

Aristotle's Theory of Universal

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The concept of universal in Aristotle's philosophy has several aspects.

1) *Universal and plurality*

Aristotle posits universal (καθόλου) versus particular (καθ' ἕκαστον) each covering a range of elements: some elements¹ are universal while others are particulars. Aristotle defines universal as 'that which by nature is predicated (κατηγορεῖσθαι) of many subjects' and particular as 'that which is not' so. (OI², I, 7, 17a38-b1) The plurality of possible subjects of universal is what Aristotle insists on.³ The inclusion of the notion of 'plurality' in the definition of universal might make us expect to have 'singularity' in the definition of particular. So, when Aristotle says that universal is that which is naturally predicable of

¹ To simplify the case, we call that which is divided to universal and particular 'element' though Aristotle never called it so. Actually he has no name for it. What he says is a description 'what is' (OI, I, 7, 17a38) by which he does only mean 'what we use "is" for' or what we say 'is', which, as we will discuss, can include both things that exist and those that do not. He asserts: '[Of] what is some [are] universal of things, others individual.' (OI, I, 7, 17a38-39)

² Abbreviations in this paper:

Cat.	<i>Categories</i>
E.Nic.	<i>Nichomachian Ethics</i>
Gen. An.	<i>Generation of Animals</i>
Met	<i>Metaphysics</i>
OI	<i>On Interpretation</i>
Part. An.	<i>Parts of Animals</i>
PrA.	<i>Prior Analytics</i>
PsA.	<i>Posterior Analytics</i>
So.	<i>On the Soul</i>
So.El.	<i>Sophistical Refutations</i>
To.	<i>Topics</i>

³ Met., Z, 1038b10-12; PsA., A, 11, 77a5-9. In Met., Δ, 1018a2-4 Aristotle says that Socrates, a particular, is not over many (ἐπι πολλῶν).

many subjects, we expect him to define the particular as ‘that which is predicable of one subject only.’ Nonetheless, Aristotle does not and indeed cannot define it this way. We cannot find a text in which he defines particular as such simply because particulars are not predicable of any subject unless we regard their predication of themselves a predication, which Aristotle does not, at least in a genuine sense. Thus, he defines a particular only negatively. Hence, the capability of predication of a plurality is indeed the capability of predication itself because the particular cannot be predicated of anything. A particular is that which cannot be predicated of anything (or: of anything else, if saying of a thing of itself is to be considered as predication). It is ‘numerically one’ and what of which the universal is predicated (Met., B, 999b34-1000a1).

Those that cannot be predicated of anything, or particulars, are of two kinds: primary substances and individual accidents. Besides *Categories* we can hardly find a text where Aristotle discusses individual accidents⁴ maybe because they are of much less importance for him compared with substances. However, substances are what he mentions repeatedly so that we can confine particulars to substances. In fact, it is substance that Aristotle considers so repeatedly as what cannot be predicated. As the main particulars and individuals, substances are posited as the main things that are not universal.⁵ The closeness

⁴ Pointing to Met., XII, 1070a21-24 as a text in which non-substantial particulars are mentioned, Daniel T. Devereux (Inherence and Primary Substance in Aristotle’s *Categories*, in: Gerson, Lloyd P., Aristotle; Critical Assessment, V.1, Logic and Metaphysics, Routledge, 1999, p.66) concludes that book 12 may be seen as an intermediate stage between *Categories* and the later view of the central books of *Metaphysics* in which there is no evidence of such particulars. (Also check Cat., 8a38-39, 8b3-6; To., 116a22-24; Met., 1087a15-21; So.El. 179a8-10, 178b37-39 and Met., 1003a7-12) Based on these texts Devereux infers that being a this may only be a distinctive mark of substance in *Metaphysics* and not in *Categories* and *Topics*. (ibid, p.55)

⁵ Met., B, 1003a7-9; Z, 1041a3-4; H, 1042a21-22; K, 1060b19-21; I, 1053b16-21. We are not to discuss the considerable controversies around the topic of substance in Aristotle’s philosophy and the differences between the substance of the so-called logical works and that of others, specifically *Metaphysics*, Z. However, as most of the commentators agree, and the above mentioned places in *Metaphysics* show, what Aristotle means by substance in this work is more compatible with the primary substance of the *Categories*. It is evident that it is the primary substance that, as individual, must be posited against universal. The fact that beside universal, genus is also distinguished from substance (Met., H, 1042a21-22) obviously indicates, among many other evidences, that secondary substances, which are strictly predicated as the genera of primary substances are not in Aristotle’s mind when he discusses substance in such texts. Nonetheless, the case is not so simple especially when Aristotle discusses what substances consist. There are two interdependent *aporiai*: i) whether substances are composite or incomposite and ii) if they are composite,

of the two concepts of ‘substance’ and ‘unpredicability’ is to the extent that he ignores individual accidents and makes these concepts equal and as the opposite of universal: ‘what is not predicated of a subject is said a substance (οὐσία λέγεται τὸ μὴ καθ’ ὑποκειμένου) but what is always said of some subject is called a universal.’ (Met., Z, 1038b15-16. cf. Met., B, 1003a7-9) Therefore, since particulars cannot be predicated of any subject and, thus, every predication is necessarily a predication of a plurality of subjects, the inclusion of ‘plurality’ in the definition of universal is either i) in the sense of ‘representation’ or it must be regarded as ii) an unnecessary addition mentioned just for clarification or iii) only for avoiding cases where something is predicated of itself. By the first we mean this: though a substance is not said of anything, it represents some one thing and there is some one thing that is that substance. A universal, on the other hand, can represent a plurality of things. There is, however, a third possibility that has no essential difference with the sense of representation. Aristotle might have ‘arbitrary predication’ in mind when he uses ‘plurality’ in the definition of universal: while a particular can be the arbitrary predicate of just one thing, a universal can be predicated, both really and arbitrarily, of many things. Whatever Aristotle’s intention was, what is important for our investigation is this: Aristotle uses the notion of plurality in the definition of universal in spite of the fact that it is not necessary. What this implies is that this notion is so important for Aristotle that albeit every predictability is a predictability of a possible plurality, he adds the notion of plurality. What makes this notion important, I believe, is that he has something like a class in mind when he defines a universal because the notion of plurality is indistinguishable from a class.

whether what they consist are universals or substances. It is evident that if they are incomposite, ‘there would not even be a formula of substance.’ (Met., Z, 1039a16-17) However, a substance cannot be composed of actual substances (Met., Z, 1039a15-16) (How can an individual be composed of other individuals?) Therefore, they must be composed of universals. But how can a substance be composed of universals when a universal is only a ‘such’ and not a ‘this’? (Met., Z, 1039a14-15). Thus, it is difficult to take a substance either as composite or as incomposite.

2) *Universal and whole; particular and part*

In Aristotle, the concepts of universal and whole are so close: ‘That which is true of a whole class and is said to hold good as a whole (which implies that it is a kind of whole) is true of a whole in the sense that it contains many things by being predicated of each, and that each and all of them, e.g. man, horse, god, are one because all are living things (τὸ μὲν γὰρ καθόλου καὶ τὸ ὅλως λεγόμενον ὡς πολλὰ περιέχον τῷ κατηγορεῖσθαι καθ’ ἑκάστου καὶ ἐν ἅπαντα εἶναι ὡς ἑκάστον, ...).

Phil Corkum⁶ points to Aristotle’s distinction between quantitative and integral wholes in *Met.*, 5, 26, 1023b26-33 where a quantitative whole is called *homoimerous*, as the sum of animal while an integral whole, e.g. a house, is called *heteromerous*. He links the notion of *homoimerous* to the notion of indivisibility of individuals (in 1b6-9 and 3b10-18) and indivisibility of universals.⁷ He believes that in *PrA.*, I, 4, 25b32-26a2 it is the transitivity of mereological containment that is discussed.⁸

3) *Universal is common between instances*

Universal is common (κοινόν) between all the plurality of subjects it can be predicated of because what belongs to more than one thing must be common between them. (*Met.*, Z, 1038b10-12) In the Same way, what is common cannot be a particular and, thus, a substance. (*Met.*, Z, 1040b23-24) An individual or substance is a ‘this’ and a ‘this’ cannot be what common indicates simply because it is here in ‘this’ and can be nowhere else while common must be common between several things. In fact, what can be indicated by a common is indeed a ‘such.’ (*Met.*, B, 1003a7-9)

⁶ Corkum, Phil, Aristotle on Predication, European Journal of Philosophy, 2013, John Wiley & Sans Ltd, p. 7

⁷ Ibid, p. 8

⁸ Ibid, p. 10

4) *Universal is the same in its instances*

We have a universal i) in all of its instances and ii) in the same way (ταὐτὸ ἐπὶ πάντων). (Met, Γ, 1005a9-10) While the first point is evident (otherwise how could it be their universal?), the second point might seem not only ambiguous but the cause of many problems. For Aristotle, therefore, a universal must be ‘one’ in number and not many. This numerically one universal is the very universal for all its instances. It is the same universal that is predicated on each of its instances. This sameness is not, however, a mere homonymous sameness or the sameness of a homonymous word. All these three points, namely oneness, sameness and rejection of mere homonymous sameness are asserted in Aristotle’s own words τι ἓν καὶ τὸ αὐτὸ ἐπὶ πλειόνων μη ὁμόνυμον. (PsA., A, 11, 77a8-9) This non-homonymous unity is asserted also in PsA., A, 24, 85b15-16.

5) *Universal as predicate*

Contrary to substance that cannot be a predicate, universal is what cannot be prevented from being in the place of predicate.⁹ Therefore, Aristotle distinguishes universal from subject because while the latter must necessarily be capable of being a predicate, though it might take the position of subject as well, the latter does not necessarily have such a capability especially when it is a this because it cannot be a predicate in such a case: ‘For the subject and universal differ in being or not being a ‘this’; like man and body and soul are the subject of accidents while the accident is something like musical or white.’ (Met., Θ, 1049a27-30) This indicates that a universal is basically different from subject and although it can be posited in the place of subject, it is the position of predicate that is its position as a universal.

⁹ Met., Z, 1038b15-16: τὸ δὲ καθολοῦ καθ’ ὑποκειμμένον τινος λέγεται αἰεὶ

In *Metaphysics*, Z, 13, Aristotle asserts that ‘no universal can be substance.’ The same is asserted in *Met.*, I, 1053b16-17 cf. 1060b21. As James H. Lesher points out,¹⁰ Aristotle’s position is that ‘nothing predicated universally is a substance.’

6) *Universal in substance*

In *Met.*, 1038b8-9 Aristotle says that no universal is a substance. While a universal cannot be a substance in the way essence (*to ti en einai*) is, it is, Aristotle asserts, ‘in’ it (*ἐν τούτῳ δὲ ἐνυπάρχειν*) (*Met.*, Z, 1038b16-18). Aristotle’s examples are: animal in man and horse. A universal is ‘in’ the thing it is its universal. But in what sense a universal can be in a thing? It cannot be in it as ‘in a subject’, which is denied in *Categories* for secondary substances. If we check the senses of being in, we can find some other senses of ‘being in’ some of which are compatible with this sense of ‘being in.’

Michael J. Loux¹¹ believes that contrary to his earlier works like *Peri Ideaon* and *Organon* in which the immanence of universals signals a reproduction of the platonic two worlds picture, in his later works like *Physics* and *Metaphysics*, when Aristotle tells us that universals are in particulars he means that they are ‘components of or ingredients in sensible particulars.’

In *Metaphysics* (Δ, 1014b3-9) Aristotle compares elements with universals and call them ‘the most universal things because elements are present either in all or in many things.’

7) *Logos is of universal*

Not only universals have logos (*Met.*, Z, 1038b18-19) but ‘Every logos and every science is of universals and not of particulars.’ (*Met.*, K, 1059b25-26) The reason is that they are

¹⁰ Lesher, James H., *Aristotle on Forms, Substance, and Universals: A Dilemma*, *Phronesis*, Vol. 16, No. 2, 1971, p. 169

¹¹ Loux, Michael J., *Aristotle on Universals*, in: Georgias Anagnosto Pocilos (ed.), *A Companion to Aristotle*, Blackwell, 2009, p. 103

the same: the logos of the unjiversal ‘circle’ is nothing but ‘being circle’ and the logos of the universal ‘soul’ is ‘being soul.’ (Met., Z, 1035b33-1036a2) The same is said about definition. (Met, Z, 1036a27-29)

8) Universal: in the soul

Contrasting individuals, universals are in the soul (So., 3, 5, 417b22-23; cf. PsA., B, 19, 100a6-7).¹² Aristotle also says that the form, i.e. the essence, of the artwork is in the soul. (met., Z, 1032a32-b2) Moreover, as Michael J. Loux points out, ‘the *Peri Ideon* tells us that we need universals to serve as the objects of noetic acts.’¹³

9) Universal: not beside individual

In spite of the fact that demonstration creates the opinion that demonstrating is based on the existence of universals as existing among the existing things, they do not have existence besides individuals (PsA., A, 24, 85a31-35; Met, Λ, 1071a19-23). Aristotle believes that universals of a P-series (B203, 71) (???) are not *παρὰ τὰ εἶδη*: 999a6ff. Also check *De Anima*, II, 3, 414b20-25

10) Primary or commensurate universal

Aristotle distinguishes ‘πρῶτον καθόλου’ (PsA., B, 17, 99a33-35) literally meaning ‘primary universal’ but mostly, and truly, translated as commensurate universal. While a universal merely ‘μὴ ἀντιτρέφει,’ a primary universal ‘ὅ ἕκαστον μὲν μὴ ἀντιτρέφει’ (PsA., B, 17, 99a33-35). Aristotle mentions three conditions for a commensurate universal. It is an attribute that i) belongs to every instance of its subject (without exception!!!), and this belonging is ii) essentially and iii) qua that subject itself (ἢ αὐτό). (PsA., A, 4, 73b26-

¹² For ‘universal in thought’ check Alexander, *De Anima* 90.2-8 and *Quaestio* 1.3 7.28-8.5

¹³ Loux, Michael J., Aristotle on Universals, in: Georgias Anagnosto Pocilos (ed.), *A Companion to Aristotle*, Blackwell, 2009, p. 191

28) However, he insists that the second and the third conditions are indeed the same. (PsA., A, 4, 73b28-30) The first condition he paraphrases as ‘to belong to any random instance of that subject’ and the second and the third as ‘when the subject is the first thing to which it can be shown to belong.’ (PsA., A, 4, 73b32-74a3) Aristotle’s example is ‘the equality of its angles to two right angles’. This attribute is not a commensurate universal of figure due to the first condition: it cannot be demonstrated of any figure. Nonetheless, though it can be demonstrated of every isosceles because every isosceles has angles equal to two right angles, it is not a commensurate universal of isosceles due to the other conditions: it is not predicated of isosceles qua isosceles but qua triangle. These conditions seem to be like regulators: they organize everything to match to the right group. The method of finding commensurate universal is like test and error method based on elimination: you must eliminate each of the higher or lower universals and check if the attribute remains or not. The commensurate universal is that which remains in between eliminated universals. (cf. PsA., A, 5, 74a37-b4)¹⁴

Brad Inwood presents an understanding of commensurate universal that is different from what I have understood and, thus, must be checked: ‘These universals are propositions in which, for example, ‘all A are B’ is true and which are still true universal statements if converted: ‘all B are A’ is also true.’¹⁵

11) Universal and knowledge

The relation between knowledge and universal in Aristotle’s philosophy is a complicated issue. Sometimes he speaks as if knowledge of universal is only a kind of knowledge besides knowledge of, for example, particular. He speaks in some places as if it is the only

¹⁴ Check PsA., A, 74a32ff. and 96a20-b14 for understanding commensurate universal better and PsA., A, I, 4 and II, 17, cf. To., v2, 130aff., Phy., II, I, 192b35ff.; To., V5, 134a18-25; PsA., I, 9, 76a5; Phy., II, 1, 192b20; De Anima, II, 7, 41a29-31; PrA., I, 35, 48a34-36

¹⁵ Inwood, Brad, A Note on Commensurate Universals in the “*Posterior Analytics*”, *Phronesis*, Vol. 24, No. 3, 1979, p. 320

kind of knowledge deserving this name,¹⁶ while in others it seems that particular knowledge must be more worthy. In *Metaphysics* (M, 1087a15-18) Aristotle distinguishes two ways of speaking of knowledge: particular, which deals with universal and indefinite, versus actual, which deals with definite objects and substances.¹⁷ Since actuality is prior to potentiality, we must take this text as saying that the prior knowledge is of the individual. However, in *On The Soul* Aristotle takes the apprehension of individual as ‘actual sensation’ and differentiates it from ‘knowledge’ that apprehends universal. (So., 3, 5, 417b22-23) Individuals are objects of sense and not of thought and sensation is not, in Aristotle’s view, knowledge in the real sense.¹⁸ (Met., B, 99b1-3) It is only the universal, and not the particular, that is the subject matter of every logos and every episteme (Met., K, 1059b24-27) and it is not possible to get knowledge without the universal. (Met., M, 1086b5-6; cf. Met., M, 1086b32-37) For Aristotle, scientific knowledge and definitions are of universals. (PsA., A, 24, 86a6-7; B, 19, 100a6-9; Met., A, 1, 981a5-12; B, 4, 999a24-29; K, 2, 1060b20-21; M, 10, 1086b32-37; E.Nic., Z, 6, 1140b31-32) However, it brings about the greatest difficulty. (Met., M, 1087a10ff.)

Aristotle distinguishes experience from *techne* in *Metaphysics* based on the difference of knowing one thing and knowing things that are together based on an *eidos* (Met., A, 981a7-12): *techne* arises when one universal judgment is produced from many notions gained by experience. (Met., A, 981a5-7 cf. PsA, B, 19, 100a6-7) However, we know in so far as things have some unity and identity and, thence, in so far as there is universality (Met., B, 999a28-29) and knowing must belong to the one who has in the highest degree universal

¹⁶ This is said about substance which is of the highest worth for Aristotle: ‘All knowledge is of universals and of the ‘such’; but substance does not belong to the universals, but is rather a ‘this and separable.’ (Met., K, 1060b19-21; cf. also: Met., Z, 1036a5-8)

¹⁷ In *Posterior Analytics* (A, 24, 86a3-7) we see Aristotle linking particular with indeterminateness and unintelligibility while universal with determinateness and intelligibility.

¹⁸ In the same way, the perception of commensurate universal is not possible. (PsA., A, 31, 87b30-33; cf. PsA., A, 31, 87b30-33 and 87b39-88a5)

knowledge because he who knows the universal, in a sense knows all the subordinate objects (τὰ ὑποκείμενα).¹⁹ (Met., A, 982a21-23).

The process of acquiring knowledge of the universal is along the reception of the knowledge of the particular by an act of recognition. (PrA., B, 67a22-30) However, a signal perception of a particular does not lead to a universal knowledge. Although Aristotle does not deny that a commensurate universal can be elicited from the several groups of singulars (ἐκ γὰρ τῶν καθ' ἕκαστα πλειόνων τὸ καθόλου δῆλον) (PsA., A, 87b39-88a5; cf. PsA., B, 2, 90a26-30), it seems it must not be considered as a general rule. Aristotle insists that there are cases where one single act of particular perception leads to the universal knowledge. (PsA., A, 31, 88a9-17) However, no matter by one or by more cases, the general rule is that 'it is by means of an induction of particulars in cases that are alike that we claim to induce the universal.' (To., I, 18, ^108b11; cf. PsA., B, 19, 100b3-5; PsA., A, 18, 81a40-b5). In fact, induction is defined as a passage from particular to universal. (So., B, 12, ^105a13-16)

12) Knowledge and commensurate universal

With the aim of explaining kinds of error and the possibility of both knowing and not knowing, Aristotle mentions, in *Posterior Analytics*, three senses of 'to know': to have knowledge of universal, to have knowledge proper to the matter in hand (ὡς τῆ οἰκεία) and to exercise such knowledge (ὡς τῷ ἐνεργεῖν). (PsA., B, 21, 87b3-5) From this he concludes that three kinds of error are possible. Thus, when one knows in one sense, it is possible for her not to know it in another sense. However, the main reason of error for Aristotle is where 'our conclusion is not indeed primary and commensurately universal (καθόλου πρῶτον) in

¹⁹ Aristotle's use of ὑποκείμενον for the subordinate objects of a universal is so consistent with class theory: the subject of a predicate is the ὑποκείμενον and the member of a class for which the predicate is the class. the use of ὑποκείμενον for subordinates of a universal or higher thing can also be seen in Met., A, 982b2-4: 'First principles (or universals) and causes are not known by things subordinate to them (τῶν ὑποκειμένων).

the sense in which we prove it so. (PsA., A, 5, 74a4-7) He mentions three types of this error all related to the commensurateness of the universal (PsA., A, 5, 74a7-11):

- a) When the subject is an individual or individuals above which there is no universal to be found;
- b) When the subjects belong to different species and there is a higher universal, but it has no name; and
- c) When the subject which the demonstrator takes as a whole is really only a part of a larger whole.

Thus, the primary truth belongs to the knowledge of commensurate universal: ‘When a demonstration is true of a subject primarily and commensurately and universally that is to be taken to mean that it is true of a given subject primarily and as such’ (λέγω δὲ τούτου πρωτου, ἢ τοῦτο, ἀπόδειξιν, ὅταν ἢ πρώτου καθόλου). (PsA., A, 5, 74a12-13) Our knowledge fails of commensurate universality when we do not have the commensurate universal. (PsA., A, 5, 74a32-35)

The possession of the knowledge of commensurate universal is prior to the knowledge of particular. One reason of this is that he who possesses the former possesses the latter but not vice versa. (PsA., A, 24, 86a11-13)

13) Universal and likeness

Universals are induced from particulars that are alike and it helps us to know ‘the points of likeness’ in order to induce a universal out of several particulars. (To., I, 18, ^108b11-)

14) Making universals in battle

For Aristotle, it is by induction that sense perception implants the universal. (PsA., B, 19, 100b4-5)

Aristotle uses the allegory of battle to modelize not only growing through states of knowledge but also creating universals. He thinks that the process of achieving the states of knowledge (as explained in PsA., B, 19, 99b34-100a9 including sense perception, persistence of this perception, systematizing perceptions in memory, developing experience out of repetition of memories, originating the skill of craftsman out of repetition of memories, originating the skill of craftsman and scientific knowledge out of experience) 'is like a route in battle stopped by first one man making a stand and then another, until the original formation has been restored. The soul is so constituted as to be capable of this process.' (PsA., B, 19, 100a9-14)

This allegory is immediately used for going from particulars to universals and then from them to higher universals: 'When one of a number of logically indiscriminable particulars has made a stand, the earliest universal is present in the soul; for though the act of sense-perception is of the particular, its content is universal, -is man, for example, not the man Callias. A fresh stand is made among these rudimentary universals, and the process does not cease until the individual concepts, the true universals, are established; e.g. such and such a species of animal is a step towards the genus animal, which by the same process is a step towards a further generalization.' (PsA., B, 19, 100a15-b3)

15) Mind makes universals out of particulars

As Michael J. Loux²⁰ notes, some believe that in *De Anima*, III, 5, Aristotle attempts to identify the noetic machinery mechanism of grasping universals on the basis of purely perceptual data by discussing active nous. Loux, however, believes that there is little in that chapter to substantiate this claim. He appeals to two texts to show that Aristotle does not believe in any specific mechanism. First, in *De Anima* (III, 8, 432a5) Aristotle 'tells us that intelligible contents are literally contained in perceptual contents. The same sort of

²⁰ Matthews, Gareth B., *Aristotelian Categories*, in: Georgias Anagnosto Pocilos (ed.), *A Companion to Aristotle*, Blackwell, 2009, p. 191

picture, he believes, is presented in PsA., II, 19 that animals with perceptual experiences like ours are put into epistemic contact with the universals that sensible particulars instantiate merely by perceiving the world.²¹

16) Form and universality; matter and individuality

Martin Tweedale²² enumerates passages that show forms as universal: Met., Z, 8, 1033b19-26; 1034a5-8; Z10, 1035a24-b3; 1035b31-1036a9; Z11, 1036b35-1037a10; 1036a28-29. James H Leshner²³ adds Gen. An. 730b35; Part. An. 644a24-25; Met., 1038b11-12 and Cat., 17a40-b1 and also texts that take matter as the cause of individuality (Met., Δ, 6, 1016b31-35; Z, 10, 1035b27-33; Λ, 8, 1074a31-36; De Caelo, A, 9, 277b27-278b8) He also points to texts where Aristotle takes Forms as particulars. (Met., Δ, 18, 1022a24-27; Z, 4, 1029b13-16; Z, 11, 1036b23-24; Λ, 5, 1071a24-29)²⁴

17) Property as class

Terence Irwin²⁵ believes that Aristotle's definition of a universal does not make clear the relation between universals and properties. He asks: 'If the species man (e.g.) is not a class, might it be the essential property shared by all the members of the class?' He refers to De Int. 17a39-40. A criterion he presents is interesting: 'It is not clear if Aristotle takes the existence of a universal to require actual plural instantiations. If plural instantiation is required, universals cannot be properties, since the existence of the property of being a man does not need plural instances.'

²¹ Check 100a4-100b5 especially 100a17

²² Tweedale, Martin, Aristotle's Realism, in: Gerson, Lloyd P., Aristotle; Critical Assessment, V.1, Logic and Metaphysics, Routledge, 1999, p. 407

²³ Leshner, James H., Aristotle on Forms, Substance, and Universals: A Dilemma, Phronesis, Vol. 16, No. 2, 1971, p. 169

²⁴ Passages that say it is matter that individuates: Met., 1034a5-8; cf. 1016b32; 1054a34; 1074a31-34

²⁵ Irwin, Terence, Aristotle's First principles, Oxford, 1988, pp. 79-80

18) Actual instantiation and universal

Referring to Cat., 14a6-10, Terence Irwin²⁶ concludes that ‘Aristotle takes actual instantiation to be necessary for the existence of a universal.’

²⁶ Ibid., pp. 79-80