

Aristotle's Theory of Predication

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1) *Predication*

Predication is a lingual relation. We have this relation when a term is said (λέγεται) of another term. This simple definition, however, is not Aristotle's own definition. In fact, he does not define predication but attaches his almost in a new field used word κατηγορεῖσθαι to λέγεται. In a predication, something is said of another thing, or, more simply, we have 'something of something' (ἐν καθ' ἐνὸς). (PsA.¹, A, 22, 83b17-18) Therefore, a relation in which two terms are posited to each other in a way that one is said (predicated) of the other is a predication. The term of which the other term is said is called a subject (ὑποκειμένον) and the other, which is said about the subject, is called the predicate. Thus, in a predication the predicate is predicated of the subject; given that being predicated is almost as the same as being said. The relation between being said and being predicated is so close that 'if something is said of a subject both its name and its definition are necessarily predicated of the subject.' (Cat., 5, 2a19-26) This, however, is true only about the second genera and not the accidents.

¹ Abbreviations used in this paper:

Cat.	<i>Categories</i>
Met.	<i>Metaphysics</i>
OI.	<i>On Interpretation</i>
Phy.	<i>Physics</i>
PrA.	<i>Prior Analytics</i>
PsA.	<i>Posterior Analytics</i>
To.	<i>Topics</i>

a) Nature of relation in predication

What is Aristotle's theory about the nature of the relation in a predication? How does he fundamentally understand this relation? Phil Corkum distinguishes between predication logic and traditional term logic and argues that the relation between subject and predicate in Aristotle is of the latter kind. While in predicate logic, subjects and predicates have distinct roles, they have the same role in traditional term logic. In predication logic, subjects refer, but predicates characterize. Thereupon, a sentence expresses a truth if the object to which the subject refers is correctly characterized by the predicate. In traditional term logic, both subjects and predicates refer and a sentence expresses a truth if both name one and the same thing. He concludes that Aristotle 'problematically conflates predication and identity claims' because while he thinks both subjects and predicates refer, he would deny that a sentence is true just in case the subject and the predicate name one and the same thing. Based on this, Corkum believes that Aristotle's core semantic is not identity but the weaker relation of constitution, which is a mereological interpretation: 'All men are mortal' is true just in case the mereological sum of humans is part of the mereological sum of mortals.²

b) Aristotle's theory of predication: one or two theories?

Frank Lewis³ finds an inconsistent gap between the theory of predication in the *Categories* and that in the later books of the *Metaphysics* VII, 6. So too Joan Kung, Terry Irwin, Daniel Graham.⁴

² Corkum, Phil, Aristotle on Predication, European Journal of Philosophy, 2013, John Wiley & Sons Ltd, p. 1

³ substance and predication in Aristotle, p. 46 and pp. 144-5

⁴ Quoted from: Back, Allen, Aristotle's Theory of Predication, 2000, Koninklijke Brill NV, p. 99

c) Distinction of 'being said of' and 'being in'

Owen⁵ enumerates the texts in which Aristotle's distinction between 'being said of' and 'being in' is asserted: *OI.* 11b38-12a17; *To.*, 127b1-4; *Cat.* 1a20-b9; 2a11-14; 2a27-b6; 2b15-17; 3a7-32; 9b22-24

d) Predication in Aristotle and the standard 'S is P'

Marie De Rijk Lambertus⁶ thinks that the 'S is P' pattern is misleading when it comes to express predication in Aristotle. In his view, 'The Aristotelian procedure should be described in terms of appositively assigning an attribute (*κατηγορούμενον*) to a substrate (*ὑποκείμενον*), rather than ascribing a predicate to a subject by means of a copula.... The comment should be considered an attribute which is said to fall to a substrate, without understanding this procedure in terms of sentence predication.'

e) Aristotle's predication: bipartite or tripartite?

It is a difficulty to make Aristotle's theories of name-verb predication and tripartite predication consistent. The reason is that tripartite is not consistent with his name-verb structure based on which he says that the predicate term is the 'verb.' (20a31; 20b1-2; 16a13-5) The problem is that in a tripartite form like 'Socrates is white' we cannot take 'is white' as the verb because, based on Aristotle himself, no part of a verb can be significant itself. (16b6-7) However, his assertions about the equivalences between the two structures (*OI.* 12, 21b9-10; *PrA.* 51b13-16; *Met.*, 1017b22-30) must mean that they are not inconsistent in his own view. Thus, as Allen Bäck⁷ points, 'Aristotle seems to think that he has a single, consistent theory.'

⁵ Owen, G. E. L., *Inherence, Phronesis*, Vol. 10, No. 1, 1965, p. 97

⁶ Lambertus, Marie De Rijk, *Aristotle: Semantics and Ontology*, Volume 1, 2002, Koninklijke Brill NV, pp. 75-76

⁷ Bäck, Allen, *Aristotle's Theory of Predication*, 2000, Koninklijke Brill NVp. 117

The sense of saying or speaking⁸ as the root sense of *rhema*⁹ makes the relation between predication (saying something of something) and verb more interesting. The use of *rhema* in the sense of a long expression approves this. In Plato's work (399ac) where Socrates claims that the name *anthropos* derives from *anthron ha opopen* ('he who examines what he has seen') we have an *onoma* from, or in place of, a *rhema*.

2) *Subject*

The subject (ὕποκειμένον) is that of which another term is said or predicated. Aristotle's own definition is of a much more philosophical value: 'By subject I mean that which is expressed by an affirmative term (λέγω δὲ ὑποκείμενον τὸ κατάφασει δηλούμενον).' (Met., K, 1067b18)

Throughout Aristotle's work, three kinds of subjects can be found: possible, prime and absolute subject.

a) *Possible subject*

Those things that can take the position of a subject in a predication we call possible subjects, no matter they can or cannot take the position of predicate in any predication. All terms except the ultimate predicates are possible subjects because they can take the position of subject.

b) *Prime subject*

Those that in any predication can only take the position of a subject and not the position of a predicate are prime subjects. (Cat., 5, 3a36-b2; Met., Z, 1028b36-1029a1) This is the truest sense of subject and belongs only to substances. (Met., Z, 1029a1-2) In fact, 'that

⁸ Guthrie (1969: 220-1) (check???) says: 'Literally *rhema* means only a 'thing said,' and a name ... is contrasted with it as that of which things are said.' Cf. Sedley (2003: 162)

⁹ cf. Ademollo, Francesco, Names, Verbs and Sentences in Greek Philosophy, in: Cameron, Margaret and Robert J. Stointon (eds), Linguistic Content: New Essays on the History of Philosophy of Language, Oxford, 2015, p. 35

which is not predicated of a subject, but of which all else is predicated' is a substance.¹⁰ (Met., Z, 1029a7-9) In *Categories*, besides primary substances (Cat., 2, 1b3-6), individual qualities are also said not to be able to be said of anything else. (Cat., 2, 1a23-29) Aristotle's examples are a certain 'knowledge-of-grammar' (τις γράμματική) and 'an individual white' (τὸ τὶ λευκὸν). Thus, although substances are indeed in the truest sense individuals and, thereby, in the truest sense primary subjects, other individuals can take the position of subject as well.¹¹

c) Absolute subject

While substances are prime subjects of all other things, there is still something of which substances can be predicated and this predication is not an accidental predication: matter. (Met., Z, 1029a21-24) This predication is, indeed, the predication of a 'form or this' on matter and material substance. (Met., Θ, 1049a34-36) The only thing that is absolutely a subject, therefore, and can be a predicate is prime matter (πρώτη ὕλη).¹² (Met., Θ, 1049a24-27)

d) Subject and substance

The most important thing in being a substance is being a subject: 'It is because the primary substances are subjects for all the other things and all the other things are predicated of them or are in them, that they are called substances most of all.' (Cat., 5, 2b15-17) And

¹⁰ Cf. PrA., A, 27, 43a25-32. Here Aristotle says that substances cannot be predicated of anything else truly and universally (ἀληθῶς καθόλου). Also in *Metaphysics* (Δ, 1018a2-4) it is said that a substance is not predicated of a plurality of subjects and, thus, we do not say that e.g. 'every Socrates' while we say 'every man.'

¹¹ It is, however, a controversial topic whether these individual qualities are indeed individual or not. G. E. L. Owen. (*Inherence, Phronesis*, Vol. 10, No. 1, 1965) believes that they can exist in more than one body. If so, how can they be individuals? For a critique of Owen's view see R. E. Allen (*Individual Properties in Aristotle's Categories, Phronesis*, Vol. 14, No. 1, 1969).

¹² Absolute subject must imply that form is the absolute predicate: what is absolutely predicable and never a subject. Herbert Grander, however, takes two passages (Met., Z, 3, 1028b36-37 and H, 1, 1042a26-31) as where Aristotle affirms the subjecthood of forms. (Aristotle on the Subjecthood of Form, in: Gerson, Lloyd P., *Aristotle; Critical Assessment*, V.1, Logic and Metaphysics, Routledge, 1999, p. 204)

what is nearer to this position is more a substance as a species is more a substance than a genus.' (Cat., 5, 2b7-8)

e) Primary versus accidental subject

A subject is a primary subject in a predication when the predicate is predicated of it as itself. In such a case, the subject is the subject of the predicate qua itself and not qua something else. A subject, on the one hand, is an accidental subject when it is not the primary subject of the predicate that is predicated on it. It means that a subject is an accidental subject when the predicate is predicated of it not qua itself but qua something else. An accidental subject is, therefore, anything other than a substance.

3) Predicate as universal

It is evident from our discussion of kinds of subjects that except matter, primary substances (if we ignore both accidental predication and cases of absolute subjects) and other individuals, everything else can take the position of a predicate. Since primary substances are individuals, it results that everything except matter and individuals are capable to take the position of predicate. The immediate consequence of this is that the predicate must be a universal. When individuals cannot take the position of predicate, this position cannot be taken by any particular. Therefore, only universals can be predicated of others. Moreover, albeit universals can be a simple subject (for another universal), they are not prime subjects. The closeness of universal and predicate is to the extent that Aristotle differentiates universal from subject. (Met., Θ, 1049a27-30)

4) Categories or classes of predicates

Aristotle distinguishes ten highest classes into one of which each predicate must necessarily fall: substance (or what a thing is), quality, quantity, relation, place, time, position, state, activity and passivity. (Cat., 4, 1b25-27; To., I, 9, 103b20- ; PsA., A, 22,

83b13-23) The substance counted among predicates must refer to secondary and not primary substances not only because Aristotle insists that primary substances cannot be predicated but also from his own examples of the category of substance: man and animal. (To., I, 9, 103b25) However, if a predicate be asserted of itself or its genus be asserted of it, the predicate signifies substance or what is; but if ‘one kind of predicate is asserted of another kind,’ it signifies one of the other nines. (To., I, 9, 103b30) These categories are so comprehensive that no predicate can remain outside them so that even non-being has as many senses as categories. (Met., M, 1089a26-30)

- a) That whether Aristotle’s categories are merely linguistic or fundamentally ontological is a so much controversial dispute. Some like G. E. R. Lloyd¹³ believe that ‘categories are primarily intended as a classification of reality ... rather than of the signifying terms themselves.’
- b) Although Aristotle’s categories have been historically regarded as a classification of predications, there are some recent commentators like Jonathan Barnes¹⁴ that think it is classifying predicates and not predications.

5) *Kinds of predicates*

In his introduction of *Categories*, as J. W. Thorp truly points out¹⁵, Aristotle distinguishes between the category of substance and the other categories using $\mu\acute{\epsilon}\nu \dots \delta\grave{\epsilon}$ construction. This construction illustrates that beside tenfold classification of categories, there is an even more crucial differentiation between two kinds of predicates: substance or what is on the one hand and the other nine ones on the other hand: the distinction between what is predicated of the subject as what it is and what is predicated of it as an accident.

¹³ Aristotle: the Growth and Structure of his thoughts, Cambridge, pp. 113-114

¹⁴ Barnes, Jonathan, Logical Matters: Essays in Ancient philosophy II, 2012, Oxford, pp. 196-198

¹⁵ Thorp, J. W., Aristotle’s Use of Categories. An Easing of the Oddness in ‘*Metaphysica*’ Δ7, Phronesis, Vol. 19, No. 3, 1974, p. 245

Therefore, we have three kinds of classification - a twofold, a fourfold and a tenfold-complicatedly classifying the same thing, viz. the predicate.

Predicates can be divided also to four kinds: property, definition, genus and accident. (To., I, 4, 101b11-20) A property is that predicate that is convertible with its subject and does not signify its essence. A definition is that predicate that is convertible with its subject and signifies its essence. It is a genus if it is not predicated convertibly and is contained in the definition of its subject. And it is an accident if it is neither convertible nor contained in the definition of its subject. (To., I, 8, ^103b3) All of these four kinds are among categories. (To., I, 9, 103b20)

It seems that there might be some kind of relation between the twofold and the fourfold distinction: whereas genus and definition are predicated as what it is, accidents are not so predicated.

There seems to be some rules that determine to each of these four kinds each predicate belongs. At To., IV, 123b30ff. Aristotle asserts: 'If B has a contrary and A does not, then B does not belong to A as its genus.'

There is a dispute around *per se* accidents (τὰ καθ' αὐτὰ συμβεβηκότα) (Topics., 102a18) whether they must be regarded as either of the four kinds or as a fifth kind. Barnes (1970) argued that they 'do not fit at all neatly into the fourfold classification.' He argues that based on the definition of accidents at A, 5, 102b4-5, they must be accidents but based on another definition, A, 5, 102b6-7, they cannot be accidents. He also defends the view that they are not properties. Barnes concludes: 'This shows that the two definitions are not equivalent, and hence that the 'predicables' are not well-defined.'¹⁶ Demetris J. Hadgopoulos¹⁷ defends the view that the two definitions of accidents are equivalent and *per se* accidents are properties.

¹⁶ pp. 139-140

¹⁷ Hadgopoulos, Demetrius J., The Definition of the 'Predicables' in Aristotle, *Phronesis*, Vol. 21, No. 1, 1976

6) *Five types of predications*

We have five kinds of predications based on our division of subjects and our discussion of predicates: simple, primary (itself divided to substantial and accidental), accidental (itself divided to primary and secondary), coincidental and absolute predication.

a) **Simple predication.** This is a predication in which a universal is predicated of either a particular or a universal subject. This sense of predication includes all other senses except the first kind of accidental predication.

b) **Primary predication.** This is a predication in which a universal is predicated of a primary subject, namely a substance. A primary predication is of two kinds:

i) **Substantial predication.** A primary predication in which the predicate is part of, or is included in, the definition of the subject. The universal that is the predicate here is the definition or the genus or the species or the differentia of the subject. It is this predication that Aristotle calls a unity: ‘A statement may be called a unity ... because it exhibits a single predicate as inhering not accidentally in a single subject.’ (PsA., B, 10, 93b35-37) It is only substantial predicates that can be predicated of each other: ‘Predicates which are not substantial are not predicated of one another.’ (PsA., A, 22, 83b18-19)

Aristotle defines a substantial predication also in another way. A predication in which a higher genus is predicated on a lower genus, species, a substance or an individual, (or a species is predicated on an individual) is a substantial predication. Therefore, a substantial predication is a predication in a series that has individuals on one of its ends and a general category on its other end. In fact, only substantial predicates can be predicated of one another. (PsA., A, 22, 83b17-19) This series cannot be an infinite series because otherwise not only substances would not be definable but also a genus would be equal to one of its own species. (PsA., A, 22, 83b7-10)

- ii) **Accident predication.** A primary predication in which the predicate is not part of, or is not included in, the definition of its subject. The universal that is the predicate here is the property or the accident of the subject.
- c) **Accidental predication.** This is a predication in which the subject is not a primary subject and its predicate is a substance.

This predication is of two kinds:

- i) **Primary accidental predication.** This is a predication in which an accident is predicated of substance. Such a predication can go ad infinitum, which is inferable from Aristotle's assertion that the secondary accidental predication cannot go ad infinitum.
- ii) **Secondary accidental predication.** It is a predication in which an accident is predicated of another accident. Such a predication, Aristotle asserts, cannot go ad infinitum because even more than two accidents cannot be combined. Now what is the meaning of Aristotle's assertion that we cannot continue this ad infinitum? Does it mean that we cannot continue the predication 'The musician is white' and say 'The white is Athenian?' But why not? Or maybe he means that by adding any predication, we are still in a condition of predicating two accidents of a substance on each other.

As primary subjects, substances can also take the position of predicate though not essentially but accidentally. In propositions like 'the white is a log' or 'That big thing is a log' we observe substance taking the position of predicate but this is only accidentally: 'When I affirm 'the white is a log,' I mean that something which happens to be white is a log- not that white is the subject in which log inheres (οὐχ ὡς τὸ ὑποκείμενον τῷ ξύλῳ τὸ λευκὸν ἐστὶ), for it was not qua white or qua a species of white that the white (thing) came to be a log (οὔτε λευκὸν ὄν οὔθ' ὅπερ λευκὸν τι ἐγένετο ξύλον), and the white (thing) is consequently not a log except incidentally.' (PsA., 22,

83a3-9) Aristotle compares this accidental use of substance in the position of predicate with the substantial use of it in the place of a subject: ‘On the other hand, when I affirm ‘the log is white,’ I do not mean that something else, which happens to be a log, is white (οὐχ ὄτι ἕτερόν τι ἐστὶ λευκόν, ἐκεῖνῳ δὲ συμβέβηκε ξύλῳ εἶναι), (as I should if I said ‘the musician is white,’ which would mean ‘The man who happens also to be a musician is white’); on the contrary, log is here the subject- the subject which actually came to be white, and did so qua wood or qua a species of wood and qua nothing else.’ (PsA., 22, 83a8-14) Aristotle asks us not to call propositions like ‘The white is a log’ a predication at all or at least call them accidental predication instead of simple (ἀπλως) predication. (PsA., A, 22, 83a14-17) An accidental predication, in which we have a substance in the place of predicate, is different from an essential predication in that while the subject of an accidental predication is said to be the predicate not by itself but as something different with which it coincides, the subject of an essential predicate is said to be the predicate by itself and not because it is something else: ‘Since there are attributes which are predicated of a subject essentially and not accidentally- not, that is, in the sense in which we say ‘That white (thing) is a man,’ which is not the same mode of predication as when we say ‘The man is white’: the man is white not because he is something else but because he is man, but the white is man because ‘being white’ coincides with ‘humanity’ within one subject. Therefore, there are terms such as are essentially subjects of predicates. (PsA., A, 19, 81a24-29)

This capability of ‘non-essentially and only accidentally’ being a subject does belong, in fact, to all sensible things. (PsA., A, 27a32-36)

- d) **Coincidental predication.** this is a predication in which none of the subject and predicate are a substance or an individual. In this predication, one of the accidents of a substance or individual is predicated of one of the other accidentals of the same substance or individual. For example, when it is said that ‘The white is musical,’ there is an individual, say Socrates, for which both of white and musical are accidents.

e) **Absolute predication.** This is a predication in which a form or a substance is predicated of a matter or a material substance.

Some commentators like Loux and Lewis regarded this predication as close to accident predication, both based on inherence.¹⁸ As R.M. Dancy¹⁹ points out, these predications make Aristotle's theory of predication immanentist: not only accident predications are explained by the immanence of accidents in substances, some of the substantial predications, which were not explained in *Categories*, are also explained by the immanence of form in matter.

It is interesting that in this kind of predication, it is the predicate and not the subject, which is in the strictest sense substance. As the central books of *Metaphysics*²⁰ claim, the form is the substance. Thus, in this predication, substance gets away from the sense of ὑποκείμενον.

Corkum²¹ mentions 68a19 as the only instance where Aristotle explicitly claims that a term may be predicated of itself, a passage that is, in Corkum's view, problematic.

7) *Demonstrable predicates*

Those predicates are demonstrable that are so related to their subjects that there are other predicates prior to them predicable of their subjects (ἔτι δ' ἄλλος, εἰ ὧν πρότερα ἅπαντα κατηγορεῖται). (PsA., A, 22, 83b32-34)

¹⁸ Quoted from: Gill, Marry Louise, APA Symposium: Aristotle on Substance and Predication, in: Gerson, Lloyd P., Aristotle; Critical Assessment, V.1, Logic and Metaphysics, Routledge, 1999, pp. 276-7

¹⁹ Two Studies in the Early Academy, 1991, State University of New York Press, p. 3

²⁰ 1032b1-2; 1033b17; 1037a27ff.; 1041b6; 1050b2

²¹ Corkum, Phil, Aristotle on Predication, European Journal of Philosophy, 2013, John Wiley & Sons Ltd, p. 12

8) *Series of predications*

Since it is possible for a predicate to be itself the subject of another predication, we can have a series of predications in which the predicate of a predication is the subject of the next predication. This series has the following features:

- a) It has a limit (in number) (PsA., A, 22, 83b14-16) on the side of subjects: there are subjects that cannot themselves be predicated (PsA., A, 27, 43a39-41), which are, as we noted, prime subjects: particulars, i.e. prime substances and other individuals. (PsA., A, 19-22) Aristotle calls them ultimate (*ὑστατον*). (PsA., 21, 82a36-b1)
- b) It has a limit (in number of kinds) (PsA., A, 22, 83b14-16) also on the side of predicates: there must be predicates that cannot be subjects. (PsA., A, 19-22; PsA., A, 27, 43a36-39) Aristotle calls them primary (*πρωτον*). (PsA., A, 21, 82b1-4) These are the highest categories or the highest genera of categories. (PsA., A, 22, 83b14-16)
- c) The series has an escalating shape from mere subjects at its downside to mere predicates at its upside. It is Aristotle himself who uses the words up and down in this sense. (e.g. PsA., A, 22, 83b2-3)
- d) The predications that lie between lowest and highest ones must be finite in number. (PsA., A, 19-22 especially: 20, 82a21-35) These have subjects and predicates, each capable of both of the roles of being subject and being predicated. A result of this fitness is that neither demonstration can go to infinity nor everything is demonstrable, the two points Aristotle always insist on.
- e) The upward side includes the more universal ones and the downward the more particular ones. (PsA., 20, 82a21-23)
- f) It follows from the above features that ‘neither the ascending nor the descending series of predications ... are infinite.’ (PsA., A, 22, 83b24-25)
- g) Reciprocation and convertibility. Except in case of terms (i.e. subjects and predicates) that are at each of the ends of series of predications, namely ultimates

and primaries, it is possible to reciprocate (ἀντιστρέφειν) terms and convert the predication. (PsA., A, 19, 82a15-20)

- h) Antipredication. Antipredication means that in a predication (S is P), the subject becomes the predicate of its predicate (P is S) in the same category its predicate was predicated on it. For example, if P is in the category of quality, antipredication means that S be predicated of P in the category of quality. In other words, P is a quality of S and S is a quality of P. Aristotle rejects this. (PsA., A, 22, 83a36-b3)
- i) Self-predication versus other-predication. Aristotle distinguishes between a predication in which a term is said of itself and a predication in which a term is said of another. (Phy., Δ, 2, 209a31-33)
- j) Predicability (Cat., 5, 3a36-b2):
 - 1) Primary substances and individuals are not predicable.
 - 2) Secondary substances are of two kinds: genus and species
 - i) Genus is predicable both of the species and of the individuals.
 - ii) Species is predicable of the individual.
 - 3) Differentiae are predicable both of the species and of the individuals.

9) *Predication as classification*

- a) Richard Patterson believes that Aristotle's so repeated construction using *hoper* (*estin A hoper B*) in *Topics* (120a23 sq., 122b19, 26sq., 123a, 124a18, 125a29, 126a21, 128a35. Also in *Posterior Analytics* (83a24-30) (Brunschwig's list. 'expresses the fact that A is a kind of B (*esti A B tis*), that A is a species of the genus B.'²²

²² Patterson, Richard, *Aristotle's Modal Logic: Essence and Entailment in the Organon*, 1995, Cambridge University Press, p. 37

10) Universal predication

Aristotle defines universal predication (κατὰ παντὸς κατηγορεῖσθαι) as such: ‘wherever no instance of the subject (τῶν τοῦ ὑποκειμένου) can be found of which the other term cannot be asserted.’ (PrA., A, 24b27-29) In this predication, the subject is included in another as in a whole (ἐν ὅλῳ εἶναι) and the predicate is predicated of all of the subject (κατὰ παντὸς κατηγορεῖσθαι). (PrA., A, 24b26-27) Attach another discussion we had about ἐν ὅλῳ here.

11) Quantity of predication

A predication, truly stated, has a quantity, which is the number of objects under the name of the subject of which the predicate is predicated. The quantity of subject can be stated in four ways:

- a. **Indefinite:** when the predicate belongs or does not belong to the subject without any mark to show to how many of the particulars under the name of the subject it does or does not belong. E.g. ‘Man is white’; ‘Man is not white.’ (PrA., A, 24a20; OI., I, 7, 17b8-12)
- b. **Universal quantity:** When the predicate belongs to all or none of the subject. E.g. ‘Every man is animal’; ‘No man is animal.’ (PrA., A, 24a18-19; OI., I, 7, 17b5-6) The contrary of a predication of a universal quality is a predication of a universal quality. E.g. the contrary of ‘Every man is white’ is ‘No man is white.’ (OI., I, 7, 17b20-23)
- c. **Particular quantity:** When the predicate belongs (or does not belong) to some of the subject. E.g. ‘Some men are white’; ‘Some men are not white.’ (PrA., A, 24a19-20)

- d. **Single quantity:**²³ when the subject is a proper name of only one object. E.g. ‘Socrates is white’; ‘Socrates is not white.’ The contrary of this predication is of a single quantity: ‘Socrates is not white.’ (OI., I, 7, 17b38-18a4)

12) Convertibility of predication.

Some predications are convertible, that is, it is possible to change the place of subject and predicate in a true proposition so that the converted proposition remains true. This is supposed to mean that given the truth of a predication, the truth of the converted predication is inferable. The convert form of a predication depends on its quantity.

- a. **Indefinite quantity:** This predication has no strictly true convert because its quantity is not stated.
- b. **Universal quantity:** It can be converted in two ways:
- i) A negative universal can be converted to a negative universal in which the terms are changed. E.g. ‘No pleasure is good’ can be converted to ‘No good is pleasure.’ (PrA., A, 2, 25a5-8 and a14-19)
- ii) An affirmative universal can be converted to an affirmative particular in which the terms are changed. E.g. ‘Every pleasure is good’ can be converted to ‘Some good is pleasure.’ (PrA., A, 2, 25a7-9)
- c. **Particular quantity:** If it is negative, it cannot be converted but if it is affirmative, it can be converted to an affirmative predication with particular quantity. E.g. ‘Some pleasure is good’ can be converted to ‘Some good is pleasure.’ (PrA., A, 2, 25a10-13 and a20-24)
- d. **Single quantity:** It cannot be converted.

²³ Aristotle does not distinguish this last kind but makes the quantity of three kinds: universal, particular and indefinite. (PrA., A, 24a16-17)

13) Characteristics of relations between subject and predicate

1. A predicate is of a wider range than its subject. It is based on this fact that Aristotle:
 - a) Prevents individuals to be predicate because there is nothing of which an individual be of a wider range. In other words, it is due to the fact that since an individual is only 'one particular' thing and, thus, cannot be of a wider extent than anything that Aristotle prevents them of being a predicate. Matthews,²⁴ however, thinks we cannot use Socrates, a substance and an individual, in the place of predicate and say it of Socrates because 'Socrates does not classify Socrates: it names him.'
 - b) Prevents differentia, species and things under species to be predicated of genus. (To., Z, 6, 144a27-)
 - c) Prevents the species and the things under it to be predicated of the differentia. (To., Z, 6, 144b1-4)
 - d) Also about the effect because it is wider than its subject. (PsA., B, 17, 99a)
 - e) Each attribute is wider than every individual it is predicated on, though several attributes, collectively considered, might not be wider but exactly the substance of a thing. (PsA., B, 13, 96a32-b1)
2. The predicate of a predicate of a subject will be predicated of the subject too: 'whenever one thing is predicated of another as of a subject, all things said of what is predicated will be said of the subject too.' (Cat., 3, 1b10-15) In fact, it is due to its predication of the subject that it is predicated of its predicate. (Cat., 5, 2a36-b1) Moreover, what is not predicated of the predicate of a subject cannot be predicated of it as well. (PrA., A, 27, 43b22-27) Thus, what, for example, is not predicated of animal, cannot be predicated of man.
3. The predicate of a subject can be predicated of its predicates as well. (Cat., 5, 3a1-6) For example, you call the individual man grammatical and, thence, you call both

²⁴ Matthews, Gareth B., *Aristotelian Categories*, in: Georgias Anagnosto Pocilos (ed.), *A Companion to Aristotle*, Blackwell, 2009, p. 146

a man and an animal grammatical. Nonetheless, the predicate of a subject belongs to it more properly than to its higher predicates. (PrA., A, 27, 43a27-32)

4. It is only the subject that can be distributed and not the predicate. (PrA., A, 27, 43b16-22; OI, I, 7, 17b12-16) Therefore, we can say e.g. 'Every man is animal' but we cannot say 'Every man is every animal.'
5. It is the reason of the relation between subjects and predicates, that is the reason of predication, which is the subject of inquiry. (Met., Z, 1041a20-24) In other words, since it is a meaningless inquiry to ask why a thing is itself (Met., Z, 1041a14-15), the only remaining meaningful inquiry is to ask why something is something else, i.e. to ask about the reason of predication.
6. A subject cannot categorize its predicate in the same category in which it is categorized by it. If e.g. A is a quality of B, B cannot be a quality of A. Therefore, there is no reciprocation in the same category. (PsA., A, 22, 83a36-39)

14) Characteristics of series of predications

1. A series of secondary accidental predication cannot go ad infinitum for not even more than two terms can be combined. For an accident is not an accident of an accident, unless it be because both are accidents of the same subject. (Met., Γ, 1007b1-4)
2. Infinite series cannot be traversed in thought. (PsA., A, 22, 83b6-7)
3. The predications of genera on each other must be ended and cannot go to infinity because otherwise not only substances would not be definable but also a genus would be equal to one of its own species. (PsA., A, 22, 83b7-10) Therefore, a series of predication of genera on each other must be limited on both sides. There must be an upward limit in general categories as well as a downward limit in individual because they cannot be predicated of others. Whatever lies between these limits can both be predicated of others and others be predicated of them. (PrA., A, 27, 43a36-43)

4. The order of predicates matters: it makes a difference whether the series be ABC or BAC. (PsA., B, 13, 96b25-32)