Simplicius on the principal meaning of *physis* in Aristotle's *Physics* II. 1–3[1]

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At the beginning of his Commentary on Aristotle's Physics II.2, Simplicius attempts to reveal the principal meaning of physis, that which in his view is preeminent above all others presented by Aristotle in Physics II.1. Through the arguments he uses to show what the principal meaning of physis is, we are also able to better understand the other meanings. These other meanings are, on the one hand, those which can be indisputably traced in the Aristotelian text itself, and on the other, those which are discovered in the light of Simplicius' insightful reading of it. Simplicius appears to recognize—or at least to be conscious of the fact—that this part of his Commentary constitutes an autonomous analysis and explanation of the different meanings of physis, which sets out to reveal its concealed principal meaning. My aim in this paper is to show that in his comments on Physics II.1, Simplicius is trying to offer an exegesis of the Aristotelian arguments, while in his comments regarding the beginning of Physics II. 2, he proceeds to a bold reading of what Aristotle has said in chapter one. He does this by giving his own interpretation of the meaning of physis, within the frame which Aristotle had already sketched out in the previous chapter, but also by deviating to some extent from Aristotle. For Simplicius the principal, albeit concealed, meaning of physis, within the Aristotelian philosophical framework, lies in the idea that nature is a sort of propensity for being moved and a sort of life, to wit, the lowest sort of life (eschatē zōē).

I. The differentia specifica *of things that exist* by nature *and the definition of* physis *in the* Physics *II.1*

In the first half of chapter one of *Physics* II, Aristotle explains that all natural things are clearly distinguishable from those that are not constituted by nature.[2] According

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[2] *Physics* 192b 8–13. I follow the translation by Philip Henry Wicksteed and Francis Macdonald Cornford (Aristotle, *Physics, Volume I: Books 1-4*. Loeb Classical Library 228 [Cambridge, MA: Harvard University Press, 1957]).

to Simplicius,[3] Aristotle accomplishes his intention to discover just what nature is by systematically revealing the difference between what exists by nature and what does not exist by nature but through other causes; this difference he concludes to be nature. Things that exist by nature differ from those that do not exist by nature in no other way than that 'they have within themselves a source of change and cessation of change'. All the things that do exist by nature clearly have within themselves the source of change and of its cessation—either in respect of place, or of growth and decay, or of alteration.[4]

Simplicius[5] clarifies that by 'source' Aristotle means the efficient cause. He also adds that, just as natural things clearly change from within themselves, in just the same way they have cessation of such change within themselves; for the change and its cessation do not originate from outside, nor are they without limit; rather the change proceeds as far as the limit of the appropriate form and then ceases.[6] It is useful to highlight that while Simplicius in his comment on 192b 12–14 asserts that, when considered as 'source' (*archē*), nature is an efficient cause, in his comment on passage 194b 29–32, he relates nature to the formal rather than to the efficient cause. In his comment on the latter passage he states that Aristotle calls the producer 'the primary principle of change and its cessation' because he wants the productive cause, in the strict sense of the term, to be separate and distinct from its product. Simplicius[7] justifies this exegesis by asserting that the inherent cause, such as the form and the nature, adheres to or is tied to the formal principle. He also reminds us that Alexander, commenting on this passage, agrees that nature is not a productive cause in the strict sense, but is rather a formal cause since it is not foremost among the producers.[8]

It is obvious that in the first half of *Physics* II.1, Aristotle reaches a conclusion regarding the *differentia specifica* of those things which exist by nature and at the same time formulates the definition of nature (*physis*). Simplicius[9] is of the opinion that the conclusion which has been drawn can be put syllogistically according to the first figure as follows. First premise: Nature is that by which things that exist by nature are differentiated from those that do not. Second premise: Things that exist by nature are differentiated from those that do not by having an internal source of change and its cessation in a primary sense, *per se*, not *per accidens*. Conclusion: Therefore, nature is a source of change and its cessation in those things in which it

[3] All references to Simplicius' Commentary on Aristotle's *Physics* are to the page and line of the Berlin Academy Edition (*CAG* IX) and follow the translation of Barrie Fleet (*Simplicius: On Aristotle Physics 2,* [London: Duckworth, 1997]). See Simpl. 264. 6–8.

[4] *Physics* 192b 13–15; see also Simpl. 264. 4–5; 8–9.

[5] Simpl. 264. 10.

[6] Simpl. 264. 10–18.

[7] Simpl. 315. 9–12. Regarding the passage Simpl. 315. 11–12, the translation is my own and is completely different to that of Fleet.

[8] Alexander apud Simplicius *In Phys.* 315. 12–15.

[9] Simpl. 266. 5–9.

is present in a primary manner, *per se* and not *per accidens*. Simplicius[10] believes that the same syllogism and the corresponding conclusion can also be framed according to the third figure.

In the second half of *Physics* II.1, Aristotle determines in how many ways nature is spoken of. According to Simplicius,[11] Aristotle himself has made it quite clear that the whole thrust of his argument has been directed at just that, to distinguish the different meanings of 'nature', since thinkers have understood the term differently and have attributed different meanings to it. Simplicius[12] claims that Aristotle has given a clear exposition of the other meanings, while keeping the principal one concealed. At the beginning of his commentary on the second chapter of *Physics* II, the commentator also provides some very useful summaries of five distinct definitions or meanings of nature.[13]

One possibility would be to study these summaries of five distinct meanings of nature only as complementary to Simplicius' detailed analysis and explanation of the distinct meanings of nature, which Aristotle himself distinguishes within the second half of the first chapter of *Physics* II. However, the consequence of this would be to ignore the significance and importance of what Simplicius puts forward and examines thoroughly within the frame of his Commentary on the second chapter of *Physics* II.[14] What he says here is something new and surpasses in value his comments on the first chapter for three reasons: firstly, because he claims that the principal meaning of *physis* has been concealed by Aristotle in *Physics* II.1; secondly, in his Commentary on *Physics* II.2, he attempts to reveal the principal meaning of *physis*,

[10] Simpl. 266. 10–14. In this case the syllogism can be framed as follows: Things that exist by nature differ from those that do not by having a nature. Things that exist by nature differ from those that do not by having within themselves a source of change and its cessation *per se* and not *per accidens*. Therefore, things that have a nature have a source of change, etc. Therefore, nature is a source of change *per se* and not *per accidens*.

[11] Simpl. 282. 30–283. 1.

[12] Simpl. 283. 1–2.

[13] Simpl. 283. 2–285. 12. See Richard Sorabji in Fleet (Introduction to *Simplicius: On Aristotle Physics 2,* [London: Duckworth, 1997] Part 1, p. 2.).

[14] Simplicius, in his comment on passage 193a 9–28, announces in advance what he will state at the beginning of his comments on *Physics* II.2 (see Simpl. 273. 10–15). In the latter passage of his comments he notes that Aristotle from 193a 9 onward cites the views of those who say that nature is the substrate and of those who say it is what is in the substrate, and he outlines and criticises the arguments of each of the two groups. At the same time, according to Simplicius, Aristotle tells us the meanings of the word 'nature', which is spoken of in several ways, as he himself has made clear at the end of this passage. Instead of the last sentence of chapter one, Simplicius cites here (273. 14–15) the first sentence of chapter two, where Aristotle says: 'Since it has been determined in how many ways nature is spoken of […]' (193b 22). He then adds that he will comment on it *ad locum*. In my view, this statement is clear evidence that in his comments on *Physics* II.1, Simplicius is trying to offer an exegesis of the Aristotelian arguments, while in his comments regarding the beginning of chapter two, he proceeds to a bold reading of what Aristotle has said in chapter one. He does this by giving his own interpretation of the meaning of *physis*, within the frame which Aristotle had already sketched out in the previous chapter. I will return to this discussion later with more textual evidence, which shows that Simplicius in his comments on *Physics* II.1, is just trying to reconstruct Aristotle's argumentation. Conversely, in his comments on II. 2, he develops his own reasoning regarding the principal meaning of *physis,* to some extent deviating from Aristotle.

that which in his view is preeminent above all others; thirdly, through the arguments he uses to show what the principal meaning of *physis* is, we are also able to better understand the other meanings. These other meanings are, on the one hand, those which can be indisputably traced in the Aristotelian text itself, and on the other, those which are discovered in the light of Simplicius' insightful reading of it.

Simplicius appears to recognize—or at least to be conscious of the fact—that this part of his Commentary constitutes an autonomous analysis and explanation of the different meanings of *physis*, which sets out to reveal its concealed principal meaning. This is what we can infer from his words in the following sentence: 'But since he has given a clear exposition of the other meanings while keeping the principal one concealed, it would be a good idea to review them all briefly […]' (Simpl. 283. 1–3). Let us attempt to analyse and understand his argumentation in these summaries of the different meanings of *physis*, as presented at the beginning of his Commentary on *Physics* II. 2. Simplicius states the following by way of an introduction: '[…]since natural body comprehends matter, form and the compound, and is generated and consequently embraces both the change which results in coming-to-be and above all the cause of change (for where there is change there is in all cases a source of change), nature can be spoken of in five ways'.[15] This introductory passage already describes in a comprehensive way the criteria by which Simplicius proceeds to the recognition and formulation of five distinct meanings of *physis* which are tantamount to five distinct definitions of it.

II. Simplicius' five distinct definitions or meanings of physis in his Commentary on Physics II.2

1. The matter

The first meaning of *physis* (nature) mentioned by the commentator relates to the matter of each thing and is identified with the first meaning of *physis* as presented by Aristotle in passage 193a 9–28. According to Simplicius,[16] when Aristotle says matter (*hylē*) he means that which belongs primarily as something formless (*arrhythmiston*) to every natural entity, just as in the case of the products of art, in the statue it is the bronze, in the ship it is the wood, in every natural body it is the primary matter (describing it from the bottom upwards) or the ultimate substrate (as those starting their analysis from the top call it). B. Fleet[17] notes that there is a certain ambiguity in the way in which matter is designated because the examples given here refer to the

[15] Simpl. 283. 3–6.

[16] Simpl. 283. 6–10.

[17] Fleet (*Simplicius: On Aristotle Physics 2,* 170, n. 102) notes that 'the proximate matter of a thing (e.g., the bronze of a statue) is on some occasions termed its primary matter, although this term is more normally applied to the bare matter, devoid of all qualities […]'.

proximate matter, although Simplicius clearly means the primary matter, as the use of the words *prōtōs arrhythmiston* (283.8) and *prōtē hylē* proves. In his comments on passage 193a 9–28 of the *Physics* II.1, Simplicius explains the relation between the several substrates of a natural being, given that in each composite entity there are often several things which go by the description of substrates and which the procedure of analysis can bring to the fore; for example, in the bodies of animals the organic parts act as substrates immediately below the whole form, while the *homoeomerous* parts act as substrates to them, the so-called four elements as substrates to them, and finally primary matter as substrate to the four elements.[18]

This genealogy of the substrates leads Simplicius[19] to draw a distinction between that which is *prōton arrhythmiston* or *arrhythmiston kath'auto* (i.e., formless or unformed *per se*) and that which is *pros ti arrhythmiston* (i.e., formless or unformed in relation to something else). While primary matter—that matter which is common to all things—is unformed *per se*, all the other things, such as the organic parts, the *homoeomerous* parts, and the elements, are lacking in form in relation to something else (i.e., in relation to the form which will be imposed on them), although they do already have their own forms. For example, bronze, the matter of a statue, and wood, the matter of a bed, already have their own forms (*eidopepoiēmena*) and in parallel are only lacking in form in relation to something else (*pros ti arrhythmista*). Still, there is a close relation between the proximate and the primary matter because, as Simplicius explains, the bronze and the wood are analogous to the primary matter, for just as they stand in relation to the statue and the bed, so it stands in relation to all things that have their own forms.[20] Furthermore, in terms of the distinction between that which is *prōton arrhythmiston* or *arrhythmiston kath'auto* and that which is *pros ti arrhythmiston,* Simplicius proceeds to the distinction between the primary and common nature of all things, namely the primary matter (*prōtē hylē*), and the proximate nature of each thing, which is its proximate matter (*prosechēs hylē*).[21]

[18] Simpl. 273. 21–24.

[19] Simpl. 273. 25–29.

[20] Simpl. 273. 30–32. This analogy can also be deduced from the fact that in any case the substratum (*hypokeimenē physis*) is to be known from analogy, as Aristotle states in *Physics* I.7, 191a 7–12. The substratum relates to the individual substance as bronze to the statue, wood to the bed, the shapeless material to the shaped thing; William David Ross (*Aristotle's Physics, A revised text with Introduction and Commentary* [Oxford: Clarendon Press, 1936], 346, 494) illustrates the above proportion as follows: *ἄμορφον:τεχνητόν=ὕλη:οὐσία*. From the analogy bronze:statue=wood:bed= primary matter:things that have their own forms, we can deduce the analogy between the bronze, the wood and the primary matter. The latter analogy is deduced from—or implied in—the analogy referred to by Aristotle in the above passage. This analogy between the substrates also becomes obvious from what is said in *Physics* II.1, 193a 17–21, where the phrase '*εἰ δὲ καὶ τούτων ἕκαστον πρὸς ἕτερόν τι ταὐτὸ τοῦτο πέπονθεν […] ἐκεῖνα τὴν φύσιν εἶναι καὶ τὴν οὐσίαν αὐτῶν*' shows that whenever we trace the relation matter: form, what we must consider as the nature and essence of a thing is its matter or its substrate which persists.

[21] Simpl. 273. 32–34. Gerard J. Pendrick (*Antiphon the Sophist, The Fragments*, Edited with Introduction, Translation, and Commentary [Cambridge: Cambridge University Press, 2002], 277–78) casts doubt on the meaning Simplicius ascribes to the word *πρῶτον* in passage 193a 10–11. As we have seen, the latter

At the beginning of his comments on *Physics* II.2, Simplicius points out that matter seems to be *physis* because the nature of each thing must be seen to remain the same throughout all its various changes. In all the various changes of any natural body, that which remains the same would be its nature; and it is the matter which remains the same.[22] According to what is said in his Commentary on *Physics* II.1, in order to show that nature is the substrate and not the form, Antiphon the Sophist adduced the fact that it is nature which either causes things to germinate (*phyousa*) or else is the germination (*ekphysis*), the continuing and constant cause of growth and motion and of generation of like species (*dianastasis eis kinēsin kai tou homoiou apogennēsin*).[23] This description or definition is followed by an example from the field of products of art, where a sharp distinction is drawn between that which is made according to the normal practice of craftsmanship and that which exists according to nature. This is also reduced to a sharp contrast between form and matter, on the assumption that the former is related to art and the latter to nature.

In the case of products of art, 'if you were to bury a bed and if the decay were to have the power to put forth a shoot, then it would be wood that grew, not a bed'.[24]

construes the whole sentence as a reference to the primary matter. It is worth mentioning that in his Commentary on the *Metaphysics* (357. 16–18), Alexander interpreted the words *πρώτου ἐννπάρχοντος* in the parallel passage 1014 b 17-18 in the same way as Simplicius. Pendrick's main argument is that Simplicius' interpretation does not accord with the immediately following examples of bronze and wood as the nature (respectively) of a statue and a bed, in passage 193a 11–12. He believes that the real meaning of *πρῶτον* appears clearly from passage *Metaph*. 1015a 7–10; he claims that in this passage primary matter does not appear at all, so he concludes that in 193a 10–11, *πρῶτον* should be understood in the sense of 'proximate'. But Alexander (359. 26–29) asserts that in this passage of the *Metaphysics,* the water as bronze's immediate constituent is an example which denotes the primary matter, while bronze denotes the proximate matter. Apart from this objection, it is important to remember that Simplicius explains the Aristotelian examples (i.e., the bronze and the wood) as analogous to the primary matter (see also note 20). It is also worth mentioning that Simplicius, in his comment on passage 193a 28–29 (275. 8–30), clarifies that nature must belong to natural things and that even in the case of natural things it is not just any matter that is the nature, but only the primary substrate; this, he states, they call 'the ultimate substrate', the substrate of everything else, but having no substrate of its own. He adds that in the case of animals the organic and the *homoeomerous* parts, together with the elements, act as substrate, but none of these can properly be called the nature, because none of them are the primary substrate.

[22] Simpl. 283.10–16.

[23] Simpl. 273. 35–274.1.

[24] *Physics*, 193a 12–14; cf. frg. 80B15 DK (Hermann Diels, *Die Fragmente der Vorsokratiker, Griechisch und Deutsch*, Zweiter Band [Berlin: Weidmannsche Buchhandlung, 1907]). William Keith Chambers Guthrie (*The Sophists* [Cambridge: Cambridge University Press, 1971], 203, n.1) points out that the conception of the origin of life from putrefying matter does not show any originality, adding that Antiphon's observations on these topics seem to go back to Heraclitus and Empedocles, and to views common to Anaxagoras and Diogenes of Apollonia. Fleet (*Simplicius: On Aristotle Physics 2,* 168, note 78) correctly stresses that behind this argument here lies the nature-convention antithesis, formulated by the Sophists of the 5th century B.C. According to Fleet, Antiphon's point is that a bed is wooden by nature, but a bed only by convention, as is evident from its behaviour when buried. I believe the point is that nature consists in what germinates and decays, namely in what is subject to germination and decay or, in a broader sense, to generation and destruction and eventually to life and loss of life or death; this proves to be the wood (i.e., according to the Aristotelian terminology, matter and not the bed as form or as compound). It is remarkable that Harpocration in his *Lexicon* s.v. *ἔμβιος* quotes Antiphon as using in his work *On Truth, I* the phrase '*καὶ ἡ σηπεδὼν τοῦ ξύλου ἔμβιος γένοιτο*'; so, Antiphon's whole phrase is reconstructed by Hermann Sauppe ('De Antiphonte sophista', in *Ausgewählte Schriften,* ed. C. Trieber [Berlin: 1896], 508-526) as the

Simplicius explains Antiphon's thesis and the above example by stating that this happens because the form is according to custom and convention, to wit, according to the normal practice of craftsmanship as opposed to what is according to nature, and because it is there by convention it comes and goes as something belonging *per accidens*, while the matter persists because it is the essence and nature of the thing, for persistence is the particular property of the essence;[25] but the essence of natural

last phrase of frg. 80B15 DK shows (cf. Ross, *Aristotle's Physics,* 503). It is also worth noting the terminology used in Simplicius' testimony and citation of this fragment from Antiphon's *On Truth*; the decay (*sēpedōn*) is supposed to have the power (*dynamin*) to put forth a shoot (*aneinai blaston*) and become a living thing. These words combined with the use of the infinitive *genesthai* show that Aristotle is deeply influenced by this opinion, which as Guthrie notes can be traced in various pre-Socratic philosophers; because also for him, things that are *by nature* or *according to nature*, are things that have within themselves the power (*dynamin*) to be subjected to motion, generation and corruption. But he deviates from the thesis which maintains that form is connected with *nomos,* custom and convention, by establishing form as the goal of each natural procedure (i.e., of each change and motion), a goal that nature in all its productions aims towards. Still, the view that the form is associated with nature is also something which Aristotle inherited from his predecessors. As reported by Diels immediately after Antiphon's frg. 80B1 and by contrast to Antiphon's thesis, in the Hippocratic work *De arte* 2 it is said that names dictate the forms of things and are legislation or conventions imposed on nature, whereas forms do not originate from names and are not conventions but natural growths, or, in other words, genuine products of nature (*blastēmata)*. Guthrie (*The Sophists*, 204, and *A History of Greek Philosophy, Volume V: The Later Plato and the Academy* [Cambridge: Cambridge University Press, 1978], 27) remarks that as one reads this fragment from *De arte* 2, one is also reminded of Antiphon's contrast between nature as a matter of growth and law as conventional agreement. Elizabeth M. Craik (*The 'Hippocratic' Corpus: Content and Context* [London and New York: Routledge, 2015], 39) notes that the author of the *De arte* is imbued with contemporary medical ideas and influenced by the contemporary sophistic debate, while the scientific thought of the sophists is also implicit in his work. Félix Heinimann (*Nomos und Physis. Herkunft und Bedeutung einer Antithese im griechischen Denken des 5. Jahrhunderts* [Darmstadt: Wissenschaftliche Buchgesellschaft, 1972],157) is of the opinion that the sophist who composed this work used the Ionian-poetic words *nomothetēmata* and *blastēmata* instead of the opposites *nomos- physis,* for the sake of *homoioteleuton* and in order to exalt his poetry to a higher sphere. Harold Cherniss ('Review of Eugene Dupréel, *Les Sophistes: Protagoras, Gorgias, Prodicus, Hippias,* Neuchatel, Éditions du Griffon, 1948-49, pp 408. Bibliothèque Scientifique 14: Philosophie et Histoire', *The American Journal of Philology* 73, no. 2 [1952]: 199–207, at 201–203, especially n.10) has shown in detail the parallels between this specific passage from *De arte* II referred to by Diels and Antiphon's frg. 15 as reported by Simplicius; he highlights in particular the striking affinities between Antiphon's language in frg. 15 and the *De arte* II antithesis between *nomothetēma* and *blastēmata* (cf. Pendrick, *Antiphon the Sophist,* 251, 284). Pendrick remarks that Diels and Kranz are not justified for printing the *De arte* II alongside the frg. 80B1, because it does not appear to have anything to do with it, although he recognizes its close parallel with Antiphon's frg. 15. In my opinion these connections show that Aristotle was also influenced by the very sophistic thought which he seems to refute and criticize. But he proceeded to the formation of his theory by introducing selections, transformations and modifications, which make the thread which binds his thought with its origins invisible or at least not easily discernible.

[25] Simpl. 274.1–8. According to Fritz Steckerl's ('On the Problem: Artefact and Idea', in *Classical Philology* 37, no. 3 [1942]: 288-298, 296) interpretation of Antiphon's fragment within Aristotle's *Physics* 193a9-17, 'that can only mean that the artefacts made by man are *nomos*, not *physis*; only the material is *physis*, and this *physis* will always break through whatever one might do to the material. The form which the artefacts may give to the material is weak; the material-the truly permanent basis of the artefacts-will again and again rid itself of the form. If you bury a bed in the ground, new wood may grow from it, but never a new bed . Arnaud Macé ('La naissance de la nature en Grèce ancienne', in *Anciens et Modernes par-delà nature et* société, eds Stéphane Haber and Arnaud Macé, Collection Annales Litteraires, Série Agon [Besançon: Presses Universitaires de Franche Comté, 2012], 47-84, 59) points out that within Antiphon's fragment in Aristotle's *Physics* we can find the original philosophical motif that the thrust, the budding, and the flowering become in the realm of the natural things the factors which determine the identity and the permanence, and simultaneously the capacity of each natural thing to extend itself and attach to what it grows.

things is according to nature (the being and essence of things that exist by nature are according to nature[26]). It is a widely held view that the distinction and contrast between the wood—considered as the bed's nature—and the bed—which is considered as a conventional arrangement—illustrates the opposition between *physis* and *nomos*, which is prominent in sophistic thought.[27] It is obvious that Simplicius' analysis of Antiphon's thesis, which follows along the lines of the Aristotelian text, tries to adjust the opposition between matter and form, as rival candidates for the meaning and title of *physis*, to the sophistic antithesis between *physis* and *nomos* (nature-convention), by adopting the terminology which accompanies the latter.[28] But in order to form the analogy *physis*: *nomos*=matter: form, following Aristotle, he uses as a medium the relation *physis*: *technē* (nature: art). The following is a brief analysis of this transition.

It is worth noting here that a difficulty arises from the fact that Aristotle in 193a 11–12 mentions the bed and the statue as instances of natural things (*φύσει ὄντα*).[29] Guthrie, in my opinion correctly, stresses that these are quoted by Aristotle as Antiphon's examples and not his own. According to his suggestion, the examples were used by Antiphon, and Aristotle retains them because he is about to show

In other words, according to my reading of this motif, these factors indicate not only the permanence but also the attachment of what grows to the future end and product of its growth, which means that they also bring to the fore a self-identity and a self-union. Sean Kelsey ('Aristotle on Interpreting Nature', in *Aristotle's Physics*, *A Critical Guide,* ed. Mariska Leunissen [Cambridge: Cambridge University Press, 2015], 31–45, at 34) ascribes this view to Antiphon himself: 'Antiphon, in asking after a thing's *nature*, is focused on its *substance*, which he conceives of not as the source of a thing's movement and rest—of its behaviour while it exists—but as what survives its demise. Indeed, this approach betrays an attitude in which the nature of things is positively concealed by their behaviour, being manifested instead in their destruction'.

[26] Simpl. 274. 8–9; cf. 273,17.

[27] See Pendrick, *Antiphon the Sophist*, 283. Sarah Waterlow (*Nature, Change and Agency in Aristotle's Physics, A Philosophical Study* [Oxford: Clarendon Press, 1982], 55) maintains that Aristotle has himself made the point that it is not the bed as such that has a nature, but the wood. She believes that Antiphon's point as Aristotle presents it is rather different; it is that the wood is endowed with nature because the wood is *matter* as opposed to the form, 'the immediate unstructured constituent . In my opinion, from Aristotle's citation of Antiphon's words (these are included in the phrase '*σημεῖον δέ φησιν Ἀντιφῶν ὅτι […] ἀλλὰ ξύλον*' [193a 12–14]), it is obvious that Aristotle has not himself made the point that it is not the bed as such that has a nature, but the wood. Also, from Simplicius' analysis of the whole passage it is clear that the reference to 'the immediate unstructured constituent is an interpolation of Aristotelian origin, incorporated into the presentation of the materialists' position.

[28] See Simpl. 274. 4–6: *kata tropon*, *kata nomon*, *kata to tais technais nenomismenon* which is opposed to *kata physin*, *kata synthēkēn on* which is associated with the *kata symbebēkos yparchon*.

[29] Cf. Ross (*Aristotle's Physics,* 502–3). Ross suggests that the bed and the statue are introduced as examples of natural things because *qua* wood or bronze they *do* exist by nature. Pendrick (*Antiphon the Sophist*, 278) points out that it is at least surprising to see the bed as an example in a discussion of naturally existing entities, since it is used immediately prior to the passage under discussion as an example of a non-natural object; see *Physics* 192b 16. Wicksteed and Cornford (Aristotle, *Physics,* 111) translate 193a 11–12 in a way which shows that they interpret the phrase introduced by *οἷον* as drawing an analogy rather than offering direct examples of the case (cf. Hans Wagner, *Aristoteles, Physikvorlesung, Werke in deutscher Übersetzung*, Band 11 [Berlin: Akademie Verlag, 1972], 450). I agree with Pendrick (*Antiphon the Sophist,* 279) that this solution is not plausible because it would destroy the meaning of the report of Antiphon's views. The testimony of Antiphon's words does not present the meaning of the alleged analogy, but explains literally the first of the two Aristotelian examples, put forward in 193 a 11–12.

up the sophist's argument, and the best way to do it is to keep his own words and refute him out of his own mouth.[30] However, I believe that only the reference to the bed, the decay, and the wood was Antiphon's original example,[31] because only this example is connected with Antiphon's thesis by name ('*σημεῖον δε φησιν Ἀντιφῶν ὅτι […]*' [193a12]). This example also enables a better understanding of the power of growth which is inherent in the wood, which is considered as the matter or nature of the bed. As Pendrick correctly points out, the reasoning underlying the buried-bed argument identifies *physis* with what grows naturally or spontaneously (i.e., the wood) in contrast to the arrangement which is imposed by human convention (*kata nomon*) and is accidental rather than spontaneous and organic.[32] Aristotle, in passage 193a 15–16, explains this argument by using a conjunction; he associates human convention with art (*tēn kata nomon diathesin kai tēn technēn*) and both of these notions with what is accidental (*kata symbebēkos*). From this reasoning follows that both human convention and art are opposed to *ousia*, which is what persists continuously while undergoing these affections. Pendrick[33] also notes that it is not hard to see how Aristotle, from the standpoint of his own concerns, concepts, and terminology, could have reinterpreted Antiphon's opposition of nature and conventional arrangement as a distinction between form and matter. He adds that in this way, Aristotle imports into Antiphon's argument not only the identification of *physis* (nature) with *hylē* (matter) he attributes to the pre-Socratics generally,[34] but also one of the central doctrines of his own philosophy.

I agree with Pendrick that Antiphon's argument is definitely connected with the intention to demonstrate the superiority of *physis*, with its dynamic and spontaneous character, to human convention and art.[35] In my view, in order to achieve the demonstration of this superiority, Aristotle begins from the antithesis between

[30] William Keith Chambers Guthrie, 'Notes on some Passages in the Second Book of Aristotle's Physics', *The Classical Quarterly* 40, no. 3–4 (1946): 70–76, at 70–71.

[31] Pendrick (*Antiphon the Sophist,* 280) believes that the bed is unquestionably Antiphon's example, although the statue is another matter.

[32] See Pendrick, *Antiphon the Sophist,* 284; cf. note 24 above. For the contradistinction between nature, considered as a source of spontaneous causality, and a different sort of causality which derives from intelligence, cf. Plato, *Sophist* 265c7-9. Arnaud Macé (*L' invention de la Nature en Grèce ancienne,* Mémoire inédit, Habilitation à diriger les recherches, [Paris: Université Paris-Sorbonne, 2013], 311-12) notes that the idea of this passage of the *Sophist* fits perfectly with the idea expressed in another Platonic passage, that is *Laws* 892c 1-3, where it is said that nature is the principle of the primary generation or, in other words, the generation of the primary things. He stresses that in those passages nature presents itself under the guise of a Mother-Nature which has a mechanistic character and is unconscious of itself.

[33] See Pendrick, *Antiphon the Sophist,* 284.

[34] Pendrick (*Antiphon the Sophist,* 282–3) points out that Aristotle's general claim that the pre-Socratics (Antiphon included) identified nature with matter should be treated with caution. He adds that the net result of Aristotle's interpretation is to read into Antiphon's argument a clearer distinction between form and matter, substrate and attribute than is plausible to ascribe to any pre-Socratic. Harold Cherniss (*Aristotle's Criticism of Pre-Socratic Philosophy* [Baltimore: The John Hopkins Press, 1935], 242–5, 359–61) also noted that Aristotle contends that the pre-Socratics for the most part recognized only the material cause, so in his discussion of the meaning of *physis* he naturally argues that by that term they meant matter alone.

[35] See Pendrick (*Antiphon the Sophist,* 284).

nature and convention (*physis kai nomos*) and uses as a transitional and analogous antithesis that between nature and art (*physis kai technē*), with which he is more acquainted and used in the first part of *Physics* II.1.[36] But in order to show the superiority of *physis* to *technē*, he focuses on the connection between *physis and essence* on the one hand, and on the other, between *technē* and what is accidental (*kata symbebēkos*). While Antiphon's treatment shows growth as an indication of the superiority of *physis,* Aristotle chooses to show that the superiority of *physis* lies in its characteristic to persist. Since the material substrate in *his* frame of thought is that which persists through change, and since he is convinced that Antiphon and the pre-Socratics identified *physis* with what *he* calls *hylē* (matter), he further combines *hypokeimenon* (substrate) or *hylē* with *physis* and *ousia* (essence), based on the criterion of persistence. Simplicius' analysis shows that this is the route followed by the Aristotelian thought processes.

Simplicius formulates the reasoning which is deduced from the relations described above: in the case of natural things, it is the matter and the substrate which persist and generate; such is the essence of natural things; nature is the essence of natural things; therefore, matter is the nature in the case of natural things, so that nature is matter; their definitions correspond.[37] Thus, since the form changes while the substrate persists, according to the criterion of persistence which determines the essence or nature of each thing, matter has priority over form in the question being debated, which of the two constituents of natural being is nature.

Nevertheless, the criterion of persistence is not an Aristotelian invention or innovation. Aristotle, in his *Physics* and in *De Generatione et Corruptione,* ascribes to all who wrote 'on nature', all the *physikoi*, as a common assumption (*koinē doxa*) the principle of '*ex nihilo nihil fit*'. He believes that this assumption is as old as the first philosophers themselves, and states that for them the greatest fear was the threat that the absolute non-being or *nil* is a real antecedent of genesis.[38] Although Aristotle has been accused of anachronism,[39] a belief in the law of the conservation of matter

[36] Arist. *Physics*, 192b 16–32. Steckerl ('On the Problem: Artefact and Idea', 296) compares the Aristotelian thesis about the opposition between *physis* and *technē* with Plato's fervent pleading of the case for the idea of the couch as the couch's true nature, in the *Republic* 597b-e. He believes that we can clearly see that the conceptions of *physis* are completely different in the systems of Plato and Aristotle. He justifies this inference as follows: ' For, if the idea of the bed expressly has a *physis* of its own and is part of *physis*, the bed cannot be completely exempt from all *physis*. So, in contrast to Antiphon, the artefacts for Plato are not forms imposed upon nature by man but belong to *physis*, since they partake of the true physis of the ideas . It is also true, as Steckerl notes, that *σκευαστὸν* and *φυτευτόν γένος* stand side by side in the *Republic* 510a.

[37] Simpl. 274. 9–12.

[38] See Arist. *Physics* I. 4, 187a 27–29 and 34–35; *De Generatione et Corruptione* I. 3, 317b 29–31.

[39] Alexander P.D. Mourelatos ('Pre-Socratic Origins of the Principle that There are No Origins from Nothing', *The Journal of Philosophy* 78, no. 11 [1981]: 649–65, at 649–50) remarks that the suspicion of anachronism is reinforced when we consider that when Aristotle discusses in his *Physics* the *aporia* of the ancient philosophers about the principles and the nature of beings, he projects to all his predecessors a rationale for '*ex nihilo nihil fit*', which seems to be grounded on his own doctrine. Aristotle states in *Physics* I. 8, 191a 30–31: 'from what-is-not nothing could have come to be, because something must be present as a substratum'.

and energy is considered a fundamental tenet which underlies early Greek cosmology.[40] After all, the Eleatic challenge as illustrated in *Physics* I. 8, may be viewed as a kind of motivation for Aristotle's introduction of the triadic Ontology matter-privation-form, combined with the doctrine of potentiality and actuality.[41] In addition, the idea that in every change there is something which somehow remains identical with itself,[42] may be also ascribed to previous philosophers of nature (*physikoi*).[43]

2. The form

Simplicius[44] notes that Antiphon even tried to prove the persistence of the matter also from the sprouting of like material, although the sprouting demonstrates that form comes from form rather than matter from matter. He justifies this opinion by referring to what was stated in Physics 193b 8–12. Man is propagated by man, he says, and wood by wood; the wood too is the form, even if it has the description of matter in relation to the bed. Thus, Simplicius implies that Antiphon's attempt to enforce the argument of persistence by connecting it with the sprouting of like materials, leads to an undermining of the argument because from the Aristotelian point of view, the criterion of the generation of like species gives priority to form over matter. Simplicius[45] cites as a second meaning of nature the form which is to do with the matter (*to peri tēn hylēn eidos*).

This meaning is identified with the second meaning of nature as presented by Aristotle in passage 193a 30–b5 of *Physics* II.1. In his comments on this same chapter, Simplicius[46] explains that nature both shares common ground with art and differs from it; nature shares common ground with art in producing the form, but differs from it in so far as nature produces the form in terms of the materials of the art (*to kata tēn hylēn eidos*), wood in the case of a bed and bronze in the case of a statue. According to my reading, this means that nature produces 'the form of the materials' (*to eidos tēs hylēs*) of the art, while art produces just the shape or the artificial form.[47]

[40] See J.D. Logan, 'The Aristotelian Concept of ΦΥΣΙΣ', *The Philosophical Review* 6, no. 1 (1897): 18–42, at 20–21. This law secures 'the relative permanence and stability of the various forms of existence that go to make up the world'; see John Burnet, *Early Greek Philosophy* (London: A&C. Black, 1930), 9.

[41] Daniel W. Graham ('Aristotle's Discovery of Matter', *Archiv für Geschichte der Philosophie* 1 (1984): 37–51, at 44) describes the Aristotelian reply to the Eleatic challenge in *Physics* I.8 as a diagnosis of a fallacy which is implicit in it, because 'what is, comes to be from what is not' is paradoxical only if 'what is not' is taken as 'nothing', while 'what is not' means 'what is not F'.

[42] This leads Aristotle to the assumption that if there is change at all there must be inner principles of change; see Waterlow (*Nature, Change and Agency in Aristotle's Physics,* 27).

[43] Burnet, *Early Greek Philosophy,* 10; Karl Popper, *The World of Parmenides, Essays on the Presocratic Enlightenment* (London and New York: Routledge, 1998), 15–16.

[44] Simpl. 283. 16–20.

[45] Simpl. 283. 21.

[46] Simpl. 275. 34–276. 7.

[47] The argument seems to be that if nature produces the form of the materials of the art (i.e., the form of the wood), nature is the form of the wood, and then the nature of wood will also be the nature of things made of wood. Apart from Simplicius, I have been helped to articulate this argument by some ideas of D.

He further provides us with the very useful information that some people, wanting to make the matter the nature, attempted to prove it on the basis of the difference between nature and art, by saying that the bed, when buried, reveals its nature in the wood and not in the shape of the bed; because what germinates spontaneously or by nature is the wood, whereas the shape is something given by the craftsman. Conversely, others, wanting to make the form the nature, pressed the affirmation of their own claim, on the basis of the common ground between nature and art in the producing of the form.[48] It is important to note that, in order to decide if nature is the matter or the form, there is a constant need to examine the behaviour of the products of art. Therefore, the commentator explains the two opposite theses (i.e., that nature is the matter or that nature is the form) in terms, on the one hand, of the communion and, on the other, of the difference between nature and art.

In order to present the view that nature is form, Aristotle draws an analogy between art and nature in *Physics* II.1, 193a 31–b5. Just as in the case of the products of art, that which is produced by art (*kata technēn*) and is artificial is said to be art, so, in the case of things which exist by and because of nature, that which is

Bostock (*Aristotle*, Robin Waterfield (trans.), and David Bostock (ed. with an introduction and notes), *Physics* [Oxford: Oxford University Press, 1996], 239), formulated in his comment on passage 193a 17. While for those who believe that the nature is the matter, the nature of the bed is the wood as matter (and in this case by analysis the proximate matter can be reduced to the ultimate matter), for those who believe that the nature is the form, the nature of the bed resides in the form of its matter (i.e., in the form of the wood) because the wood is already formed and not indeterminate matter. Consequently, it is supposed that what makes the substratum of the wood 'wood' is the form of the wood, which becomes the nature of the wood; otherwise the wood could be any kind of matter. So, the wooden bed is such and such, because of the form of its matter, which is a natural form (i.e., a form produced by nature); see also *Physics* 193b 9–11; Simpl. 278. 19–20.

[48] Helen Lang (*Aristotle's Physics and its Medieval Varieties* [Albany, NY: State University of New York Press, 1992], 29–30) also presents a materialist point of view in which art and nature have a common ground. From this point of view, since matter of all things could be reduced to the four elements, there is no real difference between natural form and artistic form, 'because both are like accidents added to, and ultimately separable from, matter'. According to this line of reasoning, natural form is also considered as something imposed on matter from without, like the artistic form. On the other hand, Jonathan Lear (*Aristotle: the desire to understand* [Cambridge: Cambridge University Press, 1988], 16–17) in his excellent analysis stresses what Aristotle would think as the correct use of the craft-nature analogy; if we are to make correct use of it, we must get away from thinking of the form of a bed as superficially imposed on wood. We must think of the bed as having its own integrity and understand that the answer to the question, what is it to be a bed, cannot be: to be wood. Lear shows that which Antiphon and Aristotle agreed upon: that a bed does not reproduce other beds shows that the bed does not have a nature; for the form of a bed is not a principle internal to the bed. Lear also shows that they disagree only to the extent that Antiphon thinks that this reveals something important about the nature of natural objects, whereas Aristotle thinks it reveals an important difference between natural objects and artefacts. As Lear notes, the form according to Aristotle's view, cannot be defined in terms of properties superimposed on a matter which exists before and (maybe) after the natural object exists. According to Lear's reading of this view, if the nature of a natural object is an internal principle, it would seem that form would have to be a part of a natural object from the beginning, i.e., it would have to be an internal principle. In my opinion, this reading is implied in the second Aristotelian argument in support of the thesis that nature is the form (*Phys*. 193b 8–12); see section III. This argument focuses on the production of the like species which is conveyed by the efficient cause. From this point of view, the form of each generated natural thing is an internal principle, since it is a part of a natural thing from the beginning.

according to nature (*kata physin*) and is natural is said to be nature.[49] Simplicius, in his comment on this passage, notes that, just as art stands in relation to the products of art, so nature stands in relation to what exists according to nature and vice-versa, for art is to be found in what exists by art, and nature in what exists by nature.[50] It is important to note that Simplicius uses the word *analogon* here and refers to the way that the children of geometricians construe this word.[51] As W.D. Ross correctly notes, the whole argument is in essence an argument by analogy from art to nature.[52] The common ground (*eidopoios koinōnia*) of which Simplicius has spoken[53] is based only on the analogy drawn, because the form which nature produces is not the same as that produced by art.[54] But this part of the argument is necessary for the construction of its second part.

The second part of the Aristotelian argument is articulated on the basis of the ontological antithesis between potentiality and actuality. Simplicius, commenting on *Physics* II.1, says that, in the case of what exists by art, that which has not yet received the form but still only exists in potentiality cannot yet be said to exist according to art; therefore, art does not reside in it; for art resides in the form. In an analogous way, in the case of things which come into being by nature, that which exists only in potentiality is still neither according to nature nor has a nature.[55] In his comments on *Physics* II.2, he adds that just as the statue is not called a statue according to the terminology of art until it has received the form according to the art, just so the matter is not called by the name of any natural entity until it has received the form. Simplicius repeats the Aristotelian theory that the matter is only potentially the thing of which it is the matter, as for example the seed is only the animal in potentiality, and each thing receives its specific designation only according to what it is in actuality. And that is the form.[56] The reception and the presence of the form (*eidos*) becomes the ontological criterion in each case for a thing's placement in the realms

[49] Trans. Fleet (1997).

[50] Simpl. 276. 12–15.

[51] Fleet (*Simplicius: On Aristotle Physics 2*, 168, note 83) refers to Plato, *Gorgias* 465b–c, where geometers are portrayed as presenting analogies in a similar way as in this case: as A is to B, so is C to D. I think even more representative of this interpretation of analogy (i.e., equivalence of relations) is the whole passage of the simile of the line in Plato's *Republic*, particularly in 510a 9–10, 511e 2–4, and also 534a 3–8. It seems that Plato in drawing the line and its division, applies the method of the geometricians. Also, Aristotle in *Metaph*. 1016b 31–35 explains that the things that are *one by analogy* (*kat' analogian*) are those which are related as a third thing is to a fourth (trans. Ross: Internet Classics Archive).

[52] Ross, *Aristotle's Physics*, 503.

[53] See again Simpl. 276.1; 276.6.

[54] The argument is that, since the relation between art and artificial is analogous to that between nature and natural, given that art is the form (i.e., art resides in the form), nature is also the form. The conclusion of this reasoning is that art and nature are both identified with form. However, the crucial difference between the natural and the artificial form is that the natural form is not separable from the matter within the realm of natural reality; it is separable only conceptually by abstraction, when it is illustrated within the definition, but which excludes the matter; cf. Lang (*Aristotle's Physics and its Medieval Varieties*, 30); see also Simpl. 277. 2–9.

[55] Simpl. 276. 15–19.

[56] Simpl. 283. 22–26.

of art or the realms of nature.[57] As in the case of an artificial thing, the character of art inherent in it is not identified with its bare matter but with the form imposed on this, so nature in a natural thing is to be identified not with its matter but with its form.[58]

Furthermore, we can note here that the name which designates that which exists according to art, and in an analogous way that which exists according to nature, is associated only with the actuality (i.e., the form [*eidos*]). This means that the accomplishment of a reality (i.e. of the form considered as actuality) is verified by the verbal designation. Thus, logos becomes the proximate to us logical and linguistic criterion which diagnoses and guarantees the reception of the form. On the other hand, the reception of the form is the ontological and teleological criterion for the accomplishment of reality.[59] Simplicius, paying due attention to the significance of the relation between form and *logos*, explains the thesis that nature is the form also in terms of the twofoldness of the form. The form has a twofold character, one

[57] Simplicius (276. 22–24) states that one could reason thus: 'Nature is the very thing whose presence causes what exists by nature to exist by nature; what exists by nature does so by the presence of the form'.

[58] Cf. Ross (*Aristotle's Physics*, 503). Yet, with regard to the analogy drawn here, apart from the problem that the natural form is not the same as the artistic form, there emerges another relevant problem. In each concrete product or work of art the evaluation of its artistic character is based on the criterion of the reception of the appropriate form. But this presupposes that it has been produced or created in accordance with the rules of art. Whereas the artistic form is imposed from without, the natural form is not, so the reception of the artistic form depends also on the capacities of the artisan; and there is a clear-cut distinction between the way the artisan acts and nature produces, since the former first conceives in his mind of the form and then acts, whereas nature does not; see Alexander apud Simplicius *In Phys.* 310. 25–36. We will examine this aspect of the problem later. However, Charlotte Witt ('In defense of the craft analogy: Artifacts and natural teleology', in *Aristotle's Physics, A Critical Guide,* ed. Mariska Leunissen, [Cambridge: Cambridge University Press, 2015], 107–20, at 118–19), in examining Aristotle's use of the craft analogy in his explanation of natural teleology in *Physics* II. 8, makes an inference which would be useful also in the context of *Physics* II. 1. She notes that Aristotle distinguishes between the individual psychological process of the artisan, who deliberates, and is the external origin of the product, and the craft itself, which is (as it were) a stationary body of knowledge; craft is the knowledge of what is to be made and how to make it. Ross (*Aristotle's Physics,* 503–4) believes that the argument in 193a 31–b3 is also complicated by a reference to a concrete sense of *technē,* in which it means a work of art, and to a corresponding concrete use of *physis*, in which it means a natural object of a certain kind. William Charlton (*Aristotle's Physics, Books I and II, Translated with Introduction and Notes* [Oxford: Clarendon Press, 1970], 90) stresses the common point between art and nature; art, like nature, is always the art of something definite, the art of making a table or restoring men to health or the like, and is, in fact, the form which the artist has in mind, or intends, for the material. Charlton, by referring to the passage *Metaph*. 1032b 5–14, points out that while the artist has it in mind only, it is only a possible form; it is realized in the material only when the work is finished, and it is only then that it actually exists.

[59] It is not the first time in the *Physics* that Aristotle traces in the way we speak of the things, the real ontological relations, the principles and the principal meaning of the things. The analysis of the use of our language brings to the fore the ontological structure of the natural world we investigate. Perhaps the most representative application of this method can be found in *Physics* A7, 189b 32–190a 31, where Aristotle shows that the ontological difference between accidental and substantial change, and also between matter and privation, is illustrated in our speech; see Philoponus *In Physics*, 144. 20 ff; Wolfgang Wieland (*Die aristotelische Physik. Untersuchungen über die Grundlegung der Naturwissenschaft und die sprachlichen Bedingungen der Prinzipienforschung bei Aristoteles* [Göttingen: Vandenhoeck & Ruprecht, 1962], 112, n.1); Wagner (*Aristoteles, Physikvorlesung,* 425).

according to the shape, the other according to the account.[60] The character that is according to the account represents the unique formulation (*monoeidē typon*) of the explicit definition (*aneiligmenou orismou*), which corresponds to the definition—as also does the name—and this is what embraces even the shape. Simplicius stresses that this form —the one according to the account or to such-and-such a shape—is the nature;[61] for if the nature of each thing lies in its being, and the being of each thing lies in the form according to the account and the definition (which is why the definitions correspond to what they define), then the nature would be the form.[62]

3. The compound

The third meaning of nature as presented by Simplicius is the compound of matter and form. Aristotle refers to this meaning only to deny it, adding a very

[60] Simpl. 276. 24–25.

[61] Simpl. 276. 27–30. The introduction of the definition as a central point in our attempt to decide what is nature, formulates an effective argument against Antiphon's thesis in the realm of artefacts, because as Lang (*Aristotle's Physics and its Medieval Varieties*, 30) points out, when we define an object such as a bed as an artefact, the material out of which it is made is no longer central to the definition. She remarks that in an artefact what is by nature is its matter in relation to its form, but what makes it definable as an artistic thing is the form imposed upon it by the artist; so, an artefact is properly identified both with what it is by nature (i.e., its matter in relation to natural form) and with its artistic form. But finally, within this line of reasoning the primacy of form is true for all things, whether by nature or by art, since all things bear their names and have definitions in virtue of their form.

[62] Simpl. 276. 35–277. 2. Friedrich Solmsen (*Aristotle's System of the Physical World, A Comparison with His Predecessors* [Ithaca, NY: Cornell University Press, 1960]: 95–96) believes that it is patent that this *physis* does not have its place in the theory of movement; he notes that instead here we find ourselves in the shadow of the doctrine of Forms. Nevertheless, he states that Aristotle provides for connections between this concept of *physis* and its definition as source of movement. Solmsen proceeds to a really insightful reading of *Physics* II.1; he notes that 'the "source" or "principle of movement"' is incorporated also in these definitions of "nature"' as formulated in the second part of the chapter, and he stresses that this conception of nature 'helps again substantially to set physical things apart from, e.g., the products of craft'. He also notes that 'the reasoning proceeds smoothly enough, showing neither break nor fissure'. According to his explanation, one concept of nature is superimposed upon another, and only historical analysis reveals that the two concepts are quite different in origin and that Aristotle's procedure is eminently synthetic. Lang (*Aristotle's Physics and its Medieval Varieties,* 30) also notes the combination of the definition of nature as form with its definition as source of movement, when Aristotle says that nature is the shape and the form of things having in themselves a source of motion (193b 3–4). But she herself also makes an interesting combination, since she identifies the thing's source of being moved with matter, because matter is aimed at form. If we read the argument in this way it seems that Aristotle recognizes both matter and form as nature. Kelsey ('Aristotle on Interpreting Nature', 31–45, at 32–33, 36) maintains that the very idea of a principle of 'motion and rest'—that is, of a thing's characteristic *behaviour*— is more or less idle in the latter half of *Physics* II. 1 and that Aristotle's focus in identifying the natures of things is not on their behaviour, not on what they 'do', but on what they most fundamentally 'are'. According to this view, in identifying the nature of things, Aristotle makes no appeal to the sources of their behaviour, and this is contrary to the expectation created by his definition of nature. On the other hand, in his comment on *Phys*. 192b 8, Philoponus notes with regard to the definition of nature that we did not learn what nature is through learning that it is the source of movement and rest, but what it does; see Philop. *In Phys.* 197. 30–33; see also note 163. So, we can assume that the second half of *Physics* II. 1 is an expected continuation of the first half. We will see (in section V) that Simplicius asserts that the definition will suit all the meanings of nature if taken of each in the appropriate way; he further explains how the definition can be applied to each of these meanings; see Simpl. 284. 28–285.12.

short statement within parenthesis in passage 193b 5–6, which says that that which is compounded of matter and form 'is not itself *a nature* (*physis*) (for the matter is a nature, as is the form) but exists *by nature* (*physei*)'. For example, the man compounded of matter and form is not *a nature*, but exists *by nature*.[63] Simplicius, in his comments on *Physics* II.1, explains that, when what is something in potentiality becomes it in actuality according to nature (*kata physin*), it has a nature (*physin echei*) and exists *by nature* (*physei*). No one would say that this is itself any longer a nature. That thing which has the form which was the nature (*hoper ēn hē physis*) is said to exist according to nature (*kata physin*) and by nature (*physei*)[64]. In his comments on *Physics* II. 2, he asserts that just as the word 'substance' is used in three ways—matter, form, and compound—so 'nature' could be spoken of in three ways. He then gives an explanation for what Aristotle says of the compound: 'it is not a nature, but exists by nature'; if each of the two components is itself a nature, and if the compound which exists because of them is something else other than these two, then it would not strictly be a nature, but only exist by nature.[65]

Simplicius, in his comments on *Physics* II. 1 as well as II. 2, testifies that Porphyry understood Aristotle's words, 'This *rather than* matter is nature' (193b 6–7), as referring to the compound. He then justifies Porphyry's opinion by stating that, even if the compound is not a nature in the proper or the strict sense (for not even any of the simple bodies is a nature in the strict sense), nevertheless it is a nature to a greater degree than matter is, since it possesses within itself the form, which is nature to a greater degree than matter is.[66] Moreover, in referring to the Aristotelian example of the man, Simplicius believes that according to Antiphon's distinction, since a man is propagated by a man as compound by compound, the compound too would be a nature.[67] Simplicius obviously implies Antiphon's thesis, referred to by Aristotle in passage 193a 12–17. Thus, if according to the commentator's interpretation of this thesis, nature is that which either causes things to germinate or else is the germination, the continuing growth, and the generation of like species, then nature could also be the compound, since a man is propagated by a man as compound by compound, and not just as form by form.

4. The growth

According to the fourth meaning Simplicius mentions, nature is said to be, as it were (*oion*), the growth (*ekphysis*), coming-to-be (*genesis*) and motion (*kinēsis*) by which the growing thing is made to grow by that which produces its growth.[68]

[63] Simpl. 277. 12–14.
[64] Simpl. 277. 14–18.
[65] Simpl. 283. 28–34.
[66] Simpl. 277. 24–27; 283. 34–37.
[67] Simpl. 284. 1–2.
[68] Simpl. 284. 5–6.

Simplicius again draws an analogy between the artefacts and the things which exist by nature; just as in the case of art, the act of producing the artefact is a change stemming from the agent and directed towards the artefact (for example, in the case of a cloak, it is the weaver who weaves, the cloak which is woven and, as a third thing, the act of weaving, which is a motion stemming from the agent and directed towards the thing that comes-to-be—i.e., the artefact), just so in the case of a natural entity there is what is growing (*to phyomenon*), what makes it grow (*to phyon*) and, between the two, such a nature as is the movement (*kinēsis*) stemming from the active nature (*tēs poiousēs physeōs*), as the process of healing stems from the art of medicine.[69] This meaning of nature is given by Aristotle only within the frame of his argumentation in support of the thesis that nature is the form. In fact, he only invokes this meaning in order to enforce his argument that nature is the form. Aristotle states in passage 193b 12–13: 'again, nature which is spoken of as genesis is the route (*hodos*) to nature'.[70] Wicksteed and Cornford translate broadly as they read: 'Again, *na-ture* is etymologically equivalent to *gene-sis* and (in Greek) is actually used as a synonym for it; nature, then, *qua* genesis proclaims itself as the path to nature *qua* goal'.[71] Simplicius seems to combine in this meaning the crucial point of Antiphon's thesis—i.e., nature as *ekphysis* (germination or sprouting or outgrowth or more generally growth)—with the meaning offered by Aristotle in the aforemen-

[69] Simpl. 284. 6–11.

[70] The translation is my own.

[71] Trans. Wicksteed and Cornford (Aristotle, *Physics,* 115); in a reference of theirs (Wicksteed and Cornford, Aristotle, *Physics,* 114, note c), they state: 'So, too, in Latin *na-tura* derived from the *na* of *na-scor* and *na-tivitas*'; they add that in fact (*g*)*natura* is derived from the same root as *gi-gno*, *γί-γνομαι*; they also refer to passage *Metaph*. 1014 b 17. Ross (*Aristotle's Physics*, 505) also believes that 'growth' is the etymological meaning which Aristotle ascribes to *φύσις* (*physis)*, and that based on this meaning he assumes that *growth* must be identical with progress towards *φύσις* (*physis*). But he casts doubts on whether *physis* ever bore this meaning of 'birth' or 'growth', although he notes that the few references to *physis* in the meaning of *γένεσις* in Greek literature (e.g., Plato, *Laws* 892c; Aristotle, *Physics* 193b 12; *Metaphysics* 1014b 16–17) seem to be learned references to a *supposed* etymological meaning; cf. also his reference to Burnet; see Ross's note on *Metaph*. 1014 b 17 (*Aristotle's Metaphysics, A revised text with Introduction and Commentary*, Volumes I-II [Oxford: Clarendon Press, 1924], I, 296). Alexander of Aphrodisias justifies the first meaning of nature offered by Aristotle in this passage of the *Metaphysics* as follows: 'He says that one sense of nature is growth and germination; for we say that what is coming to be is growing, and that for a thing to be brought to a point where it is coming to be is for it to proceed towards its nature. He gave a similar definition of nature in the *Physics*'; Alex. *In Metaph.* 357.7–10; I follow the translation by William E. Dooley (Alexander of Aphrodisias, *On Aristotle's Metaphysics 5* [Ithaca, NY: Duckworth 1993). Dooley (*On Aristotle's Metaphysics 5*, 135–36, n. 65) correctly stresses that Alexander's expression '*to eis genesin eis physin agesthai*' (*In Metaph.* 357. 9) seems to be based on the text of *Physics* (193b 12–13) to which Alexander refers, where *physis* in the sense of *genesis* is said to be *hodos eis physin* ('the road towards nature'). In my view, the etymological connection is not a necessary presupposition of this meaning because in ancient Greek, *genesis* is an already recognizable or common meaning of *physis*. Philoponus justifies this meaning as follows: 'for we commonly call the sprouting and outgrowth of fruits nature'; Philop. *In Phys*. 211. 1–2; all references to Philoponus' Commentary on Aristotle's *Physics* II follow the translation by Alan R. Lacey (Philoponus, *On Aristotle's Physics 2*, trans. [Ithaca, NY: Cornell University Press, 1993]). I agree with Lacey (Philoponus, *On Aristotle's Physics 2,* 152, n. 121) that *ekphysis, blastē* and *physis* itself are ambiguous between process and product; the meaning they bear depends on the context in which they are used.

tioned passage 193b 12–13, that is, nature considered as *genesis* and movement or change.[72]

Philoponus considers that the meaning concerned with generation and the road to form is the third sense of nature, the other two being the form and the matter.[73] He also explains in a very useful way as follows why *genesis* has been called *physis*:

> For every process of generation gets its name paronymously from the form towards which it moves; for we call the road to whiteness whitening, naming the road from the end-state towards which the movement [is], and not blackening, from that from which it has moved; and similarly [we call] the road towards heat heating. So, in the case of the generation of plants, too, the generation will be called after the end-state. So, since it strives after nature, but could not paronymously be called 'naturing' (*physansis*) because that sounds cacophonus [in Greek], it was called 'nature' (*physis*), coinciding in name with the end-state.[74]

It is important to note that although Philoponus cites 'generation and the road to form' as the third meaning of nature, he believes that from this as well, is again shown that form is nature, not matter.[75] W.D. Ross points out that Philoponus ingeniously uses φύσανσις, 'naturation', as equivalent to φύσις (*physis*) in the sense of 'growth' and, following a similar interpretative line, he states that what is referred to by Aristotle in 193b 12–18 (i.e., nature in the sense of genesis or growth) must be considered as a third argument in support of the view that φύσις (nature) is μορφή (form).[76] Alexander of Aphrodisias identifies nature as genesis or growth (i.e., what Simplicius considers the fourth meaning of nature) with the first meaning of *physis* referred to by Aristotle in *Metaph*. 1014b 16–17.[77] Alexander also associates *physis* in the meaning of *genesis* with form (*eidos*), since he notes that 'every coming-to-be is a progression towards the complete form'.[78] Solmsen remarks that this meaning of *physis*, used as a synonym of *genesis*, is the meaning in which the pre-Socratics like to employ it.[79]

[72] We only have to compare Simplicius' terminology on 284. 5–6 with that on 273. 35–274. 1.

[73] Philop. in *Phys*. 210. 33–211.1; 211. 20–22.

[74] Philop. *In Phys.* 211. 3–9.

[75] Philop. in *Phys*. 211. 2–3; cf. 211. 9–12. Macé ('La naissance de la nature en Grèce ancienne', 82) associates Aristotle's thesis that nature is the form with what we define as the fourth meaning of nature recognized by Simplicius. He claims that when Aristotle says 'man propagates man', he restores the balance which permits to consider nature as a path to nature or, in other words, to consider the origin of all natural things as a path towards their nature. In my reading, through this connection of these two meanings of nature (i.e., nature as form and nature as growth or process or progression towards the complete form), we can realize that there is a reversion of each natural thing to its origin.

[76] Ross (*Aristotle's Physics,* 505).

[77] Alexander of Aphrodisias, *In Metaph*. 357. 7–13; see again note 71.

[78] Alex. *In Metaph*. 357. 11–12; trans. Dooley.

[79] Solmsen (*Aristotle's System of the Physical World*, 96). See esp. Empedocles DK 31 B8.1, Plutarch

5. The cause of change

From what Simplicius recognizes as the fourth meaning of nature there is only one step till the fifth and last meaning of nature because any change, coming-to-be and growth needs or presupposes an efficient cause. Simplicius states that, according to the fifth, and most important, meaning, nature is the cause of change in natural bodies. He again sets out to trace what is common and what differs between art and nature, as he did in his comment on *Physics* II.1, 193a 30–b5. The commentator again draws a parallel between art and nature, claiming that, just like art (which is the producer of artefacts) and its motive force, nature in this sense starts from the material nature and ends at the formal nature, producing the compound nature, and this is what the productive nature has in common with art.[80] According to Simplicius' analysis, the difference between art and nature is that the art is external, and starts from the considerations proper to it, but ends at some completion beyond itself (e.g., the medical art ends up with health).[81] On the other hand, the nature, which is inherent in what is growing, works through the, as it were, outgrowth towards the nature of the perfected entity, and ends as a nature reaching a nature through a nature. Art preserves its similarity to nature since it also works through an artistic change and ends up with the artefact which is of like form, but nature differs from art in that the actualization of the nature is inherent and internal.[82]

III. Simplicius on the Aristotelian arguments in support of the thesis that nature is the form

in B11; B63; Plato, *Laws* 892c; cf. also Cherniss (*Aristotle's Criticism of Pre-Socratic Philosophy,* 243–245, n.114); Charlton (*Aristotle's Physics*, 91). For the usual connection of *physis* with origin, birth and growth, or with the appearance and development of a thing in the pre-Socratics, see also Patricia Curd (*The Legacy of Parmenides, Eleatic Monism and Later Presocratic Thought* [Las Vegas: Parmenides Publishing, 2004 (1998)], 43); Enrique Hülsz Piccone ('Heraclitus on *Φύσις*', *Epoché* 17, no. 2 [2013]: 179–94, at 182). See also Ross (*Aristotle's Metaphysics*, I, 296) in his note on *Metaph*. 1014 b 17, where he remarks that the general meaning of *physis* in the pre-Socratics is pretty much the same, 'stuff' or 'material'.

[80] Simpl. 284.12–16.

[81] This means that the form which is according to the considerations proper to art or the form which inheres in the artisan's soul is the same with art, whereas the artefact which results from the artisan's agency is not identified with art, but is of like form with it (*homoeides*). Only the form of the artefact is identified with the art because the artefact as a whole is a complex which also includes matter, but the art resides only in the form (cf. *Metaphysics* 1032a 22–25; a32–b1; b13–14; see also pseudo-Alexander *In Metaph*. 488. 16–23; 489. 5–9; see also again *Phys.* 193a 33–35; b 8–12). Horst Seidl, ed., (*Beiträge zu Aristoteles' Naturphilosophie, Elementa*, Band 65 [Amsterdam-Atlanta: Rodopi, 1995], 37–38) stresses the difference between art and nature by focusing on the same point as Simplicius; while art ends at something different from it, nature with its activity (i.e., the generation and growth of natural things) in a way attains self-reversion. But at the time of self-reversion, nature has a different sense from the one it had at the starting point of its activity, because at the beginning what is coming-to-be and growing is nature without the corresponding form, whereas at the end it is nature endowed with form.

[82] Simpl. 284. 16–24.

Simplicius, referring to *Physics* 193b5–6, asserts that having interpolated this passage about the compound, Aristotle adds what else he has to say about the form.[83] Aristotle states in passage 193b 6–8: 'this rather than matter is nature; for each thing is said to exist when it is in actuality rather than in potentiality'. Simplicius notes that Aristotle adds this comment about form since he wants both matter and form, but more so form, to be nature; therefore, Aristotle henceforth explains the reasons why he wants form rather than matter to be nature, demonstrating it in several ways.[84] Thus, we can assume that henceforth and until passage 193b 18, Aristotle will expound his own arguments in support of the thesis that nature is form. From Simplicius' analysis of Aristotle's words in passage 193b 6–18, we can infer that the commentator recognizes in it three arguments or proofs in support of the thesis that nature is the form. According to this reading, we can assume that Aristotle presents these arguments as independent of that articulated in the relevant passage 193a 30–b5 by those who claim that nature is form, although they constitute a natural sequence of it and some of them presuppose it, because they refer to it.

1. The first Aristotelian argument in Physics 193b 6–8

Nature is the reason why each natural thing is what it is said to be; the reason why it is what it is said to be is the reason why it is in perfect realization (entelekheia) and not merely in potentiality; the reason why it is in actuality what it is said to be is the form; therefore, its nature is the form.[85] According to Simplicius' testimony, Alexander summed the argument up as follows:

> Each existing thing is what it is when it is in perfect realization; so what exists by nature so exists when it is in perfect realization; anything is in perfect realization when it possesses the form, and so things that exist by nature so exist when they possess the form; but the very thing whose presence causes

[83] Simpl. 277. 18–19.

[84] Simpl. 277. 20–24.

[85] Simpl. 277. 27–31. Philoponus recognizes three arguments in support of the thesis that nature is the form in the Aristotelian text. According to him, the first is illustrated in 193a 31–b5, the second in 193b 6–8 and the third in 193b 8–18 (see Philop. *In Phys*. 214. 22–217. 17). Philoponus seems to include in the same argument the phrase 'Furthermore a man comes to be from a man, but a bed does not come to be from a bed' and the phrase 'again, nature qua *genesis* is *hodos* towards nature'. This is verified by the fact that in the same comment he refers to the nature which is spoken of as *genesis* and makes the following statement: 'Again nature in the sense of coming-to-be is a process towards nature. [He means] that from the third sense of "nature" too, that of "outgrowth", form is shown to be more strictly nature than matter'; see Philop. *In Phys*. 215. 24–216. 2. According to my reading of his comment on 193b 13–14, Philoponus believes that Aristotle uses the phrase 'a man comes to be from a man', just in order to justify and explain why in the case of natural things, in contradistinction to matters of the arts, it is reasonable that the generating has a single name; see in particular Philop. 216. 9–22.

> what exists in nature to so exist is nature, and it is by the presence of the form that what exists in nature does so exist; therefore the form is nature.[86]

Simplicius points out that the term *entelekheia* (perfect realization) is considered to be Aristotle's own. According to him, it signifies the form which is said *in actuality*, inasmuch as it is in this respect that we refer to the reception of *telos* of the one or of being one (*hē tou henos telous apolēpsis*), or to the reception of being one and perfect, or to the continuous possession of the perfect, to wit, the state according to the perfect.[87] In my opinion, what is remarkable in this exegesis is the connection of *telos* with the *hen* within the frame of a continuous state.[88]

2. The second Aristotelian argument in Physics 193b 8–12

This argument presupposes and takes advantage of the argument put forward by those who claim that matter rather than form is nature, and more specifically the argument associated with Antiphon's view of nature. Those who claim that matter is nature say that the natural factor in the case of a bed is not its shape but the wood, because if it was buried and then germinated it would come up wood and not a bed.[89]

[86] Alexander apud Simplicius 277. 31–278.3.

[87] Simpl. 278. 5–9. It is also important to pay due attention to the fact that Simplicius chooses to explain the meaning of the term *entelekheia* with regard to this passage. This proves that he thinks that this passage is crucial for the accomplishment of this meaning and its understanding. Philoponus chooses to give his own exegesis of the term with regard to the definition of motion in *Physics* III.1 (Philop. *In Phys.* 342. 10–15). He explains the term in a rather similar way to Simplicius, by stating that 'the word "*entelechy*" in Aristotle signifies actuality and completion, for it is a compound of the words *hen* ("one"), *teleion* ("complete") and *ekhein* ("have a certain state"). When any particular thing possesses its own completion, it is said to exist in *entelechy*'; (Philoponus, *On Aristotle's Physics 3*, trans. Mark J. Edwards [London: Duckworth, 1994]). Cf. Suidae Lexicon, ed. Ada Adler, ([Lipsiae: B.G. Teubner, 1928-1938]1931: 293), where it is supported that *entelekheia* is the form associated with the one and the complete and what brings about cohesion, completion and unity. It is worthwhile noting that Philoponus also emphasizes the connection between *hen, teleion* and *ekhein*. Ross (*Aristotle's Metaphysics,* II, 245–46) remarks that the existence of the word *ἐντελεχής*, from which the word *ἐντελέχεια* is supposed to be derived, in the time of Aristotle is doubtful, but he stresses that it is not necessary to suppose its existence in this time, because he may have formed the abstract noun directly from *τὸ ἐντελὲς ἔχον* or possibly from *ἐντελῶς ἔχον*. For different etymologies of *entelekheia* see Daniel W. Graham ('The Etymology of Entelexeia', *The American Journal of Philology* 110, no. 1 [1989]: 73–80), George A. Blair ('Aristotle on Entelexeia: A Reply to Daniel Graham', *The American Journal of Philology* 114.1 [1993]: 91–97) and also Florian D. Walch (*Ökonomie der Natur, Die Frage der Naturkonzeption in der Physik des Aristoteles* [München: Herbert Utz Verlag-Wissenschaft, 2002], 54).

[88] The *telos* as constituent of the word bestows a strong teleological dimension on it, which is related to the completion or perfection, while the presence of the word *hen* offers the trait of self-sufficiency, oneness and separation, and *ekhein* or *hexis* shows the continuity of perfection. Aristotle in *Metaph*. 1039a 3–14, referring to the conclusion that a substance cannot consist of substances present in it in complete reality (*ἐντελεχείᾳ*), points out that *entelekheia* separates things from one another. See also pseudo-Alexander, *In Metaph.* 525. 38–526. 27.

[89] I partly follow the translation by Wicksteed and Cornford (*Aristotle, Physics*, [1957]). Philoponus notes that through the considerations by which they established that matter is nature Aristotle himself establishes that form more than matter is so; see Philop. *In Phys.* 215. 26–28.

Simplicius explains the Aristotelian argument included in the above passage as follows: Since a man is propagated by a man, and a man is a man because of the form, then nature would be the form. Even if a bed is not propagated from a bed, a man is propagated from a man like wood from wood, and in general products of art are not propagated from other products of art, but natural things are. Since this is the case, a general rule about natural things must be inferred only on the basis of what is true in the realm of nature, and such a rule must say that the form is the nature and one should not disavow it, judging from the case of the products of art. In this way, following Aristotle, Simplicius draws a clear-cut distinction between art and nature. Art does not make forms that are productive of their like, as nature does. For even if the wood is the matter of the bed, it is still a natural form and it is in respect of this that it too has the power of propagating its like.[90] Based on this reasoning, the commentator reconstructs the argument as follows: A man comes to be from a man as a natural form from a natural form, not as an artificial form from an artificial form. Looking to this latter assumption, they claim that the form is not nature, but they ought rather to look to natural entities that propagate things like their own forms; since this is peculiar to nature, they should say that the form is nature.[91] It is also interesting to note that Simplicius, in his exegesis, apart from the criterion of propagating the like, attaches to the form the criterion of persistence, in the sense that what persists in nature is the form. We have seen that those who claim that nature is the matter have also used this argument, focusing on matter's persistence.[92]

[90] Simpl. 278. 10–20. Lang (*Aristotle's Physics and its Medieval Varieties*, 31–33) maintains that Aristotle returns to this odd *sign*, the planted bed, and reinterprets it in light of his own account because this sign, which originates from Homer, may serve as an ancient *locus classicus* for the problem of the union of art and nature.

[91] Simplicius believes that the words 'A man comes to be from a man' were proclaimed like some final conclusion of the argument, but they only served to cloud its premises, so he sets up to reformulate it in its full structure; see 278. 20–26. We can see the above phrase also in Arist. *Phys*. 194b 13; *Metaph*. 1032 a 25; see also pseudo- Alex. *In Arist. Metaph*. 683. 12–22 (in his comment on 1071a 11–17). It is worth noting that in the construction of this argument, Aristotle follows a different path from that chosen by the thinkers who claim that nature is the form. While they use the analogy between art and nature, as is obvious in passage 193a 31–36, Aristotle chooses to put forward the crucial difference between art and nature, namely that the natural forms propagate their like; see in particular *Metaph*. 1032a 24–25. This difference corresponds to a crucial difference between two kinds of *genesis*, since for the products of art we should rather talk about *poioumena* and *poiēsis*, which is the artistic procedure by which a product of art comes into existence. Walch (*Ökonomie der Natur*, 57) stresses that the artefacts are not generable and characterises *genesis* as an innate principle of change which affects both matter and form. In such an interpretation, *genesis* is identified with nature. Aristotle establishes the criteria of the distinction between *genesis* in the realm of nature and *genesis*, namely *poiēsis*, in the realm of art in *Phys*. 192b 16–32; *Metaph*. Z 7; *EN* 1140a 10–16; see also Melina G. Mouzala *Zētēmata Gnōsiologias, Ontologias kai Metaphysikēs stēn philosophia tou Aristotelous, Hupo to phōs archaiōn kai byzantinōn hupomnēmatōn* [*Issues of Epistemology, Ontology and Metaphysics in Aristotle's Philosophy, In the light of Ancient and Byzantine Commentaries*], (Athens: Gutenberg-Dardanos Publications, 2013), 82–85.

[92] Walch (*Ökonomie der Natur*, 57–58) correctly notes that behind the phrase 'A man comes to be from a man' is hidden the Aristotelian conception of the eternal Nature, the eternity of which resides in the eternity of the Aristotelian natural forms. Marjorie Grene (*The Understanding of Nature, Essays in the Philoso-*

3. The third Aristotelian argument in Physics 193b 12–18.

Nature used in the sense of 'growth' (*ekphysis*) and 'coming to be' (*genesis*) is a process towards nature, starting from the thing that is coming-to-be, and finding completion in its nature.[93] Simplicius again draws a parallel between the products of art and natural things: Just as in the case of the products of art anything that is being made is said to be being made into what lies at the end of the process, not what lay at the beginning, similarly in the case of natural things, the thing which is growing is said to be growing when it is proceeding towards its nature, not from its nature. Since it is proceeding towards its form, the form is its nature. The structure of the argument is as follows: Nature is that towards which anything growing and increasing is proceeding; anything growing and increasing is proceeding towards its form, not towards its matter; therefore, its form is its nature.[94] It is important to note that Simplicius construes nature as *genesis* as a process (*hodos*) towards nature as a goal (*telos*), in other words, he identifies *eidos* with *telos*, meaning the natural form.[95]

We can see that Aristotle uses this meaning of nature, as also defined by Simplicius as the fourth meaning, namely nature as genesis or growth, only as a vehicle or means in order to prove that nature is the form. He does not lay emphasis on it as if he was thinking that the two meanings are of equal importance. On the contrary, Simplicius recognizes this meaning of nature, nature as growth, coming-to-be and change, as a totally distinct and autonomous meaning which deserves separate analysis and explanation. It is also useful to note that for Simplicius, nature as growth, as genesis or change, represents an intermediate meaning from two points of view. On the one hand, nature as growth, as genesis or change *stemming from the active nature,*[96] seems to be for Simplicius an intermediate meaning (or a medium) between nature considered as agent or as efficient cause and nature considered as compound or as form; the latter is the goal or the end (*telos*) of each growth or change in the natural world, since nature as form is that towards which anything growing and increasing is proceeding. When Simplicius states that nature, according to his fourth meaning, lies between what is growing and what makes it grow, by the term 'what is

phy of Biology, Boston Studies in the Philosophy and History of Science 23, [Dordrecht/Boston: D. Reidel Publishing Company, 1974], 75–76), by referring to *De Gen. et Cor.* II. 11, 338 b 7ff., notes that 'Aristotle's world is finite, unique, eternal, consisting of a finite number of eternally existent species', which endeavour in their re-production to simulate the eternal circling of the celestial spheres. For the meaning of the Aristotelian *telos* with regard to *eidos*, see Grene (*The Understanding of Nature*, 76–77; 79ff.). In terms of the criterion of persistence, it is generally acknowledged that what is repeatable in the sense that it persists is the form. Sheldon Cohen ('Aristotle's Doctrine of the Material Substrate', *The Philosophical Review* 93, no. 2, (1984): 171-194, 173) notes that the principles of persistence shift as we move from Aristotle's physics to chemistry, and then to biology, while there are cases where we are able to see that form has a greater claim than matter to be called 'substratum'. Cohen adds a further meaningful remark: 'to understand Aristotle we might want to drive a wedge between the notions of a persisting matter and a persisting substratum, to allow for cases in which form, not matter, is the more rightful substratum'.

[93] Simpl. 278. 36–279.2.

[94] Simpl. 279. 2–11.

[95] Simpl. 279. 23–24; 25–31.

[96] Simpl. 284. 8–10.

growing' (*to phyomenon*), in my opinion, means here rather the form, namely, that towards which anything growing is proceeding, than the compound.[97] On the other hand, according to Simplicius' fifth meaning, nature as growth, outgrowth, genesis or change seems to be an intermediate meaning, placed between nature considered as matter (the material nature) and nature considered as form (the formal nature).[98] Nature as outgrowth,[99] genesis or change is the movement of the active or productive nature, which by moving from the material to the formal nature produces the compound nature.[100]

IV. Simplicius on the Aristotelian form as paradeigma

The special relation and close connection between nature in the sense of cause of change and form is also obvious in Simplicius' Commentary on the third chapter of *Physics* II, particularly in the passage in which Aristotle refers to the formal cause. Simplicius states that when Aristotle calls the form a model (*paradeigma*), he is not suggesting that it is some self-subsisting eidetic substance (*eidikē ousia*) to which the things in this world bear a likeness, as do those who posit the Forms.[101] He then quotes an extended passage from the lost Commentary of Alexander of Aphrodisias on Aristotle's *Physics*, in which the latter among others states the following:

> Things that are productive in nature do not first of all have a conception of what they are producing, and then produce it in such a way that one could say that according to Aristotle the conception is a model of what is produced, as is the case with the arts; rather it is the form which is instantiated in matter

[97] Simpl. 284. 9–10; I have reached this conclusion based on the analogies which can be traced in the terms used by Simplicius within his fourth meaning (284. 6–10). In 284. 6–8 the cloak (*himation*) which is woven, which is referred to as *to huphainomenon*, could also be interpreted as the compound, and by analogy the same meaning could be attributed to *to phyomenon* in 284. 9. In 279. 25–27 Simplicius uses the term *phyomenon* for the matter (*hylē*), while for the form he uses the words *ho phyetai*; but that does not mean that he could not use the same term with another meaning in a different context.

[98] I believe this interpretation could be perfectly sustained by Simplicius' words 'physis eis physin dia physeōs' (284. 19–21).

[99] From Philoponus' exegesis of passage 193b 13–15, it is clear that nature in the sense of outgrowth or process is tightly bonded with nature in the sense of end or *telos* (i.e., in the sense of form). According to my reading of Philoponus' exegesis of the relevant passage, this means that nature in the sense of outgrowth or process is associated exclusively with the final cause; on the other hand, in the case of matters of the arts the generatings and the processes are associated both with the efficient and the final cause because these are called what they are both after the ends and after what they arise from by way of efficient cause; see Philop. 216. 5–217. 6; in particular 216. 11–18 and 216. 25–217. 6.

[100] In my opinion in 284. 13–16 and 19–21, Simplicius includes all of the five meanings of nature that he recognizes in the Aristotelian text.

[101] *Physics* 194b 26–29; Simpl. 310. 23–24. Francis A. Grabowski III (*Plato, Metaphysics and the Forms,* Continuum Studies in Ancient Philosophy [New York/London: Continuum, 2008], 29) notes that the Forms and abstract universals obviously share many of the same features, but they have also important differences. One of these differences between them is that, 'unlike universals, which do not in any way look like the particulars that instantiate them, the Forms are routinely depicted as *paradeigmata*, 'standards' or 'paradigms', which resemble their sensible counterparts to a greater or lesser extent'.

which he calls a model because nature produces whatever it produces by aiming at this.[102]

According to Alexander's explanation, this is clear from the fact that when it has been produced, nature ceases producing it, since the form is something defined and, as it were, a target set up at which nature aims, which is the reason for its being called a model by Aristotle.[103]

According to Simplicius' testimony, Alexander points out that the end (*telos*) and the model (*paradeigma*) do not have the same significance in the case of everything that produces for the sake of something. Nature does not work as the things that produce according to choice, art, and reason. In the latter case the end for the sake of which everything else comes-to-be must first be conceived in the mind of the producer and be set up as a target and model for what is to be. On the contrary, in the case of things that come-to-be by nature, this is not so.[104] Alexander states that nature does not work by choice or by any reason within it, because nature is an irrational power.[105] But this in no way implies that nature produces at random and not for the sake of something. Besides, as the commentator points out, the term *heneka tou* ('for the sake of something') is not applied only to coming-to-be based on reason and choice, but everything that comes-to-be according to some regularity and because of something else does so for the sake of something.[106] So even if we accept that nature is an irrational power, one should not represent nature for this reason as not acting for the sake of something.

The real teleological dimension of nature is recognized when we construe form as a model according to which nature produces everything, nodding in its direction

[102] Alexander apud Simplicius *In Phys*. 310. 25–28.

[103] Alexander apud Simplicius *In Phys*. 310. 28–31. Fleet (*Simplicius: On Aristotle Physics 2,* 173, note 188) stresses that, on the contrary, art can go on working on its matter *ad infinitum*. Nevertheless, I believe it is necessary to underline that the conception which pre-exists in the artisan's mind as a model is also definite. Otherwise it could not be a model and a target.

[104] Alexander apud Simplicius *In Phys*. 310. 31–36.

[105] Alexander apud Simplicius *In Phys*. 310. 36–311. 1. In his comment on *Phys*. II. 2, 193 b 22, Simplicius, following what Aristotle states in passage 199a 17 ff., supports that nature, being analogous to art, acts for the sake of something and is a cause in the sense of being for the sake of something (*heneka tou*); Simpl. 288. 11–14. Nevertheless, in this context it is not quite clear if Simplicius believes that nature is a rational or irrational power. Based on what he states in passage 314. 15–19, we can infer that he believes that nature aims at the enmattered form as a target, but that this is not a purposeful action. But from what he states in 288.15–16, we can infer that he ascribes to nature a kind of volition to realize targets and to achieve completion and ordering in its products. In the latter passage, by referring to passage 271a 33 in *De caelo*, Simplicius stresses that Aristotle is clearly matching nature's work with that of God. This means that Simplicius implies the presence of *Nous* also in the realm of nature. But it is most probable that he simply means that nature as productive power realizes the procedure of coming-to-be of natural things by looking towards a definite goal. This approach brings to the fore a kind of intentionality, but this intentionality is oriented towards a certain *telos*, namely a goal, which is the good; see Simpl. 288. 20–24; 27–30. For the view that nature is mind-directed see Solmsen (*Aristotle's System of the Physical World,* 94–95), while for the view that it was the Judaeo-Christian God who imposed the dominance of a cosmic teleology upon Aristotelian nature, see Grene (*The Understanding of Nature*, 76–77).

[106] Alexander apud Simplicius *In Phys*. 311. 20–25.

not through choice, but more like a 'marionette' (*neurospastoumena*).[107] The meaning of this word is clarified in Alexander's description of the way in which natural things are produced:

> The power which is engendered from the first change produces in its turn a second change, and keeps its force until it has produced something like that from which it started when it was lodged in matter, and something the same either in species or in genus […]. This progression proceeds according to stages and regularity until what is coming-to-be is perfected according to the form, if nothing prevents it. This does not happen according to any reason or choice in the agents of change and production, as has been said.[108]

Alexander further explains the reasons why the Aristotelian form must be considered as a model (*paradeigma*), but in a completely different way to the Platonic conception of a model (*paradeigma*). In the case of natural things, the form of the producer is the same as the form or the genus of the thing produced and it too would be a model. In general, those who produce something according to a model produce it according to something determined. It is special to that which is produced according to a model to be produced according to something that is both determined and like it. If something is produced according to something determined and like it, then it would be produced according to a model. This is how the products of nature come-to-be; therefore, they are produced according to a model.[109]

Simplicius follows the same line of reasoning as Alexander and supports the thesis that it is clear that Aristotle calls the form a model not in the sense of a Platonic Form. The proof of Aristotle's divergence from Plato's view, according to him, is that he takes the enmattered form as a cause according to which the compound has the essence (*ti ēn einai*).[110] At the end of his comment on passage 194b 26, Simplicius offers another significant interpretation. He suggests that perhaps Aristotle calls the enmattered form a model equally as a target for nature, at which it aims not by way of knowledge but by way of substance, so producing everything, and equally as a model that is produced for art, since he does not want natural things to be produced according to some model, while he says that artefacts do need some model. The aim of this approach, according to the commentator, is to make clear that the natural form is the model for art.[111]

[107] Alexander apud Simplicius *In Phys*. 311. 28–30.

[108] Alexander apud Simplicius *In Phys*. 311.14–21. For the description of this procedure see also Alexander apud Simplicius *In Phys*. 311. 1–14.

[109] Alexander apud Simplicius *In Phys*. 311. 30–37.

[110] Simpl. 312. 1–3. I translate in a different way to Fleet because my syntax is different.

[111] Simpl. 314. 15–21. In this way Aristotle preserves the priority of nature over craft. Solmsen (*Aristotle's System of the Physical World,* 93) speaks of the Aristotelian tendency to preserve the priority of nature over craft and chance by contrasting nature's mode of operation with the working of chance, accident, and craft. Conversely, the priority of *technē* over nature in Plato is depicted in 'the idea of the "natural" world

V. The principal meaning of Nature (physis)

Simplicius draws a distinction between the word *physis* itself and its common connotation. He points out that the word *physis* itself is more strictly suitable to nature in the sense of change and growth (on the analogy of weaving, healing, and change in general). But he notes that the common connotation of the word fits better with nature in the principal sense, to wit, the nature which is productive of natural things. However, according to his exegesis, the definition of nature will suit all its meanings if taken of each in the appropriate way.[112] He further explains how the definition of nature offered by Aristotle in passage 192b 20–23 can be applied to each of the five meanings he has recognized. Nature in the strict sense is a principle and cause of movement and its cessation, while nature as change is something instrumental; for it is by means of nature in the sense of change that the productive nature brings to completion change and its cessation in natural things, just as a doctor brings about health through the practice of medicine.[113]

Simplicius states that matter and form are principles in an elemental sense of the actualization brought about according to nature. He testifies that Eudemus says that even these admit being described as nature, because the matter and the end in view (*to hou heneka*) seem to be principles or sources of change.[114] For example, the underlying matter is responsible for the fact that lead drops downwards. It is carried downwards because it is made of this sort of matter; hence it has a principle of change within itself and *per se*, considered as lead *qua* lead. The form is a principle also in the sense of an end in view (*hou heneka*), since it is to this that nature looks in doing all its work.[115] With regard to the compound, Simplicius poses the question: 'how could the compound be a principle and a cause when it comprises only the finished product?'. He then answers by asserting that even this could be a principle of change in the sense of an end in view (*hōs telos*); for whether the compound is a form

as *unnatural*', in other words, as the product of a *technē*, which as James G. Lennox ('Plato's Unnatural Teleology', in *Platonic Investigations,* ed. Dominic J. O'Meara [Washington, D.C.: The Catholic University of America Press, 1985], 195-218: 195–196) notes, is a stable feature of Plato's later thought (see esp. *Laws* 892b). Plato usually explains the paradigmatic role of the Forms by indicating that a craftsman or artist must use a Form as his model if his intention is his work to be beautiful. This tendency culminates in the view that an intelligent Maker or Craftsman is the truly responsible agent in the procedure of the creation of the world; for the references to the relevant Platonic dialogues see Grabowski (*Plato, Metaphysics and the Forms,* 29–31). For the view that it is craft that provides the model for nature in Aristotle, not the reverse, see Sarah Broadie ('Nature and Craft in Aristotelian Teleology' in *Aristotle and Beyond: Essays on Metaphysics and Ethics* [Cambridge: Cambridge University Press, 2007], 85-100, 85–86). Broadie points out that it is nature in the sense of the specific essential nature of an individual substance, the inner principle of its behaviour and organisation that Aristotle likens to craft—to one or another specific craft—for craft in its active exercise is evidently end-directed, and to Aristotle the same is true of nature, although less evidently so. Broadie's view is well supported by the passage *Phys*. 193a 31–36.

[112] Simpl. 284. 25–29.

[113] Simpl. 284. 29–33. This explanation justifies why Aristotle does not lay so much emphasis on nature considered as genesis or growth but only uses this meaning in order to prove that nature is the form; see again 193b 12–18.

[114] Simpl. 284. 33–285. 1.

[115] Simpl. 285. 1–5.

in matter or a product of matter and form, nature is productive of this compound and not of the form as existing *per se*.[116] Furthermore, he adds that perhaps the compound is a principle of change and its cessation also as a productive cause, since actualizations and their cessation, as changes, are produced in compounds.[117]

Simplicius notes that it seems worthwhile asking why Aristotle, in his listing of the different meanings of nature, failed to give the most important one, that of nature as productive of natural things. In the second half of *Physics* II.1, Aristotle presented the other meanings of nature, namely he said that nature is the name given to the matter and the form, and then to the compound and to the outgrowth and the change leading to the form; but he made no mention of it as the productive cause.[118] The commentator believes that in reply to this question it must be said that at the very outset of his discussion about nature in *Physics* II.1, Aristotle presented nature in the strict sense as the productive cause and defined it as such. According to him, the evidence for this is that when Aristotle was explaining the term *per accidens* (*kata sumbebēkos*), he took as an example the doctor treating himself, as though seeking that which is a *per se* (*kath' auto*) productive cause, that which is analogous to the person making a house and other artefacts.[119] Thus, having in that passage presented nature in the strict sense (*kyriōs physin*), in the second half of the same chapter he offers the other meanings of the description of nature (*ta alla sēmainomena tou tēs physeōs onomatos*).[120]

We can assume that for Simplicius, the principal meaning of *physis* is definitely that denoted by and included in its Aristotelian definition. This is identified with what was presented by him as the fifth meaning of nature, namely, the cause of change in the natural bodies or the productive nature. Moreover, the commentator believes that perhaps Aristotle did not pass over nature in the strict sense even in the passage 193a 9–b 21. He maintains that Aristotle revealed this principal meaning when he said that healing was a process starting from medical knowledge and aiming not at that knowledge but at health, and that nature as change started from a nature and moved towards a nature. He points out that the nature which is analogous to medical knowledge is the productive nature and not any of the other kinds of nature that correspond to the four meanings.[121] From this reasoning we can infer once again that the fourth meaning, nature as change, is an absolutely necessary stage in Simplicius' exegesis, since it is crucial for understanding the fifth and principal meaning of

[116] Simpl. 285. 5–8; cf. Simpl. 283. 37–284. 2, where the commentator states that 'a man is propagated by a man as compound by compound'. It is worth noting that Simplicius considers the compound as the subject in the strict sense (*kuriōs hupokeimenon*) of generation and destruction; see 246. 24–33.

[117] Simpl. 285. 8–11.

[118] Simpl. 285. 13–17.

[119] Simpl. 285. 18–22; see *Physics* 192b 22–27. See also Simpl. 267. 5–22.

[120] Simpl. 285. 22–24

[121] Simpl. 285. 24–28.

nature. This will be more obvious when we clarify what kind of change is nature for Simplicius.

1. Nature and soul (physis and psychē)

Since the soul too is a principle of movement and change in ensouled bodies according to both Plato and Aristotle himself, Simplicius poses the question: what, then, is the distinction between nature and soul?[122] He then attempts to explain what kind of principle or source of change nature is in Aristotle's natural philosophy, by comparing it with the soul. The first thing he clarifies is that even the lowest part of the soul, called the 'vegetative' (*phytikē*), is something other than nature even according to Aristotle, even if they often call the vegetative part of the soul 'nature' on the grounds that it is close to nature.[123] From what Simplicius states within his investigation of the relation between nature and soul, we can infer that he establishes the following four criteria, on the basis of which *physis* is differentiated from *psychē*: 1) While soul is 'the ultimate actuality of the natural body possessing organs', it is not only bodies with organs that have a nature, but also *homoeomerous* substances and the four elements[124] 2) Furthermore, we give the name 'ensouled' to things that have within themselves the cause of growth, increase and the propagation of their kind, while we designate as 'natural' also things which are not like this, such as rocks, other minerals, lifeless bodies, and simple bodies[125] 3) Furthermore, all body has a nature (including the materials of artefacts like the material of the statue) and is natural just like the wood of the bed. But not all body is ensouled. At this point Simplicius reaches the conclusion: 'Therefore nature would not be soul'.[126] One would expect that with this inference the commentator integrates his argumentation regarding the difference between nature and soul. But this is a temporal impression, since immediately thereafter he poses again in a more decisive way the

[122] Simpl. 286. 20–22. Cf. Simpl. 262. 13–263. 17; in the latter passage, Simplicius poses the question in what sense does Aristotle mean that animals and plants exist by and because of nature, given that they are ensouled, and are what they are because of soul. He then attempts to answer this question by offering a detailed discussion of the matter.

[123] Simpl. 286. 22–25. Simplicius notes that all soul, even the lowest kind, is said by Aristotle to be 'the ultimate actuality of the natural body possessing organs'; Simpl. 286. 25–27; Arist. *De anima*, 412 a 19–b 6. The vegetative part of the soul belongs to the body which has a nature, being something clearly different from its nature. He states that it is clear that nature is inferior even to the vegetative soul, since such soul supervenes on natural body as form on matter; Simpl. 286. 34–36.

[124] Simpl. 286. 27–29. See also note 122.

[125] Simpl. 286. 29–31; cf. Simpl. 262. 22–26, where the commentator notes that the definition of the soul given in *De anima*, 412a 27–28, which calls it 'the first actuality of a natural body with organs, potentially possessing life', fits both plants and animals, but not the simple bodies such as earth and fire, etc., which do not have organs.

[126] Simpl. 286. 31–34.

question: 'How then did Aristotle present the difference between it and soul?'. In answer to this question, Simplicius' argumentation in support of the radical difference between nature and soul culminates with him introducing his final and strongest argument. 4) This argument consists of two parts. Simplicius states that he thinks that the phrase 'in which it resides' (*en ō estin*) is sufficient in respect of the answer to that question, and the following clearer phrase, 'in a substrate', refers to nature.[127] But while nature always resides in a substrate and is within the thing of which it is the source of change, all soul, because it properly has the power of moving, is set apart from what is moved.[128] This is the first part of the argument. We can trace the second and more crucial part of it in passage 287. 9–17 of Simplicius' Commentary. The commentator believes that it is most decisive both for the understanding of the natural substance and for the distinction between it and the soul. This part of the argument is intended to satisfy those who were not yet convinced on the basis of its first part. The counter-argument they provide is that the vegetative and irrational parts of the soul also reside in bodies as substrates.[129] As stressed by Simplicius in answer to these, Aristotle does not say that nature is a source of change for bodies in the same sense that both he and Plato say that the soul is. For according to both, the soul is what moves bodies, but nature is not a source of movement in respect of moving but of being moved, and of cessation of movement not in respect of stopping but being stopped. That is why natural things are not said to be moved by themselves; for if they could move themselves, then they could also stop themselves. He adds that, if nature were a principle of movement in the sense of causing movement, it would not in this respect differ from the soul and the primary moving cause.[130] In his comment on passage 195a 3 of *Physics* II. 3, Simplicius draws a distinction, saying that the principle of change is twofold, the self-changing (*autokinētos*) and the unchanged (*akinētos*). He then clarifies that being the principle of change in the strict sense (*kyriōs*) means being an unchanged changer, so that the efficient cause in the strictest sense (*kyriōtaton*) of things that come-to-be would be that which is unchanged, eternal and always remaining enduringly the same; such is august Intellect.[131] Below Intellect comes soul, explains Simplicius; for even if soul is changed, it has the agent of change within itself. According to him, that is why Aristotle prefers to call it unchanged, since he thinks that only those things that are altered in body are changed. So, the self-changed could be a principle of change in

[127] See Arist. *Phys*. 192b 22; 192b 34; Simpl. 286. 36–287. 3.
[128] Simpl. 287. 3–4.
[129] Simpl. 287. 4–7. Cf. *De anima* 412a 17–21.
[130] Simpl. 287.7–13; 16–17.
[131] Simpl. 317. 9–10; 14–17. Simplicius stresses that therefore that which is unchanged and subsisting eternally, being productive and a cause of change in the strict sense, is primary; Simpl. 318. 15–16. Alexander also stresses that the efficient cause in the strict sense must be separate and distinct; Alexander apud Simplicius *In Phys.* 317. 27–28.

that it has the agent of change within itself, although it is not a principle in the strict sense, because it remains the same and yet is changed.[132]

2. Nature as a sort of propensity for being moved

Simplicius sets out to discover what the principal meaning of nature is, by systematically attempting to reveal the difference between nature and soul. One of the most characteristic points of Simplicius' explanation of the Aristotelian nature is the view that nature seems to be a sort of propensity (*epitēdeiotēs*) for being moved and regulated. He adds that this propensity seems to be, as it were growing upwards from below and inviting the regulative causes because of its own fitness.[133] The commentator points out that it is clear what Aristotle primarily means by the word *nature* when he defines nature as the principle of change in the sense of being changed, not causing change.[134] The definition given in passage 192b 20–23 says that 'nature is a

[132] Simpl. 317. 17–20; 12–14.

[133] Simpl. 287. 13–15.

[134] Simpl. 287. 26–27; Arist. *Phys*. 192b 21–22. Richard Sorabji (*Matter, Space and Motion*: *Theories in Antiquity and their Sequel* [London: Duckworth, 1988], 220) correctly points out that the word *kineisthai* stands indifferently for the intransitive *being in motion* and for the passive *being moved*. Helen Lang (*The Order of Nature in Aristotle's* Physics*, Place and the Elements* [Cambridge: Cambridge University Press, 1998], 40–41) notes that since the forms are homographic, the verb *kineisthai* may be either middle or passive, and that the choice between them is crucial because the middle voice implies that nature is a self-mover, whereas the passive voice clearly indicates being moved (i.e., moved by something). She argues that the verb here must be passive: what is by nature must be moved by something. Her main argument is that *kineisthai* is always passive, not middle (or reflexive), in both Plato and Aristotle and, furthermore, is never used to express self-motion (Lang, *The Order of Nature,* 42–43). David Furley ('Self-Movers', in *Self-Motion, From Aristotle to Newton,* eds Mary Louise Gill, James G. Lennox [Princeton, New Jersey: Princeton University Press, 1994], 3–4) notes that to anyone who reads the *Physics* incautiously it might appear that since nature is declared to be an internal source of change and rest, all the things specified at the beginning of *Phys.* II.1 should be self-movers: living things and their parts, plants, and simple bodies, earth, water, air, and fire. Furley stresses that, of course, this turns out to be too generous, since we are told explicitly in *Phys*. 255a 5–10 that the bodies that move by nature up or down cannot be said to move themselves. Johannes Fritsche ('Aristotele's Usage of *Ἀρχὴ κινήσεως* (›Principle of Motion‹) and the two Definitions of Nature in *Physics* II 1', *Archiv für Begriffsgeschichte,* Band 52 [Hamburg: Felix Meiner Verlag, 2010], 7-31, 7ff.) maintains that in the entire corpus of Aristotle's writings the expression 'principle of motion' most probably never means a passive principle. By examining several relevant Aristotelian passages, he sets out to prove that this expression in *Physics* 192b 14 and 20–23 is used in the sense of a mover. It is also worth mentioning that Philoponus replaces the infinitive *kineisthai* of the definition with the phrase *archē kinēseōs* in his commentary and he generally interprets nature as an active principle of motion; see Philop. *In Phys*. 195.24–26; 196.6–8; 196. 13–16;196. 21–26;197. 9–10; 197. 30–33; 198. 9–10; 198. 22–23; 198. 30–32; 199. 12–16; amongst these the most indicative passage is 196. 13–16. In his comments on *De Generatione et Corruptione* 336a 6–12, Philoponus also stresses that the efficient cause in a strict sense is not acted upon. He then adds: 'And indeed we would not say that nature is acted upon, insofar as it is efficient cause, but if at all, [that] its underlying substrate [is acted upon], while [nature] itself always imparts motion' (Philop. *In De Gen. et Cor.* 287. 29–288.1; Inna Kupreeva, trans., Philoponus: *On Aristotle On coming- to-Be and Perishing 2.5-11* [London: Duckworth, 2005]). From Philoponus' words we can infer that he recognizes that nature is an efficient cause in the strict sense, namely, in the sense that it is always active, that it always imparts motion, and is never acted upon. Furthermore, with regard to Simplicius' interpretation of nature as passive principle, it is worth remembering that in *De Generatione et Corruptione* 323a 15–20, there is the statement that the mover is said to act (*poiein*) and the acting thing to impart motion (*kinein*). Nevertheless, Aristotle invites us to draw a distinction, for not every mover can act, if the term

principle and cause of being changed and its cessation', and that the nature resides in the substrate. But, according to what was previously stated, that which resides in the substrate would not in the proper sense be a principle that moves the substrate, because the moving or the efficient cause in the strict sense must be separate and distinct from what is to be moved.[135]

Simplicius' first and main argument that nature is a sort of propensity for being moved is the Aristotelian reference to the principle of change in the sense of being changed and not causing change, within the definition of nature offered in *Physics* II.1. His second argument is based on what is referred to in passage 255b 29–31 of book VIII of the same treatise. In the latter passage, when discussing the four elements, Aristotle states: 'It is clear that none of these things moves itself. But they do have a principle of movement, not in the sense of acting or causing movement, but of being moved'.[136] Simplicius adds that since it is acknowledged that the elements are not moved by themselves, Aristotle asks what it is that moves the elements; for he wants moving by themselves to be particular to animals that have a soul, which he defines as a source of movement (*archēn kinētikēn*).[137] The commentator also makes

ʿagent'(*poioun*) is to be used in contrast to ʿpatient' (*paskhon*) and ʿpatient is to be applied only to those things whose motion is a qualitative affection... in the sense that they are altered (trans. Harold H. Joachim, *Aristotle, On Coming-to-be and Passing-away (De Generatione et Corruptione), A Revised Text with Introduction and Commentary* [Oxford: At the Clarendon Press, 1922]). Joachim (*Aristotle, On Coming-to-be,* 147) notes that the term *poioun in the strict sense* applies only to a body which causes a change of *pathos* (affection) in another body. So, we can infer that *kinein* is a wider term than *poiein*; and based on this reasoning we can also infer that *kineisthai* is not identified with *paskhein* but is a wider term than the latter.

[135] Simpl. 287. 27–30; *Phys*. 192b 34. See also note 131 above.

[136] Simpl. 287. 30–33. Sorabji (*Matter, Space and Motion,* 220), when referring to the passage *Phys*. 255b 30–31, notes that this idea of passivity illustrated in it, to wit, the idea that nature is an internal source of change, a source not of causing motion, but of passively undergoing it (*paskhein*), had been prepared for in the earlier account of nature in *Physics* II.1, when Aristotle had described it as a source of *kineisthai*; see *Phys*. 192b 21. Simplicius, in his comments on *Physics* VIII.4, repeatedly stresses that being moved is a kind of being affected; see Simpl. 1210. 21; 1220. 22. In his comment on *Phys*. 255 b 24, he further notes that since none of these [sc.the elements] are moved by themselves, but by something else, an objection presents itself, asking how these physical [bodies] are said to have in themselves their nature as the principle of motion, if they are not moved by themselves, from within, but by something else, from outside. Simplicius believes that Aristotle resolves this objection precisely by saying that these are said to have ʿthe principle of motion' not as [the principle] of ʿcausing motion, nor of producing [motion]', but of ʿbeing moved' and ʿbeing affected'. He explains that not only that which moves from itself is said to possess a principle of motion, but also that which is of a nature to be moved. For the term ʿmotion' is common both to the mover and to that which is moved; but if motion is in that which is moved, as it has been proved in *Physics* III.3, motion is more proper to that which is moved; see Simpl. 1217. 34–1218. 7. All references to Simplicius' Commentary on Aristotle's *Physics* VIII. 4 follow the translation by István Bodnár (István Bodnár, Michael Chase, and Michael Share, Simplicius*, On Aristotle's Physics 8. 1-5* [London: Bloomsbury, 2012]).

[137] Simpl. 287. 33–288. 1. See *Phys.* 254b 33–255a 10, especially 255a 4–7; see also Simpl. 1207. 26–27; 1208. 8–10; 1208. 28–31; 1209. 5–6; 1209. 20–24. Simplicius notes that Aristotle proves by several arguments that it is impossible that the elements are moved by themselves. The first argument is the one that it is the sign of life (*zōtikon*) that something moves itself. The commentator proves that this is a common assumption, by adding a reference to Plato's *Laws* and *Phaedrus*: 'For we all say that for something to move itself is the same as to live, as Plato says in the tenth book of the *Laws*, "-Are you asking me whether we say that something lives when it moves itself. -Indeed" (see *Laws*, 895c). And, Aristotle says, it is the property of ensouled beings that they are moved from themselves. This is also said by Plato in the *Phaedrus*: "That for which motion is from outside-he says- is without soul, that for which it is from within, is ensouled"

reference to two other Aristotelian passages in order to articulate his argument. Firstly, he alludes to passage 255a 24–26 in book VIII of the *Physics*, where Aristotle states: 'Similarly that which can by nature be changed is that which is potentially of a certain quality, quantity or position when it has within itself such a source'. He believes that Aristotle is clearly referring here to the nature of the thing which can be changed (*kinēton*).[138] Secondly, he alludes to passage 284b 30–285a 1 in Book II of the *De caelo*, where Aristotle stated the following: 'In none of the soul-less entities can we see the origin of the source of movement'.[139] Finally, the reasoning of this second argument is formulated as follows: 'If, then, the four elements are natural entities and do not have within themselves the origin of the source of movement, i.e., the moving cause, it is clear that it is not in this sense that nature as a cause of movement is said to be a source of movement, but as a source of being moved'.[140]

Immediately after defining nature as something like potentiality and the propensity to be moved, Simplicius poses the following question: If nature is something like that, why do we so often say that it is active or a cause of change, in other words, efficient or productive cause?[141] *Prima facie*, one could claim that Simplicius

(see *Phaedrus*, 245e). If, then, these bodies (i.e., the elements) are without a soul, and the ones which move themselves are ensouled, these would not be moved from themselves'; see Simpl. 1209. 26–35.

[138] Simpl. 288. 1–3; cf. Simpl. 1211. 31–37.

[139] Simpl. 288. 3–6. See also Alexander apud Simplicius *In De caelo*, 387. 5–12. In this passage Simplicius presents a citation from Alexander, where the latter states that the soul-less entities also have within them a source of movement since they are natural bodies, but this is not a moving principle or a capacity (*dynamis*) to move, for the cause of their movement is from without; but they have a passive principle and capacity of being moved (my own translation). Cf. Simpl. *In Phys.* 1209. 23–27; 1211. 15–16. Terence Irwin (*Aristotle's First Principles* [Oxford: Clarendon Press, 1988], 94) claims that Aristotle explains the 'origin of change' only in *Physics* II. 3, when he introduces the doctrine of the four causes, and specifically in passage 194b 29–30 (cf. 195a 22–23), where in his view, the 'efficient cause' is described in terms very similar to those applied to nature in *Physics* II.1. In my view this is not true, because the definition of nature in *Physics* II.1 obviously emphasizes the idea that this principle, which can be considered either passive or active—that depends on the interpretation—, is inner or inherent, whereas in the *Physics* II. 3, we see that Aristotle describes only the relation between the agent and its effect, or between the producer and its product, and determines what is primarily called 'efficient cause'.

[140] Simpl. 288. 6–9. In his Commentary on *Physics* VIII. 4, Simplicius remarks that the case of the elements is problematic, because it seems absurd that they should be moved by something else when they perform their natural motion (*kata physin kinēsin*), since they are said to possess the principle of their motion in themselves (for animals were said to be moved by themselves on this very same account), while to assert that they (heavy and light bodies) are moved by themselves is to say something impossible; see Simpl. 1209. 20–24. Sheldon M. Cohen ('Aristotle on Elemental Motion', *Phronesis* 39, no. 2, [1994]: 150-159, 153) notes that if the natural motions of the elements are caused by another, rather than having an internal source in their natures, it might seem that they do not proceed from an internal principle, and so ought not to be counted as *natural* motions in the first place. He adds that Aristotle's main task is to explain how elemental motions can be natural, granted that they have an external cause. But the difficulty, according to Cohen, is that he has to come up with an answer to this question that is compatible with the account of nature in *Physics* II.1, which seems to require an internal principle for natural motions.

[141] Simpl. 288. 9–11. It is worth mentioning what Simplicius testifies about Alexander's views on nature considered as efficient cause. In his comments on *Physics* II. 3, Simplicius presents a climax of the efficient causes, culminating in the efficient cause in the strictest sense, which is the unmoved prime mover. He states that, 'since of natural things those that come-to-be and pass away come-to-be because of the proximate agency of what is eternal and in orbit ("for both man and the sun generate man"), it is clear that the producer in the strict sense causes change not by approaching what comes-to-be and passes away di-

is being inconsistent when he finally defines nature as a sort of propensity for being moved, whereas he has already defined its fifth meaning, that is nature as the cause of change in the natural bodies, as the most important.[142] How could nature be both an active and passive principle? As always, Simplicius expounds his own peculiar dialectic, articulated by means of crucial questions and equally insightful answers and comments. While he gives the impression that he just wishes to anticipate an objection, he in fact uses this dialectical device in order to reinforce and deepen our understanding of his explanation.

According to Simplicius, there are two reasons for which it is plausible and legitimate to say that nature is active and productive. Firstly, everything that comes-to-be does so from a substrate which is potentially that which it is going to become, and by the agency of whatever produces the change, which is actually that which the substrate potentially is. Both are necessary for the end result. For this reason, even if nature is a propensity in the substrate, it is said to *act* because it contributes to the end result.[143] Secondly, Simplicius places emphasis on these Aristotelian passages

rectly, but through everlasting intermediaries'" (317. 20–23). The commentator believes that in this way it becomes clear to us what the instrumental cause is, namely, that which is both changed by something else and itself changes another thing. This is evident in the production of artefacts, says Simplicius. And he adds that, according to Alexander, nature in its whole as well as partial nature is a kind of instrumental cause because the efficient cause in the strict sense must be separate and distinct; see Simpl. 317. 23–28; cf. 315. 15–18. In his comment on *Phys*. 194b 29–32, where Aristotle determines what the efficient cause is, Simplicius states that since Aristotle wants the productive cause, in the strict sense of the term, to be separate and distinct from its product, the inherent cause, such as the form and the nature, is to be associated with the formal principle. He then points out that it is useful to remember that Alexander, commenting on the same passage, agrees that nature is not a productive cause in the strict sense, but is rather a formal cause since it is not foremost among the producers; see Simpl. 315. 10–15; see also note 8 above.

[142] T. Irwin (*Aristotle's First Principles,* 96) believes that, 'When the effect is specified more clearly, reference to the first three causes turns out to be attribution of formal, final, or material properties to the efficient cause. If this is right, then Aristotle's initial suggestion that form and matter are internal origins of change, and therefore efficient causes, is more nearly correct than his claim that formal and material causes are not efficient causes'. From Irwin's reasoning we can infer that, since form and matter as internal origins of change can be construed of as internal efficient causes, in stating that form and matter are nature, Aristotle claims that nature is an internal efficient cause. I believe that Irwin's suggestion is not consistent with what Aristotle in the most explicit way states about matter in *De Generatione et Corruptione* II. 9. In *De Gen. et Cor.* 335b 16–18 and 24–35, Aristotle reproaches those who tried to explain generation and destruction of the things by the material cause, to wit, as effects of the movement originating in the matter. He states that, although to assign to the matter the causal role in the process of generation and destruction of things would be more in accordance with the study of nature than considering the Forms as efficient causes, it is also incorrect. He believes that those who posited matter as the cause of generation or movement deserve also criticism insofar as they did not display anything else as the cause of movement in matter. According to him, this proves that they were unaware of the fact that matter does not have movement from itself; see Melina G. Mouzala ('Aristotle's Criticism of the Platonic Forms as Causes in *De Generatione et Corruptione* II.9. A reading based on Philoponus' exegesis', *Peitho-Examina Antiqua*- 1, no. 7 [2016]: 123-147, 142). Aristotle says in 335b 29–31: 'For it is the property of matter to be acted upon and to be moved, whereas causing movement and acting belongs to another capacity' (Christopher John F. Williams, trans., *Aristotle's De Generatione et Corruptione, Translated with Notes* [Oxford: Clarendon Press, 1982]). Philoponus, in his comments on *De Gen. et Cor.* 335a 22, 335a 31 and 335b 24, also stresses that matter obviously does not have the principle of producing and moving, but rather of being moved and being acted upon by another (trans. Kupreeva, 2005); see Philop. *In De Gen. et Cor.* 282. 10–11; 283. 27–284. 4; 287. 2–5.

[143] Simpl. 288. 17–21.

which present nature as *acting* for the sake of something (*heneka tou poiein*). In particular, he focuses on what Aristotle himself says towards the end of the second book of his *Physics*, in passage 199a 8–20. Here it is said that nature is analogous to art and that it acts for the sake of something, which means that the coming-to-be of natural things looks towards a definite goal, and that they do not come-to-be through luck or chance, but because they are constituted by nature to become what they become.[144] There are also two specific references by Simplicius to the notorious Aristotelian statement in the first book of the *De caelo,* in passage 271a 33: 'God and nature do nothing to no purpose'. The commentator believes that Aristotle through this statement is clearly matching nature's action and production (*poiēsin*) with that of God. According to him, the real meaning of this statement is that nature provides from below the propensity which looks towards a goal which is the good, while God sheds his light from above in the actualized form of it.[145]

The thesis that physical bodies are said to possess the principle of being moved because they possess the capacity and the propensity or the aptitude for being changed into something, is also expressed in Simplicius' Commentary on *Physics* VIII.4.[146] It is worth considering the meaning of the word *epitēdeiotēs*, which Simplicius prefers to use in his exegesis of the principal meaning of nature.[147] Based

[144] Simpl. 288. 11–14; 21–27.

[145] Simpl. 288. 15–16; 27–30. In his comments on *Physics* VIII.4, Simplicius states that if the nature of these bodies (of the elements) is not a principle of causing motion and producing (motion), but of being moved and of being affected, when Aristotle says that nature is a productive cause, somewhere saying that 'neither god nor nature does anything in vain', and somewhere else proving that nature is a productive cause according to reasons and for the sake of something, we have two possibilities: either we have to think of that nature as some other nature—that is to say, the demiurgic intellect pervading everything—or, provided he speaks about the same nature, one has to understand what he says in a material and passive way, as we have understood also the principle; see Simpl. 1218. 13–19. I believe the identification of nature with the demiurgic intellect which pervades everything alludes to the Neoplatonic perspective of the dialectic between unity and plurality, which escorts the manifestations of the demiurgic intellect. The latter has established the cosmos as one and many; and if this is true, since that which creates bestows on what it makes this character that it possesses, then the plurality and the unity are inherent in him; see Glenn R. Morrow and John M. Dillon (*Proclus' Commentary on Plato's Parmenides* [Princeton, NJ.: Princeton University Press, 1987], 130). But clearly this is not Aristotle's view of nature.

[146] Especially in the passage 1218. 7–10 of Simplicius' Commentary in the *Physics*, we can find the most detailed explanation of the real meaning of the statement that nature is the *principle of being moved*. The key-word *epitēdeiotēs* which is repeatedly used by Simplicius both in his comments on *Physics* II. 2 and *Physics* VIII.4 is translated by Fleet as 'propensity', whereas by I. Bodnár as 'aptitude'.

[147] The definition of nature as inner principle of change begs some questions anyway. Lear (*Aristotle: the desire to understand,* 16) believes that a plausible question emerges: 'if nature is an *internal* principle of change, how could nature be a cause? Nature would seem to be too much a piece of the thing itself to be its cause'. Sorabji (*Matter, Space and Motion,* 220) stresses that 'Aristotle needed to find something by which a falling rock was moved. And the rock's inner nature would not be sufficiently distinct from the rock to serve his subsequent argument for a prime mover distinct from the heavens'. But he adds that Aristotle had also to reconcile this constraint with the need to distinguish natural bodies from artefacts as having an *internal* cause of motion; see also Sorabji (*Matter, Space and Motion,* 221). According to Lang (*The Order of Nature*, 45), the characterisation of nature as a source or cause of being moved and being at rest essentially and not accidentally, in *Physics* II.1, is followed immediately by the rejection of an apparent case of self-motion, a doctor who cures himself. H. Lang construes the case of a doctor who cures himself (*Phys*. 192b 24–33) as a case of an apparent self-motion because the doctor cures himself only accidentally.

on the passage 192b 18 in *Physics*, H. Lang asserts that Aristotle identifies nature with *hormē* (*ὁρμή*),[148] and describes the latter as 'an intrinsic active striving that contrasts with external force'.[149] Simplicius, in his comment on 192b 15, states that 'he (Aristotle) called this source of change from within an impulse in the proper sense of the word' and adds that some people write 'source' instead of 'impulse'.[150] Simplicius' statement shows that Lang's suggestion is absolutely reasonable, since it paraphrases what Aristotle states in the definition of nature and its surroundings in 192b 16–23. Lang further explains this interpretation and associates it with that of Aristotle's teleology. By referring to the way Charlton construes the *passive power,*[151] she points out that 'passive' in the case of the definition of nature, as in the phrases 'to be affected' or 'to be moved', does not mean for Aristotle 'to be passive', because the ability of a natural thing to be moved is always potential *for* something, which means that is never neutral to its mover. Lang construes of nature considered as *hormē*, as the active orientation of potency to actuality which rests on the intimate relation between them: the moved, or potential, has its very definition in that which is actual (i.e., the mover). She also claims that Aristotle's teleology should be identified with this active orientation of a thing toward its own being. In her opinion, although the definition of nature determines nature as an intrinsic source of being moved, its force lies here: 'nature is uniquely defined by an intrinsic active orientation of the moved, potency, toward its mover, actuality'.[152] I have strongly insisted on this interpretation because I believe that 'active orientation' is a good candidate for the meaning of *epitēdeiotēs* and this discussion helps me to expound my own view of it.

She believes that through this example, Aristotle proves that even apparent self-motion is nothing other than being moved by another and that the target of his argument about self-motion is undoubtedly Plato's doctrine of the soul. According to this doctrine, soul is defined as self-moving motion and serves as the origin of all motion in the cosmos; see again *Phaedrus* 245c–246a. Although what Lang suggests is an interesting interpretation and is generally correct with regard to Aristotle's criticism of Plato's doctrine of the soul, I believe that passage 192b 22–27, and particularly that which is within the parenthesis, sets out to only show the difference between what is present primarily and *per se* and what exists *per accidens*; see also Simpl. 266. 33–268. 12.

[148] This term is translated in different ways: '(innate) impulse' by Robert P. Hardie and Russell K. Gaye (Aristotle: *Physics*, Translation [Oxford, 1930]), '(inherent) trend' by Wicksteed and Cornford (Aristotle, *Physics,* 1957), '(innate) tendency' by Charlton (*Aristotle's Physics,* 1970), '(innate) impulse' by Fleet (*Simplicius: On Aristotle Physics 2,* 1997).

[149] See Lang (*The Order of Nature,* 48, and note 49). In my opinion the Greek term is more successfully rendered by this description in English than by the suggested English translations of it.

[150] Simpl. 265. 14–15. See also Fleet (*Simplicius: On Aristotle Physics 2,* 166, note 41).

[151] See William Charlton ('Aristotelian Powers', *Phronesis* 32, no. 3 [1987], 277-289: 278).

[152] Lang (*The Order of Nature,* 48). I believe that Lear's interpretation is oriented towards the same direction, which suggests that an object's nature would seem to be a developmental force which impels it *toward* the realization of its form; see Lear (*Aristotle: the desire to understand*, 19). It is important to emphasize here the distinction between nature and art, because as Lang (*Aristotle's Physics and its Medieval Varieties,* 31) correctly notes, 'matter is exclusively oriented toward natural form and possesses no innate ability to be moved by artistic form'.

In my view, Simplicius' *epitēdeiotēs* is not the *hormē* referred to by Aristotle in 192b 18.[153] *Epitēdeiotēs* is not a trend, tendency, impulse or intrinsic active striving; the word *hormē* is appropriate to describe the difference between natural beings and artefacts, but not to render the meaning of Simplicius' term. To say that *epitēdeiotēs* is 'an active orientation of potency to actuality' would be closer to what Simplicius means; but still this is not a precise meaning, because as we saw from Lang's explanation, this presupposes an intrinsic active effort or a movement towards. But what Simplicius really means is 'having a good or natural disposition for being moved'. We can understand very well what he means if we pay due attention to his own words, since in his comments on *Physics* VIII.4 he explains it in a clear way, as follows: 'For to be of a nature to be moved with some motion is the same as possessing the principle of such motion, as, for example, one who is gifted for philosophy [is said] to possess the principle of philosophy, not [the principle] of making someone else a philosopher, but [the principle] of himself becoming a philosopher'.[154] The key-word in Simplicius' explanation of *epitēdeiotēs* is *euphyēs*, which in its etymological structure contains as a constituent, apart from the 'nature', the *eu* (*εὖ*), in other words, the good nature, or the good disposition for something.[155] In my view, nature as a kind of propensity for being moved is something distinct from the natural thing itself as well as from the efficient cause of its movement, considered in the strict or proper sense of the efficient cause. We have seen that Simplicius justifies the characterisation of nature as efficient cause, by the fact that nature is said to act to the extent that it contributes to the end result. I would say that *epitēdeiotēs* of a thing for being moved is a presupposition of the realization of the agency and efficacy of the efficient cause, since it pre-exists the efficient cause. Consequently, it ensures and allows for the possibility that something can act as efficient cause on whatever has this kind of propensity. Furthermore, given that *epitēdeiotēs* is *euphyia* for being moved, I conclude that nature as *epitēdeiotēs tis* is neither the material nor the formal cause. In other words, it cannot be identified with either matter or form. But it could

[153] Philoponus, with regard to the elements, also uses the word *ropē*; in his comments on *Physics* 192b 8, he says that what brings the stones down is the natural inclination they have; see Philop. *In Phys.* 195. 27–29.

[154] Simpl. 1218. 7–13; esp. 10–13.

[155] I owe my interpretation partly to Simplicius and partly to the fortune that I have to use and feel the meaning of the word *epitēdeiotēs*, since it is also used in Modern Greek where it has approximately the same meaning. This meaning of nature, namely, *epitēdeiotēs tis* of a certain thing for being moved, perfectly supports what Charlton (*Aristotle's Physics,* 88) points out in his Notes on the *Physics*; in particular, that Aristotle conceives the word *nature* as applying not to some single all-pervading demiurgic force, but to that factor in a thing which we call its nature. So, for Aristotle there is no such thing as nature over and above the nature of this, the nature of that, etc. Charlton notes that Aristotle, in the *Metaphysics* 1070a 12, states that nature is a 'kind of disposition'. But according to pseudo-Alexander, in this passage Aristotle calls 'nature' and 'a this' (*tode ti*) and 'a kind of disposition' (*hexis*) the form, because all these are in parallel; see ps. Alex. *In Metaph*. 676. 30–31.

be successfully described as something that prepares the linkage between matter and form, as a *sine qua non* presupposition of their joining.[156]

Simplicius notes that earlier thinkers also clearly had some such conception of nature viewed in terms of the propensity of each thing for change, according to which natural entities are characterised. He adds that, since all natural entities have matter and form, some of these thinkers ascribed such a potentiality to the matter, claiming that this was a nature by which natural entities are constituted to be changed, and seeing that natural things were most changed in their matter (as for example a bed is changed in terms of the wood). Others, claiming that it was nature in terms of which natural entities have their being, since the form is the mark of each thing by which each thing subsists and is said to be just what it is, for this reason said that the form was the nature.[157] However, Simplicius stresses the fact that Aristotle did not think it right either to call *matter per se* 'nature' (for *matter per se* is an impotent substrate), or to call the form 'nature' (for this is natural but not nature), but he designated as nature the propensity of matter for appropriate movement and change, when it changes from one form to another; for the loss and reception of the form happens to matter according to its natural propensity.[158] So, according to Simplicius' explanation of Aristotle's conception of nature, matter and form are both natural, but neither is nature; nor, similarly, is the compound. But still, there is a scale and a climax regarding the relation to nature: Form rather than matter would be nature because of its character and power. And the compound rather than matter would be nature because of the form, since it becomes an entirely natural individual thing when it receives the form; for matter *per se* is indeterminate and lacking in definition.[159]

3. Nature as a sort of life (eschatē zōē)

Simplicius attempts to explain more accurately and further specify the fifth meaning of nature, namely, the designation of nature as cause and inner principle of change in all natural bodies. Nature, being a propensity (*epitēdeiotēs*) for the existence of the form, in a way pre-exists the form by being present in the matter in potentiality, as one would expect; and it gives within itself a prior indication of

[156] On the other hand, in passage 1045a 30–33 of his *Metaphysics,* Aristotle mentions as the cause of this union of what is potentially with what is actually in the case of things which are generated, apart from the agent, the essence of matter and form: 'For there is no other cause of the potential sphere's becoming actually a sphere, but this was the essence of either' (trans. W.D. Ross, The Internet Classics Archive). But here it is easy to assume that the *essence* of matter and form is the *nature* of matter and form; see also Melina G. Mouzala (*Ousia kai Orismos, Hē Problēmatikē tēs henotētos eis ta oikeia kephalaia tōn* 'Meta ta Physika' *tou Aristotelous* [Substance and Definition: The Problematic of Unity in the relevant chapters of Aristotle's Metaphysics], [Athens: Harmos Editions, 2008], 86–95; Mouzala, 'Aristotle's Criticism of the Platonic Forms as Causes', 127, note 15).

[157] Simpl. 288. 33–289.7.

[158] Simpl. 289. 9–15.

[159] Simpl. 289. 17–22.

the form, being its nature and its growth, as it were, and its sprouting from the matter.[160] Simplicius states that those who say that nature is the lowest level of life are quite right. He then reaches the point where he states that nature, being the life of the form, is not only its growth, but also its cohesion and continuation once it has come-to-be, and its rising up to act and be acted upon, according to its natural constitution.[161] The commentator describes what the relation is between nature and the bodies using as a starting point his own perspective: since bodies are far removed from the indivisible and unextended essence and since there is a life that subsists in (absolute) being,[162] with regard to absolute being they are lifeless and spiritless in themselves and too chilled for any kind of life. But they have within themselves the lowest (*eschaton*) sort or form of life which relates to potentiality and propensity, namely that which we call 'nature'.[163] It is because of this that even lifeless bodies can be moved and changed, and what is more, grow and act upon each other, being passive.[164] Simplicius explains the phrase '*kai eis allēla pathētika energein*' (287. 22–23) by clarifying that their activities are not pure but involve being acted on; and he adds that this is the reason why all natural bodies can only move other things if they themselves are moved; yet what is strictly unmoved itself moves.[165] In Simplicius' reference to the life that subsists in the (absolute) being, it is implied that there is a contradistinction between this life and the lowest sort or form of life, which is what we call 'nature'. The relation between them becomes clear in passage 289. 26–33 of his Commentary on *Physics* II. 2.

From his Neoplatonic perspective, Simplicius draws an analogy in passage 289. 26–35 between the primary life and potentiality and the lowest life and potentiality. The primary potentiality and primary life, which subsists according to the first movement of being, is the bubbling over, as it were, from primary being into

[160] Simpl. 289. 22–25.

[161] Simpl. 289. 25–26; 33–35.

[162] I deviate from the translation by Fleet, because my syntax is different with regard to Simpl. 287. 17–19.

[163] Simpl. 287. 17–21. Philoponus also defines nature as life. In his comment on *Phys*. 192b 8, he notes that this definition of nature does not signify what nature is but the activity of it, for we did not learn what nature is through learning that it is the source of movement and rest, but what it does. According to him, in order to give also the definition of its essence itself we must say that nature is a life or a power which has descended into bodies, and which moulds and manages them, being a source of change and rest for that 'in which it belongs primarily, *per se* and not *per accidens*'. He believes it is clear that the definition of nature will also embrace the nature of the animate, which is the soul. Moreover, with regard to the animate things he identifies their life with their soul. One could infer from this that he identifies soul with nature, since both are determined as life by him. However, he clarifies that nature manages not only animate things but also inanimate ones and that as form is more manifest in the animate, so also is the providence of nature. Each thing owes the holding together of its being to the natural power which inheres in it, for it would have perished and gone over into not being if there were nothing holding it together; see Philop. *In Phys.*197. 30–198. 8.

[164] Simpl. 287. 21–23.

[165] Simpl. 287. 23–25; cf. Simpl. 289. 15–17, where he states that the form comes-to-be according to its own nature from its opposite, and once it has come-to-be it is preserved and changed by both acting and being acted on, or rather by having a passive activity.

the separating out of the *hypostasis* of form and the movement outwards (*ekstasis*) from being (*einai*) to actuality (*energein*). Analogous to the movement outwards from *einai* to *energein*, which is characterised as the first movement of being, is the growth of the enmattered form from matter and the movement towards that form, viewed according to the potentiality of the form; this movement is the lowest potentiality and the lowest life.[166] The crucial point of Simplicius' analysis in this whole passage (289. 21–35) is that nature is the nature (*physis autou*) and growth (*ekphysis*) of the form, as it were (289. 24; 34), and its sprouting (*anablastēsis*) from the matter (289. 25). Moreover, being the life of form, is not only its growth, but also its continuation once it has come-to-be, along with its rising up (*dianastasis*) to act and be acted upon, according to its natural constitution (289. 33–35). We can see here that Simplicius uses the same terms, *ekphysis, anablastēsis* and *dianastasis*, as he used in the analysis of Antiphon's views. We have also seen that this analysis adopts, to a certain degree, the crucial terms and arguments of the view that nature is the matter.[167] Thus, we can reach the conclusion that, by defining nature in its principal meaning as a sort of propensity for being moved, Simplicius basically attempts to make an insightful reading of Aristotle's definition of nature in 192b 20–23. However, when he determines nature as a sort of life of the form, he offers an interpretation in which his Neoplatonic approach is merged with Aristotelian and pre-Aristotelian lines of reasoning.[168]

[166] In *Metaph*. 1072b 26–28, Aristotle determines life as the actuality of Intellect, and finally identifies the first Intellect (i.e., God) with that actuality. But while for Aristotle, life is identified with *energeia*, considered as the energeia of the first Intellect or the first principle, according to the Neoplatonic approach of Simplicius, the primary life is the first movement of the primary being from *einai* to *energein*.

[167] See again Simpl. 273. 35–274. 1; see also notes 24 and 27 above.

[168] When Simplicius describes the primary life as the first movement of being, and more specifically as an *ekstasis* from *einai* to *energein*, it is obvious that he determines it from a Neoplatonic perspective, because as previously mentioned in note 166, Aristotle in Book Lambda of his *Metaphysics* firstly identifies life with *energeia* of the Intellect, and secondly identifies the first Intellect with *energeia*. But when Simplicius defines nature as the lowest life or the life of form, by using a terminology which alludes to his analysis of the materialist's position (e.g., Antiphon), it is obvious that he also exploits both Aristotelian theory and pre-Aristotelian philosophical tradition.