

*Concepts in the Neoplatonist Tradition**Péter Lautner**

Anyone trying to give an account of the various notions and kinds of concepts in Neoplatonic writings is beset with the abundance of terms of which the meaning is not quite clear at the outset. To mention but a few, we find *noēma*, *ennoia*, *to katholou* and *logos*, all referring to concepts of different kinds, provenance and function. Neoplatonic writings also distinguish concepts from moments of thought¹ and represent various aspects of the process of thinking. However, treating these aspects of concepts distinctly comes at a price, since they impinge on one another in a variety of different ways. Furthermore, different Neoplatonists use the same term in various ways, so that we may not transpose automatically the meaning that a given term has in one author to another author. My aim in this paper is twofold: first to give a survey on the different kinds of concepts as they vary from one author to another and then to emphasize the nowadays somewhat underrated role of empirically acquired, or 'later-born' concepts in the epistemology of some Neoplatonists. The latter issue gives an opportunity to highlight some discrepancies in the explanations of how to acquire knowledge of the physical world. Whatever it may amount to, however, I hope to show most of these authors accepted the existence of empirically acquired concepts. I shall confine myself to the Platonists and shall not consider Themistius' account.

In order to have a glimpse at the variety of concepts with different origin and kind in Neoplatonism we shall start with a threefold division made by an Athenian philosopher in the fifth century. In Syrianus' commentary on Aristotle's *Metaphysics* we find that there are three types of *logos*. The first is the so-called *ousiōdēs logos*. It is *ousiōdēs* because it belongs to the substance

* I am very grateful to the editors and the anonymous referees for their useful suggestions. It does not mean, however, that they are responsible in any way for the remaining mistakes.

¹ For useful and diverging discussions of this difference, see Wedin 1988: 158–59, Corcilius 2009, and Johansen 2012.

of the soul. It is the non-empirical source of knowledge.² The second is the *dianoētikos logos* which is a presence of the *ousiōdēs logos* in discursive reason.³ It comes from the Intellect and its presence in the soul is not due to abstraction; it was born along with the soul as a result of its emanation from the Intellect. The third type is the *doxastikos logos*.⁴ It is close to *phantasia*, the representational capacity, which implies that it is connected to sense-perception as well. The connection, however, is not to be understood as a kind of dependence. It has to recur to sense-impressions, but we shall never have right opinion on the sole basis of sense-perception. In addition to the three types of *logos*, we have universals that are called later born (*husterogenes*). They relate to the sensible qualities of external objects. For this reason, *doxastikos logos* precedes, and is superior to, the so-called later-born universals for we derive them from the sensibles.⁵

I Variety of Mental Contents in Plotinus

We can start with Plotinus and see whether his views on conceptual content allude to this latter distinction. To begin with, Plotinus does not have any single term, or a clear vocabulary for that matter, which he regularly uses to refer to what we call concepts in the soul. Depending on the context, he talks about *logoi* (1.2.3.27; 4.3.30.9; 5.1.3.7–8) or about form (*eidos*) in the soul (1.1.8.19) or in the intellect (2.4.4.1; 2.6.18.24; 3.9.1.4), or about *ennoia* (3.7.1.4; 6.9.5.40), *epinoia* (5.9.5.11; 6.2.13.28), *to katholou* (1.3.6.11–13, 4.3.13.25), *dianoēma* (4.3.29.7; 30.4), *noēma* (4.3.30.6–7; 5.9.6.6–7) or about *ennoēma* (2.9.11.18, 25, 26; 6.6.12.13–4). Such a variety of terms may indicate that they do not refer to distinct kinds of concepts. Some of them may be generic, while others more specified. Moreover, it is not always clear whether the terms refer to concepts or to thoughts, the latter taking the form of propositions as well. Since this issue is discussed in this volume by Sara Magrin, I shall make only a few crucial points and focus my attention on the possibility of acquiring concepts through sense-perception.

Empirically acquired concepts are important because they enable us to make judgements about the changes that the physical objects produce in

² 91.20–30, 95.15–16, 179.7–10. ³ 91.22–30.

⁴ See 50.8. Kröll's edition gives *doxastos logos*, but the authoritative manuscript (Cod. Par. Coislianus 161, of the fourteenth century) has *doxastikos*. As a matter of fact, *doxastos* is an emendation by Hermann Usener.

⁵ On the classification of concepts in Syrianus I wrote more in Lautner 2009.

the sense-organs. Because the changes in the sense-organs, called *pathē* (affections), are themselves without any conceptual content and hence do not prompt the soul to produce perceptual judgements, the concepts included in perceptual judgements must come from elsewhere. Plotinus calls such concepts *logoi*. It seems that they are the same as the forms within. They can be hardly different from them since the soul cannot be affected by sensible objects. It only grasps the intelligibles.⁶ By using the term ‘forms’ (*eidē*) Plotinus emphasizes the origin of these *logoi*; they come from the Intellect which contains the forms/ideas as the objects of its thinking. The Intellect sends their copies forth into the soul in generating the soul (2.3.17.10–15). Thus they are in the soul independently of previous sense-perceptions; we do not acquire them by abstraction. Acquisition of concepts through sense-perception would imply that the soul is somehow subject to affections or alterations caused by the physical world (3.6.1–5). If the soul were exposed to such impacts, then it might also be destroyed by them (3.6.1.28–30; 2.49–52; 10.22–28).⁷ At the level of sense-perception, therefore, *logoi* are endowed with a role of building up propositions about the objects of sense.

Two questions are worth asking. First, what is the capacity to which *logoi* belong? And, second, what is their origin? The capacity to work with *logoi* in human soul is called *dianoia*, to be translated here as ‘reason’.⁸ As we read in Plotinus, *Ennead* 1.1.9.18–23:

When passing judgements on the imprints produced by sense-perception reason also studies the forms (*eidē*), and it studies them with an act of joint-perception⁹ as it were – the reason that genuinely belongs to the soul – for true reason is the actualization of intellections (*noēseis*) and it is frequently an assimilation and similarity of the outer to the inner. (trans. A. H. Armstrong, modified)

As mentioned, reason is not only making judgements on sensory impressions but is also aware of the forms that do not originate in sense-perceptions.¹⁰ The

⁶ On Plotinus’ views of cognition, see Emilsson 2007: 127–29, and Emilsson 1988: 137–40. On the use of *logoi*, see Brisson 1999.

⁷ The thesis of the impassibility of the soul creates several problems, both epistemological and ethical, which we can leave out of consideration now. For a recent analysis, reflecting on some of the earlier approaches, see Noble 2016.

⁸ With Harder (‘Verstand’) and Pradeau (‘raison’). Armstrong translates it by ‘reasoning’, whereas Aubry by ‘réflexion’. It seems that the term τὸ λογιζόμενον in 5.3.2.7 also refers to the same capacity.

⁹ *sunaisthēsei*. I am following the reading in both editions by P. Henry and H.-R. Schwyzer. Bréhier and Aubry prefer *sun aisthēsei*. On the use of the term, see Emilsson 1988: 76.

¹⁰ This implies that it is διάνοια that makes the judgement, not a distinct perceptual capacity, see Lavaud 2006. He based this thesis on the interpretation of 5.3.

two activities must be simultaneous since joint perception is a kind of simultaneous activity.¹¹ Cognition consists in matching the forms with the appropriate sensory input. Given that the simultaneity is not accidental, in order to pass judgement on sensory affections reason must be in touch with the forms. It seems that reason is an actualization of these forms: it exists only insofar as these forms are operational in respect of sense-perception.¹² It is an offspring of the Intellect and a kind of *logos* (5.1.7.40–42).¹³ As an offspring, however, it is less perfect than the Intellect itself.¹⁴ Reason has to rely on the intellect in order to perform the cognitive activities of its own. It is informed by the Intellect (1.6.2; 1.4.10.3–16) and can process concepts that come from the Intellect.¹⁵ To illustrate this link Plotinus says that the Intellect illuminates reason so that it will be able to engage in sense-perception. Illumination means that reason receives traces (cf. *ikhnos*) which are mere images of the genuine intelligible entities, that is, the ideas or forms that remain in the Intellect. The images in reason are imperfect copies of them since they are broken up and fall away from one another, whereas in the Intellect they were unified. Since they come from the Intellect, concepts in reason are not only indispensable means of producing perceptual judgements, but they also serve as standards (*kanōn*) for such judgements (5.3.4.14–18). They help us arrange and interpret the input from the perceptible world.¹⁶ The innate notion of the good enables us to say that ‘Socrates is good’.¹⁷ By using the example of the beautiful body Plotinus says that in sense-perception we see the shape (*morphē*) of the physical body and, as it were, bring it back to the interior of our soul. There, the shape is presented to the appropriate *logos* (1.6.3.6–15).¹⁸

Plotinus explains why the concepts in reason must differ from the ideas in the Intellect. The ideas in the Intellect are unified in a way. Their unity

¹¹ See also 3.6.2.35–36, a text suggesting that sense-perception implies the actualization of some cognitive content that the soul has already had.

¹² To some extent, it runs against the claim by Caluori 2015: 37, 44–49, who says with reference to 3.9.1.34–37 that reason cannot be the work of the hypostasis Intellect, the world of Forms or any of its members because reasoning is distinct from the intellectual activity of an intellect. As I see it, however, the distinction between Intellect and reason in the soul is not so much between distinct faculties, as between the operational modes of concepts/notions.

¹³ It is an ‘intelletto ectipo’, to use the formulation by Chiaradonna 2010: esp. 45.

¹⁴ Sometimes, it is called ‘the intellect in us’ (e.g., 1.8.2.10). For an analysis, see Lavaud 2006: esp. 30–31.

¹⁵ See also 2.3.17.1–2; 5.3.2.2–14. P. Remes 2007: 145–46), who argues that the capability of reason to divide and combine might be based on the intelligible notions of sameness and difference.

¹⁶ On the various aspect of assimilating imprints with the forms in us, see Gerson 1999: esp. 75–76.

¹⁷ For a detailed analysis of this and other related problems about reason, see Chiaradonna 2012b: esp. 203–4.

¹⁸ The description of the process shows very close resemblance to Plato’s notion of recollection, see Helmig 2012: 186–88.

is manifested by the fact that the Intellect thinks them all at once and timelessly. The act of Intellect does not involve time either. By contrast, perceptual judgements involve only a few concepts at the same time and constitute a series extended in time. In this way, they are separated from one another since they leave the original unity in the Intellect where all items of knowledge are together. At this point there is no distinction between different concepts or different use of concepts in the soul. It also seems that the term *dianoēma* signifies its content indiscriminately, as opposed to *noēma* which most of the time refers to the content of the Intellect.¹⁹ In making judgements about the objects of sense reason works with the representational capacity (*to phantastikon*). The contact between representational capacity and reason, however, involves the activity of the *noēmata* as well. The mechanism is this (4.3.30.7–11):

Perhaps, for instance, we might postulate the reception into the representational capacity of the expression (*logos*) such as follows on the thought (*noēma*). For the thought has no parts, and when it has not yet, as it were, proceeded to the outside, it remains unnoticed within. The expression, however, by unfolding it and bringing it forth from the thought to the representational capacity, it exhibits the thought as if in a mirror, and this is how there is apprehension of it, and persistence of it, and memory. (trans. H. Blumenthal and J. Dillon, slightly modified)

The difference between thoughts and expressions is that the former are without parts, while the latter are their unfolded expressions that can also be definitions or descriptions of the objects referred to by concepts; they are probably sentences, not concepts.²⁰ On the other hand, they are the mediating factor between thoughts and the representational capacity. It is the expression of thought in the representational capacity. As the passage deals with the generation of awareness and memory, it concentrates on the way thoughts appear in the representation. The crucial question concerns the relation between thought and expression. For the latter is a kind of copy and differs from that of which the copy it is. How does that difference affect the cognitive content of the expression? If we assume that the

¹⁹ See, e.g., 2.3.17.1–2; 2.4.4.19; 5.8.11.19; 5.9.6.6–7. Sometimes, however, its meaning is not so specific for it can refer to the content of the soul too (1.4.10.7; 3.8.8.13). In other terms, the contents of the Intellect are also called ideas; they are true beings. For an analysis, see Emilsson 2007: 155–59, who stresses (158–59) that the subject-object distinction in the Intellect, the basis of any talk about thoughts/ideas, exists as a dual aspect of that realm and is not simply due to the limitations of our soul and discursive reason.

²⁰ See also 1.4.10.6–21. On the partless nature of *noēma*, see also 4.7.6.23. On *logos* as signifying statement here, see Gerson 1994: 171.

difference is between the operational modes of the same entity, then the problem has an easy solution. If, however, we insist that thought and expression are two different entities, one in the Intellect and the other in the soul, then we face a serious problem. By definition, the copy must be less perfect than the paradigm. There is no evidence in Plotinus' account to suggest that the meaning or reference of thought and the meaning or reference of the corresponding verbal expression differ. Imperfection is manifested rather in the way expression exists in the soul; it is dispersed, as it were, which means that it lacks the unified context characteristic of thoughts assembled in the Intellect. Moreover, if it had a different meaning, it would be difficult to show the mechanism whereby we can reliably connect expression and thought; to mention but one sample, it would make definition or description wholly impossible. Plotinus describes the expression as displaying the thoughts in the representational capacity as if in a mirror (4.3.30.10), which suggests, again, that there must be a strong connection between expression and thought since it is the content of thought that is displayed in the mirror, while the whole process requires the contribution of the expression, itself being the copy of thought.

Looking back to the taxonomy in Syrianus, then, we have seen that Plotinus is perfectly acquainted with all of items listed there, except for one. He has no problem with the view that we are endowed with substantial *logoi*; they are innate and belong to the essence of the soul. He may also accept that the discursive nature of our thinking requires the unfolded manifestations of such *logoi*, the expressions. On the other hand, understandably enough we do not find any account of the generation of empirically acquired concepts.²¹ The omission is striking, though, particularly because later Neoplatonists embraced the idea of empirically acquired concepts.

2 Porphyry's Concordism

The first philosopher to consider is Porphyry. As an associate of Plotinus and editor of his works he was fully familiar with the *Enneads*. Nevertheless, he was very much influenced by the Platonic thinking in the early Imperial period, which sometimes narrowed down the possibilities of adopting full-fledged Plotinian doctrines. Also, he saw the possibility of establishing a certain harmony between Plato and Aristotle.²² Due to his reconciliatory tendencies he seeks to find a place for the Aristotelian notion of the acquisition of knowledge, too. His extant commentary on

²¹ See also Caluori 2015: 159–60.

²² The harmony was not full, see Chiaradonna 2016: 321–40.

the *Categories* offers an interesting analysis of universals which is marked by Aristotelian elements.

It is impossible to conceive of an ox or a man or a horse or an animal in general apart from the particular ones. If, however, we start from the perception of the particulars we can arrive in thought at their common predicate which we no longer conceive as a 'this' but a 'such', and if we eliminate the particular animals, what is predicated in common of them will no longer exist either. (trans. S. Strange, slightly modified)

This passage exhibits a strong commitment to the metaphysical status of universals. They depend on the particulars, since, if these are destroyed, the universals also cease to exist. Of course, the particulars have a priority over the universals not individually, but collectively. The universals cease to exist only if all the particulars are removed.²³ Particulars seem to enjoy some sort of epistemological priority as well. We get to the knowledge of universals by perceiving the relevant property on the external object. Universals are common predicates. Moreover, even if Porphyry discusses here secondary substances such as ox and horse as species, it seems that the distinction between form and matter applies to them as well. In a truly Aristotelian manner, as species or natural forms, secondary substances involve matter and therefore they are natural beings in a way. On the other hand, it is the form that is accessible to our thinking. In order to grasp the form of ox, however, we have to rely on the perception of the particulars.²⁴ If, then, the analysis is in terms of the species, it draws on sense-perception, a process involving forms of material beings.

It would sound all too Aristotelian for a Platonist philosopher, however, if that were the only story about the origin of concepts in us. First, therefore, we must raise the question of whether it is the only kind of universal we have, and if there are more kinds, how they fit to one another. The most informative account is in the commentary on Ptolemy's *Harmonics*. Porphyry describes here a cognitive process which starts from sense-perception and terminates in *ennoia* (I3.21–I4.6 Düring).²⁵ The

²³ See also Lloyd 1990: 51–52. It seems to contradict the claim he made in *Isagoge* §10, 17.9–10 Busse, that genera and species are prior by nature to particular substances. Perhaps, one might say that when taken individually, particular substances are posterior to universals by nature. By contrast, Barnes 2003: 274–75 insists that they are posterior both individually and collectively. It fits well to the account in the *Isagoge* but is hard to reconcile with the thesis in the *Categories*-commentary. For a critique of Barnes' interpretation, see Chiaradonna 2008.

²⁴ See the note by Bodéüs 2008: 251, n. 1.

²⁵ The account is linked to the report on Thrasyllus. It cannot be ruled out that his views had an influence on Porphyry, see Tarrant 1993. But, for present purposes, it is important to stress that, whatever we may think of its origin, Porphyry endorsed the theory.

process has four phases. The form of the perceptible object is grasped by sense-perception. Next, the belief-making assumption (*doxastikē hypolēpsis*) receives the form, names it, and describes it with words. The last two steps are what follows.

Next, the third faculty is one that makes images out of distinctive features and is really like a faculty of painting or moulding, namely, the *phantasia*. It is not content with the form produced by naming and describing, but just as those who try to detect persons sailing into port, or by way of those who attend to features to match them, and work out details of resemblance, so this faculty works out the whole structural outlook of the object, and when it achieves accuracy in this way, then it stores the form in the soul. This is the mental image (*ennoia*). And when it has arisen within and received confirmation, the condition of knowledge comes about. From this, like a light kindled from leaping fire intellect shines forth, just like an accurate vision for a focus on true being. (trans. my own)²⁶

The most important element of the passage is the account of the origin of *ennoia*; it is produced by the representational capacity out of the distinctive features (*idiōmata*) of the perceptible forms. As the characteristic activity of the representational capacity is a kind of painting and moulding we may assume that *ennoia* has a pictorial content with a universal character.²⁷ Consequently, it is not a concept strictly speaking. The assumption is corroborated by Porphyry's remark that *phantasia* makes images. The mental image leads us to the universal concept (*to katholou*) which has to be confirmed by the intellect (14.8–14). When it has been confirmed, we reach the state of knowledge. The switch from *ennoia* to universal concept is thus a change from a pictorial content to a conceptual one as well. Confirmation by the intellect means that *ennoia* must be adjusted to the intelligible form (*eidōs*) that resides in us. Indeed, Porphyry is committed to the view that the soul contains the form of everything, and this is how recognition of the physical objects can take place.²⁸ Thus reason (*logos*) can function as one of the criteria (14.29–15.1) whereby we can assess our cognitive states.²⁹ Due to its precise nature it recognizes, supplements and corrects the possible mistakes in sense-perceptions (15.10–29). It does it by means of comparing sense-impressions with the innate content of the

²⁶ For a detailed analysis of the passage, see Lautner 2015. See also Chiaradonna 2012b.

²⁷ It reminds us of Sextus Empiricus' report on the epistemology of the Peripatetics, especially of Theophrastus, who talk about the generic Man as a product of the representational capacity (*M.* 7.216), as has also been noted by Chase 2010.

²⁸ See 15.1–6, *Sentences* 16 and 22, and fr. 264 Smith.

²⁹ It also functions as cause of the perceptibles, see 12.5–6. Its ruling position is well illustrated by the metaphor of 'king' (*logos*) which receives information from the messenger (*aisthēsis*) in 15.10–29.

soul. In all likelihood, therefore, the intelligible form can be identified with the universal. As a result, Porphyry argues that we have two kinds of universal, one is conceptual and resides in the soul, the other seems to be pictorial and the ultimate result of sense-perception. In order to have knowledge, the two must get in touch with one another. As he says in *Sentence* 16, intellectual processes cannot occur without *phantasia*, which in the context of the *Harmonics-commentary* means that we need mental images in order to get our rational faculty working.³⁰ The faculty itself seems to be fully unified. As far as our sources allow us to say, Porphyry does not make use of the Plotinian distinction between concept/conceptual content in the Intellect and in our discursive reason. As a consequence, he does not distinguish between the two phases of concepts that are not empirically acquired. It is an important modification of his teacher's doctrines for he assumes that we are endowed with two kinds of concept, one of them being empirically acquired; it is of a lower rank that has to be adjusted to the inborn universal. It is a possibility that, it seems to me, Plotinus did not entertain.

3 Later Developments

3.1 Syrianus and Proclus. Critique of Abstractionism

Syrianus and his disciple Proclus relied on many – if not all – of Plotinus' suggestions.³¹ The only important divergence for present purposes is that they made room for empirically acquired concepts or universals. The term for such universals is *husterogenēs*, 'later born'.³² Hermias, whose commentary on the *Phaedrus* is based on Syrianus' lectures, claims that humans are capable of collecting in thought from the common elements in the particulars the later born universals, and from these they put forth (*probalein*) the universals that essentially inhere in the soul. Ultimately, the whole process leads to the recollection of Forms in the intelligible realm (171.8–13 Couvreur). The commentator does not enter into details as to what kind of content the later born universals have, pictorial or

³⁰ The Greek text poses several difficulties that were discussed by M.-O. Goulet-Cazé and J. Pépin 2005: 449–57. I am following their textual suggestions.

³¹ For a detailed exposition, see Helmig 2012: 184–204.

³² For obvious reasons, because he does not accept the existence of empirically acquired concepts, Plotinus does not have the word *husterogenēs*. To my knowledge, the first occurrence in Neoplatonist literature is to be found in Iamblichus' *Comm. M.* 10, 42.16 Festa.

conceptual, but it is highly interesting that they serve as the basis for projecting those universals that are inherent to the soul. Projection means that by sense-perception the inborn universals become activated. Sense-perception triggers the human intellect to activate the relevant concept that it possesses by nature. It seems, then, that in humans we encounter a threefold process. Later-born universals are gathered from the common features of perceptible particulars, essential universals are activated from the later-born ones, and essential universals prompt us in turn to recollect the Forms.³³ It also seems that later-born universals are both ontologically and epistemologically independent of the essential ones. The thesis can be called into question. The crucial text supporting the objection says that (171.13–17).

The soul of the beasts is not capable of performing it [sc. the whole threefold process] for in seeing this horse here, and that one, and again that other too, it cannot gather in thought the later born universal 'horse'. This [sc. the impossibility of the threefold process] is also because it does not have the notions (*logoi*) of those things in its essence and nature, and the essential universal either' (trans. my own).

The text suggests that beasts are in lack of universals of any kind because they cannot assemble the concept of a species (horse) on the basis of sense-perception. It may also suggest that, in order to have later-born universals, living beings also need to have essential *logoi* and therefore essential universals as well.³⁴ According to this view, then, Hermias/Syrianus claims that essential *logoi* are the necessary prerequisites of later born universals. Without them we cannot assemble empirical concepts out of the various sense-perceptions. Since beasts are completely devoid of forming or retaining universals in this way they do not possess concepts at all.³⁵ This view may result in a peculiar epistemology which says that first we need essential universals in order to form empirically acquired, later born, universals which in turn serve to activate, put forth, the essential universals. It seems as if essential universals were active before getting activated by later born universals. To avoid such a peculiarity we may claim that the passage in 171.13–17, quoted above, says only that beasts are not capable of performing the cognitive activity consisting of the three aforementioned stages, because (i) they cannot form later-born universals and also

³³ From this point of view, it is similar to Porphyry's account, see Sorabji 2010.

³⁴ This is the interpretation of Helmig 2012: 69–70.

³⁵ On the other hand, it is important to realize that the commentators allow for the existence of *ennoia* in the representational capacity (263.10). It occurs in dreams and is an image of the true.

(ii) because they do not possess the essential ones.³⁶ By contrast, humans are able to form later-born concepts even if the latter may occasionally be inaccurate. Nonetheless, they can be set right by the soul (171.20) so that by the aid of them it can make ready and project the essential *logoi*.

In any case, empirically acquired universals are inferior to the essential ones. Their inferior status is manifested in Hermias' critique of the theories about the way we acquire them. The critique is meant to establish the inferior status of empirically acquired universals, not to deny their existence. The three-stages model implies that empirically acquired universals have a distinct origin; they do not arise from the essential *logoi* in any way. Instead, we acquire them by collecting the common elements of the perceived particulars. This is not to say, however, that they can serve as the basis for scientific knowledge. The main reason for that, I suppose, is that they do not entail the definition of the things perceived; in fact, the definition is entailed by the essential *logoi*. Furthermore, due to the Neoplatonic stratification of beings, everything which comes from the perceptible world must be posterior to what is in the soul by nature. For this reason, empirically acquired concepts are inferior to inborn universals both ontologically and epistemologically. Their inferior status does not imply that they depend on the inborn content of the soul. Indeed, Hermias insists that later-born concepts make the recognition of perceptible objects possible.³⁷

It seems that Syrianus expresses a markedly different view in his commentary on Aristotle's *Metaphysics* M–N. He criticizes the abstractionist ideas of the Peripatetics. Not surprisingly, the critique extends to the related issue of induction as well. In one of the central texts he discusses the nature of proof. It must contain universals which are either inseparable and mere parts of the perceptible things or separable. Against the Aristotelian assumption that such universals are inseparable from the physical bodies, Syrianus raises many questions. One of them is this (161.24–29).

... but are we to make the means of demonstrations separable on the one hand, but 'later-born' and devoid of substance on the other, like the concept of man (*ho kat' epinoian anthrōpos*) which derives its existence in our representations and beliefs by the aid of abstraction from the sensibles?

³⁶ I take *touto* in line 16 not as a reference to, and explanation of, the incapability of forming empirical universals, as Helmig does, but as a reference to *touto* in line 13. I also lay more emphasis on *de* in *oude* (l. 16) as listing an additional element explaining the shortcomings of animal cognition.

³⁷ This has also been emphasized by Helmig 2012: 309.

But in this case once again proofs will derive not from prior entities nor from causes, but from posterior ones and from effects, and furthermore it will result that we will come to know beings on the basis of non-beings, which is of all things the most absurd. (trans. J. Dillon and D. O'Meara, slightly modified)

As it stands, the critique is relying heavily on Platonic assumptions, but for present purposes it is important to emphasize that the commentator finds questionable that there were empirically acquired universals even if we ascribed a much inferior status to them.³⁸ The term *kat' epinoian* signifies the merely conceptual, mind-dependent status of 'later-born' universals (*in Metaph. B* 7.22).³⁹ If at all, they would exist in the representational and in the belief-making capacities. It comes from the thesis that they do not have substantial existence and therefore they cannot exist on their own. The commentator claims that properly speaking they do not exist (110.12) and denies them any role in acquiring true knowledge. For neither the representational nor the belief-making capacity is able to reach the accuracy and stability required from knowledge (73.19–20). It turns out, however, that the representational capacity cannot store universals of any kind.⁴⁰ It is the task of reason to uncover the appropriate universals on the basis of the perceptual forms existing in *phantasia*. Unfortunately, the precise mechanism by which reason works is not described in detail. The commentator offers some clue in the following passage (Syrianus, *in Metaph.* 96.6–12)

We should agree, in general, that discursive reason recollects on the basis of perceptibles but it is not right to say that the shape (μόρφωμα) coming from them is received in it. For the forms (εἶδη) that are sent to us through sense-perception can advance only as far as *phantasia*. In the *phantasia* itself, these forms remain individual and are such as they were when getting in. When, at the end, the thought (ἐννοία) goes over from these forms to the universal notions and the subjects of a study that uses accurate accounts, then it is clear that thought will examine the things that belong to itself. (trans. my own)⁴¹

³⁸ In another respect, the whole passage shows Syrianus' commitment to the Aristotelian framework of demonstration. On the related issue of deriving axioms from sense-perceptions, see Helmig 2009: 347–80.

³⁹ See also 42.12, 45.1, 107.7.

⁴⁰ In 163.7 he speaks about *husterogenē phantasmata* but these are not concepts but the perceptual and individual forms in the representational capacity.

⁴¹ The similarity of the passage with the text in Porphyry's *in Ptol. Harm.* 13.21–14.6, quoted above, has been noted by Helmig 2012: 181–82. One of the differences is that unlike Syrianus Porphyry does not seem to consider *ennoia* as an active factor in the cognitive process.

This passage describes the stages from sense-perception to the knowledge of universals that are within the rational soul. The key moment is the operation of thought on the perceptual forms in the representational capacity. These forms are individual and thought needs them to reach the universals that are related to them. Is there any role for later-born universals here or shall we be committed to the thesis that the particular forms trigger the thinking capacity to rely on the innate forms of its own without any involvement of later-born universals? It seems that he is very much critical of the view that we know the particulars through such universals, that is by having recourse to later-born universals (53.8–10).⁴² As a consequence, he is left with the option that innate universals perform various functions, as has already been indicated at the beginning of the paper.⁴³

Syrianus' critique of abstractionist theories was shared by his pupil, Proclus, too. But that does not imply that Proclus took over the denial of existence of later-born universals as well. For sure, he explicitly denies that our soul is like a blank slate receiving *logoi* from without (*in Alc.* 277.17–19).⁴⁴ Drawing on the *Meno*'s argument he claims that sometimes in conversation people state quite a few things without any recurrence to experience: their soul actualizes innate notions in itself. These notions were there, and they were waiting to be actualized by experience. Consequently, our souls are not blank slates receiving impressions from without; rather, they are like tablets ever inscribed and the writer is within. It does not follow, however, that all of our concepts are innate. Proclus suggests that there are many kinds of concepts, although their difference is mainly functional. Most of them are different manifestations of the innate, substantial notions of the rational soul.

Two kinds of concepts are related to recollection.⁴⁵ The first is the so-called substantial *logoi*. They represent the essences of things and therefore if we are becoming aware of them we shall know the things in their true nature.⁴⁶ Every soul possesses them from the beginning for the demiurge put them in the soul when he created it. 'Creation' is not meant literally, of

⁴² See also 29.21–24, 35.32, 82.27–30, 91.19–92.11, 101.2, 106.9–13, 136.37.

⁴³ For detailed exposition of the list, see Lautner 2009.

⁴⁴ See also 281.2–6. It may be important to note that Iamblichus attributes the view that the soul is not a *tabula rasa* to Aristotle, too, see ap. Philoponus(?)' *in De an.* 3. 533.25–35.

⁴⁵ The crucial importance of the model of recollection in Proclus' theory has been emphasized by Helmig 2012: 310–12.

⁴⁶ See e.g., *El. Theol.* §194, *in Parm.* 892.35, 896.19–21, *in Alc.* 280.24–281.8, *in Crat.* 61.5–9, *in Eucl.* 16.8–10. On *ousiōdēs logos*, see especially Steel 1997 who suggests to translate *logos* as 'reason principle', Taormina 1993: esp. 227–28, and Helmig 2012: 266–68, 310–12.

course, but only signifies that substantial *logoi* belong to the very nature of the soul. As a consequence, they are not empirically acquired. The second kind of concepts is also connected to recollection.⁴⁷ Unlike the first kind, however, it is related to the belief-making capacity. Unlike the majority of Platonists, Proclus is much more optimistic about the role of *doxa*. He is about to show that it has an indirect access to the knowledge of the Forms. The access is mediated by the *logoi*, the innate rational principles – called also substantial *logoi* – that enable it to recognize *logoi* in the perceptible things. The two kinds of *logoi* are compared to one another in this capacity. The latter is linked to the substantial *logoi* because they project it into the *doxa* as a result of which *doxa* is capable of knowing the essence (*ousia*) of the thing in question.⁴⁸ Thus, *doxa* does not only inform us about the object's unity and identity through time, for if this alone were the case we could not really cognize what the object is. Rather, *doxa* can help us to judge the information obtained through sense-perception in order to identify what an object is.⁴⁹ However, even though *doxa* gives us factual information, it does not supply any causal explanation: the latter is supplied by the *doxa* in discursive reason.⁵⁰ Therefore, *doxa* cannot furnish us with the knowledge of the true nature of the thing, since that would imply the knowledge of definition.

The cognitive act mediating between the two kinds is called *metabatikē noōsis*, a discursive act by which the soul can think the different *logoi* one by one.⁵¹ In other cases, projection is onto the discursive reason (*dianoia*). Namely, we have certain innate notions that are derived from the Intellect and represent the essence or definitional content of perceptible things. In order to get grips with the spatial nature of these things the notions themselves must be extended in the human soul. It is this process that is referred to by the term 'projection'. Its complexities are best exemplified in geometrical thinking. Substantial *logoi* are projected onto *dianoia* (*in Eucl.* 3.1–4.8). But if we stick to this model, we cannot explain geometrical thinking which operates with size and shape. To explain it, Proclus has to rely on the representational capacity which can contain images with extension.⁵² Moreover, it is in the representational capacity that all sorts of manipulations with such images (constructions, comparisons, additions, substractions, etc.) take place (*in Eucl.* 78.20–79.2). This move, however,

⁴⁷ See *in Tim.* I. 251.6–7. ⁴⁸ *in Tim.* I. 248.10–13, 251.6–7. ⁴⁹ *in Tim.* I. 249.28–30.

⁵⁰ On the notion of *doxa* in Proclus, see Martijn 2010: 144–52, and Helmig 2012: 231–53.

⁵¹ *in Tim.* I.244.18.

⁵² See also the long section *in Eucl.* 53.18–55.13 with Mueller 1995. The emphasis on the role of *phantasia* is extraordinary within the Neoplatonic tradition, see O'Meara 1989: 168–69.

faces a problem. Whereas ‘later-born’ universals have no role in Proclus’ philosophy of geometry, it is not quite clear how transcendent universals can function as explanatory factors for the generation of geometrical images. Geometrical reasoning must be based on certainty. The link with discursive reason guarantees precision because the objects of discursive reason are immaterial. It establishes the truth of geometrical propositions and makes the soul independent from sense-perception in this matter. On the other hand, in Proclus’ view, geometrical procedures and constructions require objects with a kind of matter (*in Eucl.* 50.2–9). One can also argue that the principles of discursive reason, viewed as transcendent universals, are not related to the geometrical objects in the imagination as common universals, but as a common source.⁵³ Proclus argues that, as immanent entities, the geometrical objects in *phantasia* do not have common definitions. Instead, they are referring to and derived from one source (*aph’ henos kai pros hen*).⁵⁴ One might say at the end that the two kinds of concepts, substantial and doxastic, have the same meaning, since their difference seems to be functional only.

Moreover, *doxa* is capable of forming ‘later-born’ concepts when triggered by *phantasmata*, contents of the representational capacity that derive from sense-perception. These concepts are not formed solely on the basis of perceptual images. In Proclus’ terminology, such concepts are images of the innate *logoi*.⁵⁵ Later-born universals have an important function, not as empirically acquired concepts, but as parts of true opinions. They can serve as criteria for judging the products of sense-perception, for example by revising the perception that the sun is one foot across.⁵⁶ Proclus insists that such universals cannot derive from sense-perceptions. He says (*in Parm.* 896.18–26):

We must, then, as I have said, ascend from the reason-principles (*logous*) in Nature to those in soul, and not only to the ‘later-born’, but also to the substantial ones. The ‘later-born’, after all, are images of these latter, not sprung from the sensible particulars. For it is not the case that there is a common element (*to koinon*) of all multiplicities: we do not after all postulate universal principles (*tous katholou logous*) of evil things; nor yet

⁵³ On Proclus’ metaphysical commitments in geometry, along with the view that *logoi* in discursive reason are related to the geometrical objects in the imagination as common sources, see Harari 2006: esp. 371, who also emphasizes that ‘later-born’ and transcendent universals differ from one another not only in ontological status but in content as well. The same geometrical model is applied to the philosophy of nature, see Martijn 2010a: 205–23; 2010b: 132–62; and Harari 2006: 362.

⁵⁴ *El. Theol.* §110, 98.10–14 Dodds, quoted by Harari 2006: 370.

⁵⁵ For a detailed description, see *in Parm.* 892.15–895.5. ⁵⁶ See *in Tim.* 1.249.30, 250.1–5, 24.

in the case of unique things do we decline to observe a common property just because they are unique. It is from within, then, and from our substantial nature, that the projection (*probolai*) of the Forms arises, and not from sense-objects. (trans. by J. Dillon, slightly modified)

On this account, ‘later-born’ universals are not the result of empirical experience. By re-defining the concept of ‘later-born’ Proclus seems to downgrade the cognitive value of experience. However, certain problems lead him to acknowledge its role in concept formation. To show that, we have to have in mind that ‘later-born’ universals relate to what he calls *ennoia*, a notion that represents the use of our innate knowledge without being entirely aware of it.⁵⁷ In the commentary on Alcibiades 1 Proclus talks about common and unperverted (*adiastrophos*) notions that function as standards for pursuing a happy life (104.8–9). They can be standards because they are derived from our conception of the way gods exist. Their existence is happy and self-sufficient so that happiness and self-sufficiency intertwine. Self-sufficiency comes to us through the gods as primary bearers of that property. As humans strive to emulate the gods and human happiness consists in a kind of rapprochement to the divine way of life, self-sufficiency is an integral part of both divine blessedness and human happiness. This conception of self-sufficiency is not only a common knowledge but an unperverted one as well, and this implies that common knowledge is not necessarily trustworthy in its own right. Sometimes, it has to be revised or articulated.⁵⁸ He also says that our knowledge consists both of inarticulate and articulate notions.⁵⁹ The former are mere notions (cf. *psilai ennoiai*) and do not contribute to the indubitable and scientific nature of knowledge.⁶⁰ Even if there is a possibility that perverted notions are also the offspring of innate concepts that are not fully operational, Proclus’ argument may also facilitate the assumption that the soul contains notions that come from experience. They are not produced by inner projection (*probolē*), Due to their origin

⁵⁷ *in Alc.* 191.11–192.7, *Theol. Plat.* 1.6, 29.9. For a more detailed analysis, see Helmig (2012), 311. It seems that here *ennoia* is used in the same sense as *logos* (meaning here substantial reason-principle).

⁵⁸ See also 117.7. Related to that is the distinction between articulate and inarticulate *ennoiai* (132.7, 133.4, 189.6–8). One can see that the term *koinē ennoia* is used not exactly in its original, Stoic meaning, see also 104.19, 176.1, 298.13. On the process of articulation, see the fine analysis with a historical context in Helmig 2012: 278–89. He also seems to claim that *koinē ennoia* and substantial/innate *logos* are the same (2012: 270–71), but the passage at *in Alc.* 104.5–10 does not support it necessarily. Once we accept the existence of god, we ascribe self-sufficiency to him quite naturally, for the concept of god may imply the concept of self-sufficiency.

⁵⁹ 191.10–192.1. ⁶⁰ See also 275.6, 276.3.

in experience, however, they need to be checked before forming a part of scientific knowledge.

The passage from the commentary on the *Parmenides*, quoted above, also shows that while firmly denying that the projection of the ideas is due to the objects of sense and that 'later-born' *logoi* originate in sense-perception, Proclus sees an important problem. How do we acquire universals of evil or bad things? No idea can correspond to them and therefore it seems that we cannot have them in the belief-making capacity by projecting them from above directly.⁶¹ One solution would be to suggest that they are not concepts strictly speaking but representational images.⁶² One problem with that suggestion is that Proclus does not call such concepts *phantasmata*. If this were the case, the representational capacity would have to be invested with conceptual content. It is true that Proclus claims explicitly that the concept of ugly or base (*to aiskhron*) derives 'from below', not 'from above' (*in Remp.* 1. 260.15–22), possibly from sense-perception or from the representational capacity. But such a concept is called *noēma husterogenes*, which makes it quite unlikely that it resides in *phantasia*. The content of *phantasia* is never called *noēma*; it is not genuinely conceptual. Instead, we may be better off placing them either in the belief-making capacity or in discursive reason. Proclus says more about this kind of concept when he distinguishes it from the concepts that belong to the substantial reason-principles. In the commentary on the *Parmenides*, after discussing the intellectual level of being where thought and object coincide, he turns to constantly thinking souls in which thoughts (*noēmata*) and objects of thought (*noēta*) are distinct. The distinction gives rise to a discussion about the directedness of thoughts in souls. As he says (*in Parm.* 895.31–896.5),

Lastly, in individual souls, thoughts (*noēmata*) are of two types. The one belongs to the substantial reason-principles, the other to 'those assembled into one from the multiplicity of sense-perceptions by means of ratiocination' (*Phdr.* 249b–c). It is actually through these that Socrates says (*Parm.* 132b) that they 'come into being in souls'. That which 'comes to be,' after all, plainly is not present substantially. This, then, is the ultimate echo of the primal level of thought, in so far as it is both universal and exists⁶³ in the intelligizing soul. When we give the title of 'thoughts' to the projection (*probolē*) of substantial reason-principles, by virtue of which we understand

⁶¹ He claims that evils have no Form at *in Remp.* 1. 37.27. ⁶² See Helmig 2012: 330–31.

⁶³ 'Exists' translates *tēn hupostasin ekhon*. Dillon has 'resides substantially', although, as I can see, here *hupostasis* may not mean substance, but existence. I am following Luna's translation here (*a son existence*), see also Helmig 2012: 315.

how the Soul is in a way the totality of all the Forms, we must be understood to use the term 'thoughts' in a different sense from that which we use to describe what is produced in the soul as a result of contact⁶⁴ with individual sense objects. (trans. J. Dillon, slightly modified)

For present purposes, we can leave the first type out of consideration.⁶⁵ It consists of thoughts that originate in, and refer to, the substantial reason-principles – a widely received thesis in late Neoplatonism.⁶⁶ On the other hand, it seems that Proclus accepts the existence of *noēmata* that result from the assembly of many sense-perceptions.⁶⁷ They relate either to sense-perceptions or to representational images. It is important to notice also that Proclus is talking about the two different types of *noēmata* in the individual souls. He does not claim that the World-Soul or the Soul as a hypostasis contains the same division of concepts since it would imply that they acquire knowledge of the physical world by having concepts based on sense-perception. On the other hand, it seems that the description of the second type of thoughts fits very well the account of 'later-born' universals we read in the commentary on Euclid's *Elements*. In distinguishing three types of universals immanent in things, transcendent and 'later-born' (50.18–51.7), Proclus characterizes the last type as formed from the plurality of particulars by means of thinking (*kat' epinoian*) and as having only a consequential existence.⁶⁸ Both the second type of *noēmata* and the 'later-born' universals come to be in the soul in the strict sense, which means that they do not issue from the substantial *logoi*.⁶⁹ As a consequence, Proclus seems to endorse the existence of empirically acquired concepts even if he nourishes serious doubts as to

⁶⁴ In reading *probolēs* ('projections') Dillon follows the Greek mss. By contrast, both Luna and Steel prefer Moerbeke's *occursum* and read *prosbolēs* ('contact').

⁶⁵ Proclus reiterates the claim in this part of the commentary too, see 897.2–3.

⁶⁶ We have to bear in mind that, although Proclus says that in the first case the term '*noēma*' is said to refer to projection (*probolē*), it may not mean that it signifies an act of thinking rather than the product of thought. As far as I can see, Proclus does not use the term to refer to acts of thinking elsewhere.

⁶⁷ From this point of view *noēma* can be related to the Stoic *ennoēma* mentioned, e.g., at *in Parm.* 896.5–18, though otherwise there is an important difference between them because *noēma* is a much broader term. The Stoic theory had an impact Neoplatonism as well, see R. van den Berg 2004.

⁶⁸ See also *El. Theol.* §67.

⁶⁹ Proclus' views were shared by his followers at Athens. Two samples will suffice. Simplicius insists that universals cannot be assembled from particulars, see *in Phys.* 1075.4–20). In his commentary on Aristotle's *De anima* pseudo-Simplicius distinguishes between two kinds of rational activity, the one is changing and proceeds from the substance, the other is permanent and coincides with the substance of the soul (5.8–15, 9.5–11, 15.29–32), see Steel 1978: 132–41.

their reliability.⁷⁰ For this reason, even if we have good reason to assume that he endorsed the existence of empirically acquired concepts, he did it with qualification. They are formed *kat' epinoian*, that is, we form these universals by the aid of our thinking. It is unclear if the term refers to just an operation, such as a synthesis of the plurality of particulars, or an operation involving inborn content. In either case, later-born universals are inferior to substantial *logoi*, although, if the term *kat' epinoian* refers to a thinking process employing inborn content, it is not easy to see how these universals can be corrected by the aid of substantial *logoi*.

3.2 *Damascius and the 'Later Born' Concepts*

Although in other respects he criticizes Proclus, Damascius, the sixth-century Neoplatonist at Athens, inherits his predecessor's doubts about the scientific value of empirically acquired universals. The particulars cannot be judged by themselves, in the way we grasp them, since we cannot trust them. Nor do we measure them by the criterion of what is common to them since if we cannot trust them individually, their supposedly common features may also mislead us. For the same reason, abstracted concepts cannot play the role of criterion either. As a consequence, the standard must be prior to the particulars.⁷¹ However, Damascius does not say that such concepts do not exist, only that they are scientifically unreliable. Unlike Proclus, however, he also keeps the traditional name for such concepts and calls them 'later-born'.

Standards can only be the innate notions that have the appropriate accuracy and reliability.⁷² In order to be operative, they must be actualized by the perceptible things; the soul is stirred by the perceptibles to project (*proballein*) such universal concepts (*ennoia*) that reside there without articulation (*in Phaed.* I §263).⁷³ These concepts should be common, but Damascius expresses doubts and offers an answer (I §267.1-6),

Perhaps we are born with the common concepts implanted in us by nature, as non-rational animals have their drives. But in that case everybody would have them, whereas in fact many people lose even these, at least a great part of them, through gross ignorance. And how, in that case, can man correct his natural, non-rational drives? For the judging faculty, supposing it judges on the basis of reason, must have knowledge; if it can do so without reason, it must have possessed them and lost them, as critics who judge a literary

⁷⁰ See Sorabji 2010: 12–14. ⁷¹ *In Phaed.* I §274.1–3, see also 2 §15.1–5, §24.2–3.

⁷² *In Phil.* §225.25–27. ⁷³ See also *in Phaed.* I §498.5–6, §516.5.

work, but without remembering the standards by which they judge. (trans. L. G. Westerink, slightly modified)

Humans are contrasted with animals insofar as the latter have their natural drives always active, whereas we do not always rely on our common concepts when making judgements. If so, how can such concepts be common and inborn? Damascius' solution invokes the Aristotelian distinction between actuality and potentiality. Even if they are common and inborn, the concepts are not active in many of us. It means that when we make false judgements they are not articulated. False judgements can be corrected if the common concepts become actualized. This is how Damascius can explain error although he does not describe in detail the whole process leading to ignorance.⁷⁴ Similarly, the process of recovering them has also been scantily explained. To emphasize the inborn character of common concepts, the commentator connects them to preconceptions (*prolēpsis*, I §476.1). The term is not used in its original Epicurean sense, to denote empirically based concepts that are prior to actual, individual sense-impressions. Rather, it refers to concepts that are prior to all sense-impressions (*in Phil.* §209.1).

Damascius introduces a novel terminology when talking about *noēmata*. They are intimately related to the substantial notions. Their novel character is tied to the broader metaphysical context. Because the One, the highest principle, is beyond our reach, Damascius denies that we could ever be in a position to apprehend it directly. On the other hand, there is a way to talk about it correctly (*Princ.* I. 11, 14–15). He argues that knowledge requires the differentiation between knower and known. Moreover, the nature of the One determines the character of the cognitive contact. Unlike other cases where the difference between knower and known never disappears, here, in approaching the One, the knower knows it less since knowledge is dissolved by the One into unknowing (*Princ.* I. 73.3–8).⁷⁵ The One is a pure simplicity which does not make room for the difference between knower and known, while knowledge requires differentiation. The difference collapses into unity when the knower approaches the One. Still, we have concepts or notions referring to the One. How can they have any relevance in such circumstances? Damascius' proposal is that the thoughts or concepts we have about it are symbols showing towards it, rather than precise descriptions of its being.⁷⁶

⁷⁴ See also 2 §93.2–3. It goes back to Proclus, see Helmig 2012: 271–72.

⁷⁵ For a detailed account, see Linguisti 1990. ⁷⁶ As noted by Gerson 1999: 79–80.

3.3 *Alexandrian Interpretations of Aristotle*

Just like Damascius at Athens, the philosophers in Alexandria followed Proclus' lead with some reservation. In general, Ammonius and his disciple, John Philoponus, paid much more attention to the subtleties of Aristotle's explanation of the cognitive process. They concentrated on the role of *phantasia* in acquiring and forming concepts. They laid great emphasis on its intermediate position between sense-perception and the intellectual capacities. Following the claim to assimilate *phantasia* with the passive intellect they assumed that its function is much closer to the intellectual capacities.⁷⁷ According to this view, *phantasia* stored imprints that could be turned into concepts. The starting point of the Alexandrian approach was Aristotle's remark that the soul does not think without a *phantasma*. If the thesis is a general one, then it says that all the notions of the intellect derive from sense-perception. The Alexandrian commentators did their best to reconcile this thesis with the Platonic commitment to inborn and substantial *logoi*.

They have a double strategy. On the one hand, they emphasize that the inborn notions are of primary importance. Philoponus claims that the actual intellect in us inscribes imprints (τύποι) in the potential intellect. This is the way in which the potential intellect becomes all things, while the active one produces all things. The actual intellect is not outside us but rather within us. Philoponus turns to Plato for help and claims that the metaphor of the painter in the *Philebus* (39b) describes the activity of the actual intellect.⁷⁸ It means that the inborn content of the human intellect determines the way we encounter the physical world. On the other hand, the commentators in Alexandria tried to reduce the universal application of Aristotle's claim.⁷⁹ Again, Philoponus explains the Aristotelian thesis by pointing out that thinking without *phantasmata* is quite rare indeed (which by and large justifies Aristotle's thesis), and that *phantasia* is inevitable only when we think of particular cases.⁸⁰ It follows that, despite the aforementioned criticism, the scope of the thesis remains quite wide. In Philoponus' account it covers the vast majority of cases; we think

⁷⁷ The claim is clearly expressed in Themistius' *in De anima* 98.35–99.10. On the development of the interpretations of passive intellect, see Blumenthal 1991.

⁷⁸ See his *in De anima* 3. 538.4–10, and also 531.27–35.

⁷⁹ The procedure has been examined by Steel 2018. He emphasises the importance of *phantasia* in practical thinking, mathematical reasoning, understanding of sensible things and also, importantly, the contemplation of intelligible forms.

⁸⁰ *In De anima* 542.7–13.

without *phantasmata raro aut semel in tota vita*, as we read it in his *De intellectu* (61.80).⁸¹ For this reason, it is important to see how *phantasmata* are transformed into concepts and where. It seems that the transformation takes place in discursive thinking (*dianoia*).

The strategy required that *phantasia* play a much more important role in the cognitive process that it played hitherto. Some philosophers identified it with the passive intellect that we know from Aristotle's *De anima* 3.4.⁸² As Philoponus says (*in De anima* 5.38–6.4),

Phantasia, taking from sense-perception the imprints (*tupous*) of perceptible objects, reshape these within itself. This is why Aristotle also calls it 'passive intellect' – 'intellect' insofar as it possesses what it knows within itself and apprehends it as does the intellect by direct intuition (*haplê prosbolê*) and not by argumentation (*dia kataskeuês*), and 'passive' because it knows by means of imprints and not without figures (*ouk askhêmatistôs*). (trans. Ph. van der Eijk, slightly modified)

Because of the imprints of sensory origin *phantasia* functions as a kind of sense-perception to discursive thinking. However, the contents of *phantasia* are not mechanical reproductions of the imprints of the perceptible objects that are transmitted by sense-perception. Even if they too are called imprints, nonetheless they are reshaped. They are also 'not without figures'. The expression is ambiguous since the expression 'not without' has three meanings: it can be used either (1) in the sense of causing no harm or benefit, or (2) in the sense of referring to a necessity, or (3) in the sense of referring to an impediment.⁸³ The choice may not be difficult, for in discussing *phantasia* he says that it is not imprinted according to the sense-objects since the first imprints would be destroyed by the next ones. It receives only the *logoi*.⁸⁴ It may mean that the content of *phantasia* is not without figures, but not in the sense that figures constitute the content of the capacity. Figures, or figurative aspects, may only accompany that content, but they do not form an essential feature of that content. To put it in different terms, these *logoi* are called the *noēmata* that are 'not without *phantasmata*', which means

⁸¹ See also his *in De anima* 542.9–12.

⁸² See the report in Proclus' *in Eucl.* I. 51.20–52.20, Pseudo-Simplicius' *in De anima* 248.11–17, 283.19–29 and Philoponus' *in De anima* 3. 523.29–31. Philoponus (*in De anima*) I. 5.38–6.4 and Asclepius (*in Metaph.* 280.14–17) attribute the view to Aristotle himself. For a survey, see Blumenthal 1991.

⁸³ On the threefold meaning of 'not without' (*ouk aneu*), see Philoponus *in De anima* 45.21–31 and also Damascius, *in Phaedonem* I § 113 and the detailed analysis in Steel 2018: 198–99.

⁸⁴ *In De anima* 3.508.16–19.

that they are not outside *phantasia*, not that they could be equated with any representational image.⁸⁵

If the content of *phantasia* is a kind of notion one may ask for a place of inductive reasoning in the soul. When confronted with the physical world we try to arrange the vast variety of sense experiences. In order to do it we try to reach general conclusions about them. Philoponus seems to accept the Aristotelian position that we can formulate general theses inductively on the basis of sense experiences. He refers to Aristotle's procedure (*Cael* 2.11, 291b17) to the effect that the spherical nature of the Moon constitutes evidence for the spherical nature of all the stars.⁸⁶ The inductive inference, however, is based on the presence of the substantial *logoi* in the rational soul. These *logoi* too reside in matter, like sparks hidden in ashes. Sense-perception grasps them, and thereby provokes *doxa* to project, that is, activate the appropriate *logoi* that were latent hitherto. In the case of the moon, we are able to make such inductive inferences because we know by these *logoi* that the moon is the same as the stars in essence. Inductive inference is an epistemic possibility, but it rests on the presence of substantial *logoi* both in the rational soul and in the physical nature.

To sum up, it seems that the philosophers after Syrianus maintain, in various forms, the distinction of *logoi* he makes in the commentary on Aristotle's *Metaphysics*. The distinction between substantial concepts and concepts projected in *dianoia* or in *doxa* serves to explain the use of concepts in two kinds of thinking. It amounts to the difference between inferential or discursive thought, usually referred to as *dianoia*, and the kind of thought characteristic of Intellect that is non-discursive. We have also seen that, far from being dismissed altogether, empirically acquired or 'later-born' concepts have a role in the epistemology of these philosophers, even if that role is very much inferior to the function of the innate and substantial concepts.

⁸⁵ *In De anima* 3.569.29–570.2.

⁸⁶ *In De anima* 4.21–26. The application of Aristotle's notion of inductive reasoning in the Alexandrian commentators has been surveyed in Sorabji 2006.