ARISTOTELIAN PREDICABLES,
UNIVERSALITY AND REALISM
THE LOGIC OF COMPARISON IN TOPICS AS DENYING
THE VIEW THAT ARISTOTLE WAS A REALIST*

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1. The question

The paradigmatic passage on how Aristotle introduces the dispute about universals is undoubtedly the seventh aporia of the third book of Metaphysics:¹

Besides this, even if the genera are in the highest degree principles, should one regard the first of the genera as principles, or those which are predicated directly of the individuals? This also admits of dispute. For if the universal is always more of a principle, evidently the uppermost of the genera are the principles; for these are predicated of all things. There will, then, be as many principles of things as there are primary genera, so that both being and unity will be principles and substances; for these are most of all predicated of all things. But it is not possible that either unity or being should be a genus of things; for the differentiae of any genus must each of them both have being and be one, but it is not possible for the genus to be predicated of the differentiae taken apart from the species (any more than for the species of the genus to be predicated of the proper differentiae of the genus); so that if unity or being is a genus, no differentia will either be one or have being. But if unity and being are not genera, neither will they be principles, if the genera are the principles. Again, the intermediate classes, whose concepts include the differentiae, will on

¹ III, 3, 998b 14 – 999a 23. This text and the others coming next are worth quoting at some length.

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this theory be genera, down to the individuals; but as it is, some are thought to be genera and others are not thought to be so. Besides this, the differentiae are principles even more than the genera; and if these also are principles, there comes to be practically an infinite number of principles, especially if we suppose the highest genus to be a principle. But again, if unity is more of the nature of a principle, and the indivisible is one, and everything indivisible is so either in quantity or in species, and that which is so in species is prior to the divisible, and genera are divisible into species (for man is not the genus of individual men), that which is predicated directly of the individuals will have more unity. Further, in the case of things in which the distinction of prior and posterior is present, that which is predicatable of these things cannot be something apart from them; e.g. if two is the first of numbers, there will not be a number apart from the kinds of numbers; and similarly there will not be a figure apart from the kinds of figures; and if the genera of these things do not exist apart from the species, the genera of other things will scarcely do so; for genera of these things are thought to exist if any do. But in the indivisible species one member is not prior and another posterior. Further, where one is better and another worse, the better is always prior; so that of these also no genus can exist. From these considerations, then, the species predicated of individuals seem to be principles rather than the genera. But again, it is not easy to say in what sense these are to be taken as principles. For the principle or cause must exist alongside of the things of which it is the principle, and must be capable of existing in separation from them; and for what reason should we suppose any such thing to exist alongside of the individual, except that it is predicated universally and of all? But if this is the reason, the more universal must be supposed to be more of a principle; so that the highest genera would be the principles (W. D. Ross)^2.

Admittedly, Aristotle was held to have been a Moderate Realist, as taking a clear position in favour of a concept of ‘universal’ that is today defended by the current Realists who do not hesitate to define their own view as ‘Aristotelian Realism’. We can see how the Oxford Dictionary of Philosophy, 1994, and the Blackwell Dictionary of Western Philosophy, 2004, report such a position, respectively:

the Aristotelian belief [is] that universals exist in things (in re), but not independently of them;

Aristotelian realism argues that a universal has no separate existence of its own but is a structure embedded in things (a universal in re)\(^3\).

Otherwise said, a Moderate Realist holds that a universal is the supposed outcome of an act embracing many different things in agreement with a qualitatively identical element or feature that may be found inside of them by abstraction of the context wherein every thing takes place and other characteristics of its own. In so far as a universal is independent of mind, it stands for the proper object of a concept who subsumes a given number of things as its own instantiations.

A sort of evidence for moderate realism in Aristotle might be the statement that universal knowledge requires universal objects and that kinds or forms are components of the particulars of which they are predicated. Universality is a characteristic of our thinking and, in some sense at least, of what our thinking is about. A universal is whatever holds of some multiplicity of things as a whole, that is, it is something that by its nature is predicated of many things because of the relations of forms to individuals and of kinds to forms\(^4\).

Therefore, in maintaining the exact or primary meaning of ‘universal’, it does not seem to be possible to take species and genera as having the same meaning, for they are just a collection of things, and a collection cannot be this qualitatively identical element or feature.


\(^4\)See for example *De Interpretatione* 7, 17a 39-b2, and *Metaphysics* VII, 13, 1038b 11; X, 1, 1052a 30 – b 1. In *On the Soul*, II, 5, 417b 18-28, and *Posterior Analytics*, II, 19, 100a 5-9, the philosopher explains that sense perception is of particulars, whereas that form of intellectual apprehension called ‘scientific knowledge’ is of universals, and universals found in knowledge are in some way in the soul. The universal is the one in addition to the many which is the single item in them all as fixed in the soul by experience. Aristotle basically accepts the Platonic thesis that scientific knowledge deals with universals, otherwise, he believes it will involve neither explanation nor demonstration. We grasp what justifies why some object has an attribute when we find an universal middle term defining that subject and to which the attribute primarily belongs. See H. CHERNESS, *Aristotle’s Criticism of Plato and the Academy*, Baltimore, The Johns Hopkins University Press, 1944, p. 338 ff.; E. DE STRYCKER, “Concepts-clés et terminologie dans les livres II à VII des *Topiques*”, in *Aristotle on Dialectic. The Topics*, ed. by G.E.L. Owen, Oxford, Clarendon Press, 1968, 141-163, esp. 150-151
Plainly, any kind, whether species or genera, may be thought of as a universal exclusively not after the manner of a collection of things.

Actually, in *Topics* Aristotle states the precise meaning of a genus, not as a collection, but predicate:\footnote{5 I, 5, 102a 31-35.}

A genus is what is predicated in what a thing is of a number of things exhibiting differences in kind. We should treat as predicates in what a thing is all such things as it would be appropriate to mention in reply to the question, ‘What is the object in question?’; as, for example, in the case of man, if asked that question, it is appropriate to say ‘He is an animal’ (W. A. Pickard-Cambridge).

This being so, if Aristotle were to be a Moderate Realist, he should consider this predicate to be the element or feature common to each species, \textit{viz.} kinds, into which a genus may be divided. This predicate would, then \textit{in concreto} be present inside of any species, as being the inherent universal which grounds the state of each species to be a division of a definite genus. Both predication and species’ membership are to be described as to justify the actuality of a universal as a repeatable feature (either as something related to things or being something that is found in all things which is predicated of in a way or another) of reality,\footnote{6 Cf. W. Sellars, *Science, Perception and Reality*, London, Routledge & Kegan Paul, 1963, pp. 156-161.} and not thought.

But we do claim that quite the reverse is true as regards Aristotle: he did perceive and comprehend the nature and significance of ‘universal’ as a feature of thought. Even when related to or grounded on things, on his own view a universal is the result of an intellectual process by which one becomes aware of reality in some or other respect. In point of fact, Aristotelian universality is not a matter of repeatability. What differentiates universals from individuals which, as indivisibles, cannot but be particular, are degrees, as it is evidently the case in the passage of *Metaphysics* quoted above.

There Aristotle wonders what the nature of universal is by taking into consideration the distinction of ‘prior’ and ‘posterior’: whether the “unity [i.e. the individuals’ being] is more of the nature of a principle” or, contrariwise, “the highest genus” is\footnote{7 See also *Metaphysics* III, 6, 1003a9-12 and VII, 13, 1039a1-6; *Posterior Analytics* I, 31, 87b28-30, where Aristotle merely uses comparative phrases like “most universal”.}.

All that underlies the idea that universality of a concept is to be understood always in comparison with another concept according to a
hierarchical relationship, unlike indivisible species predicated of individuals – and individuals as embodiment of those species – among which one is not prior and another posterior. For instance, “white” is a universal, but “color” is more universal, and “quality” still more. There can be such differences in degree, because universality is a relational concept. Something is a universal relative to the subjects which it can be predicated of. Hence unlike present-day logic, Aristotelian logic agrees with natural language that the same term can work properly as predicate in one proposition and a subject in another, for Aristotle can treat a term as universal relative to its subjects and particular relative to its predicates. Thus, a hierarchy of universality comes to be generated which makes any sense to talk of one term as being more universal than another.

So, just in virtue of this hierarchy we might understand how in Aristotelian terms a concept may be either more or less universal than or in the same degree as another one. From the highest genera, τὰ μὲν ἅλλα γένη (rendered in Latin as ultima genera), that is, the Aristotelian categories, to the τὰ ὄντων εἴδη, represented by the indivisible forms (equivalent to the Middle Age infima species), all concepts would be basically compared with one another in order to establish the difference or likeness in universality degree amongst their instantiations and causal relations.

2. The logic of comparison in *Topics* and universality

As is well known, it is in *Topics* that Aristotle lays down the rules that set up how the comparative terms – such as ‘more’ (μᾶλλον), ‘less’ (ἲττον), and ‘likewise’ (ὁμοίως) – work. It is just through comparison that he orders genus, property (propium, i.e. τὸ ἰδίον), accident, and definition, namely, the so-called ‘predicables’, by truth degrees. As a matter of fact, the significance of concepts of ‘greater or lesser or like universality’ for degrees of being derives from Aristotle’s doctrine that truth is one of the four senses of ‘being’. If truth is a kind of being, and truth comes in degrees, then, so, does being. At all events, if being has different senses, these senses can be ordered according to their degree of ‘universality’, and a doctrine according to which beings or truths have a rank order is a doctrine of degrees of being.

In the relevant sense, the four kinds of predication play a role not only logical, but also ontological. The predicables, on assuming a given degree by comparison, define the degree of belonging of both essential and accidental attributes to substance. The logic of comparison of the

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8 As claimed in *Metaphysics*, V, 2, 1026 a 35; V, 4.

9 As said earlier, the predication in Aristotelian logic may be either essential or accidental.
predicables shows the degree by which a predicate inheres in a substratum, depending on greater or lesser universality of its own right. Thus, a predicate has a universality degree that can be more or less consistent with the attribute of the substratum to which it may be ascribed. As said by Albert the Great in his commentary on *Topics*\(^\text{10}\): “in quae una qualitate similata sunt, considerandum est ex magis et minus inesse per intentionem et remissionem qualitatis inhaerentis”\(^\text{11}\), that is to say, *per intentionem et remissionem qualitatis* a thing will be more or less modified by some quality, and, accordingly, a difference in ‘more and less’ may be put in evidence between two things being acted upon by the same quality.

At first, in *Topics* Aristotle specifies the rules which state the inherence of any accidental attribute in underlying substrata (the first four quotations are about the difference in ‘more and less’, the fifth about ‘likewise’)\(^\text{12}\):

Moreover, argue from greater and less degrees. There are four commonplace rules.

One is: see whether a greater degree of the predicate follows a greater degree of the subject: e.g. if pleasure is good, see whether also a greater pleasure is a greater good; and if to do a wrong is evil, see whether also to do a greater wrong is a greater evil. Now this rule is of use for both purposes; for if an increase of the accident follows an increase of the subject, as we have said, clearly

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11 *Cit.* p. 324b.

the accident belongs; while if it does not follow, the accident does not belong. You should establish this by induction.

Another rule is: if one predicate is attributed to two subjects, then supposing it does not belong to the subject to which it is the more likely to belong, neither does it belong where it is less likely to belong; while if it does belong where it is less likely to belong, then it belongs as well where it is more likely.

Again: if two predicates are attributed to one subject, then if the one which is more generally thought to belong does not belong, neither does the one that is less generally thought to belong; or, if the one that is less generally thought to belong does belong, so also does the other.

Moreover: if two predicates are attributed to two subjects, then if the one which is more usually thought to belong to the one subject does not belong, neither does the remaining predicate belong to the remaining subject; or, if the one which is less usually thought to belong to the one subject does belong, so too does the remaining predicate to the remaining subject.

Moreover, you can argue from the fact that an attribute belongs, or is thought to belong, in a like degree, in three ways, viz. those described in the last three rules given in regard to a greater degree. For supposing that one predicate belongs, or is thought to belong, to two subjects in a like degree, then if it does not belong to the one, neither does it belong to the other; while if it belongs to the one, it belongs to the remaining one as well. Or, supposing two predicates to belong in a like degree to the same subject, then, if the one does not belong, neither does the remaining one; while if the one does belong, the remaining one belongs as well. The case is the same also if two predicates belong in a like degree to two subjects; for if the one predicate does not belong to the one subject, neither does the remaining predicate belong to the remaining subject, while if the one predicate does belong to the one subject, the remaining predicate belongs to the remaining subject as well (W. A. Pickard-Cambridge).

The main point is that just ex comparatione ejus quod est magis et minus inesse ad simpliciter inhaerens – claims Albert the Great – we can distinguish the several degrees of belonging to a substratum and the different degrees of being.13

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13 Interestingly enough, Albert the Great places emphasis on the necessity that accidents have a fixed degree of belonging to a subject in the manner of a hierarchy
The same rules also apply to the other comparative term ‘likewise’ as proved by the fact that its account takes place soon after the four commonplaces about the ‘more and less’, and as well stressed by the Albert the Great in his own commentary: *Amplius autem adaptando tres ultimas considerationes ad similiter inesse, vel quod videtur similiter inesse quemadmodum in eo quod magis et minus et in posterius dictis tribus locis fieri dicebatur*[^14].

An accident is such that it may be predicated of a substance by chance or without known cause insofar as a contingent occurrence. It may be either predicated or not predicated alike, and belong or not to a subject at the same extent because its absence does not involve the destruction of the subject itself. In that case, an accident, as predicatable inheriting in a subject, displays a degree of being which may vary from the lowest to the highest in terms of intensity or quantity. For instance, the attribute ‘good’ may belong to pleasure in different degrees because there are different ways and times according to which it may be a quality of one single pleasure, or different ways in relation to which it belongs to different pleasures. In the highest degree the attribute ‘good’ may be ascribed to a given pleasure as to be one of its own essential attributes, or, by way of contrast, in the lowest degree it may be ascribed to many different pleasures, if not all, to be regarded as one of the most contingent occurrences. So, a series of degrees of universality of the same and one attribute comes to light, and the different degrees in principle can be sequentially ordered into an infinite set of items to get a determination as distinct as much possible. The existence of an accidental quality is depending any time on how it may be predicated, either more or less generally, or conversely, more or less specifically.

The rules of comparison that assign the role played by genus are illustrated in the fourth book of *Topics*:[^15]

[^15]: IV, 6, 127b 19-128a 12
Moreover, judge by means of greater and less degrees: if overthrowing a view, see whether the genus admits of a greater degree, whereas neither the species itself nor anything that is called after it does so; e.g. if virtue admits of a greater degree, so too does justice and the just man; for one man is called more just than another. If, therefore, the given genus admits of a greater degree, whereas neither the species itself nor anything called after it does so, then what has been given will not be the genus.

Again, if what is more generally, or as generally, thought to be the genus is not so, clearly neither is the given genus. The commonplace rule in question is useful especially in cases where the species appears to have several predicates in what it is, and where it has not been determined and we cannot say which of them is genus [...]

The same mode of inquiry may be applied also to the case of the species, by comparing it with some other species; for if the one which is more generally, or as generally, thought to be found in the given genus is not found herein, then clearly neither will the given species be found therein.

In demolishing a view, therefore, you should follow the rule as stated. In establishing one, on the other hand, the commonplace rule that you should see if both the given genus and the species admit of a greater degree will not serve; for even though both admit it, it is still possible for one not to be the genus of the other. For both beautiful and white admit of a greater degree, and neither is the genus of the other. On the other hand, the comparison of the genera and of the species one with another is of use: e.g. supposing this and that to have a like claim to be genus, then if one is a genus, so also is the other. Likewise also, if what has less claim is a genus, so also is what has more claim [...]

The same observations will apply also in the case of the species. For instance, supposing this and that to have a like claim to be a species of the genus in question, then if the one is a species, so also is the other; and if that which is less generally thought to be so is a species, so also is that which is more generally thought to be so (W. A. Pickard-Cambridge).

That passage seems to call into play a specific argumentum ex gradibus: where there is a marked degree of being there must be a ‘more’, ‘less’ and ‘like’. Genera and species as beings are an instance of unity\(^\text{16}\); then, if unity comes in degrees, does so a single attribute which is being exhibited by members of species and genera. Aristotle makes this

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\(^{16}\) At *Metaphysics* III, 2, 1003b 22-26 and X, 2, 1054a 13-19, the philosopher declares that being and unity are the same and a single nature.
clear at *Metaphysics* X, 1, 1052a 19-23, where unity is likened to continuity. Continuity is a kind of being and unity, and since continuity comes in degrees, so do genera and species. Now, since coming-in-degrees is a character which can belong to genera without belonging to their species, may happen that continuity, the genus, comes in degrees, but the species, however they are beings and unities, do not. But if so, degrees of continuity would not be degrees of unity and being, therefore, if the genus rendered admits of a greater degree, whereas neither the species does so itself nor yet any term called after it, then what has been rendered could not be the genus.17

Here Aristotle seems to hold a firm doctrine that an attribute can only vary in degree where it is predicated univocally. One instance of an attribute cannot *qua* that attribute be more or less than another instance, if the attribute is predicated ambiguously in two cases. But, however odd it might seem, predicates defined by degrees of belonging to a substratum will often be used ambiguously in the course of the dialectic exchange of arguments — that systematically weighs contradictory facts or ideas with a view to the resolution of their real or apparent contradictions — which violates his normal prohibition. So, normally one is not allowed to compare across ambiguity, but when the subjects of predication are as related as prior and posterior, then one is allowed to speak about a given predicate applying to “a greater degree” despite of the multiplicity of senses.18

That’s why Aristotle hastens to add that if what is more generally, or as generally, thought to be the genus be not so, clearly neither is the genus rendered. Otherwise said, just when the items to which a predicate is applied are related to each other as prior and posterior, then comparison

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17 In *Metaphysics*, X, 8, 1057b 35 – 1058a 9, Aristotle makes the point that genus is different in each of its own species, consequently, the genus means different things depending on the species it is predicated of.

18 This view about predicates is highly speculative. In part it can draw direct support from ordinary language, as when Aristotle says that a human being in a picture is not a human being in the same meaning as a living human being (like in the well-known example in the beginning of *Categories*). But, pretty clearly, it goes well beyond it. If Aristotle were to defend the principle of no comparisons across ambiguity for all cases of ambiguity, even those generated just by his own theoretical views about predicates, he could do so only at the cost of a significant conflict with normal usage. He would deprive us of the right to say many things which we usually say. Actually, Aristotle does not do this. On the contrary, he moderates his principle by excepting those cases of ambiguity which are due to posteriority and priority, while holding it as a rule for physical and mathematical attributes which naturally are referring to. See Morrison, *op. cit.*, 400-401.
is allowed. This alone is sufficient to justify our claim that the rules of
comparison put ourselves in the way to sharply distinguish genus from
species with the belief that the priority of a term to another implies that it
admits of a greater degree of being and, accordingly, a priority of this sort
serves as criterion of universality.

Both at ontological and logical level, comparison patterns are needed
because it would not be possible to successfully handle predicates in
terms of a greater or lesser universality. An increase or decrease of
inherence of an attribute in subjects can be recognized just through
comparative terms which properly arrange the succession of genera and
species. So, then, the four commonplaces and the rules stated by them
earlier about accident are valid for genus and species too. A genus is
being compared with another genus that seems to be such either more or
in the same degree. If the former is not genus, certainly the latter will not
be either. Again, even so in the case that the genus rendered admits of a
greater degree, whereas neither the species does so, as we have just seen.

The same mode of inquiry may be also applied to the case of the
species, by comparing each species with some other ones: for if the one
which is more generally, or as generally, thought to be found in the genus
rendered be not found therein, then clearly neither could the species
rendered be found therein.

19 The same argument especially holds for a comparison between two contrary items,
as pointed out by Albert the Great: «Amplius ex consideratione generis comparati
interimitur genus: et primo ex consideratione comparationis duorum ad duo:
quoniam aliquo contrario existente generi, et aliquo contrario existente speciei,
que ad invicem secundum melius et pejus sive vilius comparantur, si tunc aliquis
quod melius est inter speciem et suum contrarium posuit in genus, pejus sive quod
pejus est, inter genus et suum contrarium: tunc enim reliquum quod pejus est, ac-
cidit per consequentiam rationis esse in reliquo, hoc est, pejus in meliori sicut in
genere: et tunc interimitur genus, eo quod contraria secundum melius et pejus sunt
in generibus contrariis: quod in moralibus est verum secundum quod bonum et
male sunt in genere secundum genera aliorum existentia secundum hoc quod est
melius. Videtur ergo in pejore esse sicut in genere, quod est inconveniens. Videtur
quod meliorum specierum sit genus melius. Comparando autem unam speciem ad
duo genera, considerandum si eadem specie ad utrumque genus posuit etiam, et
melius aequaliter se habente aliquis ponit illam speciem in pejus, et non in melius,
peccat et non indebitum genus posuit: et sic interimitur genus» (op. cit. p. 386a).

20 Cf. Albert the Great: «Hic autem locus considerationis utilis est et praecipue esse
videtur in his in quibus plura videntur in quod praedicari de assignata specie, et
dubitatur quod illorum sit genus, eo quod illud non sit demonstratum: quia per ra-
tionem ostendentem habemus dicere quod illorum sit genus. […] Ex eisdem etiam
consideratio est in specie assignata, si ad illud alicuius comparatur quod sit ut spe-
cies secundum magis et minus et similiter: nam si quod magis et similiter videtur
ut species in assignato genere, et non est in ipso ut species in genere, palam est
The comparative terms bring about relationships among genera and species which allow us to ascertain whether some predicate is genus/species or not, and, most importantly, put forward a well-founded hierarchy that by ranking genera and species defines the universality degree of a predicate supposed to be a genus or species. Furthermore, this hierarchy makes us more careful and self-confident in assigning to a predicate the status of genus or species.

Even in the case of another predicatable such as definition the statements describing the accident are valid.

To be true, at the core of any discussion about definition a hierarchy of predicates in terms of universality degrees ought to come out as no surprise. In Categories, 5, 2b 11-18, Aristotle says that both genera and species are substances, but to a lower degree in comparison with particulars, which are more substance than either genera and species: the former are said primary substances\(^2\), the latter secondary. Therefore, he appears to use the expression “more substance” (μελλόν οὐσία) to express his conviction that things are substances in varying degrees, and this is compatible with the statement that substances are essentially ordered according to their degree of being: a particular is prior to species, and species is in turn prior to genus. Of course, this reading of ours does not imply that substance is like a single attribute coming in degree, but

\[\text{quod sequitur, quod neque assignata species est in illo ut in genere. Capitulando ergo et epilogando dicimus jam satis dictum quemadmodum locis et considerationibus opinandi utendum est ad interimendum genus assignatum. [...] et quod si genus et species suscipit magis et minus, quamvis sequatur quod id non sit genus quod non suscipit magis et minus, specie magis et minus suscipiente, tamen non videtur inferri genus si species suscipit magis et minus. Et similiter genus quod sequatur illud esse genus assignatae speciei: nam bonum et album urumque suscipit magis et minus, et tamen non ita se habere ad invicem, ut si duo genera vel plura compararentur ad unam speciem, et unum similiter videatur esse genus et alterum, sequitur probabiliter quod si unum est genus ejus, quod alterum etiam sit genus ipsius. Similiter sequitur duobus generibus comparatis ad unum ut ad speciem, si unum minus videtur esse genus quam alterum et sit genus, quod et alterum quod magis videtur, sit genus. [...] Eadem autem secundum magis et minus et similiter convenit dici: nam similiter secundum rationem hoc et hoc sive duas species comparatae ad unam genus: et si similiter una sicut alia est species propositi generis et assignati, et alterum illorum est species assignati generis, sequitur eadem ratione quod et reliquum sit species ejus. Adhuc autem sequitur per locum a minori, si id quod minus videtur esse species assignati generis est species, quod etiam id quod magis videtur esse species sit species» (op. cit. pp. 386a-387b and 388a-b).]

\(^2\)Primary substances are such that one refers to them directly without mentioning anything different from themselves, not being signs or expressions of any kind.
only that Aristotle is especially interested in determining which substances, relative to all the other things, are the first. Whatever is substance in stricter sense is “more substance” than what is substance in a lesser sense.22

That lends a clear confirmation to the conclusion seen above: if being has many senses which can be ordered according to their degree of universality, even the different instantiations of substance – which is the primary meaning of being – are related to each other as being more or less universal. Not only is the case that species are more substance than genera as much as are less universal than genera, and vice-versa,23 but, by the same token, we may put forth reasons that even other kind of predicates than species and genera can show some order of posteriority and priority accounted by the fact they are able to show a higher or lower degree of substantiality which are being predicated of.

This being granted, if we keep in mind that definition is a phrase (λόγος) signifying a thing’s essence,24 the above suggests that exactly this order of priority and posteriority should be consistent with a feasible hierarchy as being able to grade definitions.

Let us see the commonplaces on definition in the sixth book of Topics25:

You should look and see also whether the term defined is applied in consideration of something other than the account given. […]

Moreover, see if the object admits of degrees, whereas what is given by the account does not, or, vice versa, what is given by the account admits of degrees while the object does not. For either both must admit them or else neither, if indeed what is given by the account is


23 Individual substances have no universality degree insofar as substance most of all.

24 Topics, I, 5, 101b 38; VII, 3, 153a 15 and 5, 154a 32. See also Metaphysics, VII, 4, 1030a 27; Posterior Analytics, II, 2, 91a and 10, 93a 29.

25 VI, 7, 146a 4-20; VII, 1, 152b 6-9; VII, 3, 154a 4-11.
the same as the object. Moreover, see if, while both of them admit of
degrees, they yet do not both become greater together: e.g. suppose
love to be the desire for intercourse; now he who is more intensely in
love has not a more intense desire for intercourse, so that both do not
become intensified at once: they certainly should, however, had they
been the same thing.

Moreover, suppose two things to be before you, see if the object applies
in greater degree to the one to which the content of the account is less
applicable. Take, for instance, the definition of fire as the body that
consists of the most rarefied particles. For flame is fire in greater degree
than light is, but flame is less the body that consists of the most rarefied
particles than is light; but both ought to be applicable in greater degree
to the same thing, if they had been the same. Again, see if the one
applies in equal degree to both the objects before you, while the other
does not apply to both alike, but more particularly to one of them [...]

Moreover, from the point of view of degrees, see if the one admits an
increase of degree but not the other, or if though both admit it, they do
not admit it at the same time; just as it is not the case that a man
desires intercourse more intensely, the more intensely he is in love, so
that love and the desire for intercourse are not the same

Moreover, look at it from the point of view of greater and equal degrees,
in all the ways in which it is possible to establish a result by comparing
two and two together. Thus if this defines that better than something
else defines something else, and the latter is a definition, so too is the
former. Further, if this defines that to the same degree as something else
defines something else, and the latter is a definition, then so too is the
former. This examination from the point of view of greater degrees is of
no use when a single definition is compared with two, or two definitions
with one; for there cannot possibly be one definition of two things or
two of the same thing (W. A. Pickard-Cambridge).

The philosopher makes it the case that if the *definiens* has an
increase in quantity or intensity, an equal increase in the *definiendum*
should occur at the same time. Should that not be the case, then it
should be set out the criteria to compare *definiens* and *definiendum*

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26 Albert the Great, more explicitly than Aristotle himself, states that: «Perspicien-
dum autem adhuc secundum consequentia diffinitionis et diffiniti penes eadem
sumpta secundum magis et minus quae dicunt mutationem in tempore: et hoc com-
paringo primo diffinitionem ad diffinitum. Quod tribus modis fieri potest: ut si dif-
finiment suscipiat intentionem aliam quam secundum designatam diffinitionem: et
si diffinitum suscipiat magis et non diffinito, vel e converso. Item si utrumque sus-
cipiat, sed non semper in eodem tempore» (op. cit. p. 458a).
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According to ‘more and less’, and generate a hierarchy of predicates which Aristotle may have thought of as definientia more or less properly applied to an assumed definiendum.

Firstly, it is shown that “desire for intercourse” is not the same thing as “love” (ἐρως), since they do not increase at the same time, as would happen, if they were. At most, we can establish the definition depending on which something is said to be increasing or decreasing27 with regard to inherence, and, consequently, make a hierarchy of predicates – of the same thing – which may be nearer28 to or farther from substance. In fact, a thing can be described according to either its own essence only or some character in conjunction with the substance. Evidently, the more this character changes at the same time as when the substance does, the nearer is to the substance, conversely, the less it does the farther is29. Just as it is not the case that a man desires intercourse more intensely, the more intensely he is in love. So, the definition of “love” cannot be the “desire for intercourse”, because this latter shows off a degree of inherence in the substratum of “love” far lesser than any other predicate which may match love’s definition. Aristotle in Eudemian Ethics, VII, 12, 1245a 24-26, says that “sensuous love (ἐρως) seems like friendship (φιλία); for the lover aims at the society of his beloved, but not as ideally he ought, but in a merely sensuous way” (B. Jowett). On this score, Albert the Great draws a clear distinction between amor amicitiae, as real love30, and

27 Along the lines of Albert the Great: «Amplius terto considerandum, si quidem utraque et diffinitio et diffinitum suscipiunt magis, non tamen simul et in eodem tempore, interimitur diffinitio. Ut si amor qui dicitur apud medicos concupiscientia coitus, interimitur haec diffinitio: quia magis amans non magis concupiscit coitum, sed forte praesentiam amatae, etiam quando appetit coitum: propter quod non simul utraque in eodem suscipiunt magis: oportet tamen hoc, si idem secundum idem esset diffinitio et diffinitum. Amplius comparando diffinitionem et diffinitum ad tertium, considerandum est si duobus aliquibus propositis (ut est diffinitio et diffinitum) et tertio comparatis de quo res diffinita secundum magis dicitur, de eodem hoc quod secundum diffinitionem (hoc est, diffinitio) minus, interimitur diffinitio» (op. cit. p. 459a).

28 The language of ‘nearness’ (ἐγγύς) recurs, attached to substance, in Metaphysics, VI, 2, 1026b 13; On generation and corruption, II, 10, 336b 34; On the Heavens, IV, 3, 310b 32; Physics, I, 9, 192a 6.

29 Cf. Albert the Great: «Amplius penes idem considerandum si res quidem diffinita suscipit magis, et id quod assignatur secundum diffinitionem (hoc est, diffinitio) non suscipit magis: aut e contrario si id quod assignatur secundum diffinitionem (hoc est, diffinitio) suscipit magis, et res diffinita non suscipit magis: interempta enim erit diffinitio: oportet enim aut utraque suscipere magis, aut neutrum: siquidem idem est rei diffinietae et secundum idem, quod secundum diffinitionem assignatur de ipsa» (op. cit. p. 458b).

30 Evidently, with special reference to Nicomachean Ethics, VIII, 11, 1161a 15 ff.
concupiscentia coitus. Therefore, we may go so far forth as to claim that “desire for intercourse” is one of the farthest predicates from the substance of “love”, which is tantamount to say that “desire for intercourse” is an accidental feature of “love”.

Secondly, Aristotle claims that two definientia may belong ‘more and less’ to a definiendum. In the case of fire, Aristotle even looks into the comparative relationship amongst a definiendum and three definientia. He considers the possible definition of fire as “the body that consists of the most rarefied particles”, then remarks that fire denotes flame rather than light, but light is more rarefied than flame, so, the fire is not the same thing as the most rarefied body. At most, as Aristotle points out in Topics, V, 4, 132b 19-34, for fire to be the “body with the most rarefied particles” may be just a propriety, specifically different from any other predicate that belong to it alone, in the same way as earth is specifically the heaviest body. In pursuing the matter further, Albert the Great explains that there are three kinds of fire: coal, flame and light. Just this last meets the definition of the most rarefied body, but this definition cannot be the definiens of fire in that these three definienda and that definiens do not increase (non suscipiant) at the same way and time. It goes to show that a property is something which does not indicate the essence of a thing, but even so, since it belongs to this thing alone, it is all the nearest predicate to substance beyond definition. The definition of a thing’s property stands for a definition of the thing itself in lesser degree.

Thirdly, Aristotle shows how to choose the right definition for something is depending on the quality of a statement to lay bare more or less a thing’s essence. Faced with two definitions of two different things,
if that one which is less definition, that is, lays the essence bare in lesser degree, is taken as definition, in that case even more it will be taken as such the definition which lays the essence bare in greater degree. More evidently, the same for two definitions laying the essence bare in like degree, even though never will it be the case that two different things have the same definition, or two definitions apply to the same thing.

The quoted passages imply – and Aristotle’s practice elsewhere makes clear that he holds – a tenable view about definition which underlies the case of a predicate applied to two subjects in accordance with a relation of priority and posteriority, so that the predicate has a different sense, i.e. a different definition, in each case. By this relation we can establish any time the degree of belonging to a substratum for such a predicate, from the highest, as a substance’s definition, to the lowest, as definition of an accidental attribute. Genus and property lie between those two extremes, as being definitions partially disclosing the nature of thing in a mediate degree. Put in a slightly different form, once again we see that any predicate may admit of a greater or lesser degree of being, and then be ordered either more or less generally, or conversely, more or less specifically. There is some sort or degree of knowledge of a thing’s attributes that Aristotle thinks is made possible by knowledge of what it is, i.e. its definition.

3. Conclusions

We wanted to hearken back to Topics with the help of Albert the Great’s commentary for inspiration and support, because it offers an excellent synthesis of the knowledge about comparative terms, whose logic we thought of the only one to be able to establish the truth degree of a predicate and whose conclusions seem to be acceptable still today.

33 Cf. Albert the Great: «Amplius inspiciendo in locum a minori, construitur diffinitio ex magis et minus videtur inesse: et hoc fit quoties contingit construere duo ad duo comparata sive comparabilia secundum magis et minus accepta. Ut verbi gratia, si magis haec diffinitio esse videtur illius quam haec alia videatur esse illius alterius, et haec quae minus videtur esse, est diffinitio, sequitur quod haec quae magis esse videtur, erit diffinitio. A simili etiam sequitur constructio diffinitionis: si enim similiter sit haec illius diffinitio ut haec alterius, si una est diffinitio, sequitur quod et altera est diffinitio quia similium simile est judicium [...] Sunt hi loci qui dicti sunt a conjugatis et casibus in proportione ex simili et ex magis et minus opportunnissimi ad construendum facile diffinitionem: et ideo maximas oportet istas retinere in memoria, et per exercitium habere paratos eosdem: eo quod isti utilissimi sunt ad plura problemata» (op. cit. p. 486a).

To weave together the threads of the foregoing discussion, if a predicate denotes the essence of the subject which is being predicated of in highest degree, it follows that this predicate conveys the subject’s definition; if a predicate denotes the essence of a subject in lesser degree, then this predicate conveys the species or genus to which the subject belongs, whether the degree of universality is lower or higher respectively (or reversely, whether the degree of substantiality is higher or lower); if a predicate denotes a quality of a subject, it can be regarded as either an accidental or essential attribute of the subject which is predicated of, whether it may be ascribed to many kinds correspondingly, i.e. in lowest degree, or one kind alone, i.e. in highest degree.

Each predicate has a universality degree in and of itself that may be more or less appropriate to represent a definite feature of the subject which is predicat of. When applied to all predicables, the logic of comparison is able to put in evidence the high or low degree to which a predicate inheres in a subject in line with its greater or lesser substantiality, or, conversely, lesser or greater universality.

To put the point in general, Aristotle thinks of a proposition as a combination of its subject and predicate term, and he thinks that a definition can be reconfigured into a proposition that asserts the existence of the definiendum by predicating the differentia of the kind. For example, if man is to be defined as the bipedal animal, then the claim that men exists amounts to the proposition that some animals are bipedal, and both the definition and the proposition can be thought of as unions or aggregations of “animal” and “bipedality”, understanding ‘union’ and ‘aggregation’ here in the broad sense in which it applies compositions of matter and form. And in like manner, the proposition “The man is white”, unites “man” and “white”. This union occurs in thought, and the proposition is true when there is a union or aggregation in the objects corresponding to it; otherwise, it is false.

The difficulty is in-built in the moderate realist view that a particular is composed of distinct components, one identical to and the other different from corresponding components in the other objects. In

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35 For lack of space we could not to deal with τὸ ἄγαν, but the rules of this logic are valid for this predicatable too.

36 See Metaphysics, VI, 4, 1027b 18-22 and IX, 10, 1054a 34 – b 5.

37 And it is in-built also in similar claims in at least some other forms of realism.
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Positing such a distinction one can but undercut the unity of particulars, and the problem is multiplied as restates the theory to explain the particulars falling under higher and higher universals. That explains why to disclose a thing’s essence means to place such an essence in the hierarchy of predicates arranged by the comparative terms and their relationships so that *definiens* and *definiendum* may become more or less in being at the same both time and way. But more importantly – taking the example of the “white man” again –, the form “man”, once isolated from any other differentiating characteristics like “white”, “tall”, “snub-nosed”, etc., will be analyzable into being an animal and whatever sets men apart, and being an animal will be analyzable in like manner and so on until we get to the greatest kind. But having done so, thus, we will have analyzed the single man into an aggregation of terms and there will be no basis for grouping these terms back together in the specific order we need, if there is to be a hierarchy of universals. For if there were none such, there will not be any forms or kinds about which we can say things as a whole, namely, insofar as holding some multiplicity of things in the manner we have seen in the first section.

So, to all outward appearances, it is not far-fetched to claim that the rules of comparison are grounded on the Aristotelian view on the manifoldness of forms which constitutes reality and brings into being the several degrees to which these forms are being embodied in predicates. For that matter, in the Aristotelian logic of comparison a hierarchy of universals is as much needed as different levels of reality are being found. Any determination of universality degree of a predicate by thought is to be related to the thing’s degree of being conveyed by such a predicate.

What is of interest to us here is the relation of difference in ‘more

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and less’ that Aristotle obtains between the forms of a kind due to continuity which grounds the unity even as whole of any universal as such. More precisely, since continuity comes in degree, this difference in ‘more and less’ seems to be the ontological basis for any universal. The sameness in kind of any universal statement consists in, or at least requires, a sort of commensurability by which we can draw comparisons among things in order to note similarities or differences according to some range along a given attribute (or within a wider range). Seeing that one character exceeds or falls short of the other in relation to the several degrees of belonging to things, we can ascertain how an attribute is to be universally predicated of things as revealed by the behaviour of the four predicables.

All this does mean nothing else than Aristotle regards universality as a feature of the manner in which we express and understand reality rather than as a feature of reality in its own right. Of course, the degree of belonging of a predicate to a substratum provides a real basis for our setting up a hierarchy of predicates, which can justify our judgements about things and their mutual causal connections in the objective mode. But this basis relies on the difference in ‘more and less’ among predicates and their instantiations that makes a universal to be true when its truth conditions are mind-independent. If and only if the referent of an universal belongs to the set of things associated with the meaning of its own, a predicate universally stands for things identical in either definition or kind or quality whose universality degree is due to the place occupied in the hierarchy of predicates.

If our account is reliable, the universality of thought consists in its taking a certain standpoint drawing a comparison of one thing with another, and a concept is an ability with regard to a set of things differing

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39 However compressing as much as possible and simplifying somewhat, since our article is intended to be just an early phase of an investigation – if not a book-length study – that would be worth pursuing further.
in ‘more and less’ to consider any of them in light of its commensurability in thought to any of the others. In the case of proper objects grasped by a particular concept, this ability plainly amounts to place them along an order defined by truth degrees with which the concept is concerned, since to do this is to relate them to all the other degrees along the same order within the range of which this ‘more and less’ variation occurs.

The mind-independence of universals cannot consist in a distinctive feature or element qualitatively identical that must be found inside of all things which is predicated of. As said at the outset, universality cannot be a matter of repeatability of the same feature able to set apart a class of objects qua having this very feature. For that reason, Aristotle definitely rejects the epistemology underlying the would-be Aristotelian Realism which does believe that a concept of an object derives from a process of abstraction withdrawing or removing from a context all the other objects proper to other concepts. Therefore, Aristotle could not have held Moderate Realism, because he would not acknowledge the metaphysical grounds underpinning this doctrine.

More broadly, indeed could he not accept the Realist stance for the sake of universality. To him there is no mind-independent universal things which our concepts are supposed to be appropriately referring to. Throughout his works we find many passages where Aristotle strongly opposes the Platonic Form even the immanent version of it posited by other Academics such as Eudoxus.


ABSTRACT

Aristotle is reportedly held to have been a Moderate Realist in that he would maintain that a concept derives from an act of grasping a mind-independent universal object that exists somehow inside of the many different things which the concept is predicated of. As far as a universal is independent of mind, it would stand for the proper object of a concept that subsumes a given number of things as its own instantiations. But we claim that Aristotle rejected such a view and instead did perceive and comprehend universality as a feature of thought rather than as a feature of reality in its own right. As showed in the chapters of Topics regarding the so-called logic of comparison (with the support of Albert the Great’s commentary), each predicate can be more or less consistent with the attribute of the subject of which it may be predicated. Both essential and accidental attributes assume a definite degree of being related to the degree of belonging to substance. Unlike particular things, the universality of a concept is to be understood always in comparison with another concept according to a hierarchy of predicates in terms of universality degree arranged by comparative terms such as ‘more’ (μᾶλλον), ‘less’ (μένον), and ‘likewise’ (ὁμοίως). What is really mind-independent are the truth conditions which make a universal true when exclusively referring to a set of things identically meant by the same predicate whose universality is given by the place occupied in the hierarchy of predicates.

Keywords: Aristotle; universal; Topics; comparison; Albert the Great; Realism

RESUMO

Aristóteles é alegadamente considerado como tendo sido um realista moderado, que sustentaria que um conceito deriva de um ato de alcançar um objeto universal independente da mente que exista como imanente encontrado entre as muitas coisas diferentes de que o conceito é predicado. Por quanto um universal é independente da mente, estaria para o objeto próprio de um conceito que subsumer um determinado número de coisas enquanto sua própria instância. Mas nós sustentamos que Aristóteles rejeitou essa óptica e, em vez disso, entendia e compreendia a universalidade como um caráter do pensamento e não como uma característica da realidade por si. Como é mostrado nos capítulos de os Tópicos sobre a chamada lógica de comparação (com o apoio do comentário de Alberto Magno), cada predicado pode ser mais ou menos coerente com o atributo do sujeito do qual pode ser predicado. Quer os atributos essenciais, quer os acidentais, assumem um grau definido de ser relacionado com o grau de pertença a uma substância. Ao contrário das coisas particulares, a universalidade de um conceito deve ser entendida sempre em comparação com um outro conceito de acordo com uma hierarquia de predicados, estruturada em termos de graus de universalidade através de termos comparativos como ‘mais’.
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(μόλλον), ‘menos’ (ήττον) e ‘do mesmo modo’ (ομοίως). O que é realmente independente da mente são as condições de verdade que fazem com que um universal seja verdadeiro, a saber, quando se referem exclusivamente a um conjunto de coisas idênticamente denotadas pelo mesmo predicado cuja universalidade é dada pelo lugar ocupado na hierarquia de predicados.

Bibliography

ACKRILL J.L., Aristotle’s Categories and De Interpretatione, Oxford, Oxford University Press, 1963
B. ALBERTI MAGNI, Opera Omnia, cura ac labore Augusti Borgnet, volumen II, Logicae Secunda Pars. Completens libros 2 De demonstracione, id est, posteriorum analyticorum; 8 Topicorum; 2 de Sophisticis Elenchis, Parisis, apud Ludovicus Vives, Bibliopolam Editorum, 1890
CASARI E., “Logica e comparativi”, in Scienza e filosofia, a/c di C. Mangione, Milano, Garzanti, 1985, 392-418
CHERNISS H., Aristotle’s Criticism of Plato and the Academy, Baltimore, The Johns Hopkins University Press, 1944
CLAY D., Platonic Questions: Dialogues with the Silent Philosopher, University Park, The Pennsylvania State University, 2000
GOHLKE P., Aristoteles, Die Lehrschriften. 2, IV: Topik, Paderborn, Schöningh, 1952
GREEN-PEDERSON N.J., The Tradition of the Topics in the Middle Ages. The Commentaries on Aristotle’s and Boethius’ Topics, München-Wien, Philosophia Verlag, 1984
LLOYD A.C., Form and Universal in Aristotle, Liverpool, Francis Cairns Publ., 1981
REALE G., Aristotele. Metafisica. Saggio introduttivo, testo greco con traduzione a fronte e commentario, 3 voll., Milano, Vita e Pensiero, 1993
ROOCHNIK D., Retrieving the Ancients: An Introduction to Greek Philosophy, London, Blackwell, 2004
SAINATI V., Storia dell’Organon aristotelico, I: Dai Topici al De interpretatione, Firenze, Le Monnier, 1968
SŁOMKOWSKI P., Aristotle’s Topics, Leiden, Brill, 1997
SORBI L., Aristotele. La logica comparativa, Firenze, Ed. Leo S. Olschki, 1999