

Aspects of nature and of its relation to craft in Plotinus with specific reference to the aristotelian background

Dimitrios A. Vasilakis

PhD in Philosophy candidate at King's College London

Preliminary notes

«Ἡ φύσις πολλαχῶς λέγεται». This phrase could have been written by the Stagirite philosopher. Further, everything has its nature... Human language can speak of the nature of man, the nature of an animal; the nature of abstract notions such as freedom; even Nature, i.e. the natural world, has its nature. Although in a sense every level of Plotinus' system has a 'nature',¹ this essay will focus on Nature as the principle that orders the physical world.² What is more, this essay will neither talk of the nature *of* craft, but for the relation between Nature and craft.³ Regarding the latter term, we have avoided (exclusively) using the noun "art", so that we do not restrict the meaning solely to the aesthetical field.⁴ Finally, we have not aspired to give a history of the notions that Plotinus uses and modifies. However, the specific reference to Aristotle is an exception. The mention of the Aristotelian background aims to show the extent to which Plotinus is influenced by his past, and at which level he transforms the ancient traditions.

Nature according to Plotinus

Introductory remarks on traditional elements and innovations

Nature has always formed a pivotal notion in the systems of the Greek philosophers starting with the Presocratics. However, as is noted before, it is not our

¹ For instance, even the 'super-natural' One has a nature, which is the transcendence of being. Cf. e.g. Plotinus, *Enneads*, VI.7.§40, line 26. [The Plotinian texts to be cited follow the standard Oxford 'editio minor' by Henry and Schwyzer; the translation of the *Enneads* comes from Armstrong's Loeb edition. (See References.)]

² Another sense of nature in which our approach will not be interested is revealed by Wiman's interesting article, 1990. As is stated in the abstract, "this paper discusses the role of some ancient Greek and Roman conceptions of Nature's *modi operandi* as predecessors of various current ecological theories."

³ If conclusions related to the nature of craft are to be made, this is going to be incidental within the scope of the present approach.

⁴ For a wide range of aspects regarding the relation between natural and artistic beauty see Α. Βασιλάκης, 2009, 101-114, ch.B2.

aim to give the history of the concepts to be approached.⁵ Nevertheless, it is interesting to mention five traits that, according to McClure, characterize the whole Greek approach to Nature: “1. Nature is Life...2...Power...3...Soul...4...divine...5...Value.”⁶ Having said that, let us disregard any doubts about the applicability of all these five tenets to the thought of every Greek philosopher up to the Stoics, and let us examine whether they are in accord with Plotinus’ thought, who merges in his system all the previous traditions. Considering the first proposition,⁷ Plotinus is quite explicit when he mentions the triplet ‘thinking-forming principle-life’.⁸ The absolute unity of Intellect with his thoughts, i.e. the Forms, constitutes its majestic life. When the inferior entities proceed from Nous these equations remain, however in an analogously inferior level.⁹

Nature is also Power (‘δύναμις’)¹⁰ not in the sense of the Aristotelian potentiality (‘δυνάμει’), but as this ultimate potency-force that is derived by the ‘overflowing’ of the One, which constitutes the cause of the existence of being and every other lower reality. The third proposition¹¹ that Nature is identified with Soul requires almost no explanation, since indeed Nature in Plotinus, as the immanent principle of the formation of the physical world, constitutes the lowest expression of the Hypostasis Soul.¹² Having granted this assertion, the divinity of Nature¹³ is also preserved, since it forms a part, even of the lowest level, of the third Hypostasis, the divinity of which is guaranteed by its majestic ancestors. Perhaps Nature is not as divine as Nous is, but, still, its divine origin is undoubted. Finally, it is these tenets that allow for the last

⁵ For instance, in Plato one could find clues about a theory of nature in the following passages: *Phaedo*, 96a6ff., (*Phaedrus*, 270aff.), *Sophist*, 265c-e, *Laws*, X, 891b-892c. Cf. Martijn, 2010, 21 (note). [I owe this reference to Prof. Peter Adamson.] Generally, in our approach we will have in mind Aristotle’s account of φύσις as expounded specifically in the *Physics*, Book II; see, for instance, nature as an “internal principle of motion and rest” (*Ph.*, 192b, 13-14). Additionally, the Aristotelian hylomorphic theory of physical-composite substance (*Ph.*, Ist Book; see also Waterlow, 1982, passim, e.g. 1-47) is of equal importance. Finally, we should not disregard the Stoic doctrine of Nature, another name for the all pervading seminal Λόγος, the principle of the formation of the physical world (see “ὁμολογουμένως τῆ φύσει/τῷ λόγῳ ζῆν”; see also *infra*, n. 18).

⁶ Cf. McClure, 1934, 112-115. McClure’s examples come from Hesiod, Thales, Anaximenes, Heraclitus and Aristotle.

⁷ See e.g. *ibid.*, 112: “In fact the whole of Ionian speculation is dominated by the confident belief in the essential unity of man and nature. The basal category is the category of “life”...”.[Cf. *ibid.*, 122.]

⁸ ‘Νόησις-λόγος-ζωή’; see *Enn.*, III.8.8, 16-18.

⁹ Cf. above quotation: “Πῶς οὖν νοήσεις (referring to the φυτική, αισθητική and ψυχική νόησις); ὅτι λόγοι. καὶ πᾶσα ζωὴ νόησις τις, ἀλλὰ ἄλλη ἄλλης ἀμυδροτέρα, ὡσπερ καὶ ζωή.”

¹⁰ Cf. e.g. McClure, 112: “Nature, being alive, possesses inherently all the resources necessary for movement, change and growth. It is the self-producing power...”, positions which refer directly to Aristotle.

¹¹ *Ibid.*, 113: “Self-movement is another name for life. Soul is the very substance of life. This view is so characteristic of both Plato and Aristotle..., old as Homer.”

¹² According to this view one can question our discussion concerning Nature, as if it were independent topic from Soul’s. Whereas Nature is subsumed in Soul, as we will assert in ch.II.ii, we hope that our approach can draw a picture of how/why we could speak primarily about Nature. Finally, on the intimately related issue of Nature as ‘vegetative soul’ see the last paragraph of the present chapter.

¹³ McClure, 113-114, cites Plato, *Laws*, 899b, and Aristotle, *Metaphysics*, I074b1ff., since “that nature is divine is, according to Aristotle, the one fact about the views of his predecessors that stands out in undisputed clearness.” For the Stoics see *infra*, n. 18.

**Aspects of nature and of its relation to craft in Plotinus with specific reference to the
aristotelian background**

principle, i.e. that Nature constitutes a Value.¹⁴ In other words, if Forms have a descriptive and a normative sense, then their instantiations in the physical world constitute a faint trace of the perfect world of Forms. It is in this sense that Nature can be a value; viz. a faint value, but still worthy of consideration, since it can help us ascend to the true and perfect intelligible world.

Having stated similarities of Plotinus' account with his history, are not there any striking new features? Of course, Plotinus does innovate in his theory of Nature, even as he draws on previous sources. The first important element is that Plotinus endows Nature with contemplation;¹⁵ Nature *is* contemplation, but the weakest possible. But to what extent is this feature new? For one thing, Aristotle did not hold that nature is contemplative, as it is not deliberative, either. But the Stoics had already identified Nature with Λόγος. However, in opposition to the Stoics Plotinus will explicitly claim that there is a difference "in that intelligence is primary, but nature is last and lowest. For nature is an image of intelligence... For this reason it does not know, but only makes...Nature has no grasp or consciousness of anything...".¹⁶ Nature in Plotinus cannot be identified with intelligence that characterizes the levels of Nous or Soul (of All). Nature's intelligence is not elevated as in the Stoic doctrine, since in Plotinus Nature contemplates its *superior* level in the hierarchy of being, and in virtue of that it has traces of intelligence. We need not mention that regarding the Stoics we cannot even speak about contemplation of Λόγος, since their ontology is too flat for Plotinus;¹⁷ Logos has nothing above it, hence it does not contemplate in that sense.¹⁸

Another Plotinian innovation concerns how the Neoplatonist views the composite of the physical substance. Contrary to the Aristotelian conception that form and matter constitute a total unity, which brings into existence the physical entity, even if subjected to generation and corruption, for Plotinus there is no such unity. Rather, the form is only projected on the *inert* matter,¹⁹ which remains all the way a mere privation (-'στέρησις'), incapable of (completely) taking on a form, and being a (necessary) condition for any defects/ugliness such a sort of physical substance presents.²⁰ What is more, this form is the λόγος that has emanated from the corresponding form in Nous and through subsequent degradations, i.e. the generation of images of such a rational forming principle in the level of (higher) Soul (of All) and the lowest level of Soul which is Nature,²¹ the latter produces a murky image of

¹⁴ McClure, 119 states that for Heraclitus "the maintenance of balance in the process of give and take gives rise to the concept of law and order", and he adds (p.115): "That nature is a vehicle of Value as well as of Power is the foundation of the Stoic doctrine of life 'according to nature'."

¹⁵ For the general issue see Deck, 1967 and *infra*, ch.II.iii.

¹⁶ IV.4.13, ll.: 2-3; 8-9, 13-14.

¹⁷ Viz. the Stoic deity is immanent in the physical world, in opposition to the Neoplatonic view for which the One is not intermingled with the mundane world.

¹⁸ See also Armstrong's n.1, 362 (on III.8.1): "The Stoics used the terms φύσις ἀφάνταστος and νοερά φύσις to distinguish between 'nature' in the sense of the Aristotelian growth-principle and in their own sense of the all-pervading divine reason: cp. *Stoic. Vet. Fragm.* II.1016."

¹⁹ Cf. Wagner, 1996, 136, 156.

²⁰ Cf. O'Brien, 1996, 178-181.

²¹ Cf. e.g. V.9.6; see also Wagner, 167,156, who stresses the influence by the Stoic "understanding of *logoi* (forming-principles) as generative causes existing within nature".

itself, which is the form projected to matter.²² Thus Plotinus will emphasize that “in fact, of course, nature must be a form, and not composed of matter and form”.²³

Having referred to Nature from the point of view of physical substance, we should not leave aside the aspect of vegetative soul, which also Aristotle had stated as shared by all living creatures including plants. It is a fact that Plotinus identifies the soul -image of the Soul (proper)- ‘residing’ in plants with Nature, i.e. with their growth-principle.²⁴ Should we then restrict Nature only to the trees, plants and flowers? Absolutely not, since “in many ways we live like plants, for we have a body which grows and produces; so that all things work together, but the whole form is man in virtue of its better part.”²⁵

Is Nature a distinct Hypostasis?

Now, after all the previous particular and scattered remarks, let us try to pose Nature into the general scheme of the Plotinian structure of reality, so that we can fill some gaps in our understanding. The One, the cause of the existence of the All, ‘overflows’ and constitutes Intellect which is identified with the (thinking of the) Forms. The power coming from the One is so strong that it causes Soul to proceed out of Nous. However, Soul, a ‘one and many’ entity, is much more complicated Hypostasis than the ‘one-many’ Nous. There are different levels of being within Soul itself. In Armstrong’s description²⁶ “Soul at its highest belongs to the world of Intellect. Universal Soul has two levels, the higher where it acts as a transcendent principle of form, order, and intelligent direction (without deliberate choice or previous planning), and the lower where it operates as an immanent principle of life and growth. This latter is in fact (though Plotinus is reluctant to admit it) a fourth distinct hypostasis, and has its own name, Nature.”²⁷

This last remark about Nature is extremely interesting. Armstrong is, of course, quite right in observing Plotinus’ vacillations. However, we are afraid that to call Nature as “distinct” and “fourth” hypostasis is, perhaps, too much, and something that Plotinus never explicitly ascertains. Let us think of the appetitive part of soul in Plato. It is true that even in this tripartite scheme, soul proper corresponds to the rational part. Nevertheless, the soul’s presence in the body necessarily entails the other two parts, which the virtuous man tries to master under the dominion of the “λογιστικόν”. Therefore, even if the (proper) soul is identified with the “λογιστικόν”, when one refers to a human (embodied) soul, then necessarily he implies the existence of the

²² Cf. e.g. IV.4.13, 19-25, and *ibid.*, §14, 9-11.

²³ III.8.2, 22-23.

²⁴ Cf. also the Aristotelian “internal principle of motion and rest” (*Ph.*, 192b, 13-14).

²⁵ III.4.2, 9-11. Then, it is evident that “soul has the power of growth when it exists in us, too, but it dominates it because it is only a part; but when it comes to be in plants, this power of growth dominates because it has, so to speak, become isolated.” (*op.cit.*, §1, 3-5.)

²⁶ See Armstrong’s Preface in the 1st vol. of Plotinus’ translated *Enneads*, p.xxii.

²⁷ In IV.4.13, 23-25, Plotinus will note: “But nature acts on matter and is affected by it, but that which is before nature and close to it acts without being affected, and that which is still higher does not act on bodies or matter.”

**Aspects of nature and of its relation to craft in Plotinus with specific reference to the
aristotelian background**

other lower parts. Hence, the “ἐπιθυμητικὸν” is subsumed under the concept of soul, even if we refer to the functions of the rational part alone, since we take for granted the embodiment. What is more, Plotinus is going to stress that “one must take into account the differences between the universal soul and ours, in its management of body; it does not direct it in the same way, and is not bound to it. ... Therefore it is unaffected by them, but we are not their masters”.²⁸ Thus, in mild contrast to the microcosm of *Phaedo*'s (81a1-2) “practice of death” or the Plotinian ‘true-self’, which transcends the “συναμώτερον”,²⁹ the macrocosm of Soul forms the physical world by never being intermingled with it.³⁰ Its majestic intelligible functions continue even if the world is eternally formed. Hence, the formation of the physical world is a by-product of the higher activities of Soul.³¹ These functions are not mingled with each other, but the latter necessarily implies the former. In conclusion, these considerations make us somehow hesitant to regard Nature, the immanent principle of the formation of the physical world, as distinct Hypostasis. The unity that Intellects attains by a quasi ‘horizontal’ multiplicity, in the level of Soul is achieved by a ‘vertical’ one. That Nature is the lowest aspect of Soul need not make the former completely alien to the latter, but it constitutes a necessary complement so that the physical world can be a beautiful trace of the intelligible world.³²

On being, contemplation and generation

Therefore, we can now understand the Plotinian tenet that “making, for it [sc. Nature], means being what it is, and its making power is coextensive with what it is. But it is contemplation and object of contemplation, for it is a rational principle.”³³ However, this association of Nature with contemplation still sounds as a paradoxical idea. Here is how we should understand it: The more powerful an entity is, the more generative it is. Generation is a *necessary*³⁴ aspect of a being’s completion and intelligibility.³⁵ The One is the source of All, since it is even beyond being.³⁶ One’s

²⁸ II.9.7, 7-8 and 14-15. Cf. also IV.8.2, particularly II.26-30, 42-53.

²⁹ Cf. for example I.1.10, 6-10 and I.2.3, 11-13.

³⁰ Additionally, we did not mean that the Platonic appetitive soul is the exact analogous of Nature.

³¹ Cf. e.g. III.8.3, 21-23; §8, 26.

³² Cf. also Plato, *Timaeus* [one of Plotinus’ main sources], 92c6-9.

³³ III.8.3, 17-19. Analogically, this tenet could be applied to the rest of the superior entities in the Plotinian hierarchy, e.g. to Nous in relation to the constitution of the Forms.

³⁴ Necessity here must have the modal meaning of ‘what cannot be otherwise’. Adamson (forthcoming), *passim*, searches various uses of necessity (-ἀνάγκη) in Plato and Plotinus; however, he is mainly interested in the aspect of necessity which is ultimately derived by the *Timaeus*’ Receptacle (see the after Demiurge’s intervention ‘persuaded necessity’) and *Theaetetus*’ account of evil (176a, 5-8), and not the kind of necessity that characterizes e.g. the ‘overflowing’ of the One, which is another aspect of its powerful freedom (on this see *Enn.*, VI.8 and Leroux, 1996, *passim*; but see also Adamson’s references in 12-13). Finally, what Vassilopoulou, 2002, 222, asserts about Soul’s activity as transcending “the standard distinction between deliberate (rational) action and ‘blind’ (mechanical) activity (as this can be found in the *Timaeus*)” can be applied to the whole “hierarchical continuum of creative principles” (p.221).

³⁵ Cf. also O’Meara, 1998, 374.

³⁶ Cf. Plato, *Republic*, 509b, 9: “ἐπέκεινα οὐσίας”. Cf. also e.g. VI.7.40, 26.

immediate offspring³⁷ constitutes its being-thinking³⁸ by contemplating the One.³⁹ Furthermore, all subsequent levels of Soul will constitute their inferior being in this mode of gradually diminished contemplation of the superior realities.⁴⁰ In the level of Nature, where the contemplative capacity is so dimmed, the things become more complex.⁴¹ Vegetative soul gives birth to mere infiniteness, dark potentiality, which is matter.⁴² However, after⁴³ the generation of matter, this level of soul proceeds for a second time downwards so that it forms matter, the outcome of which is the physical world.⁴⁴

³⁷ Plotinus frequently describes the generation of inferior realities as 'emanation'. However, on the question whether Plotinus' metaphysics is creationist or emanationist Gerson, 1993, 574 has replied as follows: "If it is allowed that instrumental creationism is a legitimate species of creationism, then I think the answer is the former. If, on the other hand, one insists that there is no common genus for a metaphysics that holds that the existence of everything depends on the first principle and a metaphysics that holds that the being of everything depends on the first principle, then Plotinus's metaphysics is not accurately called creationist. But it is not emanationist either. I do not have a convenient label to offer for this alternative." However, we do not think that the image of emanation in p.562 is absolutely fair. On these grounds we were wondering whether one could see a kind of emanation as connected to the 'double activity', a notion that also Gerson employs in p. 569ff. On the concept of double activity, one external as opposed to internal, see Emilsson, 2007, 1stch. (22-68), *passim*.

³⁸ Cf. the famous Parmenidean equation of thinking and being in Fragment B3(D-K).

³⁹ See e.g. VI.7.42, 14-17, *ibid.*, §§14; 17; 39; 40; §41, 9-17, V.1.7, V.2.1, 7-12.

⁴⁰ Let us note here the two 'stages' of the creation of the lower realities by referring to the example of the creation of Nous. In the first stage of the One's emanation, we have the production of inchoate intellect, or *intelligible matter*. (Proper) Intellect, i.e. the world of Forms is formed when, in the second stage, Nous contemplates the One. (Cf. apart from the previous note's references, Emilsson, ch.2, especially 103-107.) What is more, the completion of this first image of the One 'makes' Soul proceed 'outside' Intellect and so forth—in spite of images, such as in III.7,11, which imply choice on behalf of Soul. (For example, Plotinus in III.9.5 speaks of Soul in relation to Nous as '*matter*'. In this analogical sense matter is called "ultimate form"—«εἰδός τι ἕσχατον» in V.8.7, 22-2.)

⁴¹ What is more, O'Meara, 1998, 374, argues that it is in the *Enn.*, III.8 [no.30 in the chronological order, as first part of the "Gross-Schrift"] that Plotinus generalizes his non-demiurgic-emanationist conception of making, so that he includes the production of the sensible world, too. (For more on this issue see our references in ch.IV.)

⁴² Cf. III.4.1, III.9.3, especially II.7-16. Cf. also O'Brien, 1996, e.g. p.171, and the illuminating exposition of 'Μάvoς, 1990, 58-78.

⁴³ The (spatio-) temporal language is conventional since for all Neoplatonists the cosmos is eternal (see e.g. V.8.12, 17-26). Rather, such a language should indicate (onto-)logical relations within the *structure* of reality. (Cf. also Vassilopoulou, 2002, 209.)

⁴⁴ It is such a point, which also Vassilopoulou mentions in p. 211, that makes us feel somehow uncomfortable with her concluding unanswered question (p. 223): "Why did the soul transform itself?". Her overall approach is indeed admirably clear, and therefore we cannot see the power of such a final consideration which is analogue to questions such as 'why did the One generate Intellect', or rephrased 'why did Nous form itself in the likeness of the One?'. From such kind of questions we can discern that the alternatives "creation or metamorphosis" in the higher realities are two sides of the same coin. Of course, the 'metamorphosis' story of Soul as formation of the natural world is more complicated. In that case we have Soul's *double downwards* inclination, since this matter, the last term of the generation series, in opposition to intelligible one, cannot contemplate and form itself in Nous' manner, but needs an 'external' formation. Yet again, the problem could be better formulated in this sense; viz., how to explain Soul's 'second' descent to matter. Nonetheless, let us not forget that Plotinus exactly aims to answer the question of the formation of the physical world. Hence, a more proper question, perhaps, would be why Plotinus chose such an account.

**Aspects of nature and of its relation to craft in Plotinus with specific reference to the
aristotelian background**

“This forming principle, then, which operates in the visible shape, is the last, and is dead and no longer able to make another, but that which has life is the brother of that which makes the shape, and has the same power itself...”⁴⁵ We should not forget that all these forming principles, being derived from Nous are contemplations;⁴⁶ “and contemplation makes contemplation.”⁴⁷ However, “a weak contemplation makes a weak product of contemplation.”⁴⁸ And it is true that going down the scale from Nous the level of being-thinking, i.e. contemplation is gradually diminished.⁴⁹ Nonetheless, “the producing (ποίησις)... has shown itself to us to be contemplation”,⁵⁰ since “everywhere we shall find that making and action (τὴνποίησιν καὶ τὴν πρᾶξιν)⁵¹ are either a weakening or a consequence of contemplation (ἀσθένειαν θεωρίας ἢ παρακολούθημα)”.⁵² We should not think that ‘weakening’ and ‘consequence’ are different types of contemplation, but rather different *grades* within a continuum. This continuum starts already from the formation of Nous. Nous’ case is a ‘consequence’ grade of contemplation since “he had another prior object of contemplation better than what he made”.⁵³ The same holds for Soul; but when we reach the lowest level of Soul, viz. that of Nature, its making is characterized by the ‘weakening’ contemplation, since, due to the deficiency in its capacity to contemplate, “it had nothing in view beyond the thing done”,⁵⁴ and hence the goal in the making was that the result be contemplated,⁵⁵ in the absence of the capacity of (adequately) contemplating a superior entity.

Having established Nature’s contemplation in relation to its making it is high time that we proceed to the comparison with craft as declared in our main title. However, before that, a touching on Aristotle’s relevant positions would be much fruitful. Still, let us keep in mind the moral of this subchapter which viewed Nature’s productive function as the lowest expression of “an activity of contemplation, the birthpain of creating many forms and many things to contemplate and filling all things with

⁴⁵ III.8.2, 30-34. Cf. also VI.2.22, 28-35.

⁴⁶ Cf. also IV.3.11, 8-12 with Π. Καλλιγᾶς, 2009, comment ad loc., especially, p.380.

⁴⁷ III.8.5, 30-31.

⁴⁸ Ibid., §4, 29-30. [Here, I followed the translation by Dillon-Gerson, 2004, 39.]

⁴⁹ Cf. e.g. ibid., §5,17: “But what goes forth (προϋόν) is not equal (ἴσον) to what remains (τῷ μείναντι).”

⁵⁰ Ibid., §3, 20-21. [Again, Dillon-Gerson’s translation.]

⁵¹ It is interesting that while Plotinus uses these two terms which are distinguished in Aristotle’s trichotomy of human activity (theoretical, practical, productive; see however relevant notes in the next chapter), he seems to refer primarily to the productive activity alone. Cf. also Armstrong’s n.1 ad loc., (vol.III, 372-373), and n.1, 376-377. Additionally, cf. I.6.9, 4-6, where Plotinus counts as beautiful works (“ἔργα”) both the products of arts and the deeds of good (“ἀγαθῶν”) men. Finally, cf. Armstrong’s n.1 in pp.382-383(vol.III): “...By making *θεωρία* the end of all perception and action Plotinus abolishes, no doubt consciously and deliberately, Aristotle’s distinction between *πρακτική* and *θεωρητική επιστήμη* or *διάνοια* (cp. *Nicomachean Ethics* A.3,1095a5; Z.2, 1139a21-b4; K.10, 1179a35ff.), and makes the whole life, not only of man but the universe, philosophy in Aristotle’s sense.”

⁵² III.8.4, 39-40. Cf. also ibid., §5, 22-24: “So what appears to be action according to contemplation is really the weaker form of contemplation”, and §6, 10: “So action bends back again to contemplation...”.

⁵³ Ibid., §4, 42-43.

⁵⁴ §4, 41.

⁵⁵ Cf. §7, 8-11.

rational principles, and a kind of endless contemplation, for creating is bringing a form into being, and this is filling all things with contemplation.”⁵⁶

Facets of the analogy of craft and nature in Aristotle – The problem of deliberation

Of course, neither Plotinus nor Aristotle are among the first to relate the productive activity of crafts to natural processes. We do not have the opportunity here to refer to the extent that Aristotle's accounts are influenced by *Timaeus*' "probable tale".⁵⁷ As in the previous chapter we were selective regarding references to the philosophical history of Nature, here, too, we will proceed in this manner by restricting our Aristotelian references to the Book II of the *Physics*.⁵⁸ More specifically, in the second half of the 8th ch.,⁵⁹ Aristotle tries to respond to a legitimate objection that his potential opponents may have had.⁶⁰ Such people would claim that since nature does not deliberate, something that Aristotle is quite happy to concede, then, however, there cannot be any natural procedure "for the sake of something". Exactly this conclusion is what Aristotle struggles to counter, and basically is related to the natural aspect of the "efficient cause". It is Aristotle's firm belief that teleology applies to human activity, nevertheless this is not the only field that teleology can be found; there are also the natural teleological processes.⁶¹ This is the assertion that has led so many interpreters to accuse Aristotle of anthropocentrism in his approaches.

Aristotle's response to the aforementioned kind of objection takes the form of a comparison between nature and art/craft.⁶² The Stagirite has already established the

⁵⁶ *Ibid.*, §7, 19-22.

⁵⁷ See e.g. Solmsen, 1963, 485-486 and 491ff. In his thorough article, Solmsen also notes Empedocles as the first to use craftsmanship imagery (p.476ff.). Let us note that Solmsen begins his article with reference to Hesiod and completes it mentioning the Stoics. In a sense, our whole approach could be a complement of Solmsen's with respect to the Neoplatonic sources. However, it is difficult for us to meet his standards of quality concerning conciseness and precision.

⁵⁸ Relevant references in other Aristotelian works can be found mainly in *De partibus animalium* and in *De Generatione Animalium*. See Solmsen's account in pp. 488-490.

⁵⁹ In the 8th chapter the Stagirite philosopher discusses his views on the *teleological* approach of nature, one of Aristotle's notorious and most famous positions. In the beginning of this chapter he makes a comparison with opposed philosophical views which prefer to explain the natural processes solely in terms of necessary sequences; contrariwise, in the 9th ch., viz. the last ch. of the 2nd book, Aristotle is going to give his own account of the way in which necessity should be regarded in nature, as related only to the material cause of the physical things' existence. In the second half of the 8th chapter, Aristotle, in a purely dialectical manner, attempts to address potential objections to his teleological conception, and respond to them. In parallel, he continues to emphasize the comparison between art and nature so that he can analogically establish teleology in nature.

⁶⁰ See 199b26-32. [The text used is that of Ross, 1936.]

⁶¹ Cf. also 196b21-22: "ἔστι δ' ἐνεκά του ὅσα τε ἀπὸ διανοίας ἂν πραχθεῖη καὶ ὅσα ἀπὸ φύσεως." As also Solmsen notes (p.487), it is interesting that "although 'action' (pratein) does not necessarily or exclusively denote technical operation - it could, for instance, refer to moral action - Aristotle in the subsequent arguments restricts the meaning of the concept to this sphere." See also note 51 for Plotinus in our ch.III.iii.

⁶² For the general issue Solmsen, p.487, n.70, refers to Meyer, 1919. [By using the word 'art' we give the alternative-equivalent sense of 'craft' as noted supra, ch.I.]

**Aspects of nature and of its relation to craft in Plotinus with specific reference to the
aristotelian background**

relationship between the two procedures emphasizing that “where there is an end, all the preceding steps are for the sake of that. Now surely as in action, so in nature; and as in nature, so it is in each action if nothing interferes. Now action is for the sake of an end; therefore the nature of things also is so.”⁶³ Hence, Aristotle will even contend that “if a house, e.g., had been a thing made by nature, it would have been made in the same way as it is now by art; and if things made by nature were not only by nature but also by art, they would come to be in the same way as by nature.”⁶⁴

Thus, the Aristotelian retort to the abovementioned objection is that *art does not deliberate, either*; but if the efficient cause were *in* the material, then e.g. a wood would become a ship by itself.⁶⁵ For wood is potentially every artifact/form of product that is made out of wood, as natural things are potentially that “for the sake of which”, sc. the visible-actual - completed result. What Aristotle tries to show here is that the only difference between art/craft and nature is that the efficient cause, i.e. the source/principle of the change-movement, in the former case is placed outside the natural substrate, whereas in the latter inside.⁶⁶ Therefore, since no one would deny that art/craft is an intentional activity, this minor difference between the two cannot amount to negation of the teleology in nature. Furthermore, according to D. Ross, perhaps this difference is even less clear, since the “formal-final cause is evidently also the efficient cause. For Aristotle, the mind is entirely informed and characterized by that which it knows. The form of a bed or of a Hermes, as imaginatively apprehended by an artist, is said to be actually ‘in his soul,’ and the form in his soul is what sets him to work to embody it in wood or in marble. And in nature, the form which is to find fresh embodiment is already present and is the cause of movement.”⁶⁷

Ross’ observation aims to show why in Aristotle’s mind the simile of art/craft is close to the natural processes. However, to such an extent the result is devastating for art, because it is made to function like nature. Ross’ implication is that once the artist has an idea, then he ‘necessarily’ goes on to inform it, as the nature would do. However, we do not think that Ross and even Aristotle would like to deny that there is room for the artist’s freedom to modify his initial idea, or to choose the secondary

⁶³ *Ph.*, 199a, 8-12. [The translation of the *Physics* passages, following Ross’ 1936-edition, is by R.P. Hardie and R.K. Gaye in Barnes, 1984.] Solmsen, p. 491, makes the apposite remark that “some doctrines that involve the parallel are, on the face of things, more persuasive in their bearing on the crafts than in their, perhaps secondary, application to nature-and yet it is the application to nature which finally counts.” (See also *ibid.*, p.492ff.)

⁶⁴ 199a12-15. Additionally, for Aristotle “the one, then, is for the sake of the other; and generally art in some cases completes what nature cannot bring to a finish, and in others imitates nature. If, therefore, artificial products are for the sake of an end, so clearly also are natural products. The relation of the later to the earlier items is the same in both.” (199a, 15-20.) In what follows Aristotle will describe the natural-craftlike procedures of animals such as spiders (11.20-32). What is more, he will further claim that the exact fact that even in the par excellence intentional activity, viz. the human one, we can ascertain the “ἀμαρτία”, i.e. failure to meet one’s end, then it is quite natural that we should explain similar digressions thus also in the physical processes (199a33ff.).

⁶⁵ Cf. 199b, 28-30.

⁶⁶ Cf. also Ross, 1936, p. 357 and Solmsen, p.491.

⁶⁷ Ross, 1949, 74-75.

elements that are going to characterize his creation, unlike nature,⁶⁸ which does not deliberate -in that sense.⁶⁹ Therefore, it is essential that we distinguish the craft from the craftsman, a distinction which is impossible to be made in nature, which seems to be simultaneously craft (in the sense of a set of forms to be in-mattered – see formal/final cause) and craftsman⁷⁰ (efficient cause).⁷¹

However, things are still not so clear-cut with respect to the agency of the craftsman. To those that quite legitimately may retort that the phrase in question⁷² refers to the craft, and not the craftsman, one could remind them of Aristotle's remark that even if we say that it is the house-builder who builds, it would be more accurate to state that it is the house-building art (via the house-builder) which actually builds the house.⁷³ It seems that the Stagirite's notorious conception of teleology is not only peculiar with respect to nature, but also with respect to human action.⁷⁴ What is more,

⁶⁸ O'Meara, p.365, too, advocates that for Aristotle the craftsman, unlike nature, does deliberate. On the other hand, Solmsen, p. 488, holds that when the Stagirite denies deliberation in art he "probably thinks of the craftsman as acting automatically and by instinct".

⁶⁹ In a written comment on this point Prof. Adamson has suggested that one "could say that art (and nature) necessarily chooses what is essential, but not what is accidental, which means that the carpenter may choose e.g. which color wood to make the chair out of, but not the fundamental properties of the chair (e.g. stability). Similarly nature produces things with many accidental features but every member of a natural kind shares essential features." The observation of the similarity is very interesting since it marks also a difference: a carpenter can paint a chair with any chance colour, but he can also deliberate on the colour to be used. Contrariwise, we cannot assign deliberation to the differences with respect to accidental attributes that characterize the members of the same natural species.

⁷⁰ From this point of view it is interesting that Solmsen's article is titled "Nature as craftsman..." and not "nature as craft".

⁷¹ This 'identification' of the formal, final and efficient cause within nature is noteworthy. It indicates exactly why nature does not deliberate, but still has an *internal* principle of change. The potential existence of a form within a (material) physical entity forms the aim, the final point towards which this entity is going to move. But exactly the actual procedure of movement is what would be the result of an efficient cause, and it is in that sense that these three causes are identified. In other words there is not one cause that has three different functions, but rather three different causes/function/ways of explanation [cf. also Annas, 1982, p.321] that interact and coincide considering the final result. In a nutshell, if nature/the nature of an entity exists potentially, and there is also no impediment, then it is going to be actualized, without any anthropomorphic deliberation for nature's part.

Aristotle's special illustration about this conception will be the doctor-analogy which was put forward also in the first chapter (see *Ph.*, 192b, 23-27). There, Aristotle will claim that nature is a *non-accidental* internal principle of change, unlike being a doctor which is not a substantial attribute of being a man. On these grounds, in the 8th ch. the Stagirite will claim that the ideal simile of nature as functioning in the way mentioned is the self-healed doctor (199b, 30-32). What is more, it is not only that the doctor has the principle towards his health in himself, but also health is considered as the proper and physical «τελεία» situation of an agent. Therefore, each completed form of a natural entity is the *τελεία* state of this entity, and since it cannot be materialized at once, it must undergo the procedure of gaining this form.

⁷² "Also art does not deliberate" («καίτοι καὶ ἡ τέχνη οὐ βουλευέται»: *Ph.*, 199b28).

⁷³ Cf. *ibid.*, §3, 195b, 21-25: "Δεῖ δ' αἰεὶ τὸ αἴτιον ἐκάστου τὸ ἀκρότατον ζητεῖν,..."

⁷⁴ However, this example, as the previous one with respect to art, and Ross' aforementioned remark bring again into the forefront the problem of the affinity of teleology in nature and in human activity. But following Aristotle's aforementioned trichotomy of human activity, i.e. theoretical, productive and practical, perhaps it would be illuminating if we examined natural teleology under the light of human *practical*, i.e. ethical and political, activity, where human being deliberates and chooses to do or not to do something. Then, it is striking that Aristotle in his ethical teachings will reach to the point to stress

**Aspects of nature and of its relation to craft in Plotinus with specific reference to the
aristotelian background**

Pépin will quite aptly note “the imperfection (doubting, uncertainty, lack of confidence) implicit in deliberation for Aristotle.”⁷⁵ Now, it seems that deliberation enters the game when the efficient cause is *outside* the material, as in the case of craft-craftsman. Then, does Aristotle regard craft as inferior to nature,⁷⁶ because in the latter the efficient cause is inside the material, and hence there is no question of any (extraneous-) deliberating agent? Furthermore, are we entitled to assume an Aristotelian degradation of the efficient cause in relation to the formal/final one, due to the exclusive association of the efficient cause-medium, when it is separate, with deliberation? Or could we view the formal cause as the proper (non-deliberating) efficient cause even in the case of crafts, regardless of the craftsman’s agency? It is such Aristotelian perspectives that Plotinus will pursue in his accounts, however elaborating them in his own distinct vertical system, as we will see in the following chapter.

Aspects of the Plotinian reflection on the relationship between Nature and craft

The issue of non-deliberation again

When Solmsen turns his account to cover the Stoic concept of “τεχνικὸν πῦρ”,⁷⁷ he characterizes the Aristotelian conception of nature and teleology as an “episode” between Plato and the followers of Zeno of Citium, in the systems of whom “purposeful operation is, . . . , associated with intelligence and supreme knowledge.”⁷⁸ However, (ancient Greek) philosophy did not end with the Stoics. We have already seen the un-Aristotelian connection between intelligence and Nature in Plotinus. But what about the “purposeful” activity and the deliberation that implies? Plotinus is explicit: “And the soul which is a whole and is the soul of the whole, by its part which is directed to body, maintains the beauty and order of the whole in effortless transcendence because *it does not do so by calculating and considering* (λογισμοῦ), *as we do, but by intellect, as art does not deliberate* (ἡ τέχνη οὐ βουλευέται) . . .”⁷⁹

Indeed, for Plotinus the *non-deliberative/necessary* aspect of the generation of every entity starting from the ultimate overflowing of the almighty One is

that action without thinking is what we should intend to. See for example the case of the courageous person, who will not think at all if he should fight in the battle, but he is going to act according to his stable disposition (see e.g. *E.N.*, III.3, 1131a, 3-5). Such a methodological movement would not only enable us to enrich our perspectives of Aristotle’s systematic thought, but it would also discern whether there are any actual similarities between natural and (ideal) human procedures. However, in that case we should stop considering only whether we are entitled to speak about potential anthropocentrism in the Aristotelian conceptions, but also *whether* we could see some of the Aristotelian views about human activity as characterized by a kind of potential (and aspired) ‘naturalism’ . . .

⁷⁵ See the reference of Pépin, 1964, p. 502, in O’Meara, 1998, p. 365, n.2.

⁷⁶ “Yet purpose and beauty are in an even higher degree present in the works of nature than in those of craft.” (*De part. anim.* I.1,639b19ff in Solmsen’s translation cited in p. 489.)

⁷⁷ See pp.495-496. See also O’Meara, p. 366.

⁷⁸ Solmsen, p. 495.

⁷⁹ IV.8.8,13-16. [Our emphasis.] Cf. also Armstrong’s note ad loc., Καλλιγῆς’ references in his n. ad loc. (esp. p. 644) and O’Meara, p. 365, n.2.

fundamental, as we have mentioned in the related chapter.⁸⁰ As with Aristotle's Nature, O'Meara points that the identification of the formal cause with the efficient one leads to the conception of an entity-cause characterized by *no* calculation.⁸¹ In other words, since an intelligible entity becomes generator in the sense that an inferior entity is emanated out of the former's relative completion (see efficient cause), and the offspring automatically constitutes itself by contemplating/gazing at its progenitor (formal cause), then there is no room for deliberation regarding the creation of the new entity.⁸² We can be assured that the offspring is always the best trace-image of its progenitor-model. This holds even for the lowest aspect of Soul,⁸³ viz. Nature,⁸⁴ which forms the sensible world in the way described above.⁸⁵

⁸⁰ See for instance V.8.6,9 referring to Nous: "no discourse or deliberation" ("οὐ διάνοησις οὐδὲ βούλευσις"). Cf. also IV.4.10, 13-14 for both Nous and Soul, and V.8.7, 8-9: "ἀλλ' οὐτε ἡ ἐπινοία (planning) δυνατὴ ἢ τοιαύτη". The reference of III.9.1,(II.1-3) to the *Timaeus*,^{39e}, 7-9, where it is stated that "the maker διανοήθη...", so that he proceeds to the making of the best possible image of the intelligible paradigm, need not be inconsistent with Plotinus' eviction of deliberation and of the related divine planning that a putative purposeful activity would entail. In the end of this chapter (II.35-37), Plotinus declares that "οὐ νοῦ ἔργον -ἡ διάνοια- ἀλλὰ ψυχῆς...", and Armstrong translates "planning" for "διάνοια". However, we are afraid that in this context this translation is a bit misleading. It is well-known that one of the main traits that distinguish Soul from Intellect is "discursivity" ("διέξοδος"; see III.7. 13, 43), which is expressed e.g. in the discursive thinking of Forms (see e.g. V.1.3, 13:"ἐν λογισμοῖς"; *ibid.*,§7, 42-43:"τὸ διανοούμενον") or in the production of time (as the result of its mode of life; see e.g. III.7.11, 35-45). Therefore, when we speak of discursion, we attribute it to Soul, which has emanated from Nous. Discursion is both a condition and result of Soul's emanation. Simultaneously, a necessary condition for the formation of the sensible world is the existence of Soul, which is going to mediate the gap between the sensible and the intelligible (in the manner of an 'interpretative' medium; cf. IV.3.11, 19). Hence, when one refers to the sensible world, he necessarily entails the presence of Soul, whose main trait is discursivity. What is more, Soul's διέξοδος is not the means/tool (see "planning") of the formation of the world, but the cause. It is because Soul διανοήθη, i.e. it emanated from Nous, that the sensible world was created. The "planning" may be an apt translation for Plato's purposes, but not always so fitting for the Plotinian ones.

⁸¹ Cf. O'Meara, pp. 370, 373 and 369, n. 14.

⁸² In IV.4.12 Plotinus describes Soul-the ruling principle of universe as an already "knower" (I.17), viz. as having/being the λόγοι from Nous via which it forms the lower entities (II.29-34). Hence, being itself intelligence, there is no reason to question its "will" to make/generate its images, since "in a being of this kind will is intelligence" ("τῷ γὰρ τοιούτῳ ἡ βούλησις φρόνησις"; II. 45-46). What is more, its identification with intelligence prevents it from using anything "brought in from outside. So it does not use calculation (-λογισμῶ) or memory; for these come from outside."(II. 48-49.)

⁸³ See also Vassilopoulou, 2002, 221-222: "... the auxiliary function of the cosmic soul can not be actually conceived in terms of a standard distinction between conception, planning, and execution."

⁸⁴ In IV.4.13 the Alexandrian philosopher contrasts Soul (proper) to Nature, a theme that we have already discussed. In this treatise Plotinus states that "intelligence (-φρόνησις) is primary, but nature is last and lowest; Ἰνδαλμα γὰρ φρονήσεως ἡ φύσις καὶ ψυχῆς ἔσχατον..." (II.2-4). Still, Nature "gives what it has spontaneously (-ἀπροαιρέτως) to what comes after it", but due to its murky contemplation "it does not know, but only makes" (II. 7-9). See also Armstrong's n. ad loc. (vol.IV, 170-171,n.1).

⁸⁵ Such an account opposes both the ostensibly deliberating Demiurge of the *Timaeus* (cf. e.g. 29d7-30a7), and the unfair-crude Epicurean critique against a laborious Demiurge who, like a human artisan, uses his hands and tools to form the world. For the last remark see Plotinus' explicit clarifications against such an anthropocentric conception in III.8.2, 1-6, V.8.7, 10-12, V.9.6, 22-24, and Armstrong's informative notes in vols:III, p.363, and V, p.303. Cf. also O'Meara, 366-367 and 369. In this article O'Meara puts forward the proposal that in the early treatises (e.g.IV.8.[6]) Plotinus has not deleted the demiurgic functions of the lowest level of Soul, although the rest of the system is clearly emanative (pp. 368-370). According to the modern significant interpreter (p.370ff.) it is only in the

**Aspects of nature and of its relation to craft in Plotinus with specific reference to the
aristotelian background**

Nonetheless, let us grant to Plotinus the non-deliberative aspect concerning Nature and the other Hypostases. Now, what about craft⁸⁶? Why does not craft/art, too, deliberate, and why does Plotinus, in an Aristotelian manner, use the comparison with art, and not the artisan, to illustrate his point on Soul?⁸⁷ The question becomes even more pivotal when one considers the account of *Enn.*IV.3.[27], where Plotinus seems to be denying the deliberation of Soul-Nature, on the grounds that otherwise it would be like craft:⁸⁸ “and it [sc. Soul] makes, not according to a purpose brought in from outside, nor waiting upon planning and consideration; for in this way it would not make according to nature, but to an art (τέχνην) brought in from outside. For art is later than soul, and imitates it, making dim and weak imitations, toys...”⁸⁹ This apparent inconsistency aside, the Aristotelian colour of the passage is still conspicuous. Basically, this is what we have seen Aristotle advocating in *Physics*(199b28-30): if the efficient cause was *inside* the material, then the process of the formation would be ‘automatic’, having an internal source of change. Now, we have seen that for Plotinus the efficient cause is identified with the formal cause,

later treatises (e.g.IV.3-4 [27-28] and “Gross-Schrift” [30-33]) that Plotinus speaks in emanationist terms even for that lowest level. However, at the same time O’Meara has already consented that the motives of non-deliberation and of absence of “gross manual methods” concerning ‘Demiurge’s’ functions (p.369) exist from the very beginning of the Neoplatonic philosopher’s writings. Well, if this is the picture that O’Meara draws, we are afraid that it is very difficult for us to capture what O’Meara means by demiurgic (in contrast to emanative) process characterized by non-deliberation and no anthropocentric toilsome work. We hope that the whole preceding discussion has shown that all these notions, e.g. creation as emanation-being-contemplation-generation-no deliberation-no anthropomorphism, are interwoven and mutually entailing each other. It is the presuppositions of the Plotinian system that lead to such a conception of the ‘proper’ demiurgic process as emanation, and these presuppositions are already present from Plotinus’ very first, although late in his life, attempt to write down his reflections (see Porphyry, *On the life of Plotinus and the order of his books*, translated in Armstrong’s vol.I.§4, e.g. 11.9ff, and Armstrong’s Preface in vol.I,p.vii). The fact that Plotinus does not mention his emanative account of Nature in the early treatises, as he does in III.8ff., need not mean that “the demiurgic functions...are not...removed” (p. 369), and that later he somehow changed his mind modifying his accounts. Rather, the elaboration that was achieved throughout the *writing* development [on this see O’Meara’s n.43, p. 378] perhaps enabled Plotinus to spell out a satisfying account of ideas that already existed seminally in his first treatises.

⁸⁶ In addition to our preliminary remarks on the sense of craft/art we cite Anton’s,1967, p. 100a first note-methodological remark: “The fact that Plotinus includes under the notion of art such things as skills, professions, various activities ranging from medicine and agriculture to politics and rhetoric, does not in any way affect the thesis of this paper; nor would any extensive treatment of the broader denotation of art, it seems to me, lead to conclusions different from the ones presented in this paper.” Therefore, the fact that Anton focuses on the aesthetical aspect of art, whereas we have not imposed such a restriction, need not prevent us from referring to Anton without any qualifications.

⁸⁷ Cf. the already cited passage from IV.8[6].8, 13-16. We remind here that in our ch.II.ii we have tried to show why when Plotinus refers to Soul (as maker), we can also imply the existence of Nature, without need for any explicit mentioning. Nature is subsumed in Soul-Hypostasis.

⁸⁸ We are not going to touch any questions referring to the development and unity of Plotinus’ thought in relation to the chronological order of the writing of each treatise. In any case, any ‘developmentalistic’ view of Plotinus seems to be quite different from the issue of the Platonic developmentalism.

⁸⁹ IV.3 [27].10, 14-18. Cf. also Armstrong’s n. ad loc. (vol.IV, p. 66): “...It is one of Plotinus’s frequent assertions of the inferiority of planned, rational (in the ordinary human sense) activity as inferior to the divine, spontaneous activity which works without planning...”.

which is also the final one.⁹⁰ Such a cause is every level of the intelligible hierarchy that generates an inferior one. Of course, the λόγοι have emanated from Nous, which is the offspring of the One; but in every lower level of emanation the λόγοι are the images of the λόγοι that generated them. Hence, these λόγοι-traces actually *are* the lower entity which generates again. Thus, whereas these forming principles come from outwards(-‘outside’), they are immanent in the entity that takes the role of a further progenitor, which continues to generate in this ‘non-calculative’ sense.⁹¹

But we seem to be digressing from the topic of craft. Does it deliberate or not? The question appears somehow awkward, since there is no need at all to find out whether craft has deliberation, given that art/craft does not initiate any change, as Nature would do. But the issue need not be that simple for Plotinus. In the cited passage from IV.8 Plotinus uses the Aristotelian reference for craft, and not the artisan. Now, in the last passage from IV.3 he uses the term “τέχνη”, but Armstrong’s careful translation speaks for “*an art*”, e.g. that of carpentry, and not the whole of art(s)/craft(s). Hence, we are inclined to see in that reference a stronger implication to the mediating function of the artisan, who expresses the human adaptation to certain needs, than in the passage from IV.8. What is more, it is notable that in IV.3 Plotinus characterizes craft as “later than soul” and as imitating the latter. Of course, apart from Nature, as the lowest trace of Soul, a human agent can imitate Soul/Nature in its productive activity. Nevertheless, this does not express Plotinus’ appreciation of art/craft, as depicted elsewhere.⁹² Therefore, the issue calls for a closer examination.

Remarks on the nature of craft, artisan and demiurgic production

In *Ennead* II.9.[33] Plotinus seems to be holding the same Platonic-depreciating attitude towards art/craft,⁹³ as in IV.3.[27]: “For it [sc. Demiurge-Soul] made the world in every way after the manner of nature rather than as the arts make; *for the arts are later than nature and the world.*”⁹⁴ However, in the immediately preceding V.8.[31],⁹⁵ where we have ample references to art/craft, the situation is much different.⁹⁶ Plotinus will declare that “if anyone despises the arts because they produce their works by imitating nature, we must tell him, first, that natural things are

⁹⁰ Cf. again O’Meara, pp. 370 and 373.

⁹¹ Consequently, cf. also IV.4[28].11, 1-5: “The administration of the universe is like that of a single living being, where there is one kind which works from outside and deals with it part by part, and *another kind which works from inside*, from the principle of its life. So a *doctor* begins from outside and deals with particular parts and is often perplexed and considers what to do, but *nature* begins from the principle of life and has *no need of consideration* (βουλευσεως).” [Our emphases; cf. also *ibid.*, §12, 45-49.] It is extremely interesting that, as we have seen, Aristotle (*Ph.*, 192b23-27 and 199b30-32), uses the ‘art’-example of doctor to contrast Nature, and of the *self-healed* doctor to compare it with Nature. Cf. also Καλλιγᾶς’ n. ad loc. (: on IV.4.11,1-11), 445-446.

⁹² Cf. Armstrong’s n. in vol.IV, 66-67 and Καλλιγᾶς, 376.

⁹³ See Plato, e.g. *Republic*, X, 597bff.

⁹⁴ II.9 [:last part of the “Gross-Schrift”].12, 17-18.[Our emphasis.]

⁹⁵ Viz. the second part of the “Gross-Schrift”.

⁹⁶ Cf. also Armstrong’s nn.1 in vol.V, pp. 240, 300-301, and Anton, 1967, 96a, who states that regarding the reflections on art, “Plotinus derives his Platonism not from the *Republic* but from the inspiring message of Diotima in the *Symposium*.”

**Aspects of nature and of its relation to craft in Plotinus with specific reference to the
aristotelian background**

imitations too. Then he must know that the arts do not simply imitate what they see, but they run back up to the forming principles from which nature derives; then also that they do a great deal by themselves, and, since they possess beauty (τὸ κάλλος),⁹⁷ they make up what is defective in things.”⁹⁸ But even if some of the crafts are imitations of the vulnerable paradigms of Nous, are they, as principles of creation, still later than Nature in the hierarchy of being? In the preceding lines of the same chapter Plotinus states that “the material did not have this form, but it was in the man who had it in his mind even before it came into the stone; but it was in the craftsman, not in so far as he had hands and eyes, but because he had some share of art.”⁹⁹ From this remark it becomes evident that not only does the Alexandrian philosopher separate the ‘inmattered’ form from the idea residing in artist’s mind, but he also differentiates the artist’s idea from the ‘art’ itself. It should be also noted that in the following lines art/craft is contrasted with the artistic result, in the sense that the latter is a degradation of the former, as exactly the λόγοι in the level of Soul are degradation of the Forms in Nous.¹⁰⁰ What is more, Plotinus makes the ‘informed’ mind of the craftsman being dependent on the sharing in (an) art/craft, as in the case of human intelligence being dependent upon Intellect. Is then art/craft posed in another level, being independent from the artist?

In V.9 Plotinus formulates the above question as follows: “Are the works of art (κατὰ τέχνην) and the arts there [sc. in the intelligible realm], then?”¹⁰¹ His answer is counter-balancing,¹⁰² and the gist of it amounts to the statement that “the Form of man

⁹⁷ For Plotinus’ philosophy of the beautiful, the theme of Γ. Βιζυηνός’ doctoral dissertation, see already the very first treatise Plotinus wrote: I.6 «Περὶ τοῦ καλοῦ». See also an exposition in Μᾶνος, 1999, 77-87.

⁹⁸ V.8.1, 32-38.

⁹⁹ Ibid., §1, 15-18.

¹⁰⁰ Cf. *ibid.*, §1, 19-21, 23-25, 31-32: “So this beauty was in the art, and it was far better there; for the beauty in the art did not come into the stone, but that beauty stays in the art and another comes from it into the stone which is derived from it and less than it...If art makes its work like what it is and has – and it makes it beautiful according to the forming principle of what it is making- it is itself more, and more truly, beautiful...and music in the world of sense is made by the music prior to this world.”

¹⁰¹ V.9.[5].11, 1.

¹⁰² Plotinus discerns three categories of arts/crafts (V.9.11: 1-27): the first is comprised by the imitative arts (“μιμητικῶν τεχνῶν”), such as sculpture and painting, which have as models objects of sense, and therefore they do not deserve a place in the intelligible world, since they are indeed ‘three steps away from truth’ [cf. Plato, *Rep.*, 602c1-2]. In this group we should add arts such as farming, or medicine which are only concerned with needs corresponding to the sensible world. In contrast to these there are arts that have as occasions sensible things, but the end is the expression of the harmony and proportions of the intelligible realm. Music is the best representative of this group. Additionally, since geometry and wisdom are already concerned with the intelligible world, they also must have a place there. The third group is comprised by ‘double aspect’ arts. The arts that produce artificial objects, such as carpentry belong to the intelligible world to the extent that they use proportions. However, to the extent that they are mingled with sense-objects, they do not belong there. [We remind here that the question whether ideas of artifacts exist in Plato has been a vexed one. See also Armstrong’s n.2 ad loc., 312-313.] Hence the position of reconciliation is that they belong to the [Form of] man, as also the whole imitative arts of the first group do, since they, too, use proportions. They same holds for arts such as rhetoric and generalship which must have a part derived from Nous, although their matters emerge in the human world of sense. Finally, Armstrong (vol.V, 312, n.1) adds that concerning the later parallel passage of V.8.1 “there is no reason to suppose that Plotinus intends to abandon there the distinction which he makes here...”.

is there [sc. in Nous], and of rational and artistic man, and the arts which are products of Intellect...".¹⁰³ These are not the only passages that Plotinus will give a privileged-independent position to the 'artistic forms' in relation to the, at least worldly, artisan. In a previous chapter of the same treatise Plotinus will strongly declare that "the objects of sense are what they are called by participation, since their underlying nature receives its shape from elsewhere: bronze, for instance, from the *art* [sic.; not the artist] of sculpture, and wood from the art of carpentry, *the art passing into them through an image, but itself remaining in self-identity outside matter* and possessing the true statue or bed."¹⁰⁴

Consequently, it seems that for the Neoplatonic philosopher 'art/craft' represents the *forms* which can be instantiated in the works of art/artifacts.¹⁰⁵ However, the form that finally is going to be projected on the material of the artifact is going to be a mere image of the prototype *art/craft*, viz. (potentially) artistic form,¹⁰⁶ which the mind of the artist has apprehended.¹⁰⁷ This is also why Plotinus can compare art/craft and the artificial product as being of the same kind,¹⁰⁸ but just not equal e.g. in beauty.¹⁰⁹ This procedure should remind us of the analogous degradations of λόγοι (rational forming principles) through their subsequent emanations-imitations from the level of Nous down to the lowest aspect of Soul, Nature.¹¹⁰ What is more, it is exactly for this reason that Plotinus chooses to illustrate the manner that Hypostasis Soul generates its lower realities¹¹¹ with the example of the procedure pursued in art/craft.¹¹²

¹⁰³ V.9.12, 1-2. The general passage is indeed obscurely structured. Nonetheless, the uncertainty need not refer to our point, but to the main topic there, i.e. the existence or not of forms of individuals. Cf. also *ibid.*, § 10, 25: "Therefore none of the things which are contrary to nature are there [sc. in the intelligible world], just as there are none of the things which are contrary to art in the arts, and there is no lameness in seeds."

¹⁰⁴ *Ibid.*, §5, 3 6-41. [Our emphasis.]

¹⁰⁵ Of course, such a conception is contrary to our modern intuitions that relate art/craft not only to the 'what', but mainly to the 'how' of a procedure, to which the word 'skill' refers. Perhaps, a painting and a sculpture represent 'David', but the painter need not know *how* to handle the marble, so that he instantiates the same representation. From this point of view, Plotinus remains a faithful Platonist, adhered to the importance of the (value of the) content of the work of art, even if he does not wholly accept the pejorative view of the work of art as 'imitation of an imitation'. Besides, Plotinus firmly believes that when we admire the beauty of a thing, we admire the beauty of its paradigm (cf. V.8.8, 11-15).

¹⁰⁶ It is in such a sense that Anton, p.94a, will characterize art in Plotinus as "at once imitative and emanative".

¹⁰⁷ Cf. V.9.3, 30-32, 35-37: "...but Intellect provides it [sc. Soul] with the forming principles, as in the souls of artist the forming principles for their activities come from their arts; ... The things which Intellect gives to the soul are near to truth; but those which body receives are already images and imitations." The first lines of this quotation remind us of Ross's account of the artistic procedure in Aristotle, cited *supra*, p.16 (ch.III).

¹⁰⁸ Cf. analogically III.8.5, 24-25: "ὁμογενές γὰρ αἰεὶ δεῖ τὸ γεννώμενον εἶναι, ἀσθενέστερον μὴ τῷ ἐξίτηλον καταβαῖνον γίγνεσθαι."

¹⁰⁹ Cf. the passages cited *supra*, n.100.

¹¹⁰ See also E. Μουτσόπουλος, 1978, especially p.171.

¹¹¹ We have already seen how this 'discursive contemplation' being a product of contemplation ("θεώρημα") generates more dimmed contemplations as products of its contemplation. (Cf. e.g. III.8.5, 1-6.)

¹¹² Cf. III.8.5, 6-8: "it is like the way in which art produces; when a particular art is complete, it produces a kind of another little art in a toy which possesses a trace of everything in it." It is notable

**Aspects of nature and of its relation to craft in Plotinus with specific reference to the
aristotelian background**

Nevertheless, which is the position of the human craftsman within this scheme? Anton stresses the placement of human factor as intermediate between Nous and Nature.¹¹³ Man can have a privileged access to Nous, through his undescended soul, whereas Nature, being the murkiest contemplation, is deprived from this direct relation.¹¹⁴ Hence, Anton emphasizes that the beauty of the *conscious* artistic creation is superior to that of the ‘unconscious’ Nature’s products.¹¹⁵ And it is true that for Plotinus this privileged relation with the intelligible enable arts to “do a great deal by themselves”¹¹⁶ and complete the task of Nature where it is necessary.¹¹⁷ However, let us not forget the aspect of deliberation, which we have seen that for both Aristotle and Plotinus denotes a kind of deficiency. From this point of view Nature, as not deliberating, seems to be in a better position in comparison to the artist, who apparently deliberates. Or for Plotinus the ideal craftsman does not βουλεύεται? The question remains: who is the true craftsman?

Plotinus has given the answer in relation to the account of the formation of the world in the *Timaeus*: the true Demiurge is Nous,¹¹⁸ who certainly does not

that for Plotinus the perfection of an art (artificial form, and not the artist) gives birth again to an art (and not to an artistic result) of a lower degree, viz. to an (artistic) *form* that is going to be projected to the material (or before that, to ‘inform’ the mind of the craftsman).

¹¹³ Cf. Anton, 95b. Such a position is analogous to that of φιλόσοφος Eros in the *Symposium*, who is a medium between humans and gods.

¹¹⁴ Cf. also Anton, 96b.

¹¹⁵ Cf. *ibid.*, 94b-95a.

¹¹⁶ The phrase need not entail an absolute freedom of the artist, but the fact that *art/craft* creates things that did not have (prior) existence in the natural world, such as a bed or music, whose initial place is in Nous as we have seen above. If one goes for the first alternative, such a freedom should involve only the accidental features of the artifact, not the essential ones.

¹¹⁷ Cf. V.8.1, 36-38; cf. also Anton, 96b-97a. We remind the reader that for Aristotle (*Ph.*, 199a, 15-17) “generally art in some cases completes what nature cannot bring to a finish, and in others imitates nature.”

¹¹⁸ Cf. V.9.3, 25-26. [See also Armstrong’s nn.1 in vol.IV, 160-160 and vol.III, 410.] The question over the identity of the Demiurge has always been one of the more vexed problems of Platonic interpretation since Antiquity. From the vast literature concerning the Platonic scholarship, Κάλφας’ thorough survey, 1997, 65-105, must be noted. [For Κάλφας the Demiurge is identified with the rational part of the World-Soul. Our only remark here is that Κάλφας seems not to be so aware of the Neoplatonic nuances of some of his proposals.]

Concerning the interpretation that Plotinus adopts, contrary even to Porphyry, it is true that sometimes he seems vacillating [cf. e.g. IV.4.10, 1-2: “Ἀλλ’ ἐπει τὸ κοσμοῦν διττόν, τὸ μὲν ὡς τὸν δημιουργὸν λέγομεν, τὸ δὲ ὡς τὴν τοῦ παντὸς ψυχὴν...”; cf. also O’Meara, 370, n.23], because he does ascribe demiurgic functions to Soul [see in relation to a Gnostic doctrine II.9.6, 14-16]. But how could he do otherwise since it is Soul, and especially Nature, that is nearer to matter, and hence to the physical world? [Cf. also Vassilopoulou, 227, n.31.] However, there is an aspect concerning the Plotinian (figurative) interpretation of the *Timaeus* that needs to be noted. When Plotinus asserts that the true Craftsman is the Intellect, he does not need to mean that the Platonic Demiurge, being subjected to the intelligible paradigm, is not an entity corresponding better to the level of Soul in his system. What he aims to show is that, regardless of Plato’s related silence, such a venerable craftsman must be the outcome-image of an even greater Demiurge, who is, thus, to be identified with the intelligible living being,

Such a rationale follows a fundamental tenet of Neoplatonic causation: in the series of generation the producer is better than its product [cf. e.g. V.8.1, 30-31: “καὶ τὸ πρῶτον ποιοῦν πᾶν καθ’ αὐτὸ κρείττον εἶναι δεῖ τοῦ ποιουμένου”; V.5.13, 37-38, and III.8. 5,17: “Οὐκ ἴσον δὲ τὸ προϊὸν τῷ μείναντι.” Cf. also V.8.2, 31-32 where Nature is held more beautiful than its products; *ibid.*, §3, 1-3 for Nature in

deliberate.¹¹⁹ Therefore, if Intellect *is* the whole set of Forms, viz. both the λόγοι that will proceed to form Nature, and (the λόγοι of) art(s/crafts),¹²⁰ which will ‘enform’ the artists’ minds-individual souls,¹²¹ then we are in a position to understand why Plotinus agrees with Aristotle that “also *art* does not deliberate”. On the other hand, when Plotinus states that, unlike Soul’s creativity, the making according to art/craft implies consideration (“βουλήν ἢ σκέψιν”) and “a purpose brought in from outside”,¹²² he aims to stress the necessary mediation of the human agent–craftsman, who is characterized not only by discursive thinking, but also from deliberation and manual labour. What is more, craftsmanly production, in the sense of imposing form to a material,¹²³ is superior to the natural, not due to the deliberation that human

relation to its producer. Finally, cf. Proclus, *The Elements of Theology*, prop.7, ll.1-2 (Dodds): «Πάν τὸ παρακτικὸν ἄλλου κρείττον ἐστὶ τῆς τοῦ παραγομένου φύσεως.»] What is more, in this series which has a first and a last term every intermediate entity is *both* product and producer (efficient-formal-final cause), excluding the One, which is only producer, and matter, which is a mere product. [See e.g. II.9.8, 20-25 concerning Intellect: “The image has to exist, necessarily, not as the result of thought and contrivance; the intelligible could not be the last, for it had to have a double activity, one in itself and one directed to something else. There had, then, to be something after it, for only that which is the most powerless of all things has nothing below it.” It is exactly in this sense that, as Plotinus contends in III.8.5, 6-8, *art*, like Soul, makes another “little *art* in a toy which possesses a trace of everything in it.”]

It is notable that also the One is sometimes called “ποιητής” (cf. e.g. III.8.11, 37). However, in the contexts of the formation of the physical world upon the intelligible paradigm we are most interested in the λόγοι that emanate from Nous—a unity in *multiplicity*—, and whose degradations form the variegated world. As Gerson, p. 572, has interestingly pointed out, the One is a cause of the *existence* of the rest realities, whereas being-οὐσία, viz. the *multiplicity of Forms*, derives from Nous, even if Intellect constitutes itself as the best possible image of the One. [Let us keep in mind that in the *Timaeus*, in contrast to the *Republic*, there is no reference to a *Highest Form of the Good*.]

Therefore, since the demiurge-Soul is formed by the emanated λόγοι of Nous, and since ‘when we admire the beauty of a thing, we admire the beauty of its paradigm’, Nous must be a more venerable product than Soul is; and if Soul is a craftsman, then the true Craftsman must be Intellect, as the principle of essence. Finally, we should add that the whole preceding discussion is intimately related to the other controversial Platonic issue, viz. whether the intelligibles are outside Intellect. [For the Plotinian stance, contra e.g. Longinus, see V.5.§§1-2 and Armstrong, 1960. Cf. also VI.2.22, 42-46: “So then the image of the intelligible is not of its maker but of the things contained in the maker, which include man and every other living being: this here is a living being and so is that which made it, each in a different sense and both in the intelligible.”]

¹¹⁹ Cf. also V.8.7, 24-28. Let us not forget that such an argument was proposed by Neoplatonists against the (Christian) idea that the world had a beginning in time. If that were the situation, then why did God *choose* that time instead of another? Rather, for the Neoplatonists god does not deliberate and, (hence), the cosmos is eternal.

¹²⁰ Viz. (potential) artistic forms, even if partially in the (mind of the) form of (artistic) man. See supra passim.

¹²¹ Cf. also V.8.5, 1-4: “Some wisdom makes all the things which have come into being, *whether they are products of art or nature*, and everywhere it is a wisdom which is in charge of their making. But if anyone does really make according to wisdom itself, let us grant that the arts are like this.” Now, the subsequent reference (ll. 4ff.) to the τεχνίτης who “goes back again to the wisdom of nature, according to which he has come into existence” need not entail direct association of the artist with Nature (which is mentioned elsewhere in the passage). Rather, the reference to “σοφίαν φυσικὴν” should denote an entity whose nature *is* intelligence, and this is Nous as can be easily extracted from the references especially of II.5-8 and 12-17. [Therefore, Armstrong’s translation of “wisdom of nature” is tricky.]

¹²² IV.3.10, 15-17.

¹²³ Cf. also III.8.7, 25-26: “καὶ ὁ γε κακὸς τεχνίτης ἔοικεν αἰσχροῖς εἶδη ποιοῦντι.”

Aspects of nature and of its relation to craft in Plotinus with specific reference to the aristotelian background

consciousness implies in contrast to Nature, but due to human's access to a better *paradigm*. This is mainly why the position of craftsman, although necessary, is degraded as of secondary and instrumental importance in comparison to the great Craftsman. The same, although to a greater extent, holds for Nature's creativity in contrast to its venerable source of λόγοι.

However, Plotinus' thought is not bereft of tensions. Whereas World-Soul is never dragged by its corporeal substrate, this is not true for the communion of the individual soul with its body.¹²⁴ As a counter-balance, the individual soul, via its undescended part, can return not only to the tranquility of pure Nous, but it can also attain the Union with the One. However, in the process of transcending the obstacles of material nature, the individual submits itself to the 'necessity'- non-deliberation of the procession governing the impersonal Hypostases. Plotinus does not seem offended by the implications of the following thought-experiment: "But I think also that if we were archetypes and real being and forms all at once, and if the form which makes things here below was our real being, our craftsmanship (δημιουργία) would have the mastery without toil and trouble. And even now, man also is a craftsman, of a form other than himself since he has become something else, what he is; for he ceases to be the All now that he has become man; but when he ceases to be man he «walks on high and directs the whole universe»; for when he comes to belong to the whole he makes (ποιεῖ) the whole."¹²⁵ If we become the All, without any deficiency related to deliberation, then it is certain that the natural production will necessarily continue to exist. Nonetheless, is it assured that also art/craft will have reason to exist in our physical world?¹²⁶ An answer might be the completion of Nature as 'improvement' of the divine 'creation' of the physical world in the image of the intelligible.¹²⁷ But if the human ideal is the going *out* of the material world,¹²⁸ why should the art/craft residing in Nous have any reason and possibilities to continue being (literally) materialized by human *composites* to satisfy their worldly needs?¹²⁹ Of course, it is certain for Plotinus that both Nature and human beings will forever exist. Nevertheless, whereas

¹²⁴ See our references in ch.II.ii.

¹²⁵ V.8.7, 28-35.

¹²⁶ Plotinus is not very clear whether it is initially Nous' artistic λόγοι that inform the mind of the artist, and prompt him to instantiate them, as in the case of Nature, or it is initially the deliberating artist who apprehends the intelligible λόγοι, because of his need to create. [Anton, p. 97a goes for the second alternative.] In any case, the human craftsman, as the Platonic Demiurge, remains subjected to the noetic paradigms (viz. the true Plotinian Demiurge), (the images of) which 'enform' his mind [cf. V.9.3, 30-32], so that he expresses their nature via his art. Hence, the room for artistic freedom, as intimately linked to human deliberation, is seriously diminished, contrary to modern conceptions that extol the aspect of freedom of the artist.

¹²⁷ Cf. Anton, p. 97a.

¹²⁸ Cf. e.g. III.4.2, 12: "διὸ φεύγειν δεῖ πρὸς τὸ ἄνω..."; cf. Plato, *Theaetetus*, 176a8-b1.

¹²⁹ Anton, p. 97a mentions the Plotinian paradox that whereas beauty has a divine origin, *vita contemplativa* is still the human ideal. A similar problem can be detected in Plotinian ethics as well. As in Plato, the Forms have both a descriptive and a normative sense. Hence, the apprehension of e.g. the Idea of Bravery calls for its practical instantiation in our mundane world. However, how possible would this be for a sage who is absorbed in contemplation, as a means for the acquaintance with the Forms? [Cf. Dillon, 1996, e.g. p. 324.] Finally, let us not forget that for Plotinus both "making and action are either a weakening or a consequence of contemplation."... [III.8.4, 39-40].

the ideal of non-deliberative Nature is not contrasted to its kind of creativity,¹³⁰ the rational soul's aim¹³¹ cannot be confined to the craftsmanly/artistic creation...¹³²

References

Primary texts' editions-translations-commentaries

- Armstrong, A.H. 1966-1988. Plotinus, *Enneads I-VI*, with an English Translation by A.H. Armstrong, vols. I-VII, Loeb Classical Library, Harvard University Press, Cambridge, Massachusetts, London, England.
- Barnes, J. 1984. *The Complete Works of Aristotle. The revised Oxford translation*, ed. by J. Barnes in 2 vols., Bollingen Series LXXI 2, PUP, Princeton, (61995).
- Dillon, J. - Gerson, L.P. 2004. *Neoplatonic Philosophy: Introductory Readings*, Hackett, Indianapolis/Cambridge.
- Henry, P. et Schwyzer, H.-R. 1964-1983. *Plotini opera*; tomi I-III: *Porphyrii Vita Plotini; Enneades I-VI*, Oxonii e Typographeo Clarendoniano, OCT [:editio minor].
- Ross, W.D. ¹1936. *Aristotle's Physics. A revised text with introduction and commentary*, Oxford, at the Clarendon Press, (repr. ³1966).
- Καλλιγᾶς, Π. 2009. *Πλωτίνου Ἐννεὰς Τετάρτη*, ancient text, trnsl. [in modern Greek], commentary, Academy of Athens, Βιβλιοθήκη Α. Μανούση 10, Centre for Research of Greek and Latin Literature, Ἀθήναι.
- Κάλφας, Β. ²1997. *Πλάτωνος Τίμαιος*, introduction.-trnsl.-comm. [in modern Greek], Polis, Athens, (repr.: ⁸2007; ¹1995).

Secondary literature

- Adamson, Peter [forthcoming in *Etudes Néoplatoniciennes*]: "Making a Virtue of Necessity: *Anankê* in Plato and Plotinus", (typescript, pp.1-20).
- Annas, J. 1982. "Aristotle on Inefficient Causes", *The Philosophical Quarterly*, vol. 32, No. 129 (Oct.), 311-326.
- Anton, J.P. 1967. "Plotinus' Conception of the Functions of the Artist", *The Journal of Aesthetics and Art Criticism*, vol. 26, No. 1 (Autumn), 91-101.
- Armstrong, A.H. 1960. "The background of the doctrine «that the intelligibles are not outside the Intellect»", in *Les Sources de Plotin. Dix exposes et discussions*, Geneve, Foundation Hardt, 393-413.
- Deck, J.N. 1967. *Nature, Contemplation and the One in the Philosophy of Plotinus*, Toronto: Univ. Press (London: Oxford Univ. Press).
- Dillon, J.M. 1996. "An ethic for the late antique sage" in L.P. Gerson (ed.), *The Cambridge Companion to Plotinus*, CUP, Cambridge, (21999), pp.315-335.

¹³⁰ Cf. IV.4.13,7 -8: as a murky contemplation Nature "does not know, but only makes."

¹³¹ See the contemplation whose *non-deliberative* by-product is the creation of all things; cf. III.8.8, 26. See supra, ch. II.iii.

¹³² Perhaps, this is the view that Aristotle, too, would share...

Aspects of nature and of its relation to craft in Plotinus with specific reference to the aristotelian background

- Emilsson, E.K. 2007. *Plotinus on Intellect*, OUP, Oxford.
- Gerson, L.P. 1993. "Plotinus's Metaphysics: Emanation or Creation?", *Review of Metaphysics*, 46:3 (Mar.), 559-574.
- Leroux, G. 1996. "Human freedom in the thought of Plotinus", in *The Cambridge Companion to Plotinus*, op. cit., 292-314.
- Martijn, M. 2010. *Proclus on Nature: Philosophy of Nature and Its Methods in Proclus' Commentary on Plato's Timaeus*, Brill Academic Publ., Series: 'Philosophia antiqua', vol. 121.
- McClure, M.T. 1934. "The Greek Conception of Nature", *The Philosophical Review*, vol. 43, No. 2 (Mar.), 109-124.
- Meyer, H. 1919. *Natur und Kunst bei Aristoteles*, Paderborn.
- O'Brien, D. 1996. "Plotinus on matter and evil", in *The Cambridge Companion to Plotinus*, op. cit., 171-195.
- O'Meara, D. 1998. "Gnosticism and the making of the world in Plotinus", in *The structure of Being and the search for the Good: Essays on Ancient and Medieval Platonism*, Aldershot, Ashgate, Variorum, pp.365-378.
- Pépin, J. 1964. *Théologie cosmique et théologie chrétienne*, Paris.
- Ross, Sir W.D. ¹1949: *Aristotle*, Methuen & Co Ltd, London, (¹1923; repr. ⁵1971; ²1974).
- Solmsen, F. 1963. "Nature as Craftsman in Greek Thought", *Journal of the History of Ideas*, vol. 24, No. 4 (Oct. - Dec.), 473-496.
- Vassilopoulou, P. 2002. "Creation or Metamorphosis? Plotinus on the Genesis of the World", in A. Alexandrakis (ed.), *Neoplatonism and Western Aesthetics*, Albany, NY, pp.207-228.
- Wagner, M.F. 1996. "Plotinus on the nature of physical reality", in *The Cambridge Companion to Plotinus*, op. cit., pp.130-170.
- Waterlow, S. 1982. *Nature, Change, and Agency in Aristotle's Physics: a Philosophical Study*, Oxford, Clarendon Press, (repr.: 1998).
- Wiman, I.M.B. 1990. "Expecting the Unexpected: Some Ancient Roots to Current Perceptions of Nature", *Ambio*, vol. 19, No. 2 (Apr.), 62-69.
- Βασιλάκης, Αντώνης Δ. 2009. *Ἡ ὄντολογία τοῦ ὠραίου στο ἔργο τοῦ Πέτρου Βράϊλα-Ἀρμένη*, [The ontology of the beautiful in Petros Brailas-Armenis' work; in Greek], "Σύλλογος πρὸς Διάδοσιν Ὠφελίμων Βιβλίων" (: "Society for Spread of Beneficial Books"), Athens.
- Μᾶνος, Ἀ. 1990. *Ἡ ὄντολογία τοῦ πάθους στο ἔργο τοῦ Πλωτίνου. Τό πρόβλημα τοῦ κακοῦ* (doctoral diss.), Ἑλληνική Ἐταιρεία Φιλοσοφικῶν Μελετῶν, Ἀθήνα. [This work has had a second-enlarged edition under the title: *Ἡ ὄντολογία τοῦ κακοῦ παρά Πλωτίνω. Ἠθικοὶ καὶ μεταηθικοὶ ἀπόηχοι*, Ἰνστιτούτο τοῦ Βιβλίου-Καρδαμίτσα, Ἀθήνα, 2002.]
- Μᾶνος, Ἀ. 1999. *Ἡ μεταφυσικὴ τῆς τέχνης καὶ τοῦ ὠραίου ὑπὸ τὸ φῶς τῆς ἀρχαίας ἐλληνικῆς φιλοσοφίας*, Σ.Δ.Ω.Β., Ἀθήνα.
- Μουτσόπουλος, Ε. 1978. «Ὀντολογία καὶ τέχνη παρά Πλωτίνω», *Φιλοσοφικοὶ Προβληματισμοί*, vol.2, *Ἀναδρομαὶ καὶ Ἀναδομήσεις*, Ἀθήνα, 169-171.