And universally, habit is the possession, but privation the defect of that which is according to nature. But with respect to those opposites which are relatives, it is necessary that they should be generated and corrupted, at one and the same time. For it is not possible that the double should exist, and the half not exist, or that the half should exist, and not the double. Whenever also the double is generated, the half also is generated; and as often as the double is corrupted, at the same time also the half is corrupted. Affirmation and negation, indeed, are rather species of speech, and are rather significant of the true or the false. For that a man is, is true when he exists, and false when he does not exist. There is the same reasoning also with respect to negation. For this is either true or false, together with the thing signified: it is true indeed, when the thing exists, but false when it does not exist. There is also a certain medium between good and evil, which is neither good nor evil. Likewise, between the few and the much, the medium is the moderate; and between the slow and the swift, that which is moved equably. But between habit and privation there

For to indigence, which is an evil, excess is the contrary, which is also an evil. In a similar manner mediocrity, which is contrary to either of these, is good. And this, indeed, may be seen in a few things; but in most the contrary to evil is always good 5. Again, of contraries it is not necessary if the one is, that the remainder should also be; for all persons being well, there will be health indeed, but not disease. And in like manner, all things being white, there will be whiteness indeed, but not blackness. Farther still, if to Socrates is well, Socrates is ill is contrary; and it is not possible that both can be inherent in the same thing; it cannot be possible, that one of the contraries existing, the other also exists. For that Socrates is well existing, that Socrates is ill.

there is no medium. For there is nothing intermediate between life and death, sight and blindness; unless some one should say, that an animal when it is not yet generated is the medium between life and death; and that in like manner a whelp who does not yet see is the medium between that which it is to be blind, and that which it is to see. He, however, who says this, will assign a medium from accident, and not according to the proper boundary of contrarieties. But relative opposites receive media. For the medium between a master and a slave is a free man; the medium between the greater and the lesser, is said to be the equal; and between the wide and the narrow is the coherent. Thus also between other contraries, some medium will be found, either with, or without a name; but between affirmation and negation there is no medium. Thus, between the man is and the man is not, the musician is and the musician is not, there is no medium. And universally, it is necessary that he who says any thing of any thing should either affirm or deny something of it. He must affirm, indeed, when he signifies that something is inherent, as the being musical is inherent in man, and the being warlike in a horse. In like manner, he must deny that something is inherent when he signifies that something is not, as that a man is not, or that a horse is not; or when something does not co-exist with this or that thing, as that the man is not musical, or that the horse is not warlike. Indeed, between affirmation and negation there is no medium." These things, therefore, Archytas wrote concerning the mutual difference of opposites, and at the same time also has accurately shown the nature of them, in which, as is evident, he has been followed by Aristotle.

Aristotle, says Simplicius, follows Archytas, in adopting this difference of contraries. For Archytas thus writes in his treatise On Opposites: "Farther, there are three differences of contraries. For some things are opposed as good to evil, as, for instance, health to sickness; some as evil to evil, as avarice to prodigality; and some as neither to neither, as the white to the black, and the heavy to the light;" where he calls neither, that which by posterior philosophers was called *indifferent*, just as Aristotle also calls the negation itself of the extremes, neither good nor evil.

will not exist. But it is evident that contraries are naturally adapted to subsist about the same thing, either in speech or genus. For disease and health are naturally adapted to subsist in the body of an animal; but whiteness and blackness are simply in body; and justice and injustice are in the soul of man. It is necessary, however, that all contraries, should either be in the same genus, or in contrary genera, or should be genera themselves. For white and black are in the same genus; since colour is the genus of them. But justice and injustice are in contrary genera; for of the one virtue is the genus, but of the other vice. And good and evil are not in a genus, but are themselves the genera of certain things <sup>6</sup>.

#### CHAPTER XII.

ONE thing is said to be PRIOR to another quadruply. First, indeed, and most principally according to time; according to which, one thing is said to be older, and more ancient than another. For it is said to be older and more ancient, because the time is longer. In the second place, [one thing is said to be prior to another,] because it does not reciprocate according to the consequence of existence. Thus one is prior to two. For two existing, it immediately follows that one is; but one

6 Archytas, says Simplicius, does not omit, but seems more accurately to have explained the difference of contraries adduced by Aristotle. For thus Archytas writes about them: "Of contraries also, some subsist in the genera of genera. For good is contrary to evil, and good is the genus of the virtues, and evil is the genus of thevices. Some likewise are in the genera of species. For virtue is contrary to vice, and virtue is the genus of prudence and temperance, and vice is the genus of imprudence and intemperance. And, lastly, some are in species. For fortitude is contrary to timidity, and injustice to justice; and justice and fortitude are species of virtue, and injustice and timidity are species of vice." Hence, Archytas here says, that nothing hinders but those contraries which are the genera of genera may also be reduced under some one genus, as good and evil under quality. He also asserts, that some are the genera of species, and others species; and he subjoins, that the first genera are always species; for, he says, they are not only genera, but also species.

existing, it is not necessary that two should exist. Hence, the consequence of the existence of the remainder does not reciprocate from the existence of one. But a thing of that kind appears to be prior, from which the consequence of existing does not reciprocate. In the third place, the prior is predicated according to a certain order, as in sciences and discourses. For in the demonstrative sciences, the prior and posterior subsist in order; since the elements are prior in order to the diagrams; and in grammar the elements are prior to syllables. And in a similar manner in discourses; for the proem is prior in order to the narration. Farther still, besides what we have mentioned, the better and the more honourable appear to be prior by nature. For the multitude are accustomed to say that those whom they more honour and love are prior in their esteem. This, however, is nearly the most foreign of all the modes. So many, therefore, nearly are the modes of priority which are adopted. But, besides the above-mentioned, there also may appear to be another mode of the prior. For of those which reciprocate according to the consequence of existence, that which is in any respect the cause of the existence of the one, may be justly said to be prior by nature. And that there are certain things of this kind is manifest For, that man exists, reciprocates according to the consequence of existence with the true sentence respecting him. For if man is, the sentence is true by which we say that man is. And it reciprocates. For if the sentence is true by which we say that man is, then man is. A true sentence, however, is by no means the cause of the existence of a thing; but it appears that a thing is, in a certain respect, the cause that a sentence is true. For in consequence of a thing existing, or not existing, a sentence is said to be true or false. Hence one thing may be said to be prior to another according to five modes.

#### CHAPTER XIII.

THOSE things are said to be SIMULTANEOUS, simply indeed, and most properly, of which the generation is in the same time; for neither of these is prior or posterior. But these are said to be co-existent according to time. Those things, however, are naturally simultaneous, which reciprocate, indeed, according to the consequence of existence, but the one is by no means the cause of the existence of the other; as in the double and the half; for these reciprocate. Thus the double existing, the half also is; and the half existing, the double is. ther is the cause of existence to the other. Those things also, which being derived from the same genus have a division opposite to each other, are said to be naturally simultaneous. But those things are said to have a division opposite to each other, which subsist according to the same division. Thus the winged is opposed to the pedestrious and the aquatic. For these being derived from the same genus have a division opposite to each other. For animal is divided into these, viz. into the winged, the pedestrious, and the aquatic; and no one of these is prior or posterior, but things of this kind appear to be naturally simultaneous. Each of these, however, may again be divided into species; as, for instance, the winged, the pedestrious, and the aquatic. Those things, therefore, will be naturally simultaneous, which being derived from the same genus, subsist according to the same division. nera are always prior to species; for they do not reciprocate according to the consequence of existence. Thus, the aquatic existing, animal is; but animal existing, it is not necessary that the aquatic should exist. Hence those things are said to be naturally simultaneous, which reciprocate, indeed, according to the consequence of existence, but the one is by no means the cause of existence to the other; and this is also the

the case with those things which being derived from the same genus, have a division opposed to each other. Those things, however, are simply simultaneous, of which the generation is in the same time.

#### CHAPTER XIV.

Of motion there are six species, viz. generation, corruption, increase, diminution, alliation, or change in quality, and mutation according to place. With respect to the other motions, therefore, it is evident that they are different from each other. For generation is not corruption; nor is increase diminution, nor mutation according to place; and in a similar manner with respect to other motions. In alliation, however, it is doubtful, whether it is necessary that what is changed in quality, is so changed according to some one of the other motions. But this is not true; for it happens that we are changed in quality, nearly according to all the passive qualities, or the greater part of them, without any communication with the other motions. For it is not necessary that what is moved according to passive quality, should be either increased And in a similar manner in the other motions. Hence or diminished. alliation will be different from the other motions. For if it were the same, it would be requisite that what is changed in quality, should immediately be also increased or diminished, or follow some one of the other motions; but this is not necessary. In a similar manner also, that which is increased, or moved with any other motion, ought to be changed in quality. Some things, however, are increased, which are not changed in quality. Thus, for instance, a square is increased, when a gnomon is placed about it, but does not become at all more changed in quality. The like also takes place in other things of this kind; so that these motions will be different from each other. Simply, however.

however, rest is contrary to motion; but particular rests to particular motions; corruption, indeed, to generation; diminution to increase; and the rest according to place, to the mutation according to place. But the mutation according to a contrary place, appears to be especially opposed; as, for instance, ascent to descent, and descent to ascent. It is not, however, easy to assign what is the contrary to that which remains of the motions that have been explained. But it seems that nothing is contrary to it, unless some one should also oppose to this, the rest according to quality, or the mutation of a quality into a contrary quality; just as in the mutation according to place [we oppose the rest according to place, or the mutation into a contrary place. For alliation is a mutation according to quality; so that the rest according to place, or the mutation of a quality into a contrary quality, will be opposed to the motion according to quality. Thus the becoming white is opposed to the becoming black; for a thing is changed in quality, a mutation of quality into contraries taking place.

# CHAPTER XV.

To have is predicated in many modes; since it is predicated either as habit and disposition, or as some other quality. For we are said to have science and virtue. Or it is predicated as a quantum; as, for instance, the magnitude which any one has. For he is said to have a magnitude of three or four cubits. Or it is predicated as things about the body; such as a garment, or a shirt. Or as in a part; as a ring in the hand. Or as a part; as the hand, or the foot. Or as in a vessel; as a bushel has (i. e. contains) wheat, or any amphora wine; for the amphora is said to have the wine, and the bushel the wheat. All these, therefore, are said to have as in a vessel. Or it is predicated as a possession:

session; for we are said to have a house or land. A man also is said to have a woman, and a woman a man. The mode, however, of having now mentioned appears to be most foreign; for by having a woman we signify nothing else than that she co-habits with a man. Perhaps also, there may appear to be other modes of having; but all those have been nearly enumerated, which are usually mentioned.