

Concepts and Universals in Aristotle's Metaphysical Thought

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1 Tackling the Concept of Concept

Concepts, as we understand them nowadays, are crucially connected with general terms, but are not identical to them. One might think of the concept as the graspable content of a general term or as its meaning. Often a single linguistic term is connected with different concepts, either related or entirely unrelated; more often it is unclear or controversial what exactly a linguistic term stands for. We can fix, determine or clarify the meaning of a term by raising definitional questions about it. Thus, whenever we proceed from the use of undefined linguistic terms to definitions or definitional questions, we proceed to what we could call 'the conceptual level'. One and the same definable content can be expressed or referred to by many different phonemes; in particular, one and the same concept can be referred to by linguistic terms of different languages. Accordingly, if, say, an angel is agreed to be 'a winged, supernatural herald sent by God', then the concept of angel consists in the characteristics winged, supernatural, herald, sent by God, and what speakers of different linguistic communities understand when they understand what 'angel', 'angelo', 'ange', 'angyal', 'anděl', 'anioł', 'ἄγγελος', etc. stands for is the concept defined by the mentioned characteristics ('Begriffsmerkmale' in Frege), which are the same for all of them.

Concepts are closely related to properties, species or kinds. If, for example, the concept of angel consists in the aforementioned set of characteristics, whoever understands the concept of angel also understands that whatever falls under the concept of angel must have certain properties, that is, it must be winged, supernatural, a herald and must be sent by God, or must be a member of a certain species or kind. Thus, the concept specifies the set of properties that something must possess in order to qualify as a thing falling under this particular concept. Though concepts on the one hand and properties, species or kinds on the other are thus

closely related, they are not the same; for a concept is something that a thinker can learn, form, acquire, understand or know, but it is not something that can be *possessed* by a particular thing. Particulars, we say, *have*, *display* or *take on* properties and *belong to* a species or kind, but they *fall under* the corresponding concepts.

Being related to properties, species or kinds, concepts are also related to universals. In principle, a concept is something under which many things can fall; correspondingly, a universal is defined as one identical entity that is shared by or present in many different entities. If there are different types of universals, e.g. properties, kinds and relations, it seems reasonable to assume that these differences are mirrored in different types of concepts. More importantly, concepts are inevitably referred to when it comes to the metaphysical question of the reality of universals. Just as we can ask about the existence or non-existence of universals in general, one might ask more specifically about the ontological commitments involved in the claim that concepts are indispensable for our understanding of the world. In this context, concepts are also often invoked as a specific conception of universals, for saying in debates concerning realism and nominalism that universals *are (just) concepts* or *merely conceptual* appeals to a metaphysical option that sees universals neither as unqualifiedly existing or unqualifiedly non-existing, but as existing in a merely mental way, as general terms or as the result of our, human beings', 'generalizations' or 'abstractions'.

To the extent that concepts are considered a vehicle of understanding, it is crucial to account for their arbitrariness or non-arbitrariness. Do people have all or, at least, some concepts in common or does each individual subject generate her own concepts? Is each conceptualization of the world as good as any other or are there conceptual systems that carve nature at its joints, while others fail to do so? Or are some concepts mostly conventionally shaped, while certain others are rather immune against historical and cultural influences?

2 Where to Look for Concepts in Aristotle?

Aristotle does not have a single or technical term for what we would call a 'concept'. However, he often touches upon several of the above-mentioned questions and problems. Above all, he displays a vital interest in the meaning of general terms, and he often refers to the phenomenon that terms may have different meanings, which are to be distinguished. When Aristotle asks, for example, for the account, definition (*horos*, *horismos*) or formula (*logos*) that corresponds to a given general noun (*onoma*), he seems

to be interested in what we would call the definable meaning of this term or the 'concept' corresponding to it. He quite regularly deals with what he calls the universal (*katholou*) or the common (*koinon*) and he expresses his views (not always the same ones) about the reality or mode of existence of such universal beings. For Aristotle as for Plato, definable general terms or, more precisely, the definiendum or the sets of repeatable properties specified by definitions are the proper object of understanding and knowledge. In Aristotelian terminology, when we fully grasp the general term *F*, we understand what being is for an *F* or what it means for an *F* to be, that is, we understand the definable essence of each *F*. Just as, in post-Fregean terminology, the concept is that under which many objects can fall, Aristotle insists that what a definition specifies is never particular, but rather a definable content that, in principle, can be instantiated by a multitude of particular beings. This is thought to be true even of the concepts of sun and moon, even though they are in fact, as Aristotle notoriously believed, instantiated only once (*Metaph.* Z.15, 1040a27–b2). In *De Interpretatione* 1, he famously provides a semantic model that explains how speakers of different languages can, in spite of the different graphemes and phonemes they use, have the same mental 'affection' (*pathēma*) or 'thought, concept' (*noēma*) corresponding to linguistic terms. In two famous passages – *Posterior Analytics* 2.19 and *Metaphysics* A.1 – he sketches the several stages through which people, starting from repeated perception and experience (*empeiria*), come to develop universals (or what we would call 'concepts') in their souls, which will provide the basis for the formation of scientific principles.¹ Arguably, all these contexts deal with certain fairly pertinent aspects of what we nowadays take to be concepts.

Having said that, the present chapter will focus on a much narrower agenda along the following lines: For Aristotle's metaphysical thought it is quite significant that he develops different models for accommodating universal beings.² Not unlike Plato he seems to think that the assumption of universals in some sense is indispensable in accounting for real or genuine knowledge. Unlike Plato though, he does not want to construe them as transcendent and independently existing beings. In his *Metaphysics* this leads him to picture (at least certain) universals as not fully real in the sense of not being causally involved in the physical world, but as, so to speak, 'merely conceptual' (see Section 6). In a similar vein, Aristotle seems

¹ See p. 000 in this volume.

² Accordingly, the following paper will not deal with concept formation and not directly with the epistemic role of concepts.

to think of Plato's forms as beings that are in reality 'merely conceptual' but became inappropriately reified and were thus construed as independent particular beings (see Section 7). He opposes these, as he thinks, inefficacious ('merely conceptual') universals to hylomorphic forms that are present in concrete particulars, namely as their internal principles of being and unity (see Section 8). Since these forms are said to be *enbulton* – 'en-mattered' or 'embodied' – and to always exist *in* the matter, Aristotle has been associated with the medieval 'in rebus'-account of universals, according to which universals exist (only) *in* the material things. However, Aristotle's account of being-in in the *Metaphysics* does not apply to *just any* universal and, more than that, it is not even clear that the forms that are said to be 'in matter' are universals at all. The substantial forms of the *Metaphysics* are the essences of the compound particulars and are, hence, closely connected with definitions, since, according to Aristotle, essences are always tracked by definitions, but the 'en-mattered' or embodied forms themselves are not just definitions (i.e., not just linguistic formulae) nor are they concept-like beings (i.e., not just mental beings or beings postulated for the sake of understanding), but are more like real properties or modes that the compound particulars in the external world actually display and in virtue of which these compound particulars are equipped with certain functions and powers. It is possible, however, to grasp these forms or to think of them, and whenever someone succeeds in doing so, Aristotle would say that there is a form or the definition corresponding to this form *in the thinker's soul*. This 'form in the soul' is involved in cognitive processes whenever we think of things in the external world that display this form, for example, when we think of human beings or horses. Also, these forms can be the origin of acts of production when, for example, an architect who is about to build a house thinks of the form of the house or a doctor who is about to cure a patient thinks of the form of health. These 'forms in the soul', it can be argued, have much in common with what we would call a 'concept': for example, they are mental beings, they are connected with the meaning of general terms, they correspond to properties or species in the external world, they play a crucial role in understanding things that have the corresponding properties or belong to the corresponding species and they are arguably one and the same for all external things exhibiting the same (kind of) form (see Section 8).

Accordingly, the following survey will try to track two ideas related to the emergence of the concept of a concept through Aristotle's metaphysical thought, first, the idea of universal entities that are 'merely conceptual' in the sense of having no extra-mental reality and, second, the idea of mental

counterparts to Aristotelian universals (as in the *Categories*, *Peri Ideōn*, *Topics*, *Posterior Analytics*) and to Aristotelian forms (in the sense of his *Metaphysics*) that are crucial for knowledge and understanding and thus seem to play a role similar to the role we ascribe to concepts (see Section 1). According to the first idea, the concept of a concept emerges as an attenuated mode of being for universals; according to the second idea, it emerges as a vehicle of cognition and knowledge.³

3 Aristotelian Realism in the *Categories*

The *Categories* does not strictly speaking belong to Aristotle's metaphysical writings; perhaps, it does not even argue for a specific metaphysical position, but is rather interested in classifications and subdivisions, thus being more closely related to Aristotle's *Topics* than to his *Metaphysics*.⁴ Still, the *Categories* provides a good starting point for discussing Aristotle's views about universals, since it formulates some tenets that can be found throughout Aristotle's oeuvre.

The *Categories* famously distinguishes primary and secondary substances. As examples of primary substances Aristotle mentions a particular human being or a particular horse, as examples of secondary substances he mentions the species 'human being' and 'horse' as well as the genera of them, for instance, 'animal' (*Cat.* 5, 2a11–9). The secondary substances are 'said of' the primary substances, as Aristotle puts it in the *Categories*; they, the secondary substances, say or reveal *what* the primary substances *are*. Although the terminology of primary and secondary substances is never repeated elsewhere in a work by Aristotle, he seems to abide by the view that particular objects, such as a particular human being or a particular horse, are substances (*ousiai*), because they are substrates (*hupokeimena*) for other attributes or properties, and he also abides by the view that such particular substances essentially belong to certain species or natural kinds, such as 'human being' or 'horse'. It is widely agreed

³ Partly owing to competing views about what it is to be a concept, there is no established scholarly view where to look for concepts in Aristotle; as already indicated, it is common – for good reasons – to look for Aristotle's concepts in the mentioned passages in *De Interpretatione* 1, *Posterior Analytics* 2.19 and *Metaphysics* A.1. In his pioneering study on forms and concepts in the Platonic tradition (Helmig 2012) Christoph Helmig dedicates a full chapter on concepts in Aristotle, mostly focussing on concept formation, which is the embracing subject of his study. I take a different approach for the simple reason that in Aristotle's metaphysical thought universals do, as a matter of fact, play an important role and that it seems worthwhile to explore where and how Aristotle connects his metaphysical assessment of universals with what we accept to be concepts.

⁴ See Menn 1995. For why the *Metaphysics*' project is different, see Section 6.

among recent scholars that the peculiar relation of ‘being said of’ (*legesthai tinos*), in spite of the first impression it might give, is not meant as a linguistic relation holding between a subject and a predicate, but is a relation between beings (*onta*), so that a secondary substance, which can be ‘said of’ many particular substances, also qualifies as a being.⁵ Some scholars speak here of ‘metaphysical’ as opposed to ‘linguistic’ predication; and indeed, it is typical of Aristotle’s terminology in and outside the *Categories* that he uses the language of predication in order to frame metaphysical relations. The non-linguistic relation that in the *Categories* is picked out by the phrase ‘being said of’ seems to amount to what we nowadays call ‘instantiation’:⁶ primary substances (e.g., the particular horses) instantiate a general kind or species (e.g. the natural kind ‘horse’) and secondary substances (e.g., the kind ‘horse’) are instantiated by the particular members of this kind. This metaphysical relation of instantiation grounds the truth of certain linguistic predications; for example, the non-linguistic fact consisting in Bucephalus’ instantiating the species ‘horse’ grounds the truth of the linguistic statement ‘Bucephalus is a horse’.

Apart from the species (*eidos*) of a primary substance, the genus (*genos*) of this species qualifies as a secondary substance. Just as the species is ‘said of’ the particular substance, the genus is ‘said of’ the species; and just as the species says or reveals what a particular substance is, the genus says or reveals what the species is. In the latter case the species is derived from a genus through a certain *differentia*. Different genera are equipped with different sets of *differentiae*, for example ‘footed’, ‘winged’ and ‘aquatic’ are *differentiae* of the genus ‘animal’, but none of them is among the *differentiae* of the genus ‘knowledge’ (*Cat.* 3, 1b16–20). Unlike non-substantial beings, that is, beings in other categories, such as quantity, quality, etc., the genus qualifies as genuine substance, but it is less of a substance than the species, because the latter is ‘closer’ to the primary substance in that it provides a more precise answer to the question of *what* a primary substance *is* (*Cat.* 5, 2b6–14). Also, just as the primary substance serves as a substrate

⁵ See for example Mann 2000: 51: ‘a relation between things, not linguistic items’, together with the important qualification on page 53 that ‘while things (*ὄντα*) are being talked about and classified, they are classified on the basis of the expressions (*λεγόμενα*) used to refer to them or to introduce them into discourse.’

⁶ One might be puzzled as to why he uses this seemingly linguistic notion to describe a genuinely ontological or metaphysical relation; perhaps this phrase is meant to express that a secondary substance is *truly* and *really* said of a primary substance, in that it says *what* it is, while accidental attributes are only predicated in a linguistic sense.

for the species that are 'said of the primary substance, the species serves as a substrate for the genus, because the genus is 'said of the species ('animal' is said of 'horse'), while the species is not 'said of the genus (*Cat.* 5, 2b15–21).

In *De Interpretatione* Aristotle defines the universal (*katholou*) as 'that which by its nature is predicated of a number of things' (*Int.* 7, 17a39–40), and the particular (*kath' hekaston*) as 'that which is not (scil. by its nature predicated of a number of things)'.⁷ Accordingly, species and genera are universals, because they are by their nature predicated of many things, while primary substances are not; indeed, the *Categories* emphasises that both primary substances and other particular beings are never 'said of' or predicated of anything else.

In the *Categories*' framework primary substances (or substantial particulars) are the most fundamental beings, they serve as substrates for everything else, that is, for secondary substances and for all non-substantial beings (as, e.g., being white, being five feet tall, walking). Secondary substances (or substantial universals), that is, the species and genera of primary substances, also serve as substrates (this is one of the two reasons why they qualify as substance, the other reason being that they 'reveal' the primary substance, i.e., say *what* the primary substances *are*), however they are substrates for non-substantial beings only because they themselves are 'said of' the primary substances that are the genuine substrates for these non-substantial beings; for example, 'body' taken generally is the substrate for the colour 'white', but ultimately it is a substrate for 'white' only because there is a particular body that is white (*Cat.* 5, 2b1–3). By designating the species and genera of primary substances as themselves substance, albeit secondary ones, Aristotle makes clear that he regards them as something real, that is, as universals that really exist and that exist in a way that is more fundamental than the way non-substantial beings exist. However, even if this is so, he also makes clear that secondary substances are dependent for their existence on primary substances: 'So if the primary substances did not exist, it would be impossible for any of the other things to exist' (*Cat.* 5, 2b5–6). This is to say that even substantial universals exist only if, and insofar as, they are instantiated by substantial particulars; the universal 'horse' would not exist if it were not instantiated by particular horses. By and large, this amounts to a position that in contemporary metaphysics is known as 'moderate' or 'Aristotelian' realism, namely the position according to which only instantiated universals exist.

⁷ See also *Metaph.* Z.13, 1038b11–12 and *An. pr.* 1.27, 43a25–35.

Aristotelian realism is opposed to stricter versions of realism that tend to make the existence of universals more independent of whether they are or are not instantiated at a time. This is true in particular of the type of realism about universals that is often ascribed to Plato (or, at least, to the Plato of the middle dialogues), for, to the extent that he conceives of his 'eternal forms' or 'ideas' as transcendent universals, their existence is completely independent from whether or not they actually are, have ever been or ever will be instantiated.

The *Categories* acknowledges a second kind of universal. In chapter 2 of the *Categories* Aristotle sketches a famous fourfold classification of all beings (strictly speaking of all beings that are *not* combined in a predication). Of all beings, he says here, (i) some are neither 'said of' anything nor 'in' anything – these are the substantial particulars that we have discussed above – (ii) some are 'said of' something else, but are not 'in' anything – these are the substantial universals we have also discussed – (iii) some others are 'in' a substrate, without being 'said of' anything – as for example the particular colour 'white' is in a substrate, the body – and (iv) still others are 'in' a substrate and also 'said of' something else – as for example 'knowledge' is 'in' a substrate, the soul, but is also 'said of' something else, for example of the knowledge-of-grammar, insofar as the former says *what* the latter *is*, namely a kind of knowledge. Beings in classes (iii) and (iv) are said to be *in* their substrates (or to '*inhere in*' their substrates), which amounts to saying, as Aristotle explicates (1a24–5), that they cannot exist without, or in separation from (*chōris*), the substrate (though they are not *in* them in the way that parts are in the whole). In this respect beings in classes (iii) and (iv) are ontologically dependent on their substrates, whereas the substantial beings in classes (i) and (ii) are not dependent, at least not in the same way – the substantial particulars are not dependent at all, while the substantial universals are only dependent on primary substances. Substantial and non-substantial beings are distinguished, then, by a specific type of ontological dependence: substantial beings do not require any other type of being as substrate, while non-substantial beings ultimately require some primary substance as substrate *in* which they are – no 'white', neither particular nor universal, can exist without a substance that is characterised as white.

The principle of 'moderate' or 'Aristotelian' realism can also be extended to non-substantial universals. Non-substantial universals make up one of the four classes of being according to the fourfold ontology of *Categories* 2 and are thus considered to be *onta*, that is, entities or beings. 'Colour' can be 'said of' all particular types of colour, insofar as it says *what* they are

(namely instances of colour); 'colour' is hence a universal. Similarly, 'white' or 'whiteness' can be 'said of' all particular shades of white or of all occurrences of white inhering in particular substances, saying *what* they *are* (namely instances of whiteness); in this sense 'white' or 'whiteness' are also universals.⁸ Analogously to the substantial universals, one could say (and Aristotle would probably subscribe to this) that there are no non-substantial universals that are not instantiated, that is, no 'colour' without specific colours and no 'whiteness' without specific shades or particular occurrences of white. The exact wording of the *Categories* chooses a slightly different strategy to restrict the reality of non-substantial universals, since, unlike substantial universals, non-substantial universals (just as non-substantial particulars) are always *in* a substrate, just as the non-substantial universal 'colour' is always *in* body; and if it is in body generally taken, it is ultimately also in a particular body, 'for were it not in some particular body, it would not be in body at all' (*Cat.* 5, 2b2–3). So, non-substantial universals must ultimately be exemplified by some particular substance; the universal 'colour' would not exist if it were not exemplified by particular substances in which 'colour' inheres, and of which it is true to say that they *are coloured*. 'For if everyone were well, health would exist but not sickness, and if everything were white, whiteness would exist but not blackness.' (*Cat.* 11, 14a7–10)

Accordingly, it seems that Aristotle in the *Categories* is willing to accept that universals – both substantial and non-substantial – are a genuine part of reality – though under the restrictions of 'Aristotelian realism'. Even if in all likelihood Aristotle eventually changed his attitude towards universals (most notably by denying, in the *Metaphysics*, that the species and genera of primary substances are themselves substances, see Section 6), he seems to have stuck to versions of the principle that for universals to exist requires them to be instantiated or exemplified by particulars (see, for example, *Metaph.* Λ.3, 1070a22–4).

4 A Case for Immanent Universals in *Peri Ideōn*

Before moving on to possible connections between universals and concepts, we should dwell on the topic of Aristotle's realism about universals

⁸ There is a long-standing debate about the nature of non-substantial particulars in the *Categories*, originating from Ackrill 1963 and Owen 1965; for a more recent survey and discussion, see Corkum 2009.

for one more section. The treatise *Peri Ideōn* deals with Plato's arguments for the existence of eternal forms or ideas. It has not been transmitted in the Corpus Aristotelicum, but parts of it can be extracted from Alexander of Aphrodisias' commentary on Aristotle's *Metaphysics*. In *Metaphysics* A and M Aristotle criticises Plato's forms (see Section 7) and Alexander found it useful to quote from the short, specialised treatise *Peri Ideōn* in order to elucidate the arguments from *Metaphysics* A. The treatise, as it emerges from the reconstructed text, has the primarily destructive purpose of refuting Plato's arguments for the existence of forms/ideas, but indirectly provides insights into Aristotle's views about universals. At first the treatise presents three sets of relatively simple arguments for the existence of eternal forms and then adds two 'more accurate' arguments that point to unwelcome consequences of the existence of Platonic forms. For our purposes we can focus on a common thread in Aristotle's criticism of the first three arguments.

The first type of argument tries to derive Platonic forms from allegedly uncontroversial facts about science. In one version (79.5–8) the argument says that, since each science does its work by referring to one unified subject-matter but does not refer to one of the particulars within its domain, each science must refer to something else, besides (*para*) the sensible (particulars), which is eternal – and such is the form/idea. In another version (79.8–11) it says that, since each science is of determinate things and since particulars are indefinite (*apeira*) and indeterminate, each science is of other things besides (*para*) the particulars – and such is the form/idea. There is a third version of the same type of argument, but what matters for our purpose is Aristotle's criticism: These arguments, he says, do not prove what they are supposed to prove, namely that there are forms/ideas; rather the arguments just establish that there must be something besides (*para*) the particular, sensible things, which is the genuine subject-matter of each science. Aristotle calls these 'somethings' that exist besides the sensible particulars '*ta koina*', the common or universal things – and he adds: 'of these we say the sciences are' (79.19–20). The first-person plural in this latter remark strongly suggests that he takes himself to be committed to the existence of these common or universal things. Indeed, Aristotle is strongly committed to the view that there are no sciences and no scientific demonstrations without universals (e.g., *An. post.* A.11, 77a7–8) and he also says in his own voice that it would be impossible to have scientific knowledge of indefinite (*apeira*) things (*Metaph.* B.4, 999b26–9). The problem is the force of the preposition 'besides (*para*)'; it might just indicate non-identity or distinctness, but it might have

stronger implications. In a passage of the *Posterior Analytics*,⁹ in which Aristotle explicitly highlights the role of the universal for sciences, he seems to contradict the argument-from-the-sciences in the *Peri Ideōn* by saying that the existence of one thing *para* (besides) the many is not necessary for scientific demonstrations; it rather suffices that one thing is truly predicated of the many (*An. post.* A.11, 77a5–8). Presumably he wants to make an anti-Platonic point here; but in this case it is plausible that *para* has stronger implications than mere non-identity, meaning for example that nothing is required that exists separately or independently from the many particulars.

The next argument in the *Peri Ideōn* is the 'One over many'-argument; here is the decisive passage:

If (i) each of the many men is a man, and if each of the many animals is an animal, and the same applies in other cases, and if (ii) in the case of each of these it is not that something is predicated of itself but that there is something which is predicated of all of them and which is not the same as any of them, then this is some being besides (*para*) the particular beings which is separated (*kechōrismenon*) from them and everlasting. For it is in every case (*aei*) predicated in the same way of all the numerically successive (particulars). And what is one in addition to the many, separated from them, and everlasting is an idea. Therefore there are ideas.¹⁰

This passage is more explicit about the kind of entity that the argument means to introduce – namely forms/ideas that are everlasting, exist in addition to the many things and are separated from them. Aristotle's criticism of this argument is similar to that of the first argument: the premises do not entail the existence of forms/ideas with the mentioned characteristics; they only entail that 'what is commonly (*koinōs*) predicated' is something different from the particulars. Again, the reference to *koina*-beings is clear, but since it is sufficient for Aristotle in this context to block the conclusion that there are forms/ideas in the purportedly Platonic sense, he does not develop the notion of *koina*-beings any further. We can, however, at least infer that they do not have the characteristics that the Platonic forms/ideas are said to have. Most notably, Aristotle seems to think that it is too strong a conclusion to say that what is commonly predicated needs to be separated (*kechōrismenon*) from the sensible things. The problem is the notion of separation involved here. On the one hand, Aristotle regularly uses this term when he speaks of Platonic forms/ideas, insinuating that it is an absurdity to construe forms as separated from

⁹ See Richard McKirahan's contribution in this volume.

¹⁰ 80.8–16, trans. Fine.

sensible substances; but on the other hand, he requires the substances in his own metaphysical theory to be separate or separated (*kechōrismenon*) in some sense. When separation is applied to Platonic forms/ideas one might naively think of the spatial sort of separation between perishable beings in our sensible world and the eternal beings somewhere up there in the intelligible world. According to an influential and well-argued interpretation,¹¹ however, the kind of separation that Aristotle wants to ascribe to Platonic forms may just amount to the ideas' capacity for independent existence, that it is possible for them to exist without being instantiated. If this is so, Aristotle would endorse against Plato the existence of *koina*-beings that are not transcendent or separate in the sense that they could exist independently of their being instantiated – which would be little surprising in the light of what we said about the *Categories*' moderate realism. We will come back to that after looking into the third argument.

The third argument presented in *Peri Ideōn* is the so-called Object of thought-argument. Given that, when we think of something, say 'human being' or 'animal', we think of something that *is* and given that we do not think of this or that particular human being or animal (since the same thought persists even after the particulars have perished), it follows that there is something we are thinking of besides (*para*) the particulars – and this is the form/idea (81.26 – 82.1).

Elsewhere (*Metaph.* B.4, 999b1–3) Aristotle also mentions the argument that, if there were nothing besides the particulars, there would not be an object of thought, but all things would be objects of sensation. Here in *Peri Ideōn* Aristotle objects – one more time – that this argument is not sufficient for establishing forms/ideas in the sense mentioned above; it just establishes, he says, that there must be something besides (*para*) the particulars which is the object of thought, but this description, he insists, applies to 'the universal (*katholou*) that is *in* the particulars' (82.8–9; *recensio altera*). Apparently, this points into the direction of 'immanent' universals; the only question is what exactly the preposition 'in' is meant to indicate. Arguably, it is just meant to be the compliment to the case of being separated: either a universal is separated from the particular things or it is *in them*. This brings us back to the controversial understanding of separation; on the reading of separation mentioned earlier, the alleged immanence of universals would amount to nothing more than saying that they are instantiated. However, instantiation or non-instantiation is hardly the issue here (as the object of thought is explicitly conceived as

¹¹ See Fine 1984 and Fine 1993: 116–19.

independent of the actual existence of particulars). In a related context (*Metaph.* A.9, 991a9–14), Aristotle says that forms/ideas can neither be the causes of movement or change, nor can they contribute to the knowledge of sensible things or to their being, because they are not *in* them (*enhu-parkhonta*). Following this objection through, one would have to conclude that whatever is capable of being a cause of a thing's movement/change or of a thing's knowability and being must be somehow present in these things – most probably in a straightforward spatial sense.

All in all, it seems that in the *Peri Ideōn* Aristotle sees the Platonic arguments that were originally meant to establish the existence of eternal, separate ideas as establishing a weaker conclusion that is compatible with the existence of only immanent universals. The sense of immanence that is implied here is not further specified, but there are reasons for thinking that it goes beyond the mere instantiation-requirement as it was defended in the *Categories*. In addition, the arguments from the sciences and from the object of thought can be easily connected with passages that are expressive of Aristotle's own views on the role of universals. With regard to the concept of concept though, there is no indication that these immanent universals themselves are meant to be mere contents of thinking (*noemata*) or have a merely mental existence.

5 Universals, Definitions and What-the-Being-Is-for-F

The universals we encountered in the *Categories* and in the *Peri Ideōn* seemed to be thoroughly robust entities existing in the external world;¹² at least there was no reason for thinking that they were meant as 'mere concepts' or as merely existing in people's minds. So, why should we bother about them in search of concept-like entities? Answer: Because there is a direct link between realistically conceived universals on the one hand and the way people conceive of the world on the other; for Aristotle's universals are connected with definitions and any cognition or knowledge of these universals (and of the particulars instantiating them) is mediated by definitions ('we know each thing through its definition': *Metaph.* B.3, 998b4–5).¹³ When thinkers understand these universals by way of grasping their definitions, they use definitions in a way similar to what

¹² See also Loux 2009: 189, who notes that 'there is good reason to believe that Aristotle construes his universals as nonlinguistic, extramental objects'.

¹³ See the argument from the science in Section 5.

we meant by saying (see Section 1) that concepts are used as a vehicle for understanding the world.

In Aristotle, the transition from the linguistic to the conceptual level or, in other words, the transition from general terms to their corresponding concepts, can be expressed in several ways. In the *Categories* he distinguishes the case in which only the name (*onoma*) of a universal is predicated from the case in which its definition (*logos*) is predicated as well (*Cat* 5, 2a27–34). If a universal predicate is ‘said of’ of its subject – that is, essentially predicated of it – both its name and its definition must be predicable (if the *logos* of human being is, say, ‘biped animal’, both ‘human’ and ‘biped animal’ must be predicable of the individual instances of human being), while in non-essential predication it is only the name that is predicated of the subject (if a particular subject is white, the name ‘white’ can be predicated of it, but not the *logos* of ‘white’). Now, if we take *logos* to be the definition – the defining formula – it is, of course, a linguistic entity, not a mental concept; however, it is the purpose of this *logos* to fix the meaning of a general term, and we said that concepts in general are to be found among the meanings of general terms.¹⁴ Aristotle himself is also prepared to say that what the general term ‘human being’ (*anthrōpos*) *signifies* is ‘the biped animal’.¹⁵ ‘Biped animal’, to be sure, is the (stock example of the) definition of ‘human being’, but it would be awkward here to construe this as saying that one linguistic expression *signifies* another linguistic expression; rather ‘human being’ signifies the meaning or the concept that is fixed by ‘biped animal’. In this respect, referring to the *logos* that corresponds to a general term is slightly ambiguous between the defining formula itself and the meaning of the general term that it determines. In the context of the example just given, Aristotle wants to say that even though the term ‘*anthrōpos*’ signifies many things (i.e., many particular human beings), it also signifies *one common* thing, namely the *unified* meaning or concept of human being that is fixed by the definition ‘biped animal’. And indeed, after the quoted remark Aristotle continues by saying that this, being a biped animal, is ‘the being for human being’ (*to anthrōpoi einai*), or what it means to be for human beings (*Metaph.* Γ.4, 1006a32–33). And whoever understands what it

¹⁴ Because of this close connection between the *logos* and the meaning it fixes, there is a strong tradition that treats Aristotelian *logoi* straightforwardly as concepts; see e.g., Brentano 1862: 128.

¹⁵ See e.g., *Metaph.* Γ.4, 1006a31–32: ‘ἔτι εἰ τὸ ἀνθρώπος σημαίνει ἕν, ἔστω τοῦτο τὸ ζῶον δίπουν.’

means to be a human being, we would say, understands the concept of human being.¹⁶

This significant use of the nominalised infinitive 'the being' (*to einai*) together with a noun in the dative is a quite common formulation for Aristotle to refer to something's essential being as determined by a certain *logos*. Whenever we are unsure about the extension of a general term F we have to proceed to what-the-being-is-for-F; if a term is homonymous, as for example the Greek term *zōion*, which can mean both a living animal and the picture of an animal, the homonymy is revealed by asking what-the-being-is-for-a-living-animal and what-the-being-is-for-a-picture, because it turns out that the what-the-being-is-for-F (or, alternatively, what-it-means-to-be-for-F) is different in the two cases (*Cat.* 1, 1a4–6). And when it comes to intellectual cognition, Aristotle remarkably wants to say that what we distinguish by the intellect is not, for example magnitude, water or flesh, but what-the-being-is-for-magnitude, what-the-being-is-for-water and what-the-being-is-for-flesh, (*De an.* 3.4, 429b10–21¹⁷) or, in general, not F, but what-the-being-is-for-F, using the same formulation with *to einai* plus dative noun we encountered before. This is, in broad outline, how in Aristotle's theory and terminology, universals are connected with intellectual cognition. There are definitions that determine and disambiguate the meaning of general terms by distinguishing what the being is for different kinds of things, and it is through grasping the being of each (kind of) thing that people understand the world. And if we focus on what we understand when we understand what the being for F is or, alternatively, what it means to be for F, this comes close to what we would accept as 'the concept of F'. Accordingly, we would say that someone knows the concept of F, whenever he or she grasps what the being is for F.

Grasping a thing's being, as Aristotle would put it, is of course closely connected with, or even boils down to, grasping its essence. One might be reluctant to identify the two across the board, for while Aristotle

¹⁶ If it is here, in this peculiar context, that we look for concept-like beings in Aristotle, the understanding of a concept would be crucially linked with the formulation of some sort of definition.

¹⁷ This is a controversial passage though. When Aristotle says here that e.g., magnitude is different from the being for magnitude or flesh different from the being for flesh, this might be a claim along the lines of *Metaphysics* Z.6, that while in some cases each thing and its essence is one and the same, in some cases it is not, so that magnitude, water and flesh in the *De Anima* passage seem to exemplify the latter case. If this is so, the claim about magnitude, water, flesh could not be generalised (i.e., it would not be true of each and every F that F and what-the-being-is-for-F is different); still, even if there are cases in which F and what-it-is-to-be-F are not different, but the same, it would be trivially true that intellectual cognition grasps the being of F.

sometimes speaks of things that are numerically one and the same, but different in being, he would not say, using the term *ti ên einai* (in its narrow sense), that one and the same thing can have two essences. Aristotle's notorious phrases with nominalised infinitives, such as 'the-being-for-horse', 'the-being-for-flesh', seem to provide the background for the coinage of the famous term by which he refers to essence, *to ti ên einai* – the what-it-was-to-be or the what-it-meant-to-be in the sense of what-we-determined-as-its-being-before (viz. through a previous definition). So, most of what we said in the previous passage could be rephrased by using the notion of essence or *to ti ên einai*; and, indeed, Aristotle himself says: 'For it is knowledge of each thing when we know the *ti ên einai* of that thing' (*Metaph.* Z.6, 1031b6–7), thus making a point similar to the one we discussed before concerning the grasp of each thing's being. However, since we have dealt so far with Aristotle's general account of universals, and not with substances or essences of substances in particular, one cautionary note might be in order. The notion of *to ti ên einai* is famously treated in Aristotle's *Metaphysics* Z.4–6; in these middle books of the *Metaphysics* the question of whether something is definable and whether it has an essence or not is treated as a criterion for substantiality and 'essence' is even used as one possible meaning or conception of substance (*ousia*). In this context, it is clear that essence and definability are used in a relatively exclusive sense. The idea is that there are primary beings (or substances) that exist and are what they are not through being related to or being predicated of anything else, and that this sort of ontological independence must be reflected in the definition of these primary beings and their essence. Accordingly, Aristotle requires that essence in the primary and unqualified way always belongs to a substance, while it belongs only in a derivative way to non-substances (*Metaph.* Z.4, 1030a27–32). By contrast, there are other Aristotelian treatises in which *to ti ên einai* is not used in this 'primary and unqualified sense' and in which there is not even a reason for treating it in this restricted sense. For example, in the *Topics*, which is not a metaphysical treatise,¹⁸ but is dedicated to the presentation of the method of dialectic, there are no such restrictions. Here Aristotle distinguishes four types of predication, one of which is definition. The definition again is a predicate that belongs to its subject peculiarly, that is, does not belong to any other subject (*Top.* 1.4–5, 8) and that signifies the *to ti ên einai*. The typical subject in the context of the *Topics* is a general term and it does not play any role in

¹⁸ See n. 3 above.

whether this term signifies a substance or not (and as opposed to the *Categories*, the *Topics* is also unconcerned about whether this term is instantiated or not). Book 6 of the *Topics*, which is dedicated to the treatment of this type of predicate, almost exclusively deals with criteria for formally correct definitions; it seems to be presupposed there that the *to ti ên einai* is the significatum of a properly carried out definition, so that, in general, essences are tracked by formally correct definitions – the only additional constraint being (according to *Top.* 6.4) that the *to ti ên einai* can be missed even by a correct definition, if one defines through what is posterior and ‘less familiar (*gnōrimon*)’. Without going into further details, we can therefore conclude that Aristotelian universals, as we encountered them in the previous sections, are typically connected with essences – though in the unrestricted sense of *to ti ên einai* – that are tracked by definitions. In Aristotelian terms, understanding the concept of *F* that corresponds to a universal, that is, understanding what it means for something to fall under the concept of *F* and to instantiate the corresponding universal, would be expressed by saying that someone grasps the essence of *F* or the (essential) being for *F*.

6 Universals as (Metaphysically) Downgraded in the *Metaphysics*

If we proceed to Aristotle's *Metaphysics*, clearly the most authoritative treatise on metaphysical questions in Aristotle, we get a slightly different picture, due to the peculiar agenda and purpose of the work. In the first, programmatic, books of the *Metaphysics* (most explicitly in *Metaph.* A, but also in *Metaph.* α and B), Aristotle clearly announces that he wants to inquire into the first principles and causes, that is, the first principles and causes of reality as a whole. It has been a matter of controversy whether Aristotle abides by this enterprise or whether he eventually shifts to a different project or to different sub-projects that are less concerned with principles and causes, but rather with general ontology, namely the study of being qua being (beginning with *Metaph.* Γ), with the general theory of substance (beginning with *Metaph.* Z) or with the more specific theory of eternal substance (in *Metaph.* Λ). Whereas for some time, scholars tended to treat these parts of the *Metaphysics* in isolation, viewing the work as ‘a collection of essays rather than a connected treatise’,¹⁹ there is a more recent tendency²⁰ to see the *Metaphysics*' general ontology (in *Metaph.* Γ and E) and its study of substance in the middle books (*Metaph.* Z, H and,

¹⁹ Barnes 1995: 67.

²⁰ See, most notably, Menn forthcoming.

to some extent, Θ) as a contribution to the search for first principles and causes and not as self-contained projects – and in the case of *Metaph.* Λ it is easy, at any rate, to take unmoved movers as Aristotle's suggestion (or part of it) for the first principles and causes.²¹

If this is so, the study of universals in the *Metaphysics* must be read with a view to the leading question of what the first principles and causes are and whether they can be found among universal beings. This general leading question is addressed, for example, in two puzzles of *Metaph.* B (B.3, 998a20–b14 = *aporia* 6, B.6, 1003a5–17 = *aporia* 12) and is discussed one more time and finally solved in *Metaph.* M.10. In the context of the middle books of the *Metaphysics*, the question concerning the status of universals is raised in a more specific version, namely by asking whether substance (*ousia*) is among the universals. These two versions of the question become intimately connected if we assume that the first principles and causes are also principles of substances (for the causes of substances are thought to be the causes of everything else, in particular of the things that are dependent on substances: *Metaph.* Λ .5, 1071a34–35) and that a principle of a substance needs to be substance in a sense too (for principles are prior than what they are principles of and substances are primary beings, so that no non-substance can be the principle of a substance: *Metaph.* Z.13, 1038b26–27, M.10, 1087a1). This peculiar context of the *Metaphysics* is important, in that it does not exactly ask whether universals exist (as we tend to do in contemporary debates about realism or anti-realism with regard to universals), but whether they are principles and substances; for it is conceivable that universals might exist without being principles or substances.²²

According to *aporia* 6 in *Metaph.* B.3, the problem is whether the principles and elements are genera or the primary immanent constituents of a thing. Are, for example, the principles and elements of the syllable 'ba' the two immanent sound-tokens 'b' and 'a' or the common genus of it, namely 'sound'? According to *aporia* 12 in *Metaph.* B.6 the problem is

²¹ Similarly, when Aristotle says in *Metaph.* E.4 1028a3–4 that we should investigate the causes and principles of being 'itself', this could be taken to mean that the study of being qua being is not an alternative approach to the inquiry into first principles and causes, but a mode of conducting this inquiry, namely by inquiring the principles and causes of being qua being.

²² On the whole, it seems that Aristotle is rather permissive when it comes to granting existence to several kinds of beings (so that there might be a hospitable place even for the downgraded universals of the *Metaphysics*); the metaphysical battles he fights are not so much about mere existence, but about fundamental, primary existence, i.e., the question of which entities are most fundamental, grounding the existence of other, non-fundamental entities. With regard to this latter question, he is anything but permissive.

whether the principles are general or particular. In both passages a case for the genera and thus for the universals and against the particulars is made by saying that knowledge and science are of the universal, that knowledge is mediated by the definitions and definitions require a universal genus, etc. Against the universals he refers to the argument that if the principles are universals, they cannot be substances, for a substance is expected to be a 'certain this' or a 'this something of a certain kind' (*tode ti*), whereas universals never signify a *tode ti*, but rather a certain qualification (complying with *Categories* 5, 3b10–21, where Aristotle argues that secondary substances only appear to signify a *tode ti*), which is bad news for any universal that aspires to be a primary being. In *Metaph.* M.10 Aristotle further escalates the dilemma between universal and particular principles by arguing that, if the principles were particular, given that they cannot be universal, we would be left with the principles/elements alone and these particular principles/elements would not be knowable (1086b20–37). Aristotle thus gives the impression that, since knowledge is always of the universal, the principles must be universal too and thus cannot exist as substances (1087a10–15), which would be a veritable dilemma. However, he adds that this claim is in one sense false and in one sense true. The solution is that actual knowledge deals with a definite object, while potential knowledge with indefinite and universal knowledge. This enables him to say that the particular *a* that is (actually) considered by the grammarian is a case of the universal *a* which the grammarian knows potentially. What does he mean? In all likelihood, the claim can be interpreted as saying that even though the definite object of knowledge might be a particular (this particular *a*), it becomes known as a case of a universal (the multiply instantiable universal *a*); on this reading, it seems, universals do not become completely futile, even though the object known need not itself be universal. Galluzzo, for example, summarises this argument by saying that Aristotle's argument only establishes '*how* we know particulars, i.e. universally, and does not rule out that *what* we know are only particulars, even though we never know them as particulars but only as a certain kind of particular.'²³ This is quite close to the suggested reading, but it seems to metaphysically downgrade universals even further by merely appealing to a *universal mode* of knowing (which could be used for dispensing with any ontological commitment to universal beings).

Let us turn to the more specific question of whether universals can be substances. Aristotle doubts that they can, as we already saw, because they

²³ Galluzzo 2013: 237.

fail to qualify as *tode ti*, a ‘certain this’ or a ‘this something of a certain kind’. If universals were *tode ti* and were thus treated like independent, separable particulars, we would face, as he thinks, among other things the problem that Socrates, a particular that is at the same time a human being and an animal, etc., would turn out to be a multitude of countable things, namely Socrates, human being, animal and so forth (*Metaph.* B.6, 1003a9–12, Z.13, 1038b29–30). In *Metaphysics* Z.3 the genus and the universal (*to katholou*) were mentioned as candidates for substance (*ousia*) or as ways of identifying substance. At the beginning of *Metaphysics* Z.13 he calls these candidates to mind and mentions people, apparently Plato and Platonists, who take universals above all to be principles and causes. The rest of the chapter provides a battery of arguments for the claim that no universal can be a substance. Many of these arguments simply take for granted that, wherever universals are considered as substance at all, they are intended to be the *ousia*-of a particular, – that is, its essence. This is why his first and perhaps most crucial argument against the substancehood of universals appeals to the peculiarity requirement for essences (*Metaph.* Z.13, 1038b9–15). Every essence is expected to be peculiar to what it is the essence of; if, for instance, ‘rational animal’ is supposed to be the essence of human beings, it must, according to standard Aristotelian definition theory, be peculiar to human beings. The universal, by contrast, is common to many things and hence cannot be the essence of one of them while not being the essence of the other; accordingly, it cannot be substance at all. It is notoriously unclear how to apply the peculiarity requirement. Does it really imply that the essence of human being cannot apply to both Socrates and Callias, but must be peculiar to each of them? In the *Topics*, at any rate, Aristotle seems to think that the peculiarity requirement is fulfilled if the essential definition of human beings applies to all human beings, but to nothing else. One might thus wonder whether in Z.13 he has in mind universals that are more general than a species, such as ‘human being’. For if the target of the argument is genera, such as the genus of animal, one could easily apply the peculiarity requirement by saying that ‘animal’ cannot be the essence of human beings, because it also belongs to turtles and horses. This sort of concern has led quite a few scholars to think that Z.13 is mainly meant to attack genera and all universals that are more general than infimae species (such as human beings, turtles, horses). The general tendency of this suggestion is certainly right, for indeed, most arguments of Z.13 (from 1038b16 onward) are explicitly directed against universals that are ‘in’ the essence – that is against the conceptual parts of essences – such as the genera. Not only

Z.13, but also the adjacent chapters Z.12 (by showing that genera are potentially inherent in species that have been derived through a correctly conducted *dihairesis*) and Z.14–16 take aim at genera, Platonic forms, higher order universals such as ‘one’ and ‘being’ and, more generally, the supposedly Platonic principle that what is more universal is more substantial or fundamental.

Does this mean that species are exempted from the *Metaphysics*’ attack against universals? Not quite. The second argument in Z.13 says that ‘substance’ means that which is not predicated of a substrate, while the universal is always predicated of a substance (1038b15–16). This is a knock-out criterion and there is no way for the species to evade it, for the species ‘human being’ is clearly predicated of certain substrates, say Socrates and Callias, the species ‘dog’ is clearly predicated of certain other substrates. That species are predicated of their particular instances as their substrates implies that they are ontologically dependent on them. This was already acknowledged in the *Categories* (see Section 3). However, in the *Categories* this unequivocal diagnosis (leading to what has become known as ‘Aristotelian realism’) did not prevent Aristotle from calling the species of particular substances ‘secondary substances’. Why, then, does Aristotle in the *Metaphysics* uncompromisingly exclude all universals – including the species – from the realm of substances? In Z.13, as already indicated, Aristotle is looking for the *ousia*-of particulars – that is, for essences in virtue of which the corresponding particulars are what they are. Now consider a species, say ‘human being’. Does it make a particular human being what it is? Does it contribute to a particular being formed or structured the way human beings are formed or structured? No. On the contrary, the species ‘human being’ requires and presupposes well-formed human beings, of which it can be truly predicated. The species ‘makes obvious’ or ‘reveals’, as it is put in the *Categories*, what human beings are, namely members of the kind ‘human being’, but this is only of secondary importance compared to what Aristotle is interested in when inquiring into the *ousia*-of a particular. The *ousia*-of a particular is expected to be a cause and principle of the particular’s being, of its being what it is and of its being a unified, identifiable entity belonging to a determinate kind (as Aristotle makes clear from Z.17 onward). Species and other universals are not in the least involved in this kind of job; they are ‘merely conceptual’ in the sense that they are inefficacious and not causally involved in the physical world and hence cannot qualify as the sought-after principles and causes. The species is, as Aristotle formulates in the *Metaphysics* (Z.10, 1035b27–31, Z.11, 1037a5–10), just a ‘universal compound (of

matter and form)’ – in other words, it is like a compound particular ‘taken universally’.²⁴ This is the main reason why they get downgraded in the *Metaphysics*, which, as we said, is above all interested in first principles and causes.

In conclusion one can say that this result – that universals are not substances – is clearly incompatible with saying, as the *Categories* did, that the species and genera of primary substances are secondary substances, for in the *Metaphysics* species and genera are in no sense substances. Having said that, it should nevertheless be kept in mind that the *Categories*’ claim that species and genera of primary substances belong to the category of substance and the *Metaphysics*’ claim that universals cannot be substances are not meant to address exactly the same sort of question, since the former claim merely accommodates these species and genera in a certain category (i.e., it is mainly a classificatory claim), while the latter claim denies priority and causality to them. The result that universals are neither principles nor substances is, however, compatible with saying that they exist in some attenuated way – for example, as objects of definitions and knowledge, as intelligible content or in a ‘merely conceptual way’. By ontologically downgrading universals and by excluding them from the exclusive club of fundamental, primary entities, Aristotle specifies a place for universals that exist as ‘mere concepts’, just as the aforementioned species that are nothing but compound substances *taken universally*.

7 Platonic Forms: Mere Concepts Aspiring to Be More

Before proceeding to the *Metaphysics*’ positive suggestion for the role of the *ousia*-of particular substances, it is worthwhile dwelling on an important concomitant of the dismissal of universals as first principles and causes. Ultimately, the *Metaphysics*’ attack on universals seems to aim at Plato’s eternal forms or ideas as well as at the attempt by Plato and his adherents to identify the first principles and causes among the most general conceptual elements, such as ‘one’ or ‘being’. Considering Aristotle’s criticism of Platonic forms in the *Metaphysics* (and in the *Peri Ideōn*: see Section 4) there seem to be chiefly two types of criticism. Firstly, they are considered to have inconsistent ontological profiles, for they are meant to be universals

²⁴ This need not be taken to mean that Aristotle is bound to give up the idea that, e.g., biological kinds are something real. However, the supposed reality of natural kinds might be based on the reality of forms (being ‘synonymous’, i.e., having the same name), without implying that there is a corresponding extra-mental universal over and above forms or over and above the compounds that have synonymous forms.

on the one hand but construed as separable particular substances on the other. Secondly, they are both inefficacious for the generation of particular substances and useless for the knowledge of them.

The first type of criticism is crucially linked with the oscillating notion of being separate (*khōriston*, *kekhōrismenon*, *khōris einai*). Aristotle repeatedly uses this language of separation to refer to a claim the proponents of eternal forms are supposedly committed to, namely that these eternal forms are different (*heteron*) and detached (*apolelumenon*) from the sensible substances. At the same time, he uses the language of separation to characterise the self-subsisting existence of particular substances. This second sense of separation is intrinsically connected with particularity. And this again seems to be at least one source of Aristotle's claim that Platonic forms, being separate, are particulars or, at any rate, very much like particulars (M.9, 1086b10–11).²⁵ He therefore concludes that the proponents of Platonic forms are committed to the inconsistent view that these forms, being predicated of many things, are universals, while being at the same time separate and hence particulars (*Metaph.* M.9, 1086a32–34).²⁶ In a similar vein, Aristotle argues that, since universals by their nature signify a 'such' (*toionde*), something qualitative, and not a 'certain this' (*tode ti*), as separate substances do, the attempt to conceive of universals as separately existing eternal substances (as in the Platonic doctrine of forms/ideas) leads to many problems and, most notably, to the third man.²⁷ According to this first type of criticism, then, Platonic forms, though being just universals, aspire to be more, namely separately existing substances.

The second type of criticism is based on the thought that the *raison d'être* of Plato's eternal forms consists in the fact that they are needed for certain demanding jobs (facilitating knowledge, thinking, science – serving as paradigms of generation); on closer examination, however, it turns out, according to Aristotle, that they are neither necessary for these jobs nor apt to do them. Some of the arguments postulating the existence of eternal forms, as we have seen (see Section 4) are examined and rebutted in the *Peri Ideōn*. In the *Metaphysics* Aristotle several times highlights their uselessness (I) for the knowledge of other things and (II) for explaining

²⁵ Important difficulties deriving from the assumption that ideas exist 'separately' are discussed in Z.14 and in Z.15, 1040a8–27.

²⁶ See the discussion in Castelli 2013: 154–162.

²⁷ See Z.13, 1038b34–1039a3; a similar argument is given in Aristotle's analysis of the third man-argument according to *Peri Ideōn* 84.22–85.3.

the movement and generation of sensible substances. (I) Their supposed uselessness for the knowledge of other things is grounded again in the fact that they are detached from these things and not in them: 'But the (Platonic) forms also are no help towards the knowledge of the other things (they are not their essence, otherwise they would be in them)' (*Metaphysics* A.9, 921a12–13). In Z.6 Aristotle nails down this point by requiring that each (primary) thing and its essence be the same (and, a fortiori, not detached), if the essence of each thing is thought to be crucial for grasping knowledge of it. (II) When it comes to the generation of sensible things, Aristotle stresses that it is unnecessary to invoke eternal forms, existing over and above the sensible things, as paradigms (in accordance with which the sensible things come to be), for it is that which generates (*to gennōn*) – the father in the case of living beings, the artist in the case of artefacts, that is the cause of why a certain form comes to be in the matter (Z.8, 1034a4–5). Nor is it sufficient to appeal to eternal forms as paradigms to explain the generation of sensible substances, 'for what is it that produces them, looking at the Forms? Anything can both be and become like another thing without being copied from it.' (A.9, 921a22–25), so that, even if there is a paradigm in some sense, an efficient cause is still needed.

Thus, even though he credits Plato with having grasped formal causes and follows Plato to a considerable extent in acknowledging the significance of formal causes, Aristotle challenges Plato exactly on his use of formal causes, assuming, as it seems, that Plato's forms, being detached and causally inefficacious universals, are inapt to actually account for the formal natures in the physical world. This assessment comes close to outlining the negative concept of being 'merely conceptual' in the sense of a universal that is a genuine object of thinking and knowledge but is not causally involved in the physical world (something we are inclined to say, in contemporary metaphysics, about abstract beings). Again, there is nothing wrong with postulating universal entities as objects of thinking and knowledge, but if these universals are posited as first principles and causes of the whole of reality, as on the Platonist view, they are confronted with a job they are unable to fulfil, owing to their 'merely conceptual' nature.

8 Aristotelian Forms: Either Embodied or Conceived

Aristotle's criticism of Plato's forms shapes the contrasting ontological profile of the entities that he himself offers as alternative: inherent forms,

which are not detached, but part of the sensible world, and which are not just predicated of many particular objects, but more like causally efficacious properties or modes of the sensible objects. The job of the *ousia*-of, in virtue of which a particular substance is what it is, is done, according to the *Metaphysics*' account, by a type of entity that was completely absent from the *Categories* (and from all other treatises subsumed under Aristotle's so-called Organon), namely form. At first sight, form looks like a close relative of species. Not only are they called by the same Greek word, *eidos*, but it is also in virtue of having a certain form, say the form of human being, that all particulars that have it qualify as members of the species 'human being'; there is, in other words, a one-to-one correspondence between the (kind of) form a particular has and the species to which it belongs. This establishes the kinship of Aristotelian forms and Aristotelian species, which is so close that the two have often been conflated by Aristotle's interpreters. Still, speaking from the perspective of Aristotle's *Metaphysics*, there is a crucial difference between form and species, in that the being of a species just consists in being predicated of its particular instances, while the form is never predicated of the particulars it is the form of – for the simple reason that without this form such well-formed particulars would not exist. The form *F* is considered to be the cause for there being a particular *F*-thing, of which the species term *F* can be predicated.

Strictly speaking, the form is predicated only of the peculiar (type of) matter together with which it makes up a compound sensible object. For this purpose, Aristotle distinguishes two modes of underlying and, correspondingly, two ways of being predicated of a subject (Z.13, 1038b5–6). In the default sense a 'certain this' (*tode ti*) underlies or is the substrate of its attributes, just like a living being is the subject of its affections; in this sense a substance, *ousia*, underlies its non-substantial features, but is never itself predicated of a substrate (Z.13, 1038b15–16). In the second sense, which is tailored for the matter/form-relation, the form is predicated of the matter and the matter underlies or is substrate for the form. In virtue of this relation, a particular (type of) matter is formed and shaped by a certain form, thus making up a hylomorphic compound. However, since the underlying matter is not a *tode ti* in actuality, this relation provides no obstacle for the predicated form to be *ousia*. With regard to the most notorious and controversial question of whether these substantial forms in Aristotle are individual or not, that is, whether they are numerically different for the members of the same species or whether numerically one and the same form occurs repeatedly in all members of the same

species,²⁸ it seems at least clear that they differ from Aristotle's paradigmatic universals in that they are *not* predicated of many things, for, strictly speaking, forms are not even predicated of one fully determinate thing (i.e., not even of one thing qualifying as *tode ti*).

Aristotle is keen to emphasise that the forms of his hylomorphic theory, in contrast to Plato's eternal forms, are indeed causally involved in the physical world, in that they are the cause of being of sensible substances and also play a crucial role in the generation of substances. First, they are simultaneously existing *causes of the being* of sensible substances in that they determine their essential non-material features which, in the case of artefacts, can boil down to shape-like features (*Ph.* 1.7, 190b5 ff.), certain positions (*H.*2) or modes of composition (*H.*2), etc. In the case of living beings, the form is the soul (*Z.*10, 1035b14–18) consisting in or bringing with it certain life-maintaining, nutritive, reproductive, locomotive, sentient and, in the case of some animals, cognitive functions or capacities. For these paradigmatic substances (i.e., living beings) being means nothing other than being alive (*De anima* 2.4, 415b13), and the soul, existing within the animal, is the principle and origin of all these life-related functions. Second, Aristotelian forms are crucially involved in the generation of new beings – as pre-existing causes. Here, in Aristotle's view, the inefficacy and uselessness of Plato's eternal forms becomes most obvious (see Section 7). Whereas Plato required eternal forms as paradigms for the generation of perishable copies that are meant to inherit the paradigm's formal features in a less perfect way, Aristotle invokes the so-called principle of synonymy expressed in the slogan 'man generates man'. According to this principle the generation of a substance with certain formal features can be explained by the impact of a pre-existing numerically not identical substance possessing the same form. Against Platonic forms, the salient point of this principle seems to be that the pre-existing cause need not be of a different and higher ontological level than the generated substance (and need not possess the form in question more perfectly or to a higher degree): it is just another ordinary human being possessing the same form as the offspring.

²⁸ The problem is that some passages in the *Metaphysics* seem to prove the individuality of form (*Λ.* 5, 1071a27–29 is an often-mentioned candidate), while others seem to disprove individuality (*Z.* 8, 1034a5–8 comes first to one's mind). For an admirable attempt to structure the overflowing debate especially in the 1990s, see Gill 2005: 229–33. For a more recent discussion see Galluzzo 2013: 234–42.

It seems that Aristotle wishes to defend this principle of synonymy for both artefacts and living beings (even though only the latter are meant to be paradigmatic substances). In the case of artefacts, it is the form in the soul of the craftsperson or artisan that is involved in the generation. For example, the form of house in the architect's mind provides the origin for the deliberation of how a pre-existing aggregation of bricks and stones could be arranged in a way such that they make up a particular house.²⁹ This deliberation leads to a point (i.e., to some change that can immediately be effected by the craftsperson) from which the building of the house can start,³⁰ so that the craftsperson, through possessing the pertinent form, becomes the moving cause of the process that ultimately aims at implementing the house-form onto the so-far unstructured materials. In the case of living beings, the formal import of the pre-existing causes, also known as parents, becomes most obvious in the case of sexual reproduction. In *Generation of Animals* 1, Aristotle pleads again and again for differentiated roles of the male and the female parent within reproduction. Appealing to the very general model of hylomorphism and arguing on the basis of limited empirical evidence, he is led to the conclusion that the male parent contributes the form (through the semen), and the female parent contributes the matter (through the *katamēnia*, i.e., the sanguineous stuff that is excreted in the course of menstruation). Apart from associating the male parent with form, Aristotle calls the father the moving cause of generation, for it is the father who, through the semen, sets a change within the *katamēnia* in motion that leads to the formation of the first parts of the foetus, namely its heart and a surrounding membrane. Apparently, he wants to say that the father's form is transmitted to the matter provided by the mother through certain motions within the semen (*Gen. An.* 1.22, 730b14–15). Setting the details of this picture (and some of its oddities) to one side, it is clear that Aristotle sees his substantial forms as directly and causally involved in the process of sexual reproduction. At least he is able to tell a story that connects the male parent's form with the origin of the generation of a new living being and with the fact that the adult specimen emerging from this process will display the same substantial form.

²⁹ For a straightforward attempt to spell out the soul's agency in the case of artificial production, see Menn 2002. It is clear, at any rate, that Aristotle regards skills and sciences, *technai* and *epistēmai*, as origins of movement (see e.g., *Metaphysics* Θ.2, 1046a36–b4) and that, e.g., the medical art is the origin of healing by way of possessing the form or definition of health (or by way of having it in the soul).

³⁰ See *Metaphysics* Z.7, 1032b21–30, *Nicomachean Ethics* 3.3, 1112b11–31.

This may suffice to say that, in their default mode of being, Aristotelian forms – as opposed to all the universals that become ontologically degraded in the course of the *Metaphysics* – are meant to be not just mental beings or abstractions, but to be involved in the physical world and causally efficacious. For all these reasons, they are, in modern terms, more like concrete properties and modes equipped with certain powers rather than like concepts. Still, most of this applies to *embodied* forms, that is, forms that actually inform some portion of matter. However, Aristotle several times refers to forms that are said to exist *in the soul* – either the soul of the artisan when it comes to the question of production, *poiēsis*, or in the soul of those who grasp or understand an essence. And if forms are understood as existing in the mind of the artisan, etc., then there is less of an obstacle to thinking that the same form exists in many minds or enjoys ‘mental existence’ in many individuals. Forms existing in this latter way, for example the form of the house in the architect’s soul, can be the blueprint for many particular houses. The form in the soul of whoever thinks of or understands the essence of, say, being a horse, corresponds to or is instantiated by all the particular horses in the world or by their forms and essences. For, to be sure, when thinking of or understanding the essence of horse, which is the form of the horse, we do not think of a particular horse and not a particular form of some horse – this is, as Aristotle tells us, why thinking needs *phantasia* in the first place.³¹ It seems, then, that Aristotle allows a counterpart to the *embodied* forms that is not itself embodied, but only *conceived* and that is said to exist in souls. These forms are appealed to as a vehicle for cognition and understanding and they seem to correspond to the forms embodied by the many individuals belonging to one and the same species. In order to account for the precise relation between the embodied and the conceived forms though, one would have to enter controversial territory. Have Aristotelian forms two modes of being, one embodied and one merely conceived or mental? And is it the same kind of entity that we find in the architect’s mind and as instantiated in the particular house? Or do we refer to two different types of entities when speaking of the ‘form of the house’, namely in one case to the form that is part of the physical world in the way sketched above, and in one case to a mental or concept-like entity, existing only in the soul or mind? These are tricky questions, especially since they are intrinsically connected with other notorious scholarly controversies, such as the one encountered before about the individuality of form,³² the

³¹ See *De Memoria* 1, 449b30–450a7.

³² See n. 28 above.

controversies concerning Aristotle's philosophy of mind,³³ and the agency of the soul,³⁴ etc. Be that as it may, here are some examples of hints to forms in this mental-cognitive setting:

In *Metaph.* Z.7, 1032b23, Aristotle speaks straightforwardly of 'the form in the soul' (*to eidos ... to en tēi psuchēi*); this is in the above-sketched context of artificial production: the form of the house in the architect's soul, health, the form of health or the art of medicine in the physician's soul, etc.³⁵ More often, Aristotle speaks in contexts like these of the *logos* or of the *logos* in the soul (e.g. 1032b5). *Logos* in this context, as is well known, means above all the formula that defines a general term or an essence; quite often, *logos* is used to pick out the substantial form itself or the formal *ousia*. For example, Aristotle refers to the *ousia kata ton logon* (e.g., 1025b28, 1035b13, 1042a31), the substance-in-accordance-with-the-formula, which is, of course, the form or *eidos*. Obviously, this is not meant to say that the form, *eidos*, is nothing but a defining formula (which would contradict the above made remarks about the involvement of forms in the physical world), rather it is meant to say that it is the essential form that is captured by the definition (similarly, when he speaks of *to eidos to kata ton logon*, the form in accordance with the formula (*Physics* 2.1, 199a31), i.e., the form that is tracked by the formula). In Z.15, 1039b20–23, Aristotle points out that the notion of substance (*ousia*) differs according to whether we speak of the compound (the *logos* taken together with matter) or of the *logos*, formula, as such; the latter, he says, can be neither destroyed nor come to be. Here it seems as though *logos* is taking the place of *eidos*, form. Since the context of Z.15 is concerned with the problem of definability, calling the formal substance *logos* outright makes clear that there is sense of substance, in which substance is definable, even though the particular sensible substances are not definable as particulars, while *ousia* in the sense of *logos* or as defined by *logos* is common to all instances and is thus definable (see the discussion of the aporia from M.10 in Section 6). Similarly, he says that the perishable things are not strictly speaking knowable when we can no longer perceive them, while we 'retain *logoi* of them in the soul' (1040a4). Aristotle's

³³ For example, whether Aristotle adopts a representational theory of mind (see Caston 1998) or whether he defends a version of direct realism (see Esfeld 2000), according to which the content of thinking would be fully determined by the thought of form.

³⁴ See n. 29 above.

³⁵ See n. 29 above; using the distinctions of contemporary philosophy, one might ask whether it is strictly speaking the form of the house in the architect's mind that triggers the generation of the house or the mental state that consists in thinking this form.

equating of, and shifting between, *eidos* and *logos*³⁶ is not a sign of negligence, but seems to be justified by the following two thoughts: first, that what he is picking out is the definable form; and second, that when we think of or understand definable forms, we think of them and understand them in terms of their essence (i.e., what it is to be a house or what it is to be healthy, etc.). In this latter sense, Aristotle says in his *De anima* that, when we think of a stone, it is not the stone that is in our soul, but the form, *eidos* (3.8, 431b29); accordingly, he works out the thesis there that essences or the definitions of these essences are among the basic elements of human thinking.

So, just as we saw in Section 5 that there are mental counterparts to realistically conceived universals, we can now conclude that there is also a certain mental counterpart to Aristotelian forms, as presented in the *Metaphysics*, namely the form or the *logos* in the soul (either a mere counterpart or the same form in a different mode of being – according to the ambiguity mentioned above). These mental counterparts to the embodied forms that are said to be substance, *ousia*, or substance-of sensible substances seem to be the same for all individual forms of the same type, and thus behave like universals, regardless of what we think about the individuality of embodied forms. It is also clear that they serve as the proper objects of thought and as vehicles of understanding. In these respects, they play a role similar to the one we assigned to concepts. And it also seems that Aristotle's insistence on the physical status of substantial forms in the *Metaphysics*, by which forms are distinguished from universals or the traditionally acknowledged types of universals did not alter his view on the necessary role of concept-like essential definitions as content of human thinking.

In conclusion, we can say that Aristotle's metaphysical thought contributed to the emergence of the concept of concept in several ways. Many of his discussions are concerned with the meaning of general terms and with whether or not they signify something real and separately existing. Throughout his evolving thoughts about the ontological status of universals, he remains committed to the view (inspired by Plato) that universals as captured by correctly conducted definitions are crucial for our understanding and knowing. To the extent, however, that he criticises the attempt to conceive of universals as existing in the way particular substances do, he sketched the idea of universals that are 'merely conceptual'. In a more positive way, he contributes to describing a role for concepts by

³⁶ For more examples compare *Metaphysics* 996b8, 1035b26, 1043a13.

acknowledging that both universals (e.g. the universals in the *Categories* or the immanent universals implied by the *Peri Ideōn*) and embodied substantial forms (as in the *Metaphysics*), have mental counterparts, by which we grasp and understand the things falling under the conceived form or essential definition, though he distances himself in the *Metaphysics* from the view that universals, such as genera and species, could ever be substances.