

Routledge International Studies in the Philosophy of Education

DISCURSIVE THINKING THROUGH OF EDUCATION

LEARNING FROM THOSE WHO TRANSFORM THE UNIVERSE

Oleg Bazaluk



Discursive Thinking Through of Education

This book is a contribution to the philosophical discourse on education.

Education is considered a tool of philosophy. Education (paideia) and politics (politeia) are equal in importance for building a sustainable society free from feud and unhappiness. Discursive thinking through of education is based on Plato's dialogues and the results of epistemological, metaphysical and ethical research in the fields of cosmology, sociology and neuroscience. The author demonstrates the potential of the threefold scheme of philosophy, a *Platone philosophandi ratio triplex*, for ordering individual and collective discourse and way of life in strict accordance with the intelligible complexity of the expanding cosmos.

An essential read for students and scholars interested in the crossroad between education and philosophy.

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First published 2024 by Routledge 4 Park Square, Milton Park, Abingdon, Oxon OX14 4RN and by Routledge 605 Third Avenue, New York, NY 10158

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British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data

Names: Bazaluk, O. A. (Oleg Aleksandrovich), 1968- author. Title: Discursive thinking through of education: learning from those who

Title: Discursive thinking through of education : learning from those who transform the universe / Oleg Bazaluk.

Description: Abingdon, Oxon; New York, NY: Routledge, 2024. | Series: Routledge international studies in the philosophy of education |

Includes bibliographical references and index. |

Identifiers: LCCN 2023025467 (print) | LCCN 2023025468 (ebook) | ISBN 9781032585802 (bardback) | ISBN 9781032585819 (paperback) |

ISBN 9781032585802 (hardback) | ISBN 9781032585819 (paperback) | ISBN 9781003450726 (ebook)

Subjects: LCSH: Plato--Influence. | Education--Philosophy. |

Education, Greek. | Thought and thinking. | Discussion.

Classification: LCC LB85.P7 B39 2024 (print) | LCC LB85.P7 (ebook) | DDC 370.1--dc23/eng/20230715

LC record available at https://lccn.loc.gov/2023025467

LC ebook record available at https://lccn.loc.gov/2023025468

ISBN: 9781032585802 (hbk) ISBN: 9781032585819 (pbk) ISBN: 9781003450726 (ebk) DOI: 10.4324/9781003450726

Typeset in Galliard by KnowledgeWorks Global Ltd.

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Acknowledgement

The book was written and published with the support of the Belt and Road Initiative Center for Chinese-European studies, Guangdong University of Petrochemical Technology, Maoming, Guangdong, China.

I am deeply grateful to Milena Bezuglaya and Tetiana Zhuravlova for their generous help with translation.



Introduction

The first question to ask about Education is "What is its purpose?" "What is the teacher trying to do?" and Plato's reply to this is, in form, the same as that of his predecessors, the 5^{th} century Sophists; "to inculcate virtue ($\alpha \rho \epsilon \tau \dot{\eta}$)" (*Protagoras* 325c). But this statement at once confronts us with two problems — "What is virtue ($\dot{\alpha} \rho \epsilon \tau \dot{\eta}$)?" and "Can it be taught?"

Russian aggression against Ukraine (2014–2023), Putin's nuclear blackmail² and the first armed seizure of nuclear power plants in world history³ brought to light the international institutions and the paradigm of global sustainability⁴ and the "just" world that they present. War and peace are the consequences of the managed processes that inform society about the quality of interstate building and ideologies of progress. Modern Global Governance and Global Institutions show their inability to avert and stop wars.

It is important for our study that government leaders of all levels who decide whether or not to make war are the products of an educational system. We must recognise that modern educational institutions at all levels of accreditation have enough time and opportunities "to inculcate virtue (*arete*)" and fulfil the goal stated by United Nations: "Providing quality education for all is fundamental to creating a peaceful and prosperous world."

However, the wars continue.

Nevertheless, why is this happening? At first glance, only two answers are possible. These are either current educational theories and national curricula that are inadequate or virtues ($aret\bar{e}$) that could not be taught.

To understand the question, it is necessary to "turn" to its origins, namely, to Plato's dialogues.

Plato used the verbs dialégesthai (διαλέγεσθαι) and dialégomai (διαλέγομαι) in similar meanings: "to practice dialectics," "discursively think through," or "to think discursively." Discursive thinking through is the opportunity to use the force of discourse/dialectics⁸ to disclose a complexity of a phenomenon. The force of discourse/dialectics has distinguished philosophy in world history since its institutionalisation in Plato's Academy. Discursive thinking through

of education is (a) to reveal the education process's concealedness and (b) to exhibit this process by the force of dialectics.

The main idea of the book is a philosophical gaze on "self-evolving education." Plato did not separate politeia¹⁰ and paideia.¹¹ He has considered them as two key and complementary tools of philosophy.¹² Philosophical discourse on education always transcends the narrow boundaries of modern "educational theories" and considers education as a tool equivalent to politeia. Philosophy investigates education only as an action: "I form," "I give form" and, more precisely, as Plato wrote in the *Republic*, ¹³ I *force* to a specific way of life, i.e. to "do as I do," to be transformed according to a specific image to imitate, a *proto-type*.¹⁴ That is why education and child-rearing are inseparable in philosophy.¹⁵ Philosophical discursive thinking through of education is the development of a *specific* way of life that *forces* and *transforms* in accordance with the proclaimed "ideal" image.

Martin Heidegger has tried to oppose phenomenology to dialectics, ¹⁶ but as a result, he regained the significance to Plato's logos. 17 Therefore, discursive thinking through of education of "Those who transform the Universe" is based on the rethinking of Plato's diá-logos. 18 Plato's lógos is proposed to be used as a work. Namely, on the one hand, in this meaning, it is "an authoritative beginning that makes continuity possible." ¹⁹ It helps to go beyond highly specialised terminology and its meanings to use its particular complexity to investigate an interdisciplinary global whole. However, the main reason is the influential work of Plato's *lógos*, which acts as a link between the "World Order Studies" and the necessity to practice the results obtained in everyday life.²⁰ Plato's *lógos* excludes the separation between "theory" and "practice" in principle. It is always a holistic set of actions (interactions), which is denoted by the verbs: to consider, to ponder, 21 to thoroughly investigate 22 and beyond that, as follows from Socrates' parting words, ²³ (i) to persuade, usually by fair means, 24 (ii) to care for, to attend to 25 and (iii) to exist, to be. 26 The main feature of Plato's *lógos* is that it does not provide for the victorious proclamation of "truth" in the form of one or another model or theory. It is an ascent to the paradigm wherein "the paradigm indicates how to go on, how to begin an enquiry or how to get beyond an impasse."27

Plato developed the "discursively think through" practice as the $m\acute{e}thodos^{28}$ to "begot" the virtue $(aret\bar{e})$ and to grow it up.²⁹ Philosophy as a concrete discourse and way of life was created during the Peloponnesian War³⁰ and was proposed as a way "to go through" the war into peace based on a new paradigm. According to Julia Annas, Plato consistently, throughout his intellectual life, held to a very general thesis of political and social life: society will reach a state of sustainable development and prosperity only if it "has the unified overall aim of making its citizens happy $(eudaim\bar{o}n)$, and that that could be achieved only by having them educated and formed."³¹ Thus, virtues $(aret\bar{e})$ could be taught, and this platonic thesis is developed in the book.

In this case, the natural conclusion is that the problem of war and peace is rooted only in modern educational theories and their potential.

The first chapter shows the formation of two competing traditions in classical Greek education³²: the philosophers and the sophists. The fundamental characteristics of these traditions are formulated. It is proved that modern education corresponds to the tradition the sophists formed.

The emphasis is placed on the philosophical view of "self-evolving education." Its significance in world history is shown.

In Chapters 2–4, axioms for new educational theories are formulated. The theoretical framework is also postulated to order the collective discourse and a way of life in strict accordance with the idea, ideals and values of "Those who transform the Universe."

Discursive thinking through of education "Those who transform the Universe" is the upward path to the key tools by which to create the "ideal" legal order, in which the laws of the cosmos exert a providential and directive influence on the way of life of people.

We shall enumerate Greek words that are used as terminus technicus, following the example of Heidegger's Dasein.³³ In most cases, Greek words are fixed in the nominative case, and their meanings are argued by quotations from Plato's dialogues.34

- 1 The adjective agathós35 and the phrase "the idea tou agathou"36 instead of "Good" and "the Idea of the Good." Plato examined the etymology of agathós in the Cratilus.³⁷ Plato associated the adjective agathós with the adjective sophós, 38 and agathós always came first. According to Plato, the idea tou agathou is a reality "that gives disclosedness (alētheia) to the objects of knowledge and the force of knowing to the knower."³⁹ In Ancient Greece, the agathós concentrated in itself the whole set of concepts that have covered and still cover all man's moral, intellectual and spiritual virtues. All of them are its derivatives. I consider agathós as a state of global sustainability and prosperity. The whole hierarchy of being and knowledge is based on agathós. "In like manner, then, you are to say that the objects of knowledge not only receive from the presence of the agathou their being known, but their very existence and essence is derived to them from it, though the agathou itself is not essence but still transcends essence in dignity and surpassing power."40 According to Plato, the *idea tou agathou* is the highest idea, and it is developed in the book in the same meaning. I promote the *idea tou* agathou as the basis of a new paradigm. The idea tou agathou is a reality in which alētheia (disclosedness) is immanent to "nature."
- 2 The adjective kalós⁴¹ instead of "beautiful," "fine."⁴² Plato was the first to single out from the diverse world of Greek Gods the collective image of the demiurge (God), who was only agathós⁴³ and therefore created kalós and kállistos (superlative degree of kalós) cosmos (order). 44 "[What is] difficult is kalós." 45 Plato clarified the meanings of *kalós*, subordinating them to the meanings of agathós. "All that is agathón is kalón, and the kalón is not excessive." 46

4 Introduction

- 3 The nouns phrónēsis⁴⁷ and sophía instead of "practical wisdom" and "wisdom." The noun *phrónēsis* is a derivative of the verb *phronéō* (φρονέω). Plato used it in the meaning "must necessarily and inevitably think thoughts that are immortal and divine."48 Plato defined phrónēsis as "perception of motion and flowing; or it might be understood as a benefit of motion; in either case, it has to do with bringing."49 Plato emphasised the paramount importance of *phrónēsis*:50 "assimilation to God" is "to become righteous and pious⁵¹ and *phronēseōs*."⁵² According to Plato, the culminating point of a man's age is the maturity and prime (akme) for both body and phroniseos.⁵³ The term *phrónēsis* conveys the inseparable connection between intelligibility and practice, which resulted in the creation of kalós and "brought to perfection" forms (things).54 In Plato's Apology, Socrates took credit for the care of the highest agathós and phrónēsis. 55 The noun sophía (σοφία) and the adjective sophós (σοφός) represented (a) knowledge and factual accuracy, (b) moral and educational integrity and (c) technical skill and aesthetic/emotional impact. ⁵⁶ Plato opposed sophia to ignorance, ⁵⁷ and the feature of Socrates was the "human sophia." Human sophia was "little or no value"⁵⁹ in comparison with the *Sophia* of God. However, the imitation of the Sophia of God distinguished the philosophers from the sophists, 60 or literally sophón (σοφόν) from sophistikós (σοφιστικόν).61
- 4 Alētheia (ἀλήθεια) and "disclosedness" instead of "truth." Alētheia and "disclosedness" are used in the book as synonyms. The noun "disclosedness" (a) conveys Plato's meanings⁶² and (b) corresponds to Heidegger's terminology, which Thomas Sheehan adapted to the English language. 63 "...of all agathón (good), for gods and men alike, alētheia stands first." According to Plato, trustworthy philosophers are those who delight in the contemplation of alētheia. 65
- 5 The nouns psukhē (ψūχή) and aretē (ἀρετή) instead of "soul" and "virtue." The etymology of psukhē and aretē is considered by Plato in the Cratylus⁶⁶ and is specified in the text. Plato's research was aimed at affirming the two main meanings of psukhē: (1) the psukhē is immortal,⁶⁷ and its nature differs from the nature of the body.⁶⁸ (2) Knowledge (epistēmē) is stored in psukhē, therefore, to seek for something and to know, in general, was called "recollection." Plato considered aretē as the essence of psukhē,⁷⁰ "the flow of agathes psychis." Aretē was disclosed by a specific discourse and way of life, philosophy. I develop the meanings of these terms in a new paradigm.

Notes

- 1 Bury [1937: 304-305].
- 2 On September 27, 2022, Dmitry Medvedev, Deputy Chairman of the Security Council of the Russian Federation, announced that "Russia has the right to use nuclear weapons, if needed" (*Izvestiya*, September 27, 2022).
- 3 The Russian armed forces captured Chornobyl (February 24, 2022) and Zaporizhzhva Nuclear Power Plants (February 28, 2022).
- 4 https://www.undp.org/sustainable-development-goals

- 5 Aretē (ἀρετή, noun), virtue ("moral excellence"), which is displayed to enrich life. (1) A virtuous course of thought, feeling and action; virtue, moral goodness; (2) Any particular moral excellence, such as modesty or purity [Thayer, 1995]. I selectively use Plato's semantics and vocabulary. In most cases, these are primary words in Transliteration A according to The Liddell, Scott, Jones Ancient Greek Lexicon (LSJ). They are shown in italics. Greek words are used as the technical terms, so I do not stick to grammatical cases except for direct quotations. The meanings of the words are based on Plato's dialogues, the Platonic corpus, the LSJ and *Thayer's* Greek-English Lexicon of the New Testament.
- 6 The Sustainable Development Goals Report 2022. "In 2020, there were about 12 million pre-primary schoolteachers, 33 million primary school teachers and 38 million secondary school teachers working in classrooms around the world." https://www.un.org/sustainabledevelopment/education/
- 7 "This is the word appropriated by Plato's own medium to designate itself: 'to engage in [Socratic] dialogue' or 'to practice dialectic'" [Nagy, 2002: 32].
- 8 τὴν τοῦ διαλέγεσθαι δύναμιν [Parmenides 135c1-2]. δύναμις, potency, i.e. a special ability to do a particular thing (a natural ability). The Romans translated dúnamis as potentia, which has formed the root of the English word "potential."
- 9 "We do have two relatively firm points to grasp in approaching Plato. One is the great influence on him of the Athenian Socrates, and the other is his founding of the Academy, the first philosophical school" [Annas, 2002: 19].
- 10 Politeía (πολιτεία, noun). The term is used in a broad sense, from "civil order, constitution of a polis (state)" to a "form of government." Its meanings are equivalent to Plato's *Politeia* (Πολιτεία, but the *Republic* in English). Politeia means a popular or relatively popular form of government in the public interest.
- 11 Paideia (παιδεία, noun), *instruction* that *trains* someone to reach full development (maturity) [Thayer, 1995].
- 12 Annas [2017].
- 13 Republic, Chapter Seven.
- 14 "Viewed in the light of a number of parallels, this points to poetic heroization, and suggests that a cult of Socrates was practiced at the Academy. Hence, his monumentalization in both literary terms (Plato's dialogues) and in more tangible ways (Socrates' portrait by a plane-tree" [Capra, 2015].
- 15 At this point, I should like to record important a historical fact. In Ancient Greece, "the most important educative forces were not thought to be the school at all — an experience that was primarily for young children. Rather, the surviving literature identifies several educative forces including (a) a city and its laws, (b) fathers and other citizens, (c) poets, and (d) sophists and other 'new' educators" [Mintz, 2018: 7].
- 16 See Gonzalez [2009].
- 17 Lógos (λόγος, noun), (i) that which is said: word, sentence, speech; (ii) that which is thought: reason, consideration, computation.
- 18 "In the diálogos led by Socrates, the verb diérkhomai 'to go through' is regularly used to designate discussion, conceptualizing diálogos as traveling. The goals or ends of this investigative journey are portrayed as distant, remote, and difficult to reach" [Schur, 2015] with modification.
- 19 Nagy [2002: 70].
- 20 "Thus, in explaining the general principle that in all our actions we pursue the good, Socrates moves from 'because we think it better' (Grg. 468b) to 'because we think it better for us' without any apparent awareness that what is expressed in the second phrase is substantially different from what is expressed in the first" [Vlastos, 2000: 65].
- 21 Φροντίζω, "continuously connecting *in*sight (enlightened inner perspective) to the necessary outward behaviour" [Thayer, 1995]. This verb describes the actions

- (interactions) of Socrates in *Symposium* 220c6. "Though it may be only a coincidence, Alcibiades' report of what the soldiers at Potidaea said about Socrates' strange behaviour includes the verb $\varphi \rho ovt(\zeta \omega v)$ " [Edmunds, 2006: 417].
- 22 ἀναζητέω (verb, from the intensifying prefix aná "up to down, completing a process" + zēteō), thoroughly investigate. τά τε μετέωρα φροντιστής καὶ τὰ ὑπὸ γῆς πάντα ἀνεζητηκὼς [Apology 18b7–8]. See Edmunds [2006] and Tell [2010].
- 23 Apology [36c4–36d1].
- 24 Πείθω. ἕκαστον ὑμῶν πείθειν [Apology 36c4].
- 25 ἐπιμελεῖσθαι, ἐπιμεληθείη [Apology 36c5], ἐπιμελεῖσθαι [Apology 36d1].
- 26 ἔσοιτο [*Apology* 36c6].
- 27 Gill [2010: 176]. The noun "paradigm" is derived from the verb παραδείκνυμι, "exhibit side by side, to make comparisons" [Liddell & Scott, 1940].
- 28 Méthodos (μέθοδος, noun), path (hodos) of pursuit (meta-), to pursue one's enquiry, or literally "the way to follow."
- 29 τεκόντι δὲ ἀρετὴν ἀληθῆ καὶ θρεψαμένω [Symposium 212a4-5].
- 30 The Peloponnesian War (431–404 B.C.).
- 31 Annas [2017: 8].
- 32 I use the terms "education" and "paideia" as synonyms in the text. However, at the same time, I understand the noun "education" and the verb "to educate", first of all, as Pais (παῖς), child and the nouns derived from it Paidiá (παιδιά, noun), child's play, Paideia (παιδεία, noun) and the verb Paideúō (παιδεύω, verb), rearing of a child, child-training. See Bury [1937].
- 33 Alexander Koyré proposed not to translate Dasein, and to use it as *terminus technicus*, especially, since in German language it is considered to be nothing more than *terminus technicus heideggerianus* [Koyré, 1999].
- 34 The Greek text is cited according to Burnet [1901, 1903; 1978; 1907] and Duke et al. [1995]. The author follows the translation (unless otherwise indicated) of *Plato in twelve volumes*, 1967–1979.
- 35 ἀγαθός; Agathou (αγαθού, masculine/neuter genitive singular); Agathón (ἀγαθόν, neuter nominative/accusative/vocative singular), good.
- 36 ή τοΰ άγαθού ίδέα [Republic 6.505a-6.509c; 6.510a-6.511d; 7.518a-7.518d; 7.532a-7.532c; 7.534c; 10.621c-d; Timaeus 29a].
- 37 See Cratylus [412c, 422a].
- 38 ἀγαθὸς καὶ σοφὸς [Meno 93e; Hippias Minor 367e].
- 39 Republic [6.508e]. Translated by Paul Shorey with modification.
- 40 Republic [6.509b]. Translated by Paul Shorey with modification.
- 41 καλός, adjective; neuter Kalón, καλόν, moral beauty, of fine quality; and Kállos (κάλλος, noun), beauty. Diogenes Laertius wrote, "He was the first to define the notion of *kāloû* (καλοῦ) as that which is bound up with whatever is praiseworthy (ἐπαινετοῦ) and rational (λογικοῦ) and useful (χρησίμου) and proper (πρέποντος) and becoming (ἀρμόττοντος)" [Diogenes Laertius, 1972: 3.1.79].
- 42 *Cratylus* [416b–416d].
- 43 δημιουργός ἀγαθός. God is *agathón*. God cannot be the cause of evil [*Republic* 2.379c].
- 44 Timaeus [29a].
- 45 χαλεπὰ τὰ καλά (Khalepà tà kalá) [*Republic* 4.435c; *Hippias Major* 304e]. This is the author's translation of the proverb consisting of two adjectives. Other translations: "The good/beautiful things [are] difficult [to attain]"; "[What is] good/beautiful [is] troublesome"; "beautiful things are difficult."
- 46 πᾶν δὴ τὸ ἀγαθὸν καλόν, τὸ δὲ καλὸν οὐκ ἄμετρον [Timaeus 87c3-4].
- 47 φρόνησις, thoughtfulness, sagacity, insight.
- 48 φρονεῖν μὲν ἀθάνατα καὶ θεῖα [Timaeus 90c1]. Translated by W.R.M. Lamb.
- 49 ή 'φρόνησις': φορᾶς γάρ ἐστι καὶ ῥοῦ νόησις. εἴη δ' ἂν καὶ ὄνησιν ὑπολαβεῖν φορᾶς: ἀλλ' οὖν περί γε τὸ φέρεσθαί ἐστιν [Cratylus 411d7–8]. Translated by Harold N.

Fowler with modification. Harold N. Fowler has translated the noun φορᾶς and the verb φέρεσθαί as motion. This is possible if we keep in mind that we are talking about the motion of the "Universe and heavenly bodies" (Liddell & Scott, 1940), and about an almost transparent allusion to Heraclitus's motto: Πάντα ῥεῖ, "everything flows." I have translated it literally. Φορᾶς and φέρεσθαί are derivatives of the verb φέρω, "bring" that is used when the object is an inanimate object, so φορᾶς is a motion, or a fragment, of what is "brought."

- 50 "Heraclitus was the first philosopher to introduce the idea of φρόνησις (phrónēsis) to put it on a level with σοφία (sophía)" [Jaeger, 1946: 180], where phrónēsis is knowledge related to action.
- 51 The difference between δίκαιον and ὅσιον is that ὅσιον is sanctioned by the gods and contrary to δίκαιον, sanctioned by human laws.
- 52 όμοίωσις δὲ δίκαιον καὶ ὅσιον μετὰ φρονήσεως γενέσθαι [Theaetetus 176b2]. Translated by Harold N. Fowler with modification. Phronēseōs is genitive singular of phrónēsis.
- 53 αὕτη ἀκμὴ σώματός τε καὶ φρονήσεως [Republic 461a1-2].
- 54 Cratylus [416d].
- 55 Apology [36c5-6].
- 56 Tell [2011: 16].
- 57 Protagoras [360d].
- 58 ἀνθρωπίνη σοφία [Apology 20d8].
- 59 Apology [23a].
- 60 Sophist [268d].
- 61 Sophist [268b].
- 62 For example, θεία τοῦ ὄντος φορὰ "the divine act of being"; θεία ἄλη "a divine wandering" (θεία ἄλη) [Cratylus 421b].
- 63 For example, "openness (the clearing) is thrown open" [Sheehan, 2014: xvii].
- 64 ἀλήθεια δὴ πάντων μὲν ἀγαθῶν θεοῖς ἡγεῖται, πάντων δὲ ἀνθρώποις [Laws 5.730c1-2]. Translated by R.G. Bury.
- 65 Republic [5. 475e].
- 66 Cratylus [399d-400b, 415d-e].
- 67 ἀθάνατος ἂν ἡ ψυχὴ εἴη [Meno 86b].
- 68 For example, Phaedo [115c-116a], Phaedrus [245c-249d] and Timaeus [34c].
- 69 "And really," said Cebes, interrupting, "also according to that speech, Socrates, which you have been accustomed to say often, if it is true (alēthēs), that learning for us happens to be nothing other than recollection (anamnēsis), also according to this, there is a necessity, I suppose (pou), that we have learned in some previous time the things which we now recall (anamimnēskesthai)" [Phaedo 72e]. Translated by Gwenda-lin Grewal (March 6, 2021).
- 70 For example, [Symposium 209a].
- 71 ροήν τῆς ἀγαθῆς ψυχῆς [Cratylus 415d].
- 72 Plato promotes this view in the dialogues Meno, Phaedo, and Republic.

1 Education in History of Philosophy

1.1 Variety of educational theories

§ 1. We shall first clarify the term "education." Education is considered in the Platonic sense as *moulding in accordance with an ideal*. Werner Jaeger argued that Plato was perhaps the first to use the word *mould* for the act. However, even before Plato, Protagoras viewed education as the form-creation of *psukhē*, and educational means as form-building forces. Jaeger convincingly proved that the Greeks were the first to recognise that "education means *deliberately moulding* human character in accordance with an ideal." Jaeger showed the transformation of the meanings of paideia from "childrearing" to the development of "... connected with the highest *areté* possible to man: it was used to denote the sum-total of all ideal perfections of mind and body – complete *kalokagathia*."

Plato was the first to establish a connection between the process of *obtaining* knowledge and the *movement* towards the ideal. Ilsetraut Hadot wrote the following: "Plato's education system should ultimately lead to a real culture, to $\pi\alpha\iota\delta\epsilon(\alpha)$ in the true sense of the word, i.e. to the harmonious development of the individual, the peak of which was the acquisition of wisdom as an art of living."

Martin Heidegger conveyed the initial meaning of education as follows: Education (literally "formation") means two things. "On the one hand, 'formation' means 'forming' people in the sense of impressing on them a character that unfolds. But at the same time, this 'forming' of people 'forms' (or impresses a character on) people by antecedently taking measure in terms of some paradigmatic image, which for that reason is called the proto-type (Vorbild). Thus at one and the same time, 'formation' means impressing a character on people and guiding people by a paradigm. The contrary of $\pi\alpha\iota\delta\epsilon i\alpha$ is $\alpha\pi\alpha\iota\delta\epsilon\nu\sigma i\alpha$, lack of formation, where no fundamental bearing is awakened and unfolded, and where no normative proto-type is put forth." Heidegger considers that in the allegory of the cave, Plato "wants to show that the essence of $\pi\alpha\iota\delta\epsilon i\alpha$ does not consist in merely pouring knowledge into the unprepared soul as if it were some container held out empty and waiting. On the contrary, genuine education takes hold of our very soul and transforms it in its entirety

DOI: 10.4324/9781003450726-2

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by first of all leading us to the place of our essential being and accustoming us to it."7

Thus, thanks to the Greeks, the educational process became a culture for the first time: it became a process by which the whole personality is modelled on a fixed pattern, the proto-type.8

- § 2. Currently, discursive thinking through of education covers an enormous amount of particular knowledge from various fields of science, technology and culture. We shall provide the following example in order to give an idea of the diversity of knowledge involved in education. The superficial analysis of educational theories that are actively promoted at present has revealed the following features:
- 1 The term "theory" in relation to "education" is used with different meanings⁹: (a) the obverse of practice-theorising is thinking and reflecting as opposed to doing; (b) a generalising or explanatory model of some kind, e.g., a specific learning theory like constructivism; (c) a body of knowledge, which may or may not be associated with particular explanatory models. Theorising involves developing this body of knowledge.
- 2 A huge number of books and journals on education are published that promote a specific educational theory or their diversity, e.g., the website of John Wiley & Sons Publishing House issues more than 160 titles of printed matter to the request "education theory." ¹⁰ In addition to academic journals, 11 John Wiley & Sons Publishing House has published the following books: "Educational Neuroscience" (2011), in which the relationship between the features of brain development and education is considered; "Jung and Educational Theory" (2012), in which Jung's teaching and his contribution to the theory of education, the philosophy of education, the professional development of teachers, etc. are rethought; "Vygotsky: Philosophy and Education," in which the author Jan Derry argues that Vygotsky's central ideas about the nature of rationality and knowledge were informed by the philosophic tradition of Spinoza and Hegel. Derry shows the influence of Vygotsky on modern philosophers: Robert Brandom and John McDowell.¹²
- 3 Theories of education use an interdisciplinary approach. For example, Philip Wexler argues the influence of social theories of Emile Durkheim, Karl Marx and Maximilian Weber on education.¹³ Ramesh Mishra reveals the impact of politics and political systems on the organisation and management of educational process.¹⁴ Peter Hick, Ruth Kershner, Peter Farrell and others argue the importance of psychology for inclusive education.¹⁵ Tara Fenwick and Richard Edwards considered the impact of actor-network theory (ANT) on education.¹⁶
- 4 There are a large number of traditions and schools within the framework of which theories of education are created and developed. Education remains being influenced by Plato's ideas¹⁷: Isocrates (1980), Origen (1885),

St. Augustine (1998, 2007), John Locke (1913), Jean-Jacques Rousseau (1961), Friedrich Wilhelm von Humboldt, Rudolf Steiner (1996), John Dewey, Anton Makarenko (1986), Maria Montessori, Lev Vygotsky, Jean Piaget (1994), Paulo Freire (2003), Michael Barber (2011), etc.

§ 3. In fact, this is only a small part of the results of discursive thinking through of education. There is an acute need to systematise the results of thinking through of education and created education theories. Different approaches are proposed, including behaviouristic, social, constructivist, cognitive, experiential and humanist learning.

In addition, some authors systematise the theories of education within the boundaries of specific academic disciplines. For example, Allen Morrow and Carlos Torres (1995) proved the impact of social theories on the development of educational theories. Lyudmila Mikeshina (2002) explored the influence of epistemology on the philosophy of education. David Holbrook (1987) systematised the theories of education in relation to the development of ideas in philosophical anthropology.

Other authors approach the systematisation of theories of education guided by the national affiliation of the authors' theories. For example, Valentin Rybalka (2015) systematised the theories of personality in psychology and pedagogy, which were developed at different times by Ukrainian scientists.

Some other authors systematise the theories of education in a state tradition. For example, Dickson Mungazi (1999) systematised the theory of education as the history of US education. In the "International Handbook of the History of Education" (2000), edited by Kadriya Salimova and Nana L. Dodde, the theories of education are systematised as the histories of education of the various states.

Many authors systematise the diversity of created theories of education according to historical periods, for example, Werner Jaeger (1986), Henri-Irenee Marrou (1998), Greg Dimitriadis and George Kamberelis (2006), Terence Moore (2012), and others.

Some authors carry out a comprehensive systematisation of the theories of education on the basis of interdisciplinary knowledge. For example, there is the three-volume work by James Bowen (2003), which covers the development of Western education over the past 4,000 years.

To systematise the diversity of modern theories of education can be as follows²²:

- 1 *Curriculum theory*. This group combines the theories and ideas of Johann Friedrich Herbart, David Snedden, John Dewey, Lester F. Ward, and others.²³
- 2 Descriptive theories of education. For example, Carsten Ullrich (2008) considers the theories of behaviourism, cognitivism, constructivism, etc., as the descriptive theories of education.

- 3 *Theories of educational neuroscience*. For example, the development of ideas in this research area is represented in the book "Educational Neuroscience" (2011), edited by Kathryn E. Patten and Stephen R. Campbell.
- 4 *Educational theorists*. The subsystem includes authors whose ideas contributed to the development of educational theories, for example, Plato, Origen and St. Augustine.
- 5 *Educational thought.* This subsystem unites the ideas of politicians, journalists, business people, public and cultural figures, medical workers, etc., which enriched the development of the theories of education and teaching.²⁴
- 6 *Theories and practices of integral education*, which consider the development of a child in the unity of body, emotions, mind, soul and spirit. Mostly these are the theories that develop the ideas of Sri Aurobindo.²⁵
- 7 Mastery learning. The founder of this direction is considered Benjamin Bloom (1980).
- 8 Naturalistic education theory (NET).²⁶
- 9 *Normative theories of education*, which provide the norms, goals, and standards of education.²⁷
- 10 Precision teaching. For the first time, precision teaching theory was offered by the American psychologist Ogden R. Lindsley. Currently, there are the theories and practices of Kent Johnson, Elizabeth M. Street and others.²⁸
- 11 Thematic learning theory.²⁹

Discursive thinking through of educational theories has identified a well-substantiated explanation of the first fundamental characteristic that distinguished paideia since Plato's dialogues. Namely, paideia is a child's play (paidiá) specially created to incantation³⁰ the child's nature. Through child's play (paidiá), paideia assimilates the child into the institutionalised social environment and its practices. Thus, it forms an individual capability of acting and being acted upon with a particular focus and limits.

The first fundamental characteristic defines the mission of paideia. It means to eliminate the opposition between child's play ($paidi\acute{a}$) and serious engagement ($spoud\~{e}$), ³¹ and therefore between individual actions (interactions) in childhood and adulthood, which is subordinate to politeia.

Moreover, discursive thinking through of modern education notes the high-quality development of the second fundamental characteristic. Plato emphasised that the straight *lógos*³² of the law, which draws children's character and directs every child³⁴ to practice this or that way of life, is affected by paideia. Paideia provides *paideian*³⁵ children forth from *aretēn*, which makes a man eagerly desirous of becoming a perfect citizen, knowing how both to rule and be subject of a right. Thus, paideia forms stress-free "passing through" the "child's play" into politeia and necessary correspondence between individual and social psychology. All current educational theories, regardless of their purposes and tasks, are subordinate to politeia and serve certain political regimes.

At the same time, discursive thinking through of modern education found its fundamental difference from the philosophical view of "self-evolving education." This difference severely threatens peace and sustainable development at the global level.

1.2 Research méthodos ("the way to follow")

§ 4. The noun *méthodos*, literally "the way to follow," is a guideline for the researcher. Our discursive thinking through of education *méthodos* was proposed by Alexander Lyubishchev in the book "Lines of Democritus and Plato in the History of Culture." We refined Lyubishchev's approach by the research results of Werner Jaeger, Henri-Irenee Marrou, Pierre Hadot, and Julia Annas. As a result, the sum of knowledge about education was systematised and represented by two traditions: the philosophers and sophists.

The traditions of philosophers and sophists take their origin from "Homer's education."⁴⁰ In the *Republic*, Plato wrote, "... when you meet encomiasts of Homer who tell us that this poet has been the educator ($\pi \epsilon \pi \alpha i \delta \epsilon \nu \epsilon \nu$) of Hellas, and that for the conduct and refinement of human life, he is worthy of our study and devotion, and that we should order our entire lives by the guidance of this poet we must love and salute them."⁴¹ The Homeric epic's educational significance lay in the fact that there was a formulated moral ideal, which the Greeks in most followed throughout the history of Ancient Greece. Marrou formulated this ideal in the phrase: "it was a heroic morality of honour."⁴²

Conceptual and empirical differentiation of two traditions in education (paideia) started with Socrates. Socrates opposed his way of thinking and the way of life of the sophists. Socrates, during his lifetime, was known as *átopos* (unclassifiable, high originality).⁴³ He urged to take care of *psukhē*,⁴⁴ and not concentrate on achieving earthly benefits. The "care of *psukhē*," in Socrates' understanding, was the necessity of taking thought for *phrónēsis*, *alētheia*, and the perfection of one's *psukhē*.⁴⁵

Hadot stated that before Socrates, paideia development was provided by two types of people. On the one hand, Parmenides, Empedocles, Heraclitus, and other *alētheia* (truth) teachers opposed their speculations to the crowd's ignorance. On the other hand, the sophists were convinced that knowledge could be sold to each and everyone.⁴⁶ With his way of life, Socrates formed the third type of teacher, *scholarchēs*.

Scholarchēs did not consider paideia as a way of transferring specific knowledge to disciples. Paideia was a way to teach disciples to live in a certain way. That is why, Socrates' disciples could have knowledge and lead a discourse that was at odds with Socrates' views. It was not typical for education in ancient Greece. However, such an approach to disciples allowed philosophy to progress. After the death of Socrates, Antisthenes, Aristippus, Euclid and Plato established their own schools, which had a significant influence on the development of world history. Antisthenes was a founder of cynicism, which significantly influenced Stoicism. Aristippus was a founder of Cyrenaics, which

significantly influenced Epicureanism. Euclid founded the Megarian school, famous for its dialectic. Plato's school became a forerunner of modern religion and spirituality in Western Europe. All above mentioned schools were united by a common approach towards education. They were united by philosophy, "... both as a specific discourse linked to a way of life, and as a way of life linked to a specific discourse."47

It is beyond argument that in Athens and other cities of ancient Greece, there were enough scholarches. Probably, not all of them were the owners of the teaching place. Apparently, they were distinguished by other characteristics. However, all scholarches were united by the common approach to forming the worldview and way of life of disciples, i.e. philosophy. Scholarches taught two to three disciples simultaneously, though, subsequently, the number of disciples grew considerably. The disciples were of full age and chose scholarchēs independently. They could leave the school anytime and choose another teaching place. Education was not limited in time and could last for decades. Scholarchēs did not take money for teaching because he considered the cooperative ascension to the highest idea as God's behest. 48 Most of the time, the disciple spent with scholarchēs at his territory. For example, Aristotle studied in the Academy for twenty years until Plato's death. Theophrastus was Aristotle's disciple until the death of the latter. Aristotle appointed him the guardian of the children and the Lyceum scholarchēs. Porphyry was a disciple of Plotinus for six years and left scholarchēs only at his request.

The current popularity of the term "life-long learning," created by Leslie Watkins in 1993, is quite surprising. In the 4th century B.C., the term "philosophy" represented these meanings much wider and more authoritative. The more significant part of Plato's dialogues was all over the revealing of the lifelong learners. The key dialogue was the *Republic*. These meanings made the philosophical school recognisable in world history. "Only those who are fifty years old, who have survived the tests and approved themselves altogether the best in every task and form of knowledge, must be brought at last to the goal."49

§ 5. The noun philosophia and the adjective philosophos appeared in ancient Greece later than the noun sophist. 50 The sophist was derived from the verb sophiso, "become or be clever or skilled in a thing." The philosophos was a derivative of two adjectives: philos, "that which is loved or important," and sophos, "skilled in any handicraft or art, clever." 52 We need to specify the meanings of the key terms to understand the reason for the separation of two traditions from the "Homeric education," as well as the difference between philosophers and *sophists*.

Currently, translators use the words "wisdom," "wise" and "sage" instead of the Greek σοφία (sophía) and σοφός (sophós). The words sophía and sophós appeared around the 5th century B.C. and stayed in use in European and Middle Eastern spiritual culture till the 19th century A.D.⁵³ Their meanings have evolved over 2,000 years. The word "wisdom" re-creates only a part of the story.

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The noun "wisdom" appeared only in the 12th century. It derives from Old English *wīsdōm*. The word meant "accumulated philosophical learning: knowledge." The adjective "wise" appeared at the same time and meant those who "are characterized by wisdom: marked by deep understanding, keen discernment, and a capacity for sound judgment." It was not until the 14th century that the English language was enriched with another noun, "sage," from the Latin *sapere*, "to be wise." ⁵⁵

The definition of "wisdom," given in the Modern Cambridge University Press Dictionary, is "the ability to use your knowledge and experience to make good decisions and judgments." However, how can one understand the key opposition of "wise" and "not wise"? Socrates (according to Plato) saw his destiny in the following: "Therefore I am still even now going about and searching and investigating at God's behest anyone, whether citizen or foreigner, who I think is wise; and when he does not seem so to me, I give aid to the god and show that he is not wise." In Socrates's view, only the God was wise. He called himself "not wise," but the one who, by God's behest, had to prove to anyone that he/she was "not wise."

As a matter of fact, Plato used the adjective *sophós*: "is not *sophós*." When the adjective *sophós* is used in such a way, it reveals entirely new meanings of the phrase that correspond to the cultural context in which it was written. First of all, it is the transformation of *sophía* into an "ideal" image to imitate, *an ideal*.

For our research, it is essential to restore three meanings of sophia and sophis.⁶⁰

- 1 "Pre-philosophical" meaning of the noun sophia. In ancient Greece, the term sophía was used to specify the outstanding qualities of people "given to them by Gods."61 That meaning was fully disclosed in opposition of the two Ancient Greek words sophia and technē. The first word Greeks used to denote giftedness, prudence, exemplarity, and other highest moral qualities, which formed unique and incomprehensible human nature, his/her aretē. It was believed that those qualities a human got from the Gods at birth. In the latter case, the word emphasised hard skills, competence, knack, success, and other qualities that were acquired by training, practice, and life experience. In the Greek world, the qualities of sophia were possessed by the most revered Gods: Metis and Athena. Metis combined shrewdness, deep thought and cunning. Homer described her features to the fullest in the character of Odysseus. Athena, daughter of Zeus and Metis, embodied the military power of her father and the "divine intelligence" of her mother. Plato wrote that Athena had the "intelligence of God," and her name meant "who knows divine things."62
- 2 The second meaning of the word *sophia* was developed by the sophists. Let us formulate it with the phrase "the general higher education." The sophists were the first professional educators. They travelled around the Greek world and were invited to gain, on a paid basis, knowledge and skills that went beyond the traditional paideia: basic literacy, arithmetic, music and

physical education. The sophists claimed that only they had privileged access to sophia, i.e. knowledge about the gods, man and society. This knowledge was divinely inspired in them, and their mission was to transmit it (paideia). 63 Plato wrote ironically about the sophists that they were sophiān sophie ("wise in some wisdom greater than human").64 The phrases "wisely wise" (σοφίαν σοφοί) or "wise with wisdom" (σοφί σοφός) are examples of the abasement of divine meanings of sophia.

3 The third meaning of the word sophia was developed by philosophers. Starting with Heraclitus, the term sophía was used to denote the highest universal force that created "Order." Plato enriched and specified these meanings. 66 Sophia was proper only to the God 67 and was promoted as an "ideal" image, the movement to which transformed a man. The man was transformed into the $daim\bar{o}n^{68}$ – the "guardians of mortal men." The daimons possessed "human sophia," which was higher than sophia of the public men, the nature of poets, those of tragedies, and those of dithyrambs, and the rest, and art of hand-workers. It was based on the awareness of one's ignorance.⁷¹

Thus, in the Academy, sophía was considered an "ideal" image, 72 the movement towards which, on the one hand, was associated with the acquisition of certain knowledge and skills. On the other hand, it ordered (moulded) the focus and limits of individual self-realisation in accordance with the intelligible complexity of the cosmos.⁷³

We shall highlight the views of *sophists* and *philosophers* on education.

§ 6. Contemporaries know the views of the sophists on education, mainly from Plato's dialogues. There is no doubt that Plato created philosophy precisely in opposition to the sophists' discourse and way of life.⁷⁴ During the Socratic period of ancient Greece, the sophists had great influence due to the demand for new methods of persuasion and argumentation. Athenian democracy reached its heyday. Therefore, the art of speech and the ability to convince people were society's most highly demanded qualities.⁷⁵

Various representatives of the intellectual elite, such as Protagoras, Gorgias and Hippias, used the common approach. That allowed us to talk about the sophists as "a competing tradition."⁷⁶

In the sophist tradition, a connection between the teacher's way of life and the knowledge given to the disciples was not provided. The sophists used the opportunities of paideia to develop disciples' oratory and dispute skills, as well as to transfer knowledge and skills that were in demand in society. The school of Isocrates was very famous in Athens. In spite of the fact that Isocrates considered himself a philosopher and opposed the educational principles of his school with the sophists' practice, namely, his approach to education most fully disclosed the views of the sophists.

Isocrates founded his school in Athens in 393 B.C., and Plato founded the Academy much later, between 387 and 361 B.C. Isocrates' school operated for half a century. In the Antidosis, Isocrates came to the following conclusions: "When anyone elects to speak or write discourses which are worthy of praise and honor, (...) which are great and honorable, devoted to the welfare of man and our common agathós, (...) he will feel their influence not only in the preparation of a given discourse but in all the actions of his life. It follows, then, that the power to speak well and think right will reward the man who approaches the art of discourse with love of sophía and love of honor."

Isocrates' education led up to a cult of the understanding of the basics of eloquence, grammar and speech styles.

Isocrates' education was based on the demand for a "high culture." In the *Protagoras*, Plato state that despite the sophists recognising the significant role of knowledge, their moral and political education was not based on it.⁷⁸ Isocrates focused on the training of intellectuals in demand in Greek society: eloquent, talkative and well-educated people who possessed a developed aesthetic taste and skills of creative self-expression.⁷⁹

Isocrates developed in his disciples the knowledge and skills most in demand in society. Isocrates' model of education prepared a man of general culture who could adapt to any societal changes and be realised in any sphere of activity: politics, art and spheres of production. Isocrates believed that it was more useful for disciples to receive correct ideas about the pressing problems in society than to go into unnecessary subtleties and achieve accurate knowledge in completely useless matters. Daily life did not require new amazing ideas; it required experienced common sense, the source of which was tradition.⁸⁰

The difference between sophists and philosophers is clearly disclosed in their understanding of *lógos*. *Lógos*, along with *sophía*, was one of the key terms in the culture of ancient Greece. According to Heraclitus, "The Logos is the reasonable connection of the world-whole, its objective law, internal thought and the meaning of the world process." Both the sophists and the philosophers attached great importance to *lógos*. However, the sophists viewed *lógos* as the development of external speech: technical and brilliant. The sophists taught dialogue skills: dialectical, formal, logical, etc. They promoted *lógos* as the art of speech. Even recognising "philosophical speech" in *lógos*, the sophists did not identify it with philosophers. Philosophers in ancient Greece were *átopos*. 82

According to Plato, the cosmos came into being thanks to the *demiurge*. The cosmos was opened by *psukhē* in *lógos* and *phrónēsis*.⁸³ Therefore, Plato used the term *lógos* not in the meaning of "external speech," as the sophists did. Plato used *lógos* to affirm a new way of life in accordance with the intelligible cosmos and "to live by what has been said." Therefore, Plato placed discourse as an exercise higher than the results obtained, and Aristotle gave the discussion of problems more educational value than their solutions.⁸⁵

§ 7. Socrates was the first to doubt the understanding of *sophia* by the sophists, as well as the ways and the very fact of its achievement.

Socrates left no notes. We form our opinion on Socrates as a historical figure and founder of a new tradition in education directly through the notes of his disciples and fellow citizens. Plato's dialogues contain the main

information about Socrates. Socrates was not unique in his contemptuous disregard of written work. In Greek paideia, eloquence and rhetoric were valued much more than writing. Writing was rarely used, and its purpose was significantly different. According to Hadot, until the end of the Hellenistic period, *scholarchēs* used written works as "notes" for conversations and lessons.⁸⁶

The leading role in the development of the philosophical tradition in ancient Greece was played by an atypical understanding of the cultural ideal and the way of its achievement.

The philosophical tradition did not provide for the mastery of sophia. In contrast to the sophists, Socrates repeatedly declared that he was not-sophós (not-wise) and could never master the qualities of sophia, which only the Gods owned. 87 Thus, the first distinguishing feature of the philosophical life proposed by Plato in the Academy was the presence of an "ideal" image to imitate. In Plato's philosophy, the focus on mastering the qualities of sophia transformed the philosopher into an "overman." In the Symposium, the prophetess Diotima accounted a person with the qualities of sophia as a daimon, a mediator between "the divine and the mortal." The daimon had the force of "interpreting and transporting human things to the gods and divine things to men; entreaties and sacrifices from below, and ordinances and requitals from above: being midway between, it makes each to supplement the other, so that the whole is combined in one. Through it are conveyed all divination and priestcraft concerning sacrifice and ritual and incantations, and all soothsaying and sorcery. God with a man does not mingle: but the daímon is the means of all society and converse of men with gods and of gods with men, whether waking or asleep."88

Plato used knowledge of the cosmos to affirm *sophía* as an "ideal" image and to prove the significance of philosophers as *guides* in the cosmos (Order) created by the demiurge. Plato presented philosophers as carriers of the *agathós* and *sophós*⁸⁹ and, accordingly, creators of the politeia as an image of the cosmos. Politeia had several meanings for the Greeks: from a "state" to a "form of government." Consequently, the knowledge of the cosmos converted philosophers into creators of a stable and prosperous polis/state.⁹⁰

In Plato's view, the body of the cosmos is eternal, stable and permanent. To become a guide in the cosmos or a *mediator* between Gods and people, a man needed to free *psukhē* from the body. In the depths of *psukhē*, there was an *aretē* in which *sophía* was concentrated. Mastering the qualities of *sophía*, i.e. *phrónēsis*, turned a man into a philosopher or, equivalently, into a *daímōn*, a demigod. The philosopher disclosed the complexity of the cosmos and saw the essences of the things. ⁹¹ He heard God's behest, ⁹² which endued him with the force to transform real life in accordance with an image of the intelligible cosmos.

The second distinguishing feature of the philosophical life institutionalised by Plato in the Academy was the way of an "ideal" image achievement. The possession of sophía was the most desired purpose in the life of every Greek. The sophists used that desire for their own benefit. Unlike them, Plato argued:

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only those obsessed ($\phi \iota \lambda$ -) by sophia⁹³ become sophos, i.e. those who are transformed in accordance with it as an "ideal" image to imitate. The Gods pointed the first philosophers' way on the pronaos of the Temple of Apollo at Delphi: "Know thyself."⁹⁴

Plato viewed the obsession with sophia as an appeal to génesis, 95 i.e. to the source of psukhē. Psukhē could be freed from the body and transcend into the agathós and sophós only by discursive thinking through. "The sophón must be sophón for himself especially." At this phase, spoken by Socrates in an ironic context, Plato formulated one of the key purposes of philosophical education. A man, possessing the qualities of sophía (sophón), should keep it especially for himself, because it is he, the philosopher, who is responsible for the stability and prosperity of the order created in the image of the cosmos. The more the philosopher will "be sophón for himself," the more he will comprehend (phronéō) the complexity of the cosmos and, accordingly, he will convey authentic knowledge to people. To love sophía meant to take on the responsibility of a mediator between God and men, namely, (a) to bring to men the answers to the questions, "Who is that God?" and "Then whatever is man?", and (b) to force men "to follow in God's footsteps."

Self-knowledge occupied an important place in philosophical life.¹⁰⁰ For example, in the *First Alcibiades*, Plato described the efforts, or rather "labour pains," that Alcibiades should suffer (124b) to master *sophia*. Plato compared the process of mastering knowledge with maieutic art.¹⁰¹ "Are we then, my friend, still pregnant and in travail with knowledge, or have we brought forth everything?" Socrates asked Theaetetus.¹⁰² Plato considered the process of *sophia* achievement as a steady and continuous self-appeal, a return to the original and magnetic depths of *agathós*.

Self-appeal initiated the birth of knowledge, which disclosed a new complexity of "Order," and it prepared the philosopher for even greater labour pains, for new knowledge. In the *First Alcibiades*, Plato revealed the essence of the process. "Then whatever is man?" (129e). "He turns out to be nothing else than *psukhē*" (130c). Taking care of *psukhē* is the way that prompted Pythia to achieve *sophía*. In addition, heading that way, the philosopher made his first significant discovery: "Everyone is *agathós* in that wherein he is *phrónimos*." 103

In the *Theaetetus*, Plato formulated two ways of human life: a philosopher's and a non-philosopher's. The philosopher's way of life was "assimilation to God as far as possible," which meant "to become righteous and holy and *phronēseōs*." Plato used the noun *phrónēsis* to emphasise once again that philosophical life was a practice, "taking up use" from the intelligible and taking care of *kalós* and *agathós*.

Plato described the way of life of a non-philosopher as seeking "all the other kinds of seeming cleverness and *sophiai*," which actually "are paltry." ¹⁰⁶ In this case, Plato used the word *sophia* with pejorative connotations used by sophists and poets. Plato disclosed two different approaches to understanding *sophia* by contrasting the ways of life of a philosopher and a non-philosopher. In the

former case, philosophy was the upward path to *phrónēsis*. In the latter case, a man followed the sophists and remained ignorant.

The focus of philosophy on self-awareness and self-transformation allowed philosophers to measure up their thoughts and actions with the intelligible cosmos. Philosophers have discovered the source of evil. The genesis of evil was concentrated not in things and the existing order but in value judgements of things, i.e. in people's *ignorance*. In the *Gorgias*, Plato called ignorance the worst of evils.¹⁰⁷ Ignorance was the cause of suffering, misfortune, unhappiness, as well as other factors of instability that abased humanity. Therefore, Plato considered rational knowledge (dialectics) and the possession of authentic knowledge as the highest value of education.

In the *Timaeus*, Plato showed the scale of knowledge necessary to establish stable and prosperous politeia as the image of the *kalós* cosmos in real life. Plato considered that the disciples of the Academy should understand the genesis of the cosmos (*Timaeus*, 28a–34b, 52d–53b), *psukhō* (*Timaeus*, 34b–36e), the stars and the planets (*Timaeus*, 36b–e, 38c–39e), etc. In the *Republic*, the *Laws* and the *Epinomis*, Plato specified and enriched the knowledge and used it to prove *kalós* politeia, society and human.

Knowledge was changing the value judgements and endowed philosophers with a deeper knowledge of truly valuable things in life, unlike other people. Plato positioned philosophers as the only "bearers" of the *kalokagathia*. ¹⁰⁸ In the *Republic*, Book VII, the allegory of the cave proves the understanding of knowledge as a liberating force that liberates the *psukhē* from ignorance. Only those who are fifty years old, "who have survived the tests and approved themselves altogether the best in every task and form of knowledge, must be brought at last to the goal. We shall require them to turn upwards the vision of their *psūkhês* and fix their gaze on that which sheds light on all, and when they have thus beheld the *agathós* itself, they shall use it as a pattern for the right ordering of the *pólin* and the citizens and themselves throughout the remainder of their lives." ¹⁰⁹

In the concept of Aristotle's general culture, "Only a philosopher can truly 'know' anything because he has a knowledge of higher principles; and whoever did not study the 'first philosophy,' he would forever remain only 'educated,' even if his education is universal." ¹¹⁰

§ 8. Philosophy was formed and developed mainly in Athens. This continued until the end of the Hellenistic era. The teaching of philosophy was based on a living word whose authority and significance reinforced the scholarch's way of life. Socrates opened people's eyes to their ignorance with words and speeches full of irony, sarcasm and pretence. Socrates's way of life gained significance and power to his words. Alcibiades, the eminent Athenian statesman and military commander, spoke of Socrates as follows, "And there is one experience I have in the presence of this man alone, such as nobody would expect in me; and that is, to be made to feel ashamed; he alone can make me feel it."

Jaeger showed how Plato and other disciples were deeply impressed by Socrates' conscious choice of death. ¹¹² By voluntarily drinking a cup of poison

instead of making concessions to his accusers, Socrates proved the force of the values and way of life he proclaimed to his disciples.

Socrates' life choice affirmed the dominance of *psukhē* over the body and established the third feature of philosophical life. It is *the necessity for personality transformation on the way to an "ideal" image*. Authentic knowledge was born as a result of self-knowledge. Only the one who changed his discourse and way of life under its influence could attain the *phrónēsis*. That was why Plato wrote his dialogues to form people rather than to inform them. Plato's dialogues were focused on the human moulding in accordance with the life and death of Socrates, who came closest to *sophía*. 113

Plato opened the Academy at a mature age when he achieved "the peak of creative forces" (akme).114 The image of philosophy institutionalised in the Academy was the embodiment of his life and gathered experience, including experience in state governance. Plato was born in Athens into an influential aristocratic family and was proud of his lineage. In his dialogues, Plato repeatedly introduced his relatives of consequence¹¹⁵ and showed his interest in political events, state governance and intellectual movements of his time. Plato survived the thirty years' Peloponnesian War and comprehended the destructive role of politeia in the disastrous effects of war for Athens. 116 Plato could compare the education in victorious Sparta with the education that prevailed in Athens. Therefore, Plato did not create philosophy as a theoretical doctrine. Philosophy was created as a way to form a new caste of rulers who could ensure the prosperity of the Greek world. 117 In modern terminology, we would say that Plato developed philosophy as a specific approach to the formation of state employees capable of ensuring sustainable development and prosperity of the state and its citizens in accordance with the intelligible complexity of the cosmos. The philosophical school had its history that began with "lovers and disciples of the Spartan culture,"118 as well as "an independent subject and method."119

Socrates, as the "ideal" image of the philosopher, was not chosen by chance. Socrates lived the life of a warrior who did not change his way of thinking and way of life under the influence of the people around him. Socrates did not sacrifice his principles facing the death. He persuaded and served *his* God, who directed him to turn people to *aretē* and *agathós*. ¹²⁰ Therefore, the main distinguishing feature of the philosophical life was "persuasion in and service of" the highest idea as a specific way of life, obligatory for all disciples. In the Academy, the disciples were taught a specific way of life.

§ 9. On the basis of the above, we can draw the following conclusions. In classical Greek education aimed at forming free personalities, who were aware of their capabilities, needs and rights, the two principal competing traditions were formed: the sophists and the philosophers. Over the past 2,000 years of human development, these traditions have been enriched with a considerable variety of empirical and theoretical knowledge. However, in general, their fundamental characteristics remain unchanged.

I call "the sophists" a wide range of people¹²¹ "who are good at inventing or discovering things"122 and who demonstrate "the ability to make wise judgements, based on a deep understanding and experience of life."123 To refine the survey by Lowell Edmunds, 124 the sophists are as follows:

- 1 Seers.
- 2 Physicians: medical doctors (MD) and doctors of osteopathic medicine
- 3 Professionals of the highest level in Music, Arts & Media.
- 4 Scientists.
- 5 Sages, as a result of long experience. 125
- 6 Professionals of the highest level in politeia and paideia. 126
- 7 Professionals of the highest level in Film, Television, and Video Games.
- 8 Professionals of the highest level in Design, Technology and Engineering.
- 9 Figurative: the sophós is the type of expert, someone good at inventing or discovering things.

Modern meanings of the term "giftedness" convey the main feature of their nature. "Giftedness includes a genetic and/or innate component in the form of an overrepresentation of giftedness within some families or in the form of genetic variation favouring atypical information-processing abilities."127

The sophists develop politeia and paideia as the $ag\bar{o}n$. 128 In the $ag\bar{o}n$, their lives and work are proceeded, summarised and judged. 129

In $ag\bar{o}n$, on the one hand, various political and educational approaches, theories, and practices are created, grown up and compete. 130 The most effective are awarded "sophós" laurels, and their results are proclaimed "sophía." On the other hand, the $ag\bar{o}n$ is controlled by the politeia. Politeia selectively propagates the authority of the "best" - "sophós" and "sophía" - and uses them as an instrument of state power. People voluntarily "turn" to the "best" 131 and imitate them, but, at the same time, the whole process is controlled by real power.

Two fundamental characteristics distinguish the sophists' approach to education:

- 1 It intends to eliminate the opposition between child's play (paidiá) and serious engagement (spoudē) and, therefore, between childhood and adulthood.
- 2 It asserts the politeia authority. The agon created by the sophists demonstrates the apparent dominance of politeia over paideia. As a result, the child (paîs), child's play (paidiá) and paideia are formed and developed as a legalised image of adults, serious engagement (spoudē) and politeia.

Two thousand five hundred years ago, Plato created philosophy¹³² as opposed to sophistry. 133 In the *Apology*, he formulated three main differences between the sophists and Socrates, ¹³⁴ which were subsequently specified. ¹³⁵ A few people¹³⁶ represent the discourse and way of life called "philosophical,"¹³⁷ much less often – "Socratic."¹³⁸

A philosopher is a person¹³⁹ who practices a philosophical way of life. The philosopher begets and grows up the disclosed *aretē* (*aretē alēthinē*),¹⁴⁰ which focuses its *tekhnē*¹⁴¹ "to love the *kalón*" to the highest ability "to gaze at a spectacle," in which "*kalós* comes to be"¹⁴² and becomes (shows itself) in time. The disclosed *aretē* (*aretē alēthinē*) is "the virtue (*aretē*) of the 'aristocratic' human being in books VIII and IX of *Republic* in contrast to the virtue (*aretē*) available to all members of the state, as described in book IV."¹⁴³

"Know thyself" means for a philosopher to care for/attend (*epimeléomai*¹⁴⁴) himself, "to talk every day about *aretē* and the other things," "discursively think through and examine well myself and others." All this and much more is done with one goal: to go beyond the form and forever reunite with *agathós*. In other words, it is to merge with "Order," which created the *kalós*, all forms in the cosmos and the cosmos. Moreover, the desire to appropriate *agathós*¹⁴⁶ was understood in the Academy as "to yearn to be grafted together" of two equal parts that were previously one. 147

Thus, the principle of the philosopher is the "Agathós Above All." ¹⁴⁸ "The good (agathón) makes beings manifest as beings, thereby at the same time letting them be. The good (agathón) is the cause of the being known of beings and their being (509b). In other words, it provides the light of alētheia in which they can first come into presence and be." The "Order" and agathós, immanently present in it, ¹⁴⁹ determine the meaning of philosophical life.

Politeia and paideia are the central, or one of the major, themes in the $24 th^{150}$ of Plato's thirty-five dialogues. Plato thought discursively of these two spheres of activity as complementary modes of incantation $(ep \hat{o}id\hat{e})$. Politeia and paideia do joint work: (i) persuade $(peith\hat{o})$ every person, (ii) care for/attend $(epimel\acute{e}omai)$ with a way/manner $(tr\acute{o}pos)^{153}$ of each person and society as a whole. (iii) Both actions cause a third: each person and society is sent to exist/to be $(eim\hat{i})$ agath $\acute{o}s$ and phronimótatos. (155)

The philosopher directs the potential of politeia and paideia¹⁵⁶ (iv) to consider/to ponder things in mid-air, (v) to thoroughly investigate all the things below the earth and (vi) to make or do (in a very wide application, more or less direct) the weaker *lógos* stronger.¹⁵⁷

Thus, the philosophical view of "self-evolving education" is no different from the view on politeia or any other sphere of activity or thing. For the philosopher, the only meaning is the ability to embrace agathós, ¹⁵⁸ to subsequently imitate key actions (interactions) and knowledge ($episteme^{159}$), which are immanent agathós and, therefore, "Order." As a result, paideia (the same for politeia) is the critical philosopher's tool to put into order/ornament ($kosmé\bar{o}^{160}$) and arrange (with or together)/put together ($syntáss\bar{o}^{161}$)¹⁶² childhood and adulthood (adulthood), citizens and the state. The philosopher uses the "best" developments of the sophists and creates new ones to continuously and non-linearly "turn" to agathós, which he discerns ($the\bar{o}r\acute{e}\bar{o}^{164}$) and comes to know ($gin\bar{o}sk\bar{o}^{165}$)¹⁶⁶ in "Order."

The philosopher's approach to education distinguishes three fundamental characteristics:

- 1 The combination between paideia and the intelligible complexity of the cosmos. Knowledge of the cosmos has a providential and directive influence on the development of educational theories.
- 2 The combination between paideia and answers to the question: "What is man, and what is his place in the cosmos?"
- 3 Paideia (along with politeia) is developed as a tool to control the focus and limits of individual and collective self-realisation in strict accordance with the proclaimed transcendental ideal.

In general, the philosophers develop education as a tool by which they "turn psukhē" towards areté and agathós 167 and affirm a specific understanding of a just and happy life.

Discursive thinking through of education in philosophy has gone through two key stages. We shall briefly consider them.

The first stage of discursive thinking through 1.3 of education: "Created by God"

§ 10. The history of humanity is about 6–7 million years. 168 In comparison with the period of development of biological organisms on the Earth (≈ 3.5 (3) billion years ago), the solar system (\approx 6 (5.5) billion years ago), and the Universe (≈ 13.7 billion years ago), 169 it is an imperceptible amount of time. This time is being reduced to several millennia if, in the argumentations, we give preference to the written sources that have survived to our days. In this interval of human history, the first stage of discursive thinking through of education is dictated by the dominance of the geocentric system of the world, i.e. the idea of the structure of the cosmos, according to which the central position in the Universe is occupied by the stationary Earth, around which the Sun, Moon, planets, and stars revolve. The main provisions of the geocentric world system, based on the astronomical knowledge of Ancient Greece and Babylon, were collected and systematised in the extant book Almagest (Great Construction) by Claudius Ptolemy. 170 If we take into account the fact that in the geocentric world system, the knowledge of Ancient Greece had been accumulated, starting approximately from the middle of the third millennium B.C., and many provisions of the geocentric model were used as indisputable truths up to the end of the Renaissance, i.e. until the end of the 16th century, ¹⁷¹ then the first stage of discursive thinking through of education covers a time period of about 4,000 years.

A certain complexity of the cosmos' intelligibility with the appropriate approaches, methods and tools of knowledge corresponded to the 4,000-year period. The intelligibility of the cosmos was based on the ideas of Ancient Egypt and the early philosophical schools of Ancient Greece, the ideas of Plato and the subsequent authoritative philosophers: Aristotle, Plotinus, Aurelius Augustinus, Thomas Aquinas and others. We take the liberty to denote in Laconian style¹⁷² the first stage of discursive thinking through of education by the metaphor "*Created by God.*" In our opinion, it is this metaphor that determined the place of man in the static "Order" for four millennia.

The first stage of discursive thinking through of education involved defining the meaning of human life and the cultural ideal. We denote the meaning of human life by the metaphor "the necessity of serving God" and the cultural ideal by the metaphor "man of faith." "For know that the God commands me to do this, and I believe that no greater agathón ever came to pass in the city than my service to the God," Plato quotes Socrates.¹⁷³ In the Laws, Plato wrote, "On this there follows, let us observe, this further rule, – and of all rules, it is the noblest and truest – that to engage in sacrifice and communion with the gods continually, by prayers and offerings and devotions of every kind, is a thing most noble and agathôi and helpful towards eudaimōn¹⁷⁴ (literally "possessed by the daimōn"), and superlatively fitting also, for the mén agathô."

In St. Augustine's view, the word was the action, and the word was the guide. St. Augustine emphasised that God had not only created the world, and "He had made it by the Word." Therefore, the "correctness of the gaze" of the citizens of the Earthly City on the City of God was formed on the basis of a special understanding of God's Word. In St. Augustine's view, when "man lives according to man, not according to God, he is like the devil." At that time, "When, then, a man lives according to the truth, he lives not according to himself, but according to God; for He was God who said, I am the truth (John 14:6)." ¹⁷⁷

The metaphor "man of faith" carries not only the meanings of the highest Christian morality, such as the desire for holiness and inner transfiguration. The metaphor also discloses the sacramental meanings of the key Ancient Greek term kalokagathia, with an accent on the notion agathós, i.e. on ethos and disclosedness (morality, grace and truth). It emphasises the moral purpose of transformation: to follow in God's footsteps in order to strive to master the sophía. "Every man ought so to devise as to be of the number of those who follow in the steps of the God."

For St. Augustine, authentic knowledge is the Truths written by the Holy Spirit in the Scripture. It is the Scripture that "seeks access to for their good that it may alarm the proud, arouse the careless, exercise the inquisitive, and satisfy the intelligent." 179 St. Augustine considered it as obvious that a *true* philosopher was moving towards love for God because the *true* Sophia has been inherent to God. Hence, *true* philosophy is Christianity. "Now, if wisdom is God, who made all things, as is attested by the divine authority and truth (Wisdom 7: 24–27), then the philosopher is a lover of God." 180

The first stage of discursive thinking through of education covers two periods of world history: Antiquity and the Middle Ages. From our point of view,

the thinking through of education in Antiquity and the Middle Ages is guided by the following fundamental meanings:

- 1 The common understanding of static "Order" (the geocentric model).
- 2 The epistemology "created by God" with a common methodology and research tools.
- 3 The general meaning of human life, i.e. the necessity of serving the
- 4 The common cultural ideal "man of faith."

§ 11. At the beginning of the Hellenistic period, there was a wide variety of philosophical schools that promoted philosophy and philosophical life. However, from the 3rd century B.C., the four major schools remained in Athens: the Academy of Plato, the Lyceum of Aristotle and Theophrastus, the Garden of Epicurus and the Stoa of Zeno and Chrysippus. Also, there were two philosophical movements during that period: skepticism and cynicism. Unlike the temporary groups that formed around the sophists, philosophical schools were permanent educational institutions not only during the lifetime of their founders but even long after their death. 181 Each philosophical school developed its own methods and means of moulding the disciples' way of thinking and way of life in their ascent to an "ideal" image to imitate. However, the basic and defining methods of education remained those that had been institutionalised in the Academy. The most talented graduates of the Academy, such as Speusippus, Xenocrates, Eudoxus and Aristotle, not only preserved Plato's pedagogical heritage but even increased it in their schools and disciples.

The rational thinking of the Ancient Greeks did not involve the creation of system-forming theories. Therefore, it is a mistake to consider Plato's dialogues as a *theory* of education from the point of view of the Ancient Greeks. In fact, neither Plato nor any other Ancient Greek thinker created or even made an attempt to create comprehensive systems and especially "theories" from knowledge. On the one hand, the priority of the spoken word did not imply such opportunities. On the other hand, in Ancient Greece, the term "theory" 182 was used as an auxiliary in philosophy and did not have the weight and influence that it had in modern science. However, Plato's discursive thinking through of paideia would reveal it as a theory in the modern sense of "scientific theory."183

Plato combined the Socratic attitude to life and Pythagoras' views on the paideia. 184 At the beginning of the 3rd century A.D., Diogenes Laertius wrote that Plato had "... mixed together the doctrines of Heraclitus, the Pythagoreans, and Socrates: perceptible of Heraclitus, intelligible of Pythagoras, and political of philosophizing Socrates." 185 As a result, during the crisis of Athenian democracy, Plato suggested using education as a tool for building an ideal polis (state). The main feature of Kallipolis¹⁸⁶ was the *moulding* of the citizens' "correct vision" of a just and happy (eudaimon) life. 187

Plato focused the philosophy and force of discourse/dialectic on practice, namely, the revival of Athens, which had lost the Peloponnesian war. Philosophy as a specific discourse and way of life liberated psukhē from the flesh and opened the way to agathós. On the way, philosophers mastered phrónēsis and turned into daímōns. In Plato's understanding, only the daímōns (demigods) could restore Athens to its former power and glory and, accordingly, subordinate the citizens of Athens to the laws that were images of the laws of the cosmos.

Plato argued his views with knowledge advanced for his time. He presented Socrates' philosophical life as a pattern¹⁸⁸ according to which the *scholarchēs* transformed disciples into statesmen who were ready to consciously (as Socrates did!) accept death for a specific discourse and way of life. Socrates' life choice allowed Plato to present philosophy as the "fundamental philosophical choice" and as the *art of death*. "Other people are likely not to be aware that those who pursue philosophy aright study nothing but dying and being dead." The prospect of death allowed philosophers to realise the finitude and, at the same time, the infinity of their own existence in the static body of the cosmos. Awareness of the finitude of existence allowed philosophers to achieve inner equilibrium: equanimity (*ataraxia*) and self-sufficiency (*autarkeia*). Awareness of the infinity of existence brought philosophers as close as possible to the acquisition of "human *sophia*." It turned them into the *cosmic consciousness* bearers, ¹⁹¹ or in modern scientific terminology – into the creators of sustainable world order.

The philosophical life institutionalised by Plato in the Academy not only liberated psukhē from the flesh but also cured it from anxiety, fear and tension. Philosophy disclosed the way to the highest aretē and agathós. Plotinus compared the movement towards the highest aretē with the carving of a statue from a block of marble, in fact, equating it to art. "... act as does the creator of a statue that is to be made beautiful (kalón): he cuts away here, he smoothes there, he makes this line lighter, this other purer, until a lovely face has grown upon his work. So do you also: cut away all that is excessive, straighten all that is crooked, bring light to all that is overcast, labour to make all one glow of beauty and never cease chiselling your statue, until there shall shine out on you from it the godlike splendour of aretês (ἄρετῆς), until you shall see the perfect goodness surely established in the stainless shrine." 192

Plato used politeia and education as tools for moulding *psukhē*. Politeia and education focused citizens' *psukhē* on achieving the *divine* purpose – the *idea tou agathou*, to which the "best state" should strive.¹⁹³

In the *Republic*, Plato elevated philosophy to the level of moulding force and presented philosophers as high-caste rulers who were capable of ensuring a just and happy life for subordinate people. It should not be forgotten that in democratic Athens, where the power belonged to the free citizens, and equality and liberty continued to be cult values, Plato promoted the rule of philosophers. ¹⁹⁴ "Philosophers become kings in our states." ¹⁹⁵

Thus, Plato's discursive thinking through of education was the starting and defining factor in the philosophical tradition. The meanings embedded by Plato in the paideia differed from the pre-Platonic meanings in three main characteristics.

- 1 The providential and directive influence of the results of the intelligible complexity of the cosmos on education.
- 2 The cause-and-effect relationship between the search for answers to the question "What is man, and what is his place in the cosmos?" and education.
- 3 The key role of education in moulding the discourse and way of life of the state and its citizens

Plato's paideia formed the image of the true philosopher. It used the philosophical life of Socrates as a proto-type for re-creating (moulding) the indissoluble unity of the three basic characteristics of the philosopher: ¹⁹⁶

- 1 *The ironic nature of the philosopher*. The philosopher knew that he would never master the authentic knowledge of the Gods who created the kalós cosmos. The knowledge that they knew nothing 197 distinguished the philosophers from the sophists, who proposed a multi-knowledge (polymatheia), and elevated the non-philosophers, who lived in ignorance. Under the circumstances, the philosophers were forced to play the role of $Eir\hat{o}n^{198}$ in order to achieve the purposes set before them by God through self-abasement and feigned ignorance.
- 2 The tragic nature of the philosopher. Philosophers loved and imitated ¹⁹⁹ an ideal that they could not achieve and which inexorably attracted, subordinated and forced them to transform their way of life. Philosophers knew that they would not gain what they aspired to and what they lived for at any time or under any circumstances. However, they defined their lives according to what it was deprived of, and what, in the opinion of those around them, was átopos.²⁰⁰
- 3 The cosmic nature of the philosopher. "Console thyself, thou wouldst not seek Me, if thou hadst not found Me."201 With the famous phrase of Blaise Pascal, we want to emphasise that the philosophers were daimons, i.e. they endowed the ancestral connection with the cosmos or the cosmic consciousness.²⁰² The ancestral connection with the cosmos transformed the philosophers' way of life and made them átopos, and, at the same time, they were respected statesmen of the level of Alcibiades.²⁰³
- § 12. The conquest of vast territories with the peoples living on them, along with other events, caused the collapse of the Greek world. Greek culture was initially developed as a closed and self-sufficient culture of small city-states with corresponding public institutions and governance. The models of the "ideal" Greek city-state and the Greek paideia proved ineffective when applied to other cultures and vast territories.

The conquest of Greece by the Roman Republic in the 3rd and 2nd centuries B.C., as well as the peculiarities of the development of the culture of Ancient Rome as a whole, led to three important changes in the development of philosophy:

Firstly, the influence of philosophy and the ideas it developed went beyond Athens. It spread throughout the Roman Republic and later the Roman Empire. Philosophical schools appeared in many cities of Europe and Asia, in which the central governing bodies of the Roman Empire were located. Alexandria and Rome became centres of concentration of philosophical schools. In the course of the spread of philosophical schools, the schools of stoicism, epicureanism and skepticism gradually lost their influence and disappeared. The unification of the schools of Plato and Aristotle caused the emergence of *Neoplatonism*. The new ideological direction was finally recognised in the 3rd century A.D.

Secondly, there occurred a separation of meanings of the term "school." "School" has come to designate:²⁰⁵

- a Ideological current. The main purpose of teaching philosophy was the knowledge of the doctrines of the four major philosophical schools (Platonism, Aristotelianism, Epicureanism and Stoicism), as well as the development of traditions laid down by authoritative *scholarchēs*. Philosophers were looking for their interoperability and like-mindedness from their creators.
- b Place of teaching. In 176 A.D., the emperor Marcus Aurelius ordered to pay for the teaching of Platonism, Aristotelianism, Epicureanism and Stoicism from the state treasury, thereby legitimising the existence of state philosophical schools along with private ones. In philosophical schools, aristocratic youth began to be taught for money.

In these senses, the term "school" has been used up to the present day.

Thirdly, philosophical schools have changed the approach to teaching philosophy. Dependence on the disciples' money forced the *scholarchēs* to abandon promoting philosophy as a way of life. The philosophy of discourse, i.e. *reading and interpreting the texts* of authoritative *scholarchēs*, has come to be considered true philosophy. For example, Plotinus began the lesson by reading Plato's and Aristotle's commentators; after that, he offered his interpretation of the commented text. Origen consistently read the *Biblical Book of Parables*, *Ecclesiastes* and *Song of Songs*. He believed that exactly in that order, the books corresponded to (a) Christian ethics, required for preliminary purification; (b) physics, teaching to see beyond sensual things; and (c) theology, leading on the way to the One God as a transcendental ideal.²⁰⁶ Since the 1st century B.C., philosophy began to turn into scholasticism, the heyday of which came in the Middle Ages. According to Pierre Hadot, the era of philosophy professors and textbooks, intended to initiate disciples and the general public into the philosophical doctrines of a new pattern, began in the philosophical tradition.²⁰⁷

However, the main changes occurred during the early Middle Ages. In history, this period is characterised by significant climatic changes, increased migration, population decline from wars and diseases, as well as other instability factors. Society needed new results of discursive thinking through of politeia and education.

In the early Middle Ages, discursive thinking through of politeia and education led to the following changes:

- 1 The movement towards an "ideal" image to imitate began to be carried out through the study of the knowledge presented in the Holy Scriptures. The Word of God was presented concisely, and it was available in writing. Thus, for the first time, the art of writing began to be valued in philosophical discourse on a par with the art of a "living" word.
- 2 Philosophical education lost the status of elitism and began to focus on the masses. In the early Middle Ages, the educational institutions of the Ancient Greeks were closed, and Early Christianity opposed the culture of the masses to a highly rationalised culture of the educated elite.²⁰⁸ For the first time, an "ideal" image, developed in the philosophical school, began to be used for the moulding of generations on an empire-wide scale.
- 3 Education came to be seen as a tool for the sustainable development of society. Politicians (secular and spiritual authorities) began to use education to control the collective focus and limits of self-realisation of the Empire's citizens. Education fell under the control of politeia.

It should be noted that by the 1st century of our era, the scholarches had so complicated and formalised the understanding of philosophy that it ceased to perform its main function. It has ceased to be a life-giving source of transformation, i.e. the desired way of life.

Along with the scholarches, who proposed the mastery of phrónesis, there were theologians who offered to live in accordance with the Logos of God in order to master its force. In their conceptual basis, the theologians were much closer to Plato's image of philosophy than representatives of Neoplatonism. The image of Jesus Christ exalted by theologians was the image of Socrates, and the disciples of theologians, together with their teachers, were martyred for the idea of the One God and God's Word as Socrates did. Theologians taught a new way of life, which was the main and defining characteristic of the philosophical life institutionalised in the Academy.

§ 13. Let us pay attention to two fundamental connotations that form the "Agathós Above All principle," a way of life that is called "philosophical" (less often – "Socratic"), as well as politeia and paideia, which are "purely" philosophical. These connotations exponentially reinforce each other; more importantly, they make philosophy and those who practice and advance it recognisable in world history, regardless of their designated terms.

30

The first connotation is the agathós

The *agathós* is something the hominin form (society) perceives/thinks ($noie\bar{o}^{209}$) and comes to know ($gin\bar{o}sk\bar{o}$) as the "Order" or "external."²¹⁰

Moreover, agathós both "leads the way and judges, estimates" (hēgéomai²¹¹¹) all forms (including the hominin form) to be fixed steadily on alētheia and being.²¹² These are both the upward path and the ultimate beginning.²¹³ The kállistos (fairest) of all that has come to be (gígnomai²¹⁴)²¹⁵ or the "Order" is the agathou offspring,²¹⁶ which the agathós begot in proportion with itself.²¹ʔ Agathós hand over²¹³ alētheia for objects perceived and give back²¹⁰ the potency for perceivers.²²⁰

Thus, it does not matter what term we name something that discerns $(the\bar{o}r\acute{e}\bar{o})$ and comes to know $(gin\bar{o}sk\bar{o})$ as the "Order." Also, the descriptive characteristics of that "something" are irrelevant, including how rational, irrational or numerical it is. It only matters that this is the subject-predicate relation "Order- $h\bar{e}g\acute{e}omai$." It is this subject-predicate relation that is called $agath\acute{o}s$.

Agathós is the "Order," which both "leads the way and judges, estimates" $(\hbar \bar{e} g\acute{e}omai)$) a person, society and any other material or non-material form. Let us consider the "Order" as the subject in agathós.

According to Émile Benveniste, in the common Indo-European period, the concept of "Order" is "the foundation, both religious and moral, of every society."²²¹ The Indic and Iranian derivatives of *rta* and *arta* emphasise the difference between the masculine and the feminine, designated "order," "rule" and "norm" in a general sense.²²² They are fixed in the lexical forms of Greek, Latin and many other languages. "Everywhere the same notion is still perceptible: order, arrangement, the close mutual adaptation of the parts of a whole to one another."²²³

The absolute importance of the "Order" lies in its potency, *dúnamis*.²²⁴ The potency of the "Order" is, in other words, the *agathou dúnamis*.²²⁵ It is the energy that determines disclosedness and being and, therefore, individual and collective discourse and way of life.

All peoples are "turning" to the "Order" and personifying it as "divine." This is a god Arta, the Avestan $d\bar{a}mi$ – "creator," Greek *thémis*, *etc*. It is the order within the house, family, state, on Earth and in space, established by divine will.²²⁶

Any study of the "Order" and its potency (dúnamis), including modern cosmological models, implies the "divine" in varying degrees. "Whether in a general philosophical sense or in a scientific sense, cosmology has always been part of theism." This is due to the fact that the "Order" for an ordinary person and any social organisation is always the highest power and authority. It is an "ideal" image to imitate that constrains and obliges personal and collective actions (interactions).

That is why *agathós* in Plato's dialogues is presented as a combination of "divine" and "rational" meanings. Socrates was accused and executed because,

on the one hand, "Socrates was guilty of not recognising the gods the state recognised," but, on the other hand, "that he invented new divine things."228

"The best-known element in Socrates' religious life has been his claim to have a personal "sign" or "voice," which he takes to be divine in origin. He refers to this vaguely as a daimonion ti, a "divine something."229 Plato wrote in the last period of his life: "Thus it is that in charging men to honor their own souls (psukhē) next after the gods who rule and the secondary divinities, I am giving a right injunction."230 Diogenes Laertius, characterising Plato's philosophy, wrote: "He thinks that the gods take note of human life and that there are daimons."231

Furthermore, St. Augustine emphasised the greatness of the ideological heritage of philosophy in comparison with other cultural movements preceding Christianity. He especially singled out the ideas of Plato, Plotinus and Porphyry, about which he wrote: "It is evident that none come nearer to us than the Platonists."232 According to St. Augustine, the main value of philosophical ideas has consisted in the fact that "these acknowledge God as existing above all that is of the nature of the soul, and as the Creator not only of this visible world, which is often called heaven and earth, but also of every soul whatsoever."233

However, all this and much more does not imply a connection between agathós, a distinctive Platonic heritage, 234 and philosophical life on the one hand and religion on the other. On the contrary, philosophy and those who practice it develop and advance opposite meanings.

Studying the etymology of "our word 'religion," Émile Benveniste proved²³⁵ that the Greek word *thrēskeia* (both cult and piety) is the opposite of deisidaimonía, literally, "he who fears the daimones," just like the Latin religio (religion), is the opposite of superstitio (superstition). Benveniste has described the opposition between threskeia and religio, on the one hand, and deisidaimonía and superstitio, on the other, as follows. "This is a curious notion which could only have arisen in civilisation and at an epoch in which the mind could detach itself so far from the practice of religion that it could appreciate both the normal forms and the exaggerated forms of belief and cult. There are barely two societies in which we can observe such a detachment and where, along independent lines, terms were created to express the distinction."236

As a result, we reveal the historical context in which the "Agathós Above All" principle and everything "philosophical" that it bases were formed. While the "state" institutions (politeia) and the sophists advanced thrēskeia/religio, i.e. becoming more complex and obligatory for citizens, purely formalistic religious practices, Plato formulated an ontological dichotomy in which the subject-predicate relation "Order-hēgéomai" or agathós takes the key place:

What is that which always is (δn) and has no génesis, and what is that which (always) comes to be (gignomai) and not ever is (δn) ?²³⁷

Agathós determines perceiving/thinking ($n\acute{o}os$) and the way to follow ($m\acute{e}$ -thodos) "What is it?" Agathós allows being embraced by $l\acute{o}gos$ and $phr\acute{o}n\bar{e}sis^{238}$ and, thereby, it helps hominin to define itself²³⁹ as a particular complexity, or the *idea tou agathou*.²⁴⁰

Moreover, the Academy during the three centuries of its existence, and then, as "philosophical schools," developed and advanced agathós as a subject-predicate relation, the meanings of which correspond to superstitious. "Superstitious is the one who is 'endowed with the power of superstitio,' that is, 'qui vera praedicat,' the seer who speaks of past events as if he had been present: the 'divination' in these examples did not refer to the future but to the past."²⁴¹ In fact, "to practice dialectics," or "discursively think through", is the upward path²⁴² into the past, to the ultimate beginning. It is the way to follow (méthodos) to the unmixed/pure (eilikrinēs²⁴³) "Order" and the potency (dúnamis) that determines it.

A more literal translation of the phrase "Know thyself" would be this: first of all, *ginōskō*, "to know, especially through personal experience (first-hand acquaintance),"²⁴⁴ but also emautou, a reflexive pronoun, which emphatically brings the action back to "myself"²⁴⁵ in more critical for us interpretation of Plato. ²⁴⁶

"Know thyself" as a discourse and a way of life is discursively thinking through one's nature to discern ($the\bar{o}r\dot{e}\bar{o}$) its beginning. It is to move into the "past" of one's form, to reunite with the original force that formed it, and to show forth it as:

- 1 The ability to be a mediator between "Order" and people.
- 2 The ability to teach the art of dying in the name of the highest idea.
- 3 The ability to transform people's discourse and way of life in accordance with the image of the highest idea, i.e. to form the necessary "correctness of the gaze" upon justice and happiness.

§ 14. Let us consider the second connotation, which determines the "*Agathós* Above All" principle and the tradition, which is called "philosophical."

The second connotation draws our attention to the predicate in the subject-predicate relation "Order-*hēgéomai*." Émile Benveniste notes an essential feature of the verb *hēgéomai*.²⁴⁷ Its predicative construction is to be understood as "to be a guide (in the opinion) that," that is to say, "to think while assuming the responsibility of one's judgment."²⁴⁸

In the *History of the Academy*, which is crucial to our understanding of the structure, functions and development of Plato's school from its foundation to its effective dissolution in the 1st century B.C., Philodemus refers to the great influence, both positive and negative, that was exercised by Plato on the development of philosophy. "On the one hand, he revived again by all possible means [the whole of philosophy] and also for this reason he gained in addition ... this gracefulness in his arguments and, on the other hand, he himself introduced for the first time many ideas of his own, by means of which – if indeed

one must state with frankness how things stand – ... of all people this man advanced philosophy and also finished it off. For while he impelled, as it were, inexperienced persons towards it by composing the [dialogues], nonetheless he also [caused some people] to engage in philosophy in a superficial manner, changing the course of an illustrious [occupation]."²⁴⁹

Philodemus' *History of the Academy* draws our attention, on the one hand, to the close relationship between the *sholarchēs* and the disciples²⁵⁰ and, on the other hand, to the inspiring influence of written dialogues.²⁵¹ However, all this contributed either to the philosophy development or "to engage in philosophy superficially, changing the course of an illustrious [occupation]."

The difference between "advanced philosophy and also finished it off" is caused by *hēgéomai*. The subject-predicate relation "Order-*hēgéomai*" advances and defines philosophy. In this respect, the predicate *hēgéomai* is to show forth "the authoritative judgment" the "Agathós Above All." It is the agathou dúnamis, which, through the scholarchēs and Plato's dialogues, "is a guide (in the opinion)" to the pure "Order" and "assumes the responsibility of one's judgment" about unmixed/pure (eilikrinēs) and, therefore, about right/righteous (díkaios). "In our eyes, the unmixed/pure (eilikrinēs) "Order" will be "the measure of all things" in the highest degree." 253

There was no strict succession in the Academy.²⁵⁴ At the same time, the main distinguishing feature of the Academicians, and all those who advanced philosophy as a way of life, was their actions (interactions), *hēgéomai*. Practicing philosophy and advancing it is both "lead the way and judge, estimate" *dialégesthai* and *dialégomai* ("to practice dialectics," "discursively think through") as actions.²⁵⁵ It is the erotic ascent²⁵⁶ and the dialectical journey²⁵⁷ as a whole, and the personal guiding perspective.²⁵⁸

Thus, the predicative construction of the verb *hēgéomai* is the *agathou dúnamis*, which constrains and obliges the philosopher to show forth the "*Agathós* Above All" and philosophy itself. It means, on the one hand, to care for/attend (*epimeléomai*) one's way/manner (*trópos*) to unmixed/pure (*eilikrinēs*), physically clean (*katharós*), unmingled²⁵⁹ *agathós*,²⁶⁰ which forms the "Order." It is "to imitate Him whom you worship"²⁶¹ up to the readiness to die for the highest idea, as Socrates, Jesus Christ and many others did.

On the other hand, it is to persuade (*peithó*) and to care for/attend (*epimeléomai*) a new way/manner (*trópos*) of society. It is to develop and use a "better" politeia and paideia to form "a universal morality overriding tradition and group interests."²⁶² It is to produce disciples²⁶³ to "turn" the masses towards *agathós*.

According to St. Augustine, people had to be turned to the Word of God or "walk by faith, not by sight." St. Augustine allowed only one way of life that made people happy (eudaimōn). All citizens should live in accordance with the Logos of God. His main book, "On the City of God against the Pagans," promotes two key ideas that were later institutionalised by the Christian Church. Namely, man's unquestioning obedience to God and a ruler ("Render unto Caesar the things that are Caesar's, and unto God the things that are God's"

[Matthew 22:21]), and his uncompromising struggle against heresies (Coge intrare!²⁶⁵).

James Bowen carried out research on limiting the choice of discourse and way of life in *political education*. He proved that as early as the 14th century, Erasmus of Rotterdam and Martin Luther used the moulding force of education as a tool for the formation and preservation of special religious beliefs, i.e. as a technology of influence on the choice of an individual way of life. ²⁶⁶ As a powerful punitive force, the Inquisition and the Crusades helped the Church to use education as a technology for *imposing* key markers of human identity on society: the world picture, the epistemology, the meaning of life, the cultural ideal, values, etc. In general, education as a tool for moulding new generations allowed the Church Fathers to manipulate public opinion and form the necessary "correctness of the gaze" upon a just and happy life for citizens.

- **§ 15.** Thus, the analysis of the results of discursive thinking through of education at the first stage allows us to draw the following conclusions:
- 1 The results of the holistic intelligibility of the cosmos had a providential and directive influence on the organisation of the educational process. The question formulated by Plato "Who is that God?" ²⁶⁷ determined the answer, or *the highest idea*, that subordinated and transformed people's way of life.
- 2 The question "What is man, and what is his place in the cosmos?" focused man on finding the source of meaningful presence. The man understood the nature of his being as "to trust and follow" the *agathós*.
- 3 The rulers *cared for* the formation of the citizens' "correct vision" of a just and happy life. Service to the God was promoted as *eunomía*, i.e. obedience to written laws and unwritten rules.²⁶⁸ "... the right way to gain honor is by serving honorably rather than by ruling honorably doing service first to the laws, since this is service to the gods, and, secondly, the young always serving the elder folk and those who have lived honorable lives."²⁶⁹

The results of the first stage of discursive thinking through of education (and politeia) as tools for ordering (moulding) the state's citizens led to three large-scale consequences in world history.

Firstly, a *Platone philosophandi ratio triplex* or the methodology of knowledge of the static "Order" was developed. "There already existed, then, a threefold scheme of philosophy inherited from Plato: one division dealt with conduct and morals, the second with the secrets of nature, the third with dialectic and with judgement of truth and falsehood, correctness and incorrectness, consistency and inconsistency, in rhetorical discourse."²⁷⁰ The methods and tools of metaphysics, epistemology and logic allowed philosophers to carry out the "Order" interdisciplinary research on a unified basis.²⁷¹ The principle of "the *Agathós* Above All" was that basis. It embodied the unity of theory and practice. Philosophers, and later theologians, developed a rigorous understanding of the subject-predicate relation "Order-*hēgéomai*" as a holistic

intelligibility of the "Order" from the lowest account of complexity to the highest, the *idea tou agathou*.

Secondly, philosopher-rulers proved the effectiveness of the moulding of subordinate peoples by the force of the "ideal" politeia²⁷² and paideia.²⁷³

The absolute value of the subject-predicate relation "Order-hēgéomai," and therefore of everything "philosophical," lies in the fact that it is wholly and entirely focused on begetting and growing up the disclosed aretē (aretē alēthinē). Where aretē is understood as the individual and collective beginning of hominin. Thanks to aretē, each person "felt such a friendly affection for the agathón."²⁷⁴ The subject-predicate relation "Order-hēgéomai" or agathós, on the one hand, and aretē, on the other hand, "yearned to be grafted together" to return to its balanced and whole state.²⁷⁵ Reunification of agathós and aretē made a person competitive, "better." He became the agathós man and an example to mīmēsis.²⁷⁶ Only philosophers could create an "ideal" unity between politeia and paideia, which transformed ordinary citizens into the agathós man.

The course of world history has proved the authority of philosophers and their developments. Philosophers did not seek to compete in the $ag\bar{o}n$ that the sophists developed and advanced. However, at the same time, philosophers developed the rules of $ag\bar{o}n$ and participated in it as judges. The fundamental connection between $agath\acute{o}s$ and $aret\bar{e}$, developed by philosophers, founded the $ag\bar{o}n$ and all the political and educational approaches, theories, and practices that were created, grown up, and competed in it.

The politeia and paideia created by philosophers ensured social cohesion in difficult transition periods²⁷⁷ and also (a) affirmed new state ideals and values, (b) transformed the discourse and way of life of society in accordance with the proclaimed "ideal" image to imitate, (c) prepared the necessary number of *conduits* (disciples) to a new "ideal" model of sustainable development.

Philosophers created and put into practice two educational technologies that have retained their relevance to the present day. We shall designate the first technology by the metaphor "philosophy-as-a-way-of-life." The abovementioned technology was developed by Plato. It provided an individual approach. "Philosophy-as-a-way-of-life" aimed to transform the disciple's discourse and way of life throughout his life. The disciple was transformed under the influence of authentic knowledge disclosed to him by the scholarchēs during the joint ascent to the image of the highest idea. We shall call the second educational technology the technology of forced moulding of the masses in accordance with the proclaimed "ideal" image to imitate. The technology was proposed by St. Augustine. It was based on a model of state governance new for its time that allowed for the forced transformation of the citizens in accordance with the Logos of God, which was the Truth.

Francesco Petrarca called the Middle Ages the "Dark Ages." It was a profound mistake. In fact, the Middle Ages marked the successful implementation of the subject-predicate relation "Order-*hēgéomai*." Initially, the Church Fathers designed the "Order" as *the Kingdom of God* and an "ideal" image to imitate. A holistic understanding of the complexity of the cosmos was

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concentrated in the idea "Created by God." On the basis of the proclaimed ideal, tools were developed for ordering (transforming) the state and its citizens in strict accordance with the idea, ideal and values of "Created by God." The technology of political education was developed and put into practice. Political education promoted a specific "correctness of the gaze" upon a just and happy life. The Church Fathers organised monasticism as a specific discourse and way of life that provided a mediator between the divine and the human. The monks, like the daímōns, ordered (transformed) human life in strict accordance with God's behests and his Logos. Political education popularised the images of "Man of Faith," "Confessor of the Faith," a "martyr" and others, as "ideal" images to imitate that subordinated and transformed the discourse and way of life of subordinate peoples.

The result of the *Founders*²⁷⁸ work was the re-creation of the Earthly City as an image of the City of God.²⁷⁹ In Europe and the Near East, with a population of more than 10 million people, the Christian Church was built.

Thirdly, at the end of the 11th and the beginning of the 12th centuries, some episcopal (or cathedral) and monastic schools in the Middle Ages acquired the status of universities, i.e. major educational centres. Unlike scholasticism, ²⁸⁰ universities formed ideas that ultimately changed the worldview basis. The active intellectual life of universities contributed to the accumulation of versatile information about the macrocosm and microcosm. Thomas Aquinas, Roger Bacon, Dante Alighieri, Francesco Petrarca, Erasmus of Rotterdam, Nicolaus Copernicus and many others were the graduates of those universities who laid the basis of a new worldview.

Despite the severity and even cruelty in the Middle Ages towards dissenters, ²⁸¹ the opportunity to rethink the criteria of the truth of "God in itself" and the God-man as a mediator led to discoveries that refuted not only the criteria of the truth of the God-man but also the truth on which the authority of the One God as Creator of all living and existing things was founded. In the classic Middle Ages, the accumulation of knowledge began that radically changed Earth's civilisation's discourse and way of life.

1.4 The second stage of discursive thinking through of education: "Those who transform the Earth"

§ 16. The transition from the Medieval to the Modern Age is due to radical changes in the understanding of "Order." Approximately from the end of the 16th century, the knowledge, refuting a static model of the Universe, began to spread in society and assert itself in the worldview of the most educated part of it.

It is difficult to speak definitely about the second stage of discursive thinking through of education; it is only unfolding and passing through the forming stage. We can clearly define the boundaries of its beginning: the end of the 16th and the beginning of the 17th century. In 1543, the book "On the Revolutions of the Heavenly Spheres" by the Polish astronomer Nicolaus

Copernicus was published; then, in 1596, the book "Mysterium Cosmographicum" by the German astronomer Johannes Kepler was published, and in 1641 and 1644, the books of the French philosopher and mathematician René Descartes were published, "Meditations on First Philosophy" and "Principles of Philosophy." During that period, the books of Galileo Galilei, Francis Bacon, Johannes Kepler, René Descartes, Baruch Spinoza, Isaac Newton, Gottfried Wilhelm Leibniz and others were successively published. They presented a new understanding of the complexity of the cosmos and the methods of its research.

The second stage of discursive thinking through of education is due to the replacement of the geocentric world system by the heliocentric system. The notion that the Earth occupies a central and stationary position in the Universe was replaced by a new vision of the world order. Initially, Nicolaus Copernicus, Galileo Galilei, Johannes Kepler and others proved that the Sun was the central celestial body around which the Earth and other planets were orbited.²⁸² In the 20th century, through the efforts of several generations of scientists, the "Order" was disclosed to us as a large-scale structure of the Universe in which the existence of numerous planets with biological life and extraterrestrial intelligence is possible.²⁸³ The basis of the modern understanding of the Universe is formed by the Big Bang Theory, which explains the two most significant facts of cosmology: the expansion of the Universe and the existence of cosmic background radiation. The modern Lambda-CDM Cosmological Model (Lambda-Cold Dark Matter) was based on the Big Bang Theory.²⁸⁴

However, modern cosmology does not take into account the influence of cosmic biospheres²⁸⁵ and noospheres²⁸⁶ on the order of the Universe. Physico-mathematical and cosmological models, which determine the meanings of modern ideas about the chronology of the Universe, neglect the impact of biochemical and neurobiological processes, considering them to be excessively small. It is for this reason, the modern holistic understanding of the complexity of the *kalós* cosmos is explained deeper by the model of Vladimir Vernadsky that we have called "Evolving matter."²⁸⁷ Vernadsky never dealt with the construction of cosmological models. However, his generalisation of the Earth's geological and biological chronicles, which he did in the first half of the 20th century, was equal to a simulation at the scale of a separate cosmic object.

The ideas of Vernadsky and his followers about the Earth's biosphere were based on the ideas of Charles Lyell, who had discovered the natural relationship between geological and biological evolution. Vladimir Vernadsky proved that not only the Universe evolved (in his terminology – Inert Matter). Having originated from a cosmic vacuum (quantum fluctuations), under the influence of certain physical and chemical processes, Inert Matter, through a transitional state, acquires a qualitatively new structure and functions – Living Matter, and, at the same time, it continues to evolve in its primary state. That is, having reached a certain inner perfection, one state of matter transitions logically into another that, on the one hand, is a certain hierarchy of the previous ("mother") state of matter and continues to evolve in complete dependence

of it and, on the other hand, creates a basis (space) for the deployment of a qualitatively new ("daughter") state of matter.²⁸⁸

Vernadsky's model of the world order does not deny the Big Bang Theory. According to Vernadsky's model, the Universe and biological life are two self-sufficient structures that evolve in close interaction with each other. The Universe as Inert Matter develops according to the laws of physics and the Big Bang Theory. Biological life as Living Matter (including man) develops according to the laws of biology and the synthetic theory of evolution. The main feature of Vernadsky's model lies in the fact that in it, using the example of the Earth, the main stages of the formation and development of biological life in certain parts of the Evolving Universe are disclosed. Vernadsky's model shows that, as a result of physicochemical and biochemical processes, macromolecules transform into biopolymers and then into the simplest structures of Living Matter, which transforms the surface of an individual cosmic object into the sphere of its existence – the biosphere over several billion years of evolution. 289

After the first publication of Vernadsky's ideas about the biosphere, much has changed in the world of science.²⁹⁰ The modern scientific community recognises the imperfection of the Big Bang Theory and the synthetic theory of evolution. New theories are being created, in which not only the chronology of the Universe is clarified, but also the "ideal models" are proposed, in which the evolution of the Universe, the cosmic biospheres and noospheres are considered a single process.²⁹¹

§ 17. We again take the liberty to denote in Laconian style the revealed complexity of the cosmos by a metaphor "Those who transform the Earth." The key phrase of discursive thinking through of the new complexity of the cosmos is the phrase of Friedrich Nietzsche: "God is dead!" Nietzsche wrote about it very impressively and emotionally in the book "The Gay Science": "Have you not heard of that madman who lit a lantern in the bright morning hours, ran to the marketplace, and cried incessantly: 'I seek God! I seek God!' (...) 'Whither is God?' he cried; 'I will tell you. We have killed him – you and I. All of us are his murderers.' (...) 'Do we hear nothing as yet of the noise of the gravediggers who are burying God? Do we smell nothing as yet of the divine decomposition? Gods, too, decompose. God is dead. God remains dead. And we have killed him."" 293

Nietzsche's categorical statement, "God is dead!" drew a line in world history in his own way. In its European part, the divine meanings in the concept of the "Order" were "killed." The New Age of Enlightenment showed forth "pure rationalism." As a result, the subject-predicate relation "Order-hēgéomai" was destroyed, and, consequently, the fundamental connection between agathós and aretē, based on it. However, what is more important, the "Agathós Above All" principle has lost its relevance, and philosophy has lost its basis. The authority of philosophy and all its developments, which united divine and rational meanings and ensured the unity of politeia and paideia, was called into question. Agōn, developed and advanced by the sophists, began

to produce its own rules. "Pure rationalists" or scientists, as they were called after the 19th century,²⁹⁴ began to elect judges from among its members and legitimise a new "view" of the "Order" and the person's place in it. Rational meanings have triumphed over irrational (divine) ones.

The rational "gaze" on the "Order" and man is created on certain sets of new fundamental meanings, each of which has its history. We would like to highlight the following:

- 1 The world around us is the Universe, the biosphere and the noosphere of the Earth, which evolve.
- 2 The Universe, biological life and man have resulted from natural physicochemical processes, some of which have been researched and explained.
- 3 Biological organisms and humans arose on Earth as a result of abiogenesis or panspermia.
- 4 Modern man is a *Homo sapiens*. He has emerged from primates as a result of neuro-evolution. Its main difference from other anthropoid apes is in the structure and functions of the brain.
- 5 A man carries out activities on a planetary scale. World history is a continuous and non-linear change in the appearance, structure and function of the Earth.²⁹⁵

Discursive thinking through of a new complexity of the "Order" helped man to identify himself as a planetary force focused on the creation of the noosphere in conditions of uncompromising competition with geological and biological processes. "The ultimate goal of man, in respect of himself and others, as well as in respect of the world and nature, is the accession of reason and the endless imposition and expansion of his power."²⁹⁶ The epistemology "Those who transform the Earth" liberated man's worldview from dependence: "Creator – Mediator – Executor." Man realised himself as an important participant in the process of transforming the Earth.

§ 18. Over the past 400 years of modern history, "professors of philosophy"297 have been able to understand and accept the fact of changing the complexity of the intelligible "Order." The question of being was not as obvious to them as to Plato, Aristotle and other predecessors. New facts did not allow perceiving being as "Order," created by God, once and forever. The "Order" had been changing. It was necessary to reconsider the genesis of being and answer the question, "What is the "Order" as a process?"

At the beginning of the 19th century, Georg Wilhelm Friedrich Hegel published two fundamental works – "Science of Logic" (between 1812 and 1816) and "Encyclopaedia of the Philosophical Sciences" (1817). Hegel reconsidered being as a process and introduced new terminology to define disclosed

Hegel regarded being as "the concept only as it is in itself" and "a process of passing over into another."298 As the other, Hegel considered nothing. "The truth of being as well as of nothing is, therefore, the unity of both."299

The unity of being and nothing represented the *becoming* and the *beginning*. The latter, according to Hegel, "is also becoming, but it expresses already the reference to the further progression."³⁰⁰

Hegel knew Greek well,³⁰¹ so his explorations of the new complexity of "Order" also included a rethinking of Platonic meanings in new terminology. The unity of being and nothing corresponded to the *kalós* cosmos, the becoming to *gágnomai* ("I come into being"), and the beginning to *gánesis*.

In search of an answer to "What is being?" Hegel concluded that the becoming was the true expression of "not only the *unity* of being and nothing, but *unrest* in itself." It was the *unrest* of the *unity* of being and nothing that represented unity not merely immobile but also as a process. Hegel specified the process manifestation with the term "Dasein." According to Hegel, Dasein is a "*one-sided* and *finite*" form of unity of being and nothing, in which the contradictions in their relationship temporarily disappeared. Dasein is a unity in which being and nothing are only moments. 303

Hegel's research was important, but not the only one that disclosed the complexity of being. Professors of philosophy achieved significant results in understanding "Order" as a process and in creating new methods and tools for its research. We would like to highlight several of the concrete results we have achieved:

- 1 The discourse in epistemology between rationalists and empiricists of the 16th century. The discourse continues to the present. It concerns the discursive thinking through of the fundamental nature of reality, including the existence of God, the nature of truth, the place of man on the scale of the Earth and the Universe and the relationship between the mind and body. 304 The understanding of being as the source of our ideas and the nature of causal connections in the world was extended due to dialectics.
- 2 Kant's "Copernican revolution" (the end of the 18th century). In "Critique of Pure Reason," Kant has proved that authentic knowledge of the essence of things does not exist. The understanding depends on the nature of cognitive abilities. Therefore, a man can cognise the world only in an image in which the world "appears specifically to him/her," and not in that state in which "he/she is by himself/herself." Kant formulated it as follows: "we can cognize of things a priori only what we ourselves have put into them." Therefore, defining ideas such as God, truth, peace, faith and others cannot be considered authentic or inauthentic. They cannot be confirmed by empirical methods. They exist as "things in themselves" and cannot be understood. 305
- 3 The non-philosophical functions, such as pre-Christian and Christian exegesis, tendentiousness of thinking, compartmentalisation of consciousness and niche discipline, were rejected. Instead, philosophers focused on researching the "Order" as a process and creating "ideal" models of global sustainability and prosperity.

- 4 Throughout modern history, different political and cultural movements, such as "liberalism," "Marxism," "psychoanalysis" and "existentialism", were formed on the basis of the theories and the "ideal" model of sustainable development. Those movements covered different population groups who lived in the territories of all continents. The main feature of new theories and "ideal" models was an effort to reach a consensus between the need to transform citizens' discourse and way of life on the achievement of the proclaimed ideal, on the one hand, and their rights, freedoms and interests, on the other hand. The search for an effective combination of the possibilities of the monarchy (aristocracy) and democracy to establish an "ideal" world order was carried out through the created political and educational theories.
- 5 There was developed a process approach in the theoretical understanding of the world and the practical development of the achieved results. A process understanding of reality involved the development of a new metaphysical and metaphilosophical paradigm with its methodology and tools. There was formed a process philosophy that, unlike traditional metaphysics, did not focus on the eternalist being and on what there is. Process philosophy analyses ways of occurring, i.e. what is occurring. It studies the regular behaviour of dynamic systems in the process of their continuous and nonlinear complication.

Over the past 400 years of the modern period, professors of philosophy have managed to revive philosophy as follows:

- 1 A discourse that combines common human sense and new ideas about the "Order" as a process.
- 2 A practice that transforms every new theory and the "ideal" model of global sustainable development into the *méthodos* of society conversion at the national, regional and global levels.
- § 19. Currently, Martin Heidegger's philosophy most fully represents the disclosed complexity of "Order." On the one hand, Heidegger's research is based on the ideas of Plato, Aristotle and other authoritative scholarchēs. On the other hand, Heidegger uses the insights and generalisations of the "professors of philosophy," such as Immanuel Kant, Georg Wilhelm Hegel, Wilhelm Dilthey, Edmund Husserl and others. 306 We shall consider Heidegger's philosophy as the image of Plato's philosophy.³⁰⁷
- 1. Thomas Sheehan argues that Heidegger's philosophy is a phenomenological investigation of the meaning and source of being, which Heidegger called On Welt = Lichtung = Da, or the "clearing." Things can manifest themselves only in the clearing and, in this sense, "be."

The complexity of understanding Heidegger's philosophy is explained by the evolution of terms and their meanings, with which Heidegger conveyed the flow of his reasoning. Heidegger reconsidered Greek terminology and its

meanings in the language space of the German language. Heidegger, like Hegel, knew Greek and studied the works of the *scholarchēs* in the original. Hegel, however, rethought the ideas of the authoritative scholarchēs using standard terminology, while Heidegger tried to convey the meanings of Greek terms maximally accurately, using the potential of the German language. Heidegger experimented with the German language. He improved not only the Greek meanings but also the language of the transmission of the improved meanings itself. Heidegger selected German words for Greek terms and, if necessary, he changed those words or created new ones, achieving the maximum possible closeness of the semantic charge.³⁰⁹ Heidegger created new terminology to convey genesis research results as such. For example, "the appropriated clearing" (die ereignete Lichtung) is nothing more than the appropriated openness (disclosedness) of the gignomai or the being of a thing, which Heidegger denoted by the word "Sein." Before Heidegger decided on the term "der Lichtung," he used the terms "Wahrheit," "Entbergung," "Entborgenheit," "Unverborgenheit," "Unverdecktsein," etc. 310 It would be wrong to say that "der Lichtung" was Heidegger's final choice. The meanings of "der Lichtung" are based on the history of the development of meanings in the previous terms. In-depth language training could be explained in this case by Heidegger's striving for the identity of German words with the Greek term α -ληθής (α -lēthḗs), in which the obvious opposition was transmitted: unconcealment-concealment, opennesshiddenness.³¹¹ The Greek word $\lambda \dot{\eta} \theta \eta$ ($l \dot{\bar{e}} t h \bar{e}$) means oblivion, concealment. Therefore, Heidegger aimed at conveying the meanings of the transition of Sein from a state of hiddenness, oblivion ($\lambda \dot{\eta} \theta \eta$) into a state of openness (ά-ληθής), or Sein as *Anwesen*, "meaningful presence." The appropriated clearing is the *genesis* of the being of a thing. However, the "realness" of a thing depends on its meaningful presence (anwesend) for people.

According to Sheehan, "the single issue that drove Heidegger's work was not being-as-meaningful-presence but rather the source or origin of such meaningful presence – what he called die Herkunft von Anwesen." "What is the source of such a meaningful presence?" "Why is the search for a source of meaningful presence not a priority for philosophy?" Heidegger came to the conclusion that starting with Plato, the issue of the source of coming into being (gignomai) was forgotten, just as the very fact of oblivion was soon forgotten as well. Heidegger called that source "the clearing (die Lichtung), or more precisely, the thrown-open or appropriated clearing (die ereignete Lichtung)." ⁸¹³

The priority of the genesis issue as such made research on the causes of the intelligibility of things urgent and over-relevant. The subject of Heidegger's research was that which gave the *significance* and *meaningful* presence or Sein as *Anwesen*. For Heidegger, the *openness* of being was obvious, so he used the term *Dasein* instead of Sein. *Da* is the openness of Sein, "being as such," its *temporality*. *Dasein* is a process, *a passage*, in which time was a key issue. Safranski described *Dasein* as follows: "a continual attempt to show that we are creatures who build bridges because we can experience open

expanses, distances, and, above all, abysses – above ourselves, around ourselves and within ourselves – and who therefore know that life means bridging the abysses and keeping in transit. Thus, Dasein is a Being that looks across to itself and sends itself across – from one end of the bridge to the other. And the point is that the bridge grows under our feet: only as we step on it."³¹⁴

The appropriated clearing is a view of *Sein* or the being of the thing. The combination between the source and the thing's being has been denoted by the term *Dasein*, where Da is synonymous with the clearing. Da is the openness or *the clearing* of the source that allows the thing to exist.

2. The key importance of time in understanding Dasein changed the purpose of raising the question of the source of Dasein. According to Heidegger, the question should not be asked to be answered, or, more precisely, not so much for that. The importance of the question was to maintain and strengthen the degree of actualisation of the question itself. For example, the significance of the question "What is man, and what is his place in the cosmos?" is not in the answers that they "are" (exist). The significance of the question provides its turning towards the nature of man and his place in the cosmos, i.e. the eternal return to oneself for the purpose of clearing the source. Therefore, just like the philosophers of Ancient Greece, Heidegger did not write "doctrines" and "theories." His legacy consists of lecture notes and articles that move, or rather, eternally return to knowing (phronéō) the source of the birth of being for its all-encompassing intelligibility as a thing. Heidegger called that move back to the genesis "the return from meaningful presence to appropriation," where "there is no more room even for the word 'being." 315

Heidegger did not consider the return to appropriation, i.e. clearing the source, as moving in the same direction towards one's ultimate purpose and for the sake of getting the desired answer. That return was filled with Aristotelian reasoning. Heidegger, like Hegel, preferred Aristotle's image of philosophy to Plato's. Therefore, Heidegger discursively thought through of philosophy as a disinterested return to the birth of being for the sake of philosophy itself. In that eternal return to the genesis, there was an increase in the scale and scope of interrogation, through which "the indefinable "it" (es)" "gives" all configurations of the clearing-for-being." 316

In Heidegger's understanding, the meaning of the clearing is the fact that Dasein structurally transcends things and returns to them. In a manuscript devoted to Aristotle, Heidegger gives a laconic definition of his philosophical intention: "The subject of the philosophical question is human existence, the question being about the character of its Being." However, the anthropological interpretation of Heidegger's teachings appears to be a mistake. Alexandre Koyré clarified: "Dasein is a 'structure' or, if a more familiar term is used, an essence that is actualized in a man, but which could (and perhaps it does) become actualized in other 'entities,' or even not actualized at all." In general, Dasein or the *Sein* movement in *Da* is a kinetic structure of transcendence-and-return. In fact, these are the revived meanings of the *lógos*, given in new terms.

The question "What is man, and what is his place in the cosmos?" sustains openness of the source of a human being, i.e. the clearing-for-intelligibility. The question "eternally returns" to transform from hiddenness into the openness that which forms the meaningful presence of a man, namely, his ex-sistence as "being made to stand out." The existence of a man, like any thing, is a movement or a process. "For Heidegger, the movement of ex-sistence – the fact that it structurally transcends things and returns to them – is what existentially holds open the clearing and makes possible the particular meanings of things." Thus, as a specific discourse and way of life, philosophy disclosed the meaningful presence of a thing as the clearing-for-intelligibility, i.e., made possible the individual intelligibility of the essence of things. It disclosed the movement of ex-sistence as a kinetic structure of transcendence-and-return, or *lógos*. 320

3. In Heidegger's philosophy, Nietzsche's phrase "God is dead!" was a borderline that separated the "old" and "new" meanings of being. In the "Letter on Humanism," polemicising with rationalism and its derived forms: humanism and metaphysics, Heidegger further clarifies the previous understanding of humanism. "The 'humanum' in the word points to humanitas, the essence of the human being the '-ism' indicates that the essence of the human being is meant to be taken essentially. (...) That requires that we first experience the essence of the human being more primordially; but it also demands that we show to what extent this essence in its own way becomes destinal. The essence of the human being lies in ek-sistence. That is what is essentially – i.e., from being itself – at issue here, insofar as being appropriates the human being as ek-sisting for guardianship over the truth of being into this truth itself."³²¹

Heidegger's understanding of humanism is important for our research by the fact that it focuses on the meanings of three key markers of human identity: the epistemology "Those who transform the Earth," the meaning of human life and the transcendental ideal. "'Humanism' now means, in case we decide to retain the word, that the essence of the human being is essential for the truth of being, specifically in such a way that what matters is not the human being simply as such." In this definition of humanism, on the one hand, Heidegger emphasised the self-sufficiency of a human being and the understanding of man as a powerful transforming planetary force. It follows from the definition that the epistemology "Those who transform the Earth" presents a man as an important actor in planetary evolution. However, on the other hand, Heidegger emphasises that the transforming force of man has borderlines that are not dependent on the being of man. The point at issue is the inclusion of planetary evolution into the evolution of the Universe and the place and role of man in the process.

Heidegger, like Plato, promoted philosophy as practice. His main mistake was the use of the developed image of philosophy in reforming the education of Nazi Germany. 323 Collaboration with the Nazis negatively affected Heidegger's reputation and made it impossible for him "discursively

think through" politeia and education as tools for moulding (ordering) states and citizens.

§ 20. The *lógos* (the account of complexity) of the intelligible "Order," which we have designated by the metaphor "*Those who transform the Earth*," defines a new meaning of human life and the cultural ideal. We denote the meaning of human life by the metaphor "*born to create*" and the cultural ideal as "*intelligent man*." Firstly, we briefly review the history of the formation of the meaning of life, "born to create."

In the course of lectures on pedagogy, which Immanuel Kant read to disciples in the winter semester of 1776–1777,³²⁴ he proposed a new direction in discursive thinking through of the meaning of human life. "One principle of education which those men especially who form educational schemes should keep before their eyes is this - children ought to be educated, not for the present, but for a possibly improved condition of man in the future; i.e. in a manner which is adapted to the idea of humanity and the whole destiny of man. (...) Parents usually educate their children merely in such a manner that, however bad the world may be, they may adapt themselves to its present conditions. But they ought to give them an education so much better than this, that a better condition of things may thereby be brought about in the future."325 Kant not only allowed the possibility of man's influence on the development of "Order," but he also argued that the ability to create and change "Order" depended on education. "Man can only become man by education. He is merely what education makes of him."326 "It may be that education will be constantly improved, and that each succeeding generation will advance one step towards the perfecting of mankind; for with education is involved the great secret of the perfection of human nature."327

In the book "On the Meaning of Life," Moisey Rubinstein disclosed the transformation process of the meaning of life in the works of key thinkers of the Modern Age: from Gottfried Wilhelm Leibniz, Immanuel Kant and others to Friedrich Nietzsche, Vladimir Solovyov and Henri Bergson. Rubinstein showed how "the necessity of serving God" was replaced by man's desire to "identify with himself, be free, active, autonomous and, therefore, moral." 328

"Born to create," as the meaning of human life, found its clear form already at the end of the 18th century in the work of the German philosopher Johann Gottlieb Fichte, who formulated it with the phrase "action for the sake of action." Fichte presented his imperative as follows: "Act! act! it is to that end we are here. Should we fret ourselves that others are not so perfect as we are, when we ourselves are only somewhat less imperfect than they? Is not this our greatest perfection, – the vocation which has been given to us, – that we must labour for the perfecting of others? Let us rejoice in the prospect of that widely extended field which we are called to cultivate! Let us rejoice that power is given to us, and our task is infinite!" The new meaning of human life gave man the possibility for free realisation of the inner creative potential. From an obedient and diligent executor of someone's will ("the necessity of serving God"), the man passed into "born to create," to act and transform.

The disciples could again choose a discourse and way of life close to their inner world rather than follow dogma.

As Rubinstein's analysis showed, it was Fichte who first discovered new perspectives of human life that followed from the intelligible complexity of "Order": "... man-personality acts as the main creative power, as a builder of the essence of the world. (...) a man-personality is not given, but posits himself, – his existence does not arise from essence, but, vice versa, his essence comes from his existence. Personality can perfect himself by perfecting the world. However, for Fichte, existence is to act that stands at the beginning, then to act means to assert and create the moral order of the world, in which the essence of the world is laid. It is clear that personality, perfecting himself and the world, creates not only his own but its essence."³³⁰

In 1946, the book "Man's Search for Meaning" by the Austrian neurologist and psychiatrist Viktor Frankl was published.³³¹ The author described his own emotional states in the dungeons of the Nazi concentration camp and the role of the meaning of life in extreme situations. Frankl introduced the concept of the "existential vacuum," or feeling of meaninglessness, into the scientific literature, which was the complete opposite of "born to create." In reality, the meaning of life formulated by Fichte opposes the subjective state of boredom, apathy and emptiness, which arise from the existential vacuum. It causes the opposite subjective states: interest, enthusiasm, passion, fullness and richness of life, purposefulness, etc. Moisey Rubinstein formulated the meaning of "born to create" as follows: "... life is to act, create, build a kingdom of reason; this meant to live with an idea, meaning conscious participation in solving global problems, participation in the infinite world creativity."³³²

§ 21. The new cultural ideal, which we have designated by the metaphor "intelligent man," discloses the increased role of knowledge in society. The state took responsibility for the education of its citizens. In the state model of education, the place of Jesus Christ was given to the university as a social institution, moulding a free, comprehensively, harmoniously developed personality.³³³

The cultural ideal "intelligent man" was formed in the Age of Enlightenment. It revived society's need for knowledge and contrasted education with ignorance. Knowledge was recognised as a part of human nature. It ensured the continuous return of man to the source of his being.

René Descartes, Gottfried Wilhelm Leibniz, John Locke, Immanuel Kant, Bertrand Russell and others formulated a new meaning of knowledge. Professors of philosophy identified in knowledge: (a) dynamism, which allowed *scientists* to perceive the changing "Order"; (b) knowledge was individual, as it was found that people differed in their ability to know the world, and those differences depended on human genetics and not just on education; (c) knowledge was aimed at practice. "Practical knowledge" has been designated by the term "competence." Competencies are primarily practical skills that increase the effectiveness of self-knowledge and knowledge of "Order" as a process.

The term "competence" was introduced by the American psychologist Robert W. White in 1959. White did research on the psychology of normal and abnormal personality development. The new term allowed White to explain the need for continuous development of personal characteristics and skills to ensure effective self-realisation in a continuously complicating social system.

However, the practice-oriented approach to knowledge has turned it into consumer knowledge. Pierre Hadot has rightly criticised the nature of modern knowledge and the ways of acquiring it for inconsistency with the traditions established by Plato.³³⁴ On the one hand, school/university unification of training programs, which allow anyone to get a diploma in order to be an official and to make a career, teaching in the numerous student groups, etc. are teachings according to the traditions of the sophists. On the other hand, access to knowledge has been artificially limited and sold. For example, the creation of international scientometric databases, such as Web of Science and Scopus. Knowledge has become a product and a part of the market economy, which also corresponds to the traditions of the sophists. Finally, the universities have lost the status of academic and spiritual centres. They fall under the sway of Big Business, Big Government and Big Foundations. The redefinition of "professor" to "grant-grubbing entrepreneur" and "teacher" to "functionary" took place. 335 Modern "teachers" and "professors" of philosophy are not responsible for the result of their influence on disciples and do not determine their discourse and way of life.

§ 22. Since the 19th century, state governments have implemented major reforms in the field of education that have led to the establishment of national education systems, the weakening of the church's influence on the school and an increase in the quality of education. Episcopal (cathedral), monastic and secular schools and universities of the Middle Ages were replaced by educational institutions of a new type.

The second stage of thinking through of education led to the following results

Firstly, philosophers have recognised that the "Order" is changing. The philosophy of cosmology explores the uniqueness of the Universe and that "the universe has such a nature that our life is possible."³³⁶ The terminology and meanings that the philosophy of cosmology promotes are exclusively focused on the mathematics, physics and astronomy that underpin cosmology.

Secondly, philosophy is increasingly "local." Transitioning from general practice and "general" knowledge to understanding concepts and issues specific to particular disciplines is counted as progress. For example, the philosophy of biology and the philosophy of neuroscience explore the uniqueness of a person and his nature. However, the meanings of this uniqueness only go beyond the boundaries of neuroscience.

Thirdly, "a threefold scheme of philosophy inherited from Plato"³³⁷ disintegrated, and each direction develops and advances as an independent one. Moreover, competition within philosophy is often aimed at debasing its fundamental characteristics and promoting new ways (*méthodos*) instead.³³⁸

However, in fairness, the following must be pointed out. In general, on the one hand, philosophy was created and constantly developed as not uniform, with various competing and often conflicting discourses and ways of life. There was no orthodoxy and dogmatism in the Academy; therefore, an important place was occupied by the authority of one or another *scholarchēs* and his school, which defended its "correctness." On the other hand, the sophists and some other traditions have always claimed the place of philosophy in world history and its achievements. ³⁴⁰ Competition is a natural phenomenon that mobilises and rallies to survive.

The question of the significance of philosophy for society has never depended on its "effectiveness" in the $ag\bar{o}n$. A profound mistake for philosophers is the desire to win in the $ag\bar{o}n$ or even to be guided by its rules. As Hakan Tell's research shows,³⁴¹ the $ag\bar{o}n$, which was created to develop and advance politeia and paideia, is the outstanding contribution of the sophists to world history. Furthermore, it must be acknowledged that the "product" philosophy created is noncompetitive in the $ag\bar{o}n$.

 $Ag\bar{o}n$ is created to meet current social needs, while philosophy develops the meanings of *superstitio*. Philosophy "thinks discursively" past and practices dialectic to move towards the ultimate beginning. The significance of the sophists and the advanced by them $ag\bar{o}n$ is that they meet society's vital needs in the present and partially prepare society for the future. At that time, the significance of philosophers and the way of life they represent lies in something completely different.

Since Plato, "true" philosophers have ignored and opposed the agon and, therefore, the present. That is why, for everything "real," all who practice the philosophical way of life are átopos, unclassifiable, with high originality. Society, however, tolerates philosophers and is guided by them.

Philosophers occupy an important place in world history due to three fundamental characteristics that they develop and advance. These characteristics underpin any society and the way of life of its citizens.

First, philosophers reveal to society the providential and directive meanings of the "Order." Every hominin has a natural connection to the "Order" and is aware of it. At the same time, it is philosophers develop and advance the "Order" and its meanings as the categorical imperative (the universal principle) that every hominin wishes to imitate. Philosophers masterfully combine known facts about the Universe and the abyss of the unknown in the "Order." They exhibit the "Order" as a rational and irrational whole and the upward path that originates in the expanding cosmos that passes through modern society and literally "leads" into the future. These meanings form the agōn, politeia and paideia that the sophists develop. The work of philosophers and sophists does not overlap. The first dedicate their lives to discern (theōréō) and come to know (ginōskō) the ultimate beginning, while the second perceive/think (noiéō) and come to know (ginōskō) present.

Moreover, secondly, philosophers develop and advance the subject-predicate relation "Order-*hēgéomai*" or *agathós*. Only in this case, the "Order"

constrains and obliges every hominin to follow the imperatives formulated by the philosophers, which they continually nourish with their way of life. It is first of all

- 1 A human desire to become an intermediary between the "Order" and society.
- 2 A man's willingness to die for the highest idea.
- 3 A desire to change the world is to transform people's discourse and way of life following the image of the highest idea.

The effectiveness of the $ag\bar{o}n$ does not depend on its internal potency. The internal potency of the agon is, in fact, destructive, as the sophists and their work compete not only within the politeia and paideia, but the politeia seeks to subdue the paideia. At the same time, philosophy synchronises and directs the agon. It puts into order/ornaments (kosméo) and arranges (with or together)/puts together (syntássō) childhood and adulthood, citizens and the state. Philosophy makes rules and judges agon, as hegéomai both "leads the way and judges, estimates" simultaneously.

When discussing the humanism, morality, or spirituality of political and educational theories, we must always "see" the imperatives philosophy promotes to unite politeia and paideia. For philosophy, politeia and paideia are tools for a more critical mission. The mission is to "turn" the hominin to the "Order" to conform to it. Philosophers create and advance the "ideal" (kalós) social system – eunomos – in which the laws of the cosmos determine the people's way of life.

In agon, the "philosophical" social systems are doomed to fail. They are a utopia. However, eunomos are not created for the agon. It is not intended to compete with actual political and educational practices. The *eunomos* mission is to show forth "a universal morality overriding tradition and group interests."342 Its mission is to persuade and serve the agathós, i.e. to show the way to unmixed/pure (eilikrinēs) "Order" and potency (dúnamis), which determines it. Eunomos is created as an "ideal" (kalós) for the real politeia and paideia, which the sophists develop.

Finally, thirdly, philosophy gives direction to the politeia and paideia "to beget and grow up" the disclosed arete (arete alethine). Philosophy shows forth the "Agathós Above All," which is equivalent to proclaiming inner freedom. Philosophy is a discourse and a way of life that liberates what we now call featureless "a man's inner self," and the Greeks – an emphatic "aretē."

Diogenes Laertius wrote, "Plato was the first to define the notion of kāloû³⁴³ as that which is bound up with whatever is praiseworthy and rational and useful and proper and becoming."344 The Sophists and the rational "better" they produce in the agon are kalós for philosophers. The work of philosophers is discursively thinking through the kalós.345

Discursively thinking through the kalós is tantamount to using the best practices - "sophós" and "sophía" - to make the kalós and agathós their own. 346 At the same time, the critical feature in the *hēgéomai* predicative construction is that the real (caring) interest³⁴⁷ with which *psukhē* looks at *kalós* and *agathós*³⁴⁸ (the "Order" and its structure) while it is being "led" is secondary. The main thing is that the *psukhē* "does so through itself" and for itself.³⁴⁹ It assumes responsibility and becomes "a guide (in the opinion)" between pure *agathós* and everyday life. In this case, the *psukhē* is disclosed as *aretē* and reunites with *agathós*, with its other half.

Summarising the above, it is worth emphasising once again that philosophy is the practice of ascending to the past. The result of this practice is the reunion of the *aretē* of a rising man with the *agathós*. A rising man transforms into the *agathós* man and uses the available *agathou dúnamis* to transform society into *eunomos*. In this sense, "*philosophers become kings in our states*." ³⁵⁰

The following three chapters offer three axioms for creating new educational (and political) theories. They are formulated on a modern understanding of the fundamental characteristics that distinguish the philosophical tradition in world history.

Notes

- 1 Jaeger [1946: 314].
- 2 Jaeger [1946: xxii].
- 3 In this meaning, it first appeared in Aeschylus [Jaeger, 1946: 286].
- 4 Jaeger [1946: 286].
- 5 Hadot [2002: 11].
- 6 Heidegger [1998]. Translated by Thomas Sheehan.
- 7 Ibid.
- 8 Jaeger, [1946: 21–22], Jaeger [1947], Hadot [1999] and Hadot [2002].
- 9 http://www.k12academics.com/education-theory
- 10 https://www.wiley.com/en-us/search?pq=education+Theory%7Crelevance (27 November 2021).
- 11 For example, journals related to the topic of our research: "Educational Philosophy and Theory" and "Educational Theory".
- 12 Derry [2013].
- 13 Wexler [2009].
- 14 Mishra [2009].
- 15 [Hick et al., 2009].
- 16 Fenwick and Edwards [2010].
- 17 Bury [1937], Capra [2015], Hadot [1999], Jaeger [1946], Marrou [1998] and Mintz [2018].
- 18 [Henningsen et al., 2013].
- 19 Dewey [1997] and McDermott [1981].
- 20 The Montessori [2004].
- 21 [Kozulin et al., 2003].
- 22 The author has changed a systematisation little, which is given on the site http://www.kl2academics.com/education-theory.
- 23 See, for example, Null [2016].
- 24 For example, the works of Hannah Arendt (1965), Philippe Aries (1992; 1999), Jacques Derrida [Derrida, Deconstruction and Education, 2004], and Svetlana Semenova (2004; 2009; 2012).

- 25 [Esbjörn-Hargens et al., 2010].
- 26 The analysis of which is presented, for example, in the books of Boris Bim-Bad (2005), and Lyudmila Mikeshina (2002).
- 27 For example, the theory of Robert A. Rescorla and Allan R. Wagner, or the normative theory of CBNs [Gopnik and Schulz, 2007] and https://www.fitelson.org/ few/few 05/scheines 1.pdf
- 28 Johnson and Street [2013].
- 29 For example, Margaret R. Lazzari and Dona Schlesier (2011).
- 30 Plato used the noun *epôidê* (ἐπ ω δή), an incantation (the saying of words believed to have a magical effect when spoken or sung. "ἐπωδή" is a compound of ἐπί- and ώδή. ώδή means "song," and the prefix ἐπί means that the action accomplished is "in favour of" [Brisson, 2020: 66-68].
- 31 "Plato would abolish the distinction between παιδιά and σπουδή by combining these two apparent opposites under the wider unity of παιδεία" [Bury, 1937: 312].
- 32 λόγον ὀρθὸν is clear or not complicated *lógos*.
- 33 νόμου λόγον ὀρθὸν [Laws 2.659d2].
- 34 παίδων όλκή τε καὶ ἀγωγὴ [Laws 2.659d1–2]. όλκή a drawing on or towards a thing; ἀνωγή – direction, training [Liddell & Scott, 1940].
- 35 Accusative singular from paideia.
- 36 Accusative singular from arete.
- 37 τὴν δὲ πρὸς ἀρετὴν ἐκ παίδων παιδείαν, ποιοῦσαν ἐπιθυμητήν τε καὶ ἐραστὴν τοῦ πολίτην γενέσθαι τέλεον, ἄρχειν τε καὶ ἄρχεσθαι ἐπιστάμενον μετὰ δίκης [Laws 1.643e4-6]. Translated by R.G. Bury with modification.
- 38 Lyubishchev [2000].
- 39 Jaeger [1946, 1947, 1986, 2014]; Marrou [1998], Hadot [1999, 2005, 2005a], Annas [2002, 2017].
- 40 ομηρική παιδεία [Jaeger, 1946; Marrou, 1998: 29].
- 41 [Republic 10.606e]. Translated by Paul Shorey.
- 42 Marrou [1998: 30].
- 43 Noun ατοπία (*atopía*), adjective ἄτοπος (*átopos*). For example, ἄτοποί [*Protago*ras 361a-b], ἀτοπώτατός [Theaetetus 149a].
- 44 [Cratylus 399d-400b].
- 45 φρονήσεως δὲ καὶ ἀληθείας καὶ τῆς ψυχῆς [Apology 29e].
- 46 Hadot [1999: 42].
- 47 Hadot [1999: 39].
- 48 See Republic [7].
- 49 [Republic 7.540a].
- 50 The philósophos "scantily attested in the fifth century, and in Plato's Apology Socrates has to go to some lengths to explain his activities as φιλοσοφέω (28e5, 29c8, d5)" [Edmunds, 2006: 423].
- 51 σοφίζω [Liddell & Scott, 1940].
- 52 Liddell and Scott [1940].
- 53 Toporov [2012].
- 54 https://www.merriam-webster.com/dictionary/wisdom#h2. I deliberately missed the term "scientific," as it appeared only in the 19th century.
- 55 https://www.merriam-webster.com/dictionary/wise
- 56 https://dictionary.cambridge.org/dictionary/english/wisdom
- 57 [Apology 23b]. Translated by Harold N. Fowler.
- 58 Ibid.
- 59 οὐκ ἔστι σοφός [*Apology* 23b6].
- 60 Edmunds [2006] and Tell [2011].
- 61 Toporov [2012].
- 62 [*Cratylus* 407b].

- 63 Tell [2011].
 64 μείζω τίνα ἢ κατ' ἄνθρωπον σοφίαν σοφοί [Apology 20e]. Translated by Harold N. Fowler.
- 65 "We have here one of the cardinal notions of the legal world of the Indo-European, to say nothing of their religious and moral ideas: this is the concept of "Order," which governs also the orderliness of the universe, the movement of the stars, the regularity of the seasons and the years; further, the relations of gods and men; and finally, the relations of men to one another. Nothing which concerns man or the world falls outside the realm of "Order." It is thus the foundation, both religious and moral, of every society. Without this principle everything would revert to chaos" [Benveniste, 1973: 546–547].
- 66 See Araújo [2020].
- 67 See [*Phaedrus* 278d].
- 68 Plato investigated the etymology of the term in the *Cratylus* [*Cratylus* 397e–398c].
- 69 φύλακες θνητῶν ἀνθρώπων [Cratylus 398a].
- 70 [Apology 22a–22d]. See the Phaedrus (278d), Apology (19c, 20e, 21a, 22c), etc.
- 71 [Apology 22a-22d].
- 72 "Plato has rightly seen what many later educators have sadly failed to see that we must have a thorough knowledge of the human *material* with which we are dealing, as well as a clear conception of the *aim* of education, before we can hope to evolve a successful *method* or frame an adequate Scheme" [Bury, 1937: 307].
- 73 "To love wisdom (sophía) is not just to love a particular epistemic object but to value and desire a specific comportment. For this reason, Plato insisted that students at his own school train in dialectic, not merely as an exercise in logical reasoning, but because he demanded they undergo an ἄσκησις, or spiritual transformation" [Ademollo, 2018: 94].
- 74 "The refutation of sophistry constitutes one of the founding acts of philosophy" [Tell, 2011: 2]. A sophistry as philosophy's opposite and its "daemonic double," see Tell [2011].
- 75 Edmunds [2006] and Tell [2011].
- 76 "Although the word σοφιστής was still in wide application during and after Plato's lifetime and did not crystallize in its meaning at any given point in time, it nevertheless appears to have acquired a more pejorative tinge in its later use" [Tell, 2011: 27].
- 77 Isocrates [*Antidosis* 15 276–277].
- 78 See [Plato, Protagoras].
- 79 This question is expounded in detail in the books of Werner Jaeger (1947), Henri-Irenee Marrou (1998) and Ilsetraut Hadot (2002).
- 80 Isocrates [1980].
- 81 Trubetskoy [1906: 225].
- 82 atopótatos (ἀτοπώτἄτος), singularity, ἀτοπώτατός [*Theaetetus* 149a13; *Phaedrus* 230c6], ἀτοπίαν ἄνθρωπος [*Symposium* 221d2]. A primary word: ἀ- + τόπος (atopos). See [Hadot, 1995: 58; 157–162].
- 83 οὕτω δὴ γεγενημένος πρὸς τὸ λόγω καὶ φρονήσει περιληπτὸν καὶ κατὰ ταὐτὰ ἔχον δεδημιούργητα [Timaeus 29a5–6].
- 84 "The *tracks* Plato bids his readers to follow include the entire dialogue, hence the full course of its argument and its complementary warnings against misology and dogmatism, which encourage critical consideration of conclusions and premises alike. To follow these tracks is to adopt as one's own the spirit and method of Socratic inquiry, and to emulate his life and character: 'to live by what has been said'" [White, 2000: 162].
- 85 Hadot [1999: 100].
- 86 See Hadot [1995, 1999].

- 87 [Apology 22a-d].
- 88 [Symposium 202e–203a]. Translated by Harold N. Fowler.
- 89 [Meno 93e].
- 90 The politeia was considered "ideal" if it equally used "persuasion and force" (πειθοῖ καὶ βία [Laws 4.722b] so that the state's citizens to "live as the willing slaves of the existing laws," [Laws 3.698b] and thought of themselves as the slaves of the law. Translated by R.G. Bury.
- 91 [Republic 7.532a-b].
- 92 "Between these two commitments on one hand, to follow argument wherever it may lead (Cri. 45b); on the other, to obey divine commands conveyed to him through supernatural channels (Ap. 33c) – he sees no conflict. He assumes they are in perfect harmony" [Vlastos, 2000: 55].
- 93 Araújo [2020].
- 94 γνῶθι σεαυτόν [Protagoras 343b2; Alcibiades 1 124a7-b1]; γνῶναι ἐμαυτόν [*Phaedrus* 229e5].
- 95 γένεσις, coming into being, production, generation. Génesis is derived from the verb gignomai. Gignomai and génesis, as well as words derived from them, are used as key terms in the presenting cosmogony and cosmology in Plato's Timaeus. According to A.F. Losey, "Only sometimes, instead of yíyvoua, Plato uses the verb γεννάω, which means 'to beget', and in Greek, this term is primarily connected with the descent from the father (24d, 28b-c, 37c, 38c, 41a-b, 41d)" [Plato, V-3, 1994: 599].
- 96 τὸν σοφὸν αὐτὸν αὑτῷ μάλιστα δεῖ σοφὸν εἶναι [Hipp. Maj. 283b].
- 97 τίς δ' ὁ θεός [Laws 4.713a].
- 98 τί ποτ' οὖν ὁ ἄνθρωπος [Alcibiades 1 129e].
- 99 [Laws 4.716b].
- 100 [Protagoras 343b; Philebus 48c]. "Unlike the Socratic piety on display in the Apology, self-knowledge on Plato's scheme now leads not so much to an appreciation of our mortal limits as to the realization that we are ourselves capable of possessing all the knowledge there is to be had (Meno 81c-d; Phaedo 72e-77e; Symposium 210a-211b)" [McPherran, 2007: 93].
- 101 "Early in the dialogue Socrates explicitly claims that the greatest accomplishment of his maieutic art is the ability to distinguish the true from the false: 'This is the greatest thing in our skill [μέγιστον δὲ τοῦτ' ἔνι τῆ ἡμετέτα τέχνη]: that it is able in all possible ways to test [βασανίζειν] whether the mind of a youth gives birth [ἀποτίκτει τοῦ νέου ἡ διάνοια] to a mere semblance and falsehood [εἴδωλον καὶ ψεῦδος] or to something genuine and true $[\mathring{\eta}]$ γόνιμόν τε καὶ ἀληθές]' (*Theaetetus* 150b9-c3)" [Gonzalez, 2009: 218-219].
- 102 [Theaetetus 210b]. Translated by Harold N. Fowler.
- 103 οὐκοῦν ὃ ἕκαστος φρόνιμος, τοῦτ' ἀγαθός [Alcibiades 1 125a].
- 104 όμοίωσις δὲ δίκαιον καὶ ὅσιον μετὰ φρονήσεως γενέσθαι [Theaetetus 176b].
- 105 ὄνησιν ὑπολαβεῖν [Cratylus 411d].
- 106 αί δ' ἄλλαι δεινότητές τε δοκοῦσαι καὶ σοφίαι [Theaetetus 176c].
- 107 [Gorgias 527e].
- 108 Jaeger [1947: 268].
- 109 [Republic 7.540a-b]. Translated by Paul Shorey with modification.
- 110 Hadot [2002: 20].
- 111 [Symposium 216b]. Translated by Harold N. Fowler.
- 112 Jaeger [1947].
- 113 "I have argued that the later Platonist practice of commemorating Socrates began a decade or two after his death, and that Plato alludes to the occasion and nature of those rites in the *Phaedo* by evoking their date, their form, and their function. This passion play, strangely moving yet sublimely dispassionate, and composed

- shortly after Plato settled beside the Academy, presents Socrates as the founding father or ἥρως κτίστης, not of an educational institution, but of a new way of life devoted to the pursuit and cultivation of wisdom (sophía) and virtue (aretē)" [White, 2000: 168].
- 114 "We know that Plato taught for a long time in a pre-existing gymnasium (387–367) and then, on his return from the second trip to Sicily, bought a property nearby, and it was in this 'small garden in the Academy' (κηπίδιον ... τὸ ἐν 'Ακαδημεία) that he founded his school. I argue that, from the very beginning, the choice of the site was not coincidental but instead reflects the roots of Plato and his followers within a specific cultural background of which the Academy served as the heart" [Marchiandi, 2020: 11].
- 115 [Republic 368a; Parmenides 126c].
- 116 The Peloponnesian War (431-404 B.C.) was an Ancient Greek military conflict, fought by democratic Athens and the Delos League, against and the Peloponnesian League led by oligarchic Sparta. Athens suffered a crushing defeat in that war and was completely devastated. Since then, Athens could never regain its pre-war prosperity, including because the people's assembly often made decisions dictated more by emotions rather than common sense.
- 117 "Plato's dialectic fails to free itself from a practical conception of the good (agathós); it remains rooted in the ethical context of φρόνησις (phrónēsis)" [Gonzalez, 2009: 47]. "While seeking something higher, while attempting to see true being (alētheia), Plato's dialectic remains firmly rooted in the practical, ethical, and discursive context of human existence" [Gonzalez, 2009: 49].
- 118 [Protagoras 342e-343b]. "What matters to my argument, however, is not that Plato was the first to establish philosophy as an autonomous field, only that his articulation was among the first ones and that it deliberately portrayed philosophy as an old discipline without acknowledging either its newfangled or contested status" [Tell, 2011: 1].
- 119 According to Julia Annas, "Plato is the first thinker to single out philosophy as an independent subject and method distinct from other approaches such as rhetoric and poetry" [Annas, 2002: 24].
- 120 [Apology 22a].
- 121 "Although the word σοφιστής was still in the wide application during and after Plato's lifetime and did not crystallise in its meaning at any given point in time, it nevertheless appears to have acquired a more pejorative tinge in its later use" [Tell, 2011: 27]. I exclude any pejorative, ironic and critical connotations in the term and use it as a synonym for sophós [Symposium 177b]. See the discussion [Edmunds, 2006: 417–418].
- 122 Edmunds [2006: 421].
- 123 https://dictionary.cambridge.org/dictionary/english/wise?q=+wise.
- 124 Edmunds [2006: 418–420].
- 125 "And in a general sense all experience is also termed by him (Plato) sophía, e.g. when he calls a demiurge sophón"; κοινῶς δὲ λέγεται παρ' αὐτῶ σοφία καὶ ἡ πᾶσα ἐμπειρία, οἶον ὅταν σοφὸν λέγη τὸν δημιουργόν [Diogenes Laertius, 1972, 3.1.63]. Edited by Robert Hicks (1972).
- 126 The discussion of the statesman and the sophists in the eponymous dialogue of Plato, see Gill [2010].
- 127 Mottron and Dawson [2021]. See Republic [7.518c-d].
- 128 Agōn (ἀγών, noun, from verb ἄγω, "I lead, bring (a person, or animal), guide." Agōn "was a unique creation of the Greeks in the ancient world. In all kinds of agon of Greece, they showed an unflinching spirit of antagonism; the Greeks made it legalisation, rationalisation and formalisation. It is from this kind of spirit that the Western thinking tradition of binary opposition was formed" [Daqing, 2010: 6809].

- 129 The sophists "shift the pre-existing competitive ethic away from physical towards verbal competition" [Tell, 2011: 115]. As a result, "the Greek elocution, rhetoric and dialectics came into being" [Daqing, 2010: 6808], and the agonistic tradition has taken an important place in areas of activity that are significant for the development of public policy and administration.
- 130 According to Daqing, the agonistic tradition contributed to the fact that "although there existed differences in age, wealth or ability, these differences were not insurmountable, various kinds of agon gave the equal citizens so many opportunities to show their talent" [Daqing, 2010: 6810].
- 131 In the direct meaning of Plato: "causing us to live as the willing slaves" [Laws 3.698b]. Translated by R.G. Bury.
- 132 "In the fourth century B.C. terms like 'philosophy,' 'dialectic,' and 'sophistry' do not seem to have had a widely agreed upon application. On the contrary, different authors seem to have fought with one another with the purpose of appropriating the term 'philosophy,' each for his own practice and educational scheme" [Tell, 2011: 36].
- 133 Note that Plato violated the synonymy between the meanings σοφοί and σοφιστής, existing in the 4th century B.C., which he recognised in *Symposium* 177b. In the Apology, Socrates was presented as Σωκράτης σοφὸς ἀνήρ [*Apology* 18b5], while the Socratic (equally philosophical) way of life was formulated in opposition to σοφιστής. See the discussion [Edmunds, 2006: 423–424; Tell, 2010, 2011].
- 134 "as opposed to the sophists, Socrates never teaches for pay (31b-c), he is not a teacher (33a-b), and he possesses no wisdom (21b)" [Tell, 2011: 35].
- 135 ὁ δέ γε φιλόσοφος, τῆ τοῦ ὅντος ἀεὶ διὰ λογισμῶν προσκείμενος ἰδέα [Sophist 254a12], that is the philosopher reckons/considers (λογίζομαι) όntos or what is "always is purely (όη)", while the Sophists runs away into the darkness of "what is not (not όπtos)," ὁ μὲν ἀποδιδράσκων εἰς τὴν τοῦ μὴ ὅντος σκοτεινότητα [Sophist 254a6]. Moreover, "The newly displayed difference between sophist and true philosopher lies in their respective uses of aporia (...) Both sophists and philosophers make use of aporia, but the philosopher does not leave us with this aporia [about what is not], but goes on to break the impasse by showing us that we can say, after all, that what is not is, because the claim that we cannot say this turns out to rest on confusion" [Brown, 2010: 169–170].
- 136 [Republic 6.494a; 6.503b; Gorgias 474a].
- 137 See Hadot [1995, 1999] and Sellars [2017].
- 138 For the continuity of the Socratic heritage in Plato's thinking, see *Reason and Religion in Socratic Philosophy* [Smith and Woodruff, 2000].
- 139 Socrates used σοφὸς ἀνήρ, a sophós man [Apology 18b5]. "In Plato's representation of him, Socrates, still in 399 B.C.E., uses σοφὸς ἀνήρ as a term that encompasses two professions which we distinguish and for which we have two different terms, "Pre-Socratic" and "sophist"" [Edmunds, 2006: 417].
- 140 [Symposium 212a4–5]. Translated by Harold N. Fowler with the modifications.
- 141 *Tekhnē* (noun, *tekhnē*, τέχνη), "an art or craft, i.e. a set of rules, system or method of making or doing, whether of the useful arts, or of the fine arts" [Liddell & Scott, 1940]. See [*Gorgias* 465a; 501a].
- 142 γένηται τὰ καλά [Symposium 204d7].
- 143 Gerson [2007: 57].
- 144 Epimeléomai (ἐπιμελέομαι, verb, from ἐπί, fitting on, which intensifies μέλει, care for, take an interest in), to care for (physically or otherwise), attend to.
- 145 ἑκάστης ἡμέρας περὶ ἀρετῆς τοὺς λόγους ποιεῖσθαι καὶ τῶν ἄλλων περὶ ὧν ὑμεῖς ἐμοῦ ἀκούετε διαλεγομένου καὶ ἐμαυτὸν καὶ ἄλλους ἐξετάζοντος [Apology 38a2-4]. I use a selective translation of the phrase.
- 146 Gerson [2007: 48].

- 147 "Now when our first form had been cut in two, each half in longing for its fellow would come to it again; and then would they fling their arms about each other and in mutual embraces yearn to be grafted together" [Symposium 191a-b]. Translated by Harold N. Fowler.
- 148 Gonzalez [2009: 312].
- 149 [Euthydemus 278e-281e; Republic 6.508e2-3].
- 150 I use Mintz [2018: 20], although I admit this figure will be higher since Mintz studied only *paideia*.
- 151 Thrasyllus considered thirty-five Plato's dialogues authentic in Antiquity [Mintz, 2018: 20].
- 152 [Apology 36c4].
- 153 τρόπον [*Apology* 36d1]. Where τρόπος is a turn, direction, a way of life [Liddell & Scott, 1940].
- 154 [Apology 36c4–36d1].
- 155 ἐπιμεληθείη ὅπως ὡς βέλτιστος καὶ φρονιμώτατος ἔσοιτο [*Apology* 36c5–6]. Phrónimos (φρόνιμος, adjective) and Phronimótatos (φρονιμώτατος, adjective, superlative of *phrónimos*), thoughtful, i.e. sagacious, "how we size things up"; reflecting our personal ("visceral") opinions [Thayer, 1995].
- 156 I add the actions that caused the charge against Socrates. See Kraut [2000: 14–19], Parker [2000: 41–46], McPherran [2000: 90–103], Edmunds [2006: 417–418; 423–424] and Tell [2010, 2011: 27]. The official charge ran: "Socrates does wrong by not acknowledging the gods the city acknowledges, and introducing other, new powers [daimonia]. He also does wrong by corrupting the young" [Parker, 2000: 41].
- 157 τά τε μετέωρα φροντιστής καὶ τὰ ὑπὸ γῆς πάντα ἀνεζητηκὼς καὶ τὸν ἥττω λόγον κρείττω ποιῶν [*Apology* 18b6–18c1]. See Edmunds [2006] and Tell [2010].
- 158 [Timaeus 29a5-6].
- "Apart from the metaphysical question of the relativity of all knowledge, the word ἐπιστήμη in Greek usage connotes certainty, and so Plato and Aristotle always take it. However, more specifically, that which (always) is, for Plato, is the 'idea' which is not subject to change and therefore always is what it is, while a particular material thing subject to change and relativity both is and is not any and every predicate that can be applied to it. Furthermore, since knowledge in the highest sense is for Plato's knowledge of abstract and general ideas, both in his and our sense of the word idea, knowledge is said to be of that which is. It is uncritical to ignore Plato's terminology and purpose, and to talk condescendingly of his confusing subjective with objective certainty in what follows" [Paul Shorey, 1969, note, *Republic* 5.477b].
- 160 Kosmέō (κοσμέω, verb, from kósmos), to put in order, arrange, make ready, prepare; to ornament, adorn [Thayer, 1995].
- 161 Syntássō (συντάσσω, verb, from σύν and τάσσω), to put in order with or together, to arrange; to (put together), constitute, i.e. to prescribe, appoint [Thayer, 1995].
- 162 κοσμοῦσά τε καὶ συντάττουσα [*Philebus* 30c6].
- 163 "the metaphorical expression of 'turning round' (περιστροφή and περιαγωγή, Republic 7.521c) the psukhē 'upwards' (ἐπάνοδος)" [Fierro, 2003: 215].
- 164 Theōréō (θεωρέω, verb, from *theáomai*), to be a spectator of, i.e. discern, gaze on for analysing (discriminating), behold [Thayer, 1995].
- 165 Ginōskō (γινώσκω = γιγνώσκω, verb), come to know, perceive, and in past tenses, know [Liddell & Scott, 1940], "to know, especially through personal experience (first-hand acquaintance)" [Thayer, 1995].
- 166 θεωροῦσα, γνῶναι [*Phaedo* 109e5].
- 167 [Republic 7.521c].
- 168 The phylogeny of hominin species formed in the Miocene, 6–7 million years ago [McNulty, 2016].

- 169 Bazaluk [2016].
- 170 The book is written, approximately, in the year 140 A.D.
- 171 Some provisions remained relevant until the 18th century. This question is discussed in the works of, for example, Konstantin Baev (1935), Igor Dmitriev (2006), etc.
- 172 The root of the word "laconicism" came from the name Laconia the region of Ancient Greece, where the city of Sparta was. In Plato's *Protagoras*, Socrates said the following on that occasion: "And you can recognize that I'm telling the truth about this, and that the Spartans are the people best educated in philosophy and arguments: if you talk to any ordinary Spartan, he seems to be stupid, but eventually, like an expert marksman, he shoots in some brief remark that proves you to be only a child" [Protagoras 343a].
- 173 [Apology 30a]. Translated by Harold North Fowler with modification.
- 174 Eudaimōn (εὐδαίμων, adjective), fortunate, truly happy.
- 175 [Laws 4.716d]. Translated by R.G. Bury with modification.
- 176 Augustine of Hippo [1998, 11.21].
- 177 Augustine of Hippo [1998, 14.4].
- 178 [Laws 4.716b]. Translated by R.G. Bury.
- 179 Augustine of Hippo [1998, 15.25].
- 180 Augustine of Hippo [1998, 8.1].
- 181 See Hadot [1999].
- 182 Θεωρία, from θεωρός (theōrós, "spectator") + - $\check{\iota}$ ' $\bar{\alpha}$ (- $\check{\imath}$ a).
- 183 For example, the American Association for the Advancement of Science provides the following definition of scientific theory: "A scientific theory is a well-substantiated explanation of some aspect of the natural world, based on a body of facts that have been repeatedly confirmed through observation and experiment" (https://www.aaas.org/).
- 184 "It is unfortunate that our English terminology fails so often to reproduce the assonances of the Greek. In English we use the colourless words Education and Play to represent the distinctive and suggestive παιδεία and παιδιά, 'childtraining,' and 'child-play' — the self-expression of the $\pi\alpha$ iδιον. But Plato is always mindful of the original native meaning and kinship of these terms" [Bury, 1937: 311].
- 185 μίξιν τε ἐποιήσατο τῶν τε Ἡρακλειτείων λόγων καὶ Πυθαγορικῶν καὶ Σωκρατικῶν: τὰ μὲν γὰρ αἰσθητὰ καθ' Ἡράκλειτον, τὰ δὲ νοητὰ κατὰ Πυθαγόραν, τὰ δὲ πολιτικὰ κατὰ Σωκράτην ἐφιλοσόφει [Diogenes Laertius, 1972, 3.1.9]. http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.01.0257%3Abook%3 D3%3Achapter%3D1
- 186 [Republic 2.369b-4.445e].
- 187 "Here we note a main difference between the treatment in the *Laws* and that in the Republic; for whereas the latter is mainly concerned with the training of the ruling Class (the 'Guardians'), and views primary and secondary Education as leading up to advanced study of Mathematics and Philosophy, little is said of this advanced study in the *Laws* and attention is concentrated on a Scheme of training suitable for the mass of the citizens, i.e., on primary and secondary education. Hence, as we are chiefly concerned in the *Laws* with the training of the ruled rather than of the rulers, the main stress is laid on the inculcation of a submissive and law-abiding spirit, obedience and self-control (σωφροσύνη, αιδώς)" [Bury, 1937: 305].
- 188 Plato used the term παραδείγματι, translated as "a pattern or model of the thing to be executed." For example, [Timaeus 28a].
- 189 On this subject, Pierre Hadot has written: "Generally speaking, I personally tend to conceive the fundamental philosophical choice, and therefore a desire for wisdom, as an overcoming of the partial, biased, egocentric, egoist self in order to attain the level of a higher self. This self sees all things from a perspective of

- universality and totality, and becomes aware of itself as part of the cosmos that encompasses, then, the totality of things" [Hadot, 2005: 139].
- 190 [Phaedo 64a]. Translated by Harold N. Fowler.
- 191 Hadot [2005a].
- 192 [Plotinus, 1952, I, 6, 9].
- 193 Jaeger [1947].
- 194 [Republic 5.449a]. "Even if the Law of Sophocles was revoked and the philosophers returned to Athens as a result, the fragments of Demochares' speech nevertheless show that it seemed promising to present philosophers of various stripes the members of the Academy prominently among them as a politically dangerous 'fifth column' of foes against the Athenian democracy" [Haake, 2020: 85–86].
- 195 [Republic 5.473c-d]. Translated by Paul Shorey.
- 196 "Socrates' claim to know the craft of love reveals a deep truth about him, therefore—so deep, in fact, that it appears to have been encoded in language itself by the possibly divine "rule-setter" who made it: "The name 'hero' (*hêrôs*) is only a slightly altered form of the word 'love' (*erôs*)—the very thing from which the heroes sprang. And either this is the reason they were called 'heroes' or else because they were sophists, clever speech-makers and dialecticians, skilled at questioning (*erôtan*)" (*Cratylus* 398c5–e5). Add *eirôn* to the etymological mix, and you have Socrates—questioner, lover, philosopher hero, "ironist"—as truly a gift of the god (*Apology* 30d7–e1)!" [Reeve, 2007: 135].
- 197 [Apology 29b-c].
- 198 The character of Ancient Greek comedies, which used self-abasement to win over opponents. The actions associated with the role of *Eirôn* were called εἰρωνεία, εἰrōnεία. Εἰrōnεία entered Latin as ironia.
- 199 Imitation (μίμησις, *mímēsis*) of an ideal was different from copying it [*Cratylus* 432c–435d; *Republic* 10.596a–10.599e].
- 200 "Once the divine sign is viewed as part of a pattern of arrogance, Socrates begins to look very dangerous indeed. He does not even attempt to hide his sense of superiority: on the contrary, even while he is on trial for setting himself above the city, he proclaims that he is the wisest Athenian. And he openly tells his judges that if they were to command him to give up his religious mission, he would disobey them and follow the god instead (*Apology* 29b-d)" [Kraut, 2000: 17].
- 201 Blaise Pascal, *Pensées*, 553. http://www.leaderu.com/cyber/books/pensees/pensees-SECTION-7.html
- 202 Hadot [1995].
- 203 [Symposium 216b].
- 204 Hadot [1999: 162].
- 205 Hadot [1999: 163-165].
- 206 Hadot [1999: 165-167].
- 207 The textbooks On Plato and his Doctrine by Apuleius (2nd century A.D.), Plato's Philosophy Textbook by Alcynius (2nd century A.D.), etc. have survived to our days. See Hadot [1999: 167].
- 208 Bowen [2003] and Platonov [2013].
- 209 Noiéō (νοέω, verb, from *noûs*), perceive by the *noûs*, to think, to apply mental effort (*noûs*) needed to reach "bottom-line" conclusions, to understand, mean, consider, intend.
- 210 According to Diogenes Laertius, Plato identified three forms, "Agathôn are in the psūkhêi, the body, and external." Τῶν ἀγαθῶν ἄρα τρία εἴδη ἐστί: τὰ μὲν ἐν ψυχῆ, τὰ δὲ ἐν σώματι, τὰ δὲ ἐκτός [Diogenes Laertius, 3.1.81]. They sequentially formed (i) the "dikaiosúnē, phrónēsis, courage (andreíā), and sōphrosúnē" (δικαιοσύνη καὶ ἡ φρόνησις καὶ ἡ ἀνδρεία καὶ ἡ σωφροσύνη [Diogenes Laertius, 3.1.80]) into psūkhêi; (ii) the "kállos, wellness, health, and strength in the body"

- (τὸ δὲ κάλλος καὶ ἡ εὐεξία καὶ ἡ ὑγίεια καὶ ἡ ἰσχὺς ἐν σώματι [Diogenes Laertius, 3.1.80]) and (iii) "friends (philoi), the eudaimonia of fatherland and wealth among the external" (οἱ δὲ φίλοι καὶ ἡ τῆς πατρίδος εὐδαιμονία καὶ ὁ πλοῦτος ἐν τοῖς ἐκτός [Diogenes Laertius, 3.1.80].
- 211 Hēgéomai (ἡγέομαι, verb) lead the way, command and the figurative sense "believe, judge, estimate" [Benveniste, 1973: 164–167].
- 212 ὅταν μὲν οὖ καταλάμπει ἀλήθειά τε καὶ τὸ ὄν, εἰς τοῦτο ἀπερείσηται [Republic 6.508d4-5].
- 213 Note that agathós is triune. Namely, "it is epistemological cause -i.e. the Good (agathós) is that through which things, more specifically intelligible things, are known and understood, and that which makes them true (6.508d-e); it is the metaphysical cause -i.e. the Good (agathós) is that by which things exist (6.509b7-8); and it is the ethical foundation - i.e. the Good (agathós) is the basis of all virtues (aret \bar{e}) and the real good (agathós) that all of us desire (6.504d-505a)" [Fierro, 2003: 226].
- 214 Gígnomai (γίγνομαι, verb) to come into being.
- 215 ὁ μὲν γὰρ κάλλιστος τῶν γεγονότων [Timaeus 29a4].
- 216 τοῦ ἀγαθοῦ ἔκγονον [*Republic* 6.508b11].
- 217 δν τάγαθὸν ἐγέννησεν ἀνάλογον ἑαυτῷ [Republic 6.508b11-12].
- 218 Παρέχω, properly, have close beside, i.e. give (offer) in an "up-close-and-personal" way [Thayer, 1995].
- 219 ἀποδίδωμι, properly, give from, i.e. to return (especially as a payment), concerning the source of the giving back [Thaver, 1995].
- 220 τὸ τὴν ἀλήθειαν παρέχον τοῖς γιγνωσκομένοις καὶ τῷ γιγνώσκοντι τὴν δύναμιν ἀποδιδὸν [Republic 6.508e1-2].
- 221 Benveniste [1973: 546–547].
- 222 Benveniste [1973: 547].
- 223 Benveniste [1973: 548].
- 224 Dúnamis (δύναμις, noun, from dúnamai), potency, i.e. a special ability to do a particular thing (a natural ability, dúnamai); the total amount that can be contained or produced (capacity). The Romans translated dúnamis as potentia, which has formed the root of the English word "potential."
- 225 τοῦ ἀγαθοῦ δύναμις [*Philebus* 64e6].
- 226 Benveniste [1973: 547–554].
- 227 Halvorson and Kragh [2021].
- 228 "In Socrates' case, the charge was given three specifications: the prosecution alleged that Socrates was guilty of not recognising the gods the state recognised, that he invented new divine things and that he corrupted the youth" [Smith and Woodruff, 2000: 9].
- 229 [Smith and Woodruff, 2000: 9].
- 230 [Laws 5.726a6-5.727a2]. Translated by R.G. Bury.
- 231 Diogenes Laertius [1972, 3.1.79].
- 232 Augustine of Hippo [1998, 8.5].
- 233 Augustine of Hippo [1998, 8.1].
- 234 "Indeed, it is quite remarkable that, as already noted, the very notion of a set of doctrines representing what should be regarded as a distinctive Platonic heritage, as well as the term 'Platonism' itself, only emerged after the discontinuation of the school's activity near the grove of Academus" [Kalligas, 2020: 6].
- 235 Benveniste [1973: 755–771].
- 236 Benveniste [1973: 763].
- 237 Ademollo [2018: 63] with modification. τί τὸ ὂν ἀεί, γένεσιν δὲ οὐκ ἔχον, καὶ τί τὸ γιγνόμενον μὲν (ἀεί), ὂν δὲ οὐδέποτε [Timaeus 27d6-28a1]. ἀεί (always) is in brackets due to its controversial use in Plato's original presentation [Ademollo, 2018: 63–66].
- 238 τὸ λόγω καὶ φρονήσει περιληπτὸν [Timaeus 29a5-6].

- 239 [Sophist 262d4-6].
- 240 τοῦ ἀγαθοῦ ἰδέαν [*Republic* 6.505a–6.509c; 6.510a–6.511d; 7.518a–7.518d; 7.532a–7.532c; 7.534c; 10.621c–d; *Timaeus* 29a]. The discussion of the "turn" towards the *agathou* idea, see Capra [2015], Fierro [2003: 215–220] and Gonzalez [2009: 330–332].
- 241 Benveniste [1973: 771].
- 242 ἄνω ὁδοῦ [*Republic* 10.621c4]. Ascending in Plato's dialogues, see Carone [2007: 221], Fierro [2003], Gerson [2007: 48–63], Gonzalez [2009: 151–152, 244–245], Hadot [1999], McPherran [2000: 105–106], McPherran [2007: 92], Schur [2015], Sheeley [2021], Sheffield [2007: 24], White [2000: 160–161].
- 243 Eilikrinēs (εἰλικρινής, adjective; from heilē, "shining of the sun" and /krystallízō, "to judge"), rightly judged because seen in full light [Thayer, 1995]; unmixed, without alloy, pure.
- 244 Thayer [1995].
- 245 ἐμαυτοῦ [Thayer, 1995].
- 246 γνῶναι ἐμαυτόν [*Phaedrus* 229e5].
- 247 "Latin duco and Greek hēgéomai have the same senses; the literal sense "lead, command" and the figurative sense "believe, judge, estimate" [Benveniste, 1973: 164].
- 248 Benveniste [1973: 167].
- 249 PHerc. 1021. Col. I 9–17 [*Plato's Academy*, 2020: 280]. Translated by Paul Kalligas and Voula Tsouna.
- 250 "It is worth emphasising at this point that the 'Successions' genre and Philodemus' own take on it was not only about who followed who (and how) as head of the school. There was also a keen interest to establish an unbroken line of teacher-pupil connections and classify everyone who was a member of the Academy, even the less prominent individuals we know nothing about from other sources. There are over 150 names of Academic philosophers or their pupils to be found in Philodemus' history" [Hatzimichali, 2020: 261–262].
- 251 "Thus the early years of the Academy and the initial inspiration for potential pupils were closely associated with the medium of writing" [Hatzimichali, 2020: 273].
- 252 "We have here the notion of an authoritative judgment; in fact *hēgéomai* in the sense of 'estimate' is often applied to matters which are the object of faith and decision, for instance the existence of the gods. The authority here is that of individual judgment, not of power" [Benveniste, 1973: 167].
- 253 [Laws 4.716c5] with the modifications.
- 254 "As far as we know, then, there is no strict continuity to be discerned in the teaching that took place in the Academy during the three centuries of its existence. From the outset, a pattern of repeated radical shifts in the positions and attitudes of its members seems to have been the norm, usually following the direction initiated by each successive scholarch" [Kalligas, 2020: 6].
- 255 "Two of the most important such traits that, though not unconnected between them, acquired different degrees of pre-eminence in various historical circumstances, and can be regarded as of paramount importance throughout its history are: a) a pronounced emphasis on the dialectic method as a means of arguing for or against any philosophical position by debating on both sides of any putative or actually held alternative; and b) the fundamental downgrading of, if not complete distrust for, perceptual cognition." [Kalligas, 2020: 6].
- 256 "Plato gave a description of desire such that for first time ἔρως (*érōs*), normally felt simply as an unavoidable but tyrannical force which governs those who fall in love, became a kind of force which configurates our whole life and perhaps a possible divine expression of what we are. The productiveness of this idea in Western culture has been perennial and enormous" [Fierro, 2003: 17].

- 257 "A certain correspondence between the erotic ascent of the Symposium and the dialectical journey of the philosopher exemplified through the image of the line and the allegory of the cave in Books 6 and 7 of the Republic has often been pointed out. However, it has been less noticed that the scala amoris is actually a sketch of the whole programme of earlier and higher education in the Republic, which consists in an appropriate training of the desires of the three parts of the soul (psukhē) so that reason's desire for the truth (alētheia) and the real good (agathón) i.e. Érōs φἴλόσοφος rules and attains maximum development" [Fierro, 2003: 262].
- 258 "Beginning from obvious beauties (καλῶν) he must for the sake of that highest beauty (καλοῦ) be ever climbing aloft, as on the rungs of a ladder, from one to two, and from two to all beautiful (καλὰ) bodies; from personal beauty (καλῶν) he proceeds to beautiful (καλὰ) observances, from observance to beautiful (καλὰ) learning, and from learning at last to that particular study which is concerned with the beautiful (καλόν) itself and that alone" [Symposium 211c1-d1]. Translated by Harold N. Fowler. The Greek words in parentheses are the inflection of kalós. See Hadot [2005] and Sheffield [2007: 34–36].
- 259 αὐτὸ τὸ καλὸν ἰδεῖν εἰλικρινές, καθαρόν, ἄμεικτον [Symposium 211e1].
- 260 According to Hadot, Socrates implicitly assumed humans have an innate desire for *agathós*. That is why he assigned himself the role of a midwife, who only helps the interlocutor discover his inner possibilities [Hadot, 1999: 50].
- 261 St. Augustine sharply criticised the main points of the book "The God of Socrates" by the Platonist philosopher Apuleius. One of Augustine's key accusations was that, unlike the Christians, Apuleius renounced the God of Socrates under the torture of the Inquisition. "Why, therefore, except through foolishness and miserable error should you humble yourself to worship a being to whom you desire to be unlike in your life? And why should you pay religious homage to him whom you are unwilling to imitate, when it is the highest duty of religion to imitate Him whom you worship?" [Augustine of Hippo 1998, 8.17].
- 262 "Through the cultic prescriptions emanating from Delphi," Walter Burkert tells us (Burkert, 1985: 148), "the outlines of a universal morality overriding tradition and group interests may be discerned for the first time among the Greeks." The inscriptions on the temple walls well convey the spirit of this morality: "Know thyself"; "Nothing in excess"; "Observe the limit"; "Bow before the divine"; "Fear authority"; "Glory not in strength" [Reeve, 2000: 29].
- 263 About 150 Academicians are known [Kalligas et al., 2020].
- 264 Augustine of Hippo [1998, 19.14].
- 265 "Compel people to come in" from Luke's Gospel, 14.23–24. The phrase "compelle intrare" is used to conclude that governmental authorities had the right to coerce people into the church.
- 266 Bowen [2003].
- 267 τίς δ' ὁ θεός [*Laws* 4.713a].
- 268 εὐνομία, kalós system of laws and government, kalós legislation, kalós order.
- 269 [Laws 6.762e]. Translated by R.G. Bury.
- 270 Fuit ergo iam accepta a Platone philosophandi ratio triplex, una de vita et moribus, altera de natura et rebus occultis, tertia de disserendo et quid verum quid falsum quid rectum in oratione pravumve quid consentiens quid repugnet iudicando. [p. 9] [Cicero, 1933: 1.19]. Translated by Harris Rackham. See Horky [2020: 171–181].
- 271 "In the ancient world Plato was thought of as the first systematic philosopher, the first to see philosophy as a distinctive approach to what were later to be called logic, physics, and ethics" [Annas, 2002: 24].
- 272 [Republic 2.369b-4.445e].

- 273 The "ideal" paideia, or πεπαιδευμένοι (pepaideuménoi, rightly educated men [Laws 1.644a], was defined as "drawing and guiding (agōgḗ) children towards that principle which is pronounced straight (λόγον ὀρθὸν, i.e. clear or not complicated) by the law and confirmed as straight (ὀρθός) by the experience of the oldest and the most just" [Laws 2.659d]. Translated by R.G. Bury with modification.
- 274 [Lysis 220d].
- 275 [Symposium 191a-b].
- 276 [Republic 6.500c; 9.590e-9.591].
- 277 For example, between the collapse of the Roman Empire and the creation of the Christian civilisation.
- 278 οἰκισταὶ πόλεως ("founders of a state") [Republic 2.379a].
- 279 Augustine of Hippo [1998].
- 280 Here we understand scholasticism as a set of speculative ideas of various medieval Christian thinkers, who, working against a background of fixed religious dogma, sought to solve a new general philosophical problems. However, in the classical understanding as a synthesis of Christian (Catholic) theology and Aristotle' logic, scholasticism was formed in universities and developed within their walls.
- 281 This issue is considered, for example, in the book "The Child and Family Life in the Old Regime" by Philippe Aries (1999).
- 282 This period in the cultural history has been thoroughly explored. For example, the research of Konstantin Baev (1935), Igor Dmitriev (2006), etc. We will not dwell on it.
- 283 Weinberg [2013] and Sagan [2013]. The research of extraterrestrial intelligence can be found, for example, in the books of Lev Gindilis (2004) and Alexander Panov (2008).
- 284 Sagan [2013].
- 285 Dawkins [1989a; 1989b], Filipchenko [1977], Kordjum [1982], Lovelock [2010], Schmalhausen [1983] and Vernadsky [1975, 1977, 1987].
- 286 Bazaluk [2005, 2010, 2016], Capra [2003], Changeux and Connes [1998], Chizhevsky [1976, 1995], Chorost [2016], Clarke [2000], Grinin [2013], Kaku [2008], Kaznacheev [1989], Kaznacheev and Spirin [1991], Krichevsky [2021], Kurzweil [2006], Nazaretyan [1991], Shklovsky [1987], Teilhard de Chardin [1987], Tsiolkovsky [2008], Ursul [1977; 2015] and Ursul and Ursul [1986].
- 287 Bazaluk [2005, 2010, 2016].
- 288 Bazaluk [2005, 2016].
- 289 Half a century later, independently of Vernadsky, the British scientist James Lovelock put forward and grounded a similar idea in the so-called Theory of Gaia [Lovelock, 2010; Kaku, 2008; Bazaluk, 2016]. At present, the ideas of Vernadsky and Lovelock quite fully disclose the stages of planetary evolution, including the transition of geological evolution into biological evolution, followed by the coevolution of these two processes [Bazaluk, 2016].
- 290 Vladimir Vernadsky published the first results of his research on Living Matter in 1916.
- 291 For example, the works of Vitaliy Kordjum (1982), Akop Nazaretyan (1991, 2015), Raymond Kurzweil (2006), and Arkady Ursul (1977, 2015).
- 292 Nietzsche wrote the book in the winter of 1881 and 1882 in Genoa.
- 293 Nietzsche [1990: 592].
- 294 In 1833, William Whewell, a theologian and philosopher first used the term "scientist," by which he designated philosophers specialising in the detailed study of some phenomena of nature, including physical, mathematical and social realms.
- 295 On this subject, the book "The Chemical Structure of the Earth's Biosphere and Its Surroundings" by Vladimir Vernadsky (1987) and "The Terrestrial Echo of Solar Storms" by Alexander Chizhevsky (1976), produced an unforgettable impression on the author. He read them in the early 1990s of the 20th century.

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296 Rubinstein [2008: 126].
297 Hadot [1999].
298 Hegel [2010: 135].
299 Hegel [2010: 140].
300 Hegel [2010: 142].
301 In his early years, Hegel taught Greek.
302 Hegel [2010: 143].
303 Hegel [2010: 143].
304 Markie, Peter. Rationalism vs. Empiricism. The Stanford Encyclopedia of Philosophy
     (Fall 2017 Edition), Edward N. Zalta (ed.). https://plato.stanford.edu/entries/
     rationalism-empiricism/
305 Kant [1964].
306 In a letter to Karl Jaspers, Heidegger characterised himself as "the museum atten-
     dant, who draws the curtains aside so that the great works of philosophy should
     be seen more clearly" [Safranski, 2005: 565].
307 Thomas Sheehan was my conduit of the fundamental meanings of Heidegger's
     heritage [Sheehan, 2014].
308 Sheehan [2014]. According to the Cambridge dictionary, the "clearing" means
     "an area in a wood or forest from which trees and bushes have been removed."
     https://dictionary.cambridge.org/dictionary/english/clearing
309 Heidegger [1998] and Sheehan [2014].
310 Sheehan [2014].
311 Gonzalez [2009].
312 Sheehan [2014: xv].
313 Sheehan [2014: xv].
314 Safranski [2005: 566].
315 "Rückgang vom Anwesen zum Ereignen" [Sheehan, 2014: 19].
316 Sheehan [2014: 19].
317 Safranski [2005: 175].
318 Koyré [1999].
319 Sheehan [2014: 26].
320 Sheehan [2014].
321 Heidegger [1949: 262–263].
322 Heidegger [1949: 263].
323 Safranski [2005] and Motroshilova [2013].
324 Kant's major work on education is a set of lectures entitled "On Pedagogy." It was
     published by his disciple Theodor Rink in 1803 [Kant, 1900].
325 Kant [1900].
326 Kant [1900].
327 Kant [1900].
328 Rubinstein [2008: 127]. For understanding the meaning of life in the Modern
     Age, the author also used the works [Bourdieu, 2001; Cavell, 1976; Frankl, 1990;
     Semenova, 2012; Troubetzkov, 1994].
329 The Christian Pioneer [1842: 182].
330 Rubinstein [2008: 129].
331 Frankl [1990].
332 Rubinstein [2008: 130].
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334 Hadot [1999; 2005].
335 Faust, D.G. (2012). By the Book. *The New York Times*, May 24. Retrieved from https://www.nytimes.com/2012/05/27/books/review/drew-gilpin-faust-by-the-book.html

333 The history of the Christian paideia transition to the state educational model is

given in book by Bill Readings [Readings, 2010].

336 Smeenk and Ellis [2017].

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- 337 Cicero [1933: 1.19] and Horky [2020: 171–181].
- 338 See Gonzalez [2009].
- 339 Hadot [1999] and Kalligas [2020].
- 340 Annas [2002, 2017], Hadot [1995; 1999], Jaeger [1946; 1947] and Kalligas [2020].
- 341 Edmunds [2006] and Tell [2011, 2010].
- 342 Reeve [2000: 29].
- 343 Masculine/neuter genitive singular kalós.
- 344 Diogenes Laertius [1972, 3.1.79].
- 345 [Symposium 211c1-d1].
- 346 "A definition of *erôs* is presented in the *Symposium* (199e-200b, 204d-e), as part of an argument that may be reconstructed as follows: *Erôs* is a wanting, or longing for, the beautiful (*kalós*). If A wants, or longs for, B that means that: (i) A does not have B, though (ii) A desires to have B, or make B its own. Thus, *erôs* desires to make the beautiful (*kalós*) its own" [Carone, 2007: 211]. The *Symposium kalos* is equated with *agathós*, so the argument is also valid for *agathós*, as confirmed by Plato in *Gorgias* 466b–468d, *Meno* 78b" [Carone, 2007: 212].
- 347 ψυχὴ ἐπισκοπεῖν [Theaetetus 185e5, 185e1].
- 348 αὐτὴ δι' αὐτῆς ἡ ψυχὴ τὰ κοινά μοι φαίνεται περὶ πάντων ἐπισκοπεῖν [*Theaetetus* 185e1].
- 349 αὐτὴ δι' αὑτῆς [Gonzalez, 2009: 185]. See [Theaetetus 185e1; 185e5].
- 350 [Republic 5.473c-d]. Translated by Paul Shorey.

2 The "Evolving Matter" Theory and Philosophy of the Cosmos

2.1 What is aletheia?

§ 23. "Of all the *agathón*, for gods and men alike, *alētheia* stands first," wrote Plato.¹

The meanings development of the term alētheia in the ancient philosophical tradition, with their subsequent rethinking in terms of vērus (true, real) and "truth," hid two fundamental Platonic messages that cannot be conveyed with the word "true." First, the alētheia and lēthē² have a standard beginning, in which the opposition between them is eliminated. Plato called it "unconditioned arkhē."³ Plato explored the "unconditioned arkhē⁴" by "composing myths"⁵ and mathematics. According to Plato, man could discern (theōréō) and come to know (ginōskō) it as the "alēthōs heaven and the alēthinon light and thus hōs alēthōs the earth." Second, from the "unconditioned arkhē," the upward path began. The fundamental feature of the path was the necessity to pursue/practise (epitēdeúō) every new way/manner (trópos) of the rightness (dikaiosúnē¹o). 11

Thus, the question "What is alētheia?" was, first of all, the way to follow (méthodos). This led the way (hēgeomai) (i) to considering, pondering things in mid-air, (ii) to thoroughly investigate all the things below the Earth and (iii) making or doing in an extensive application, more or less direct the weaker lógos, the stronger. Socratic lógos were an inseparable and essential part of this path. It served for computing the "Order"; moreover, its inner dúnamai was aimed at self-reinforcement and self-improvement to guarantee understanding and practice of the intelligible.

2.2 The "Evolving matter" theory: The basic provisions

§ 24. Modern cosmology defines the "unconditioned *arkhē*" as "the initial singularity," which has contained all the energy and space-time of the Universe.¹⁴ It was followed by the "part of the Planck epoch" or "the first second of the chronology of the Universe." According to the Big Bang

Theory, singularity is an active principle¹⁶ that causes "the chronology of the Universe."¹⁷

The question "What is *alētheia*?" focuses on the search for basic axioms predicted by modern scientific theories, which cannot be refuted. Therefore, there is a need to rethink Vernadsky's model.

The main feature of Vernadsky's model was the successful unification of the genesis of the Universe and the biosphere.¹⁸ Through the example of the Earth, Vernadsky considered the ways of the coming into being of Living Matter in certain parts of the Universe, as well as the connection between the coming into being Living Matter and planetary evolution.

At the end of the 20th century, the key disadvantage of Vernadsky's model was identified. The model did not explain the genesis of Intelligent Matter in the Universe.

In 2000, based on Vernadsky's model, the author created the "Evolving matter" theory. The theory offered a general understanding of *the coming into being* of Inert Matter, Living Matter and Intelligent Matter, as well as some other states of matter that have not yet been discovered by man. A uniform basis was proposed for the Big Bang Theory, the synthetic theory of evolution and the theory of noogenesis. The "Evolving matter" theory was based on two postulates. First, evolution is the *complication* of the structure of matter, the types of interaction and the environments in the unity and struggle of opposites. The complication of "Order" is the complication of the three components of the physical reality: (a) the structure of matter, (b) the types of interaction between the structures of matter and (c) the environments, in which complication of these structures and interactions are carried out. The complication of these structures and interactions are carried out.

The second postulate, the complication of any state of matter (the Universe, the biosphere or the noosphere), is based on three factors and two causes. The factors of complication are as follows:

- a Continuity of self-complication of the structure, the types of interaction and the environments of any state of matter, supplemented by blocks of continuous self-complication and the principle of dominance of continuous block self-complication.
- b A non-linear complication of the structure, the types of interaction and the environments of any state of matter, which is added by the factors: hierarchical non-linear complication and direction of non-linear hierarchical complication.
- c Isolation of complication (or Plotinus' setup for "self-assembly").22

The causes of complication are (a) active principle, which is inherently the basis for the initial elements of any state of matter and forms self-complication, and (b) natural selection. Interaction of the inner active principle of any state of matter with natural selection forms a regulatory compromise.

On the basis of the postulates, the author systematised the accumulated knowledge about the evolution of the Universe, biological life and human and came to the following conclusions²³:

- 1 Complications of the structure of matter, the types of interaction and the environments in our Universe have been carried out by hotbeds, continuously and non-linearly, over proximately 13.7 billion years. A complication of the structure and functions of the Universe happens under the influence of the same (universal) factors and causes. In due course, there is a complication of factors and causes, which leads to the formation and development of the *n* number of *states* of matter.
- 2 Each new state of matter becomes a new account of complexity of the structure of matter, the types of interaction and the environments. The new state of matter complicates the existing "Order" and forms a new hierarchy (a new account of the complexity), providing fixation (co-evolution) of the new state of matter in the existing "Order" and complication of its own structure and functions. Each new state of matter brings new opportunities for the organisation of the circulation of substances, energy and information, as well as ways of moving in space.
- 3 During the work on the complication models of Inert Matter, Living Matter and Intelligent Matter, the author discovered and considered the transition states of matter. The author defined them by the terms "BioInert" and "BioIntelligent" matter.²⁴ The structure and functions of the transition states of matter are most developed in the "mother" state of matter and basic in the "daughter" state of matter.
- 4 The Solar System research discloses the following sequence of complication of the states of matter in our Universe:

Inert Matter → Living Matter → Intelligent Matter,

or alternatively, taking into account transition states of matter:

Inert Matter → BioInert Matter → Living Matter → BioIntelligent Matter → Intelligent Matter

The modern understanding of the complication of these states of matter is considered in the Big Bang Theory, the synthetic theory of evolution and the concepts of noogenesis.

- 5 At the scale of the Solar System, the states of matter have been formed sequentially, at intervals of approximately 3 billion years:
 - a Approximately 6 (5.5) billion years ago, in the Milky Way Galaxy, the Solar System was formed - one more hotbed in continuous and nonlinear block complication of the Universe. Vernadsky denoted the structure and functions of our Universe by the term "system of Inert Matter."

- b Approximately 3.5 billion years ago, as a result of geological evolution, on the Earth, the first biological organisms emerged and gained a foothold. Over 3 billion years, they formed the system of Living Matter, which Vernadsky denoted by the term "biosphere."
- c Approximately 6–7 million years ago, as a result of neuroevolution, the first structures of Intelligent Matter emerged in the Earth's biosphere. This started the formation of the *noosphere*.
- § 25. Extrapolating the Solar System research results on the structure of the Universe, the author came to a whole series of conclusions. Let us consider the following²⁵:
- 1 At the scale of the Universe, five states of matter are evolving as a minimum. One of the unknown states of matter to modern science is the "mother" state of our Universe. The Universe is developing within it, and probably separate features ascribed to the Universe (e.g., gravitation) are actually manifestations of states of Y-Matter.
- 2 The second state of matter, still unidentified by scientists, emerged on the basis of highly developed Intelligent Matter. In the model, it is indicated as X₁-Matter. The model admits X₂-Matter, from which Y-Matter is probably formed, or a "new Universe" is born.
- 3 The Earth's noosphere in the modern state is only the beginning of noogenesis. A minimum of 3 billion years of continuous and non-linear complication are to be expected in the future. Great changes are upon humanity. The scope of changes can be compared using the example of the complication of Inert Matter and Living Matter in the Solar System. Inert Matter and Living Matter have taken 3 billion years to evolve from quarks to polymers, and from RNA molecules to mammals, respectively. The complication of the Earth's Intelligent Matter began with neural ensembles of subconsciousness that separated out the taxonomic tribe Hominini (informal name, "hominins"). With nearly 6-7 million years of neuroevolution, sociocultural evolution and the evolution of technologies, hominins have brought us to the exploration of near-Earth space. Taking into account that in 1 billion years, the condition of the Earth will be unsuitable for biological life due to physical changes in the sun, a strategy of the evolution of Intelligent Matter becomes evident. The complication of Intelligent Matter is focused on: (a) replacing the biological functions of the body with technologies, ²⁶ (b) the exploration of the near and far space and (c) the complication of the sociocultural environment and technologies to a quality, protecting the noosphere from the destructive influence of the cosmos.

In general, the "Evolving matter" theory proves that the evolution of the Universe, the biosphere and the noosphere of the Earth is a holistic process of

complication of the structure of matter, the types of interaction and the environments. The complication of matter in the Universe and the Solar System is subject to common factors and causes. The complication of each state of matter begins with the initial and definite space, lasts about 3 billion years and has its focus and limits of self-realisation. The system of any state of matter creates conditions for the formation of a "daughter" state of matter. A "daughter" state of matter changes the existing order. In the new order, the "mother" and "daughter" states of matter are complicated as a single whole.

The "Evolving matter" theory allows a simultaneous presence of a certain number of states of matter in the Universe, which are at different stages of complexity. We can speak of the five states of matter with the greatest probability:

- 1 Y-Matter is substance, the types of interaction and the environments, which preceded Inert Matter, and at the scale of which Inert Matter arose and continues to become more complicated. Y-Matter is not recognised and is not studied by modern science.
- 2 Inert Matter is ours and other Universes. At present, the Big Bang Theory gives a complete understanding of continuous and non-linear complication of Inert Matter.
- 3 Living Matter is biospheres that naturally arise on cosmic objects with a certain range of physicochemical characteristics. The synthetic theory of evolution provides a complete understanding of the continuous and non-linear complication of the biosphere in an individual cosmic object.
- 4 Intelligent Matter is noospheres, which naturally arise on the basis of highly developed biospheres. In modern science, the cosmic significance of Intelligent Matter is not recognised. The theory of the complication of Intelligent Matter has not been developed.
- 5 X₁-Matter is a state of matter which naturally arises in highly developed noospheres. Modern science does not recognise and research this state of matter.

2.3 Philosophy of the cosmos

§ 26. The "Evolving matter" theory is the scientific theory that uses modern methods of analysis (Big data) in order to systematise the knowledge of the last four centuries in a certain way. The theory gives insight into the modern *scientific* understanding of "Order" as a process.

In the philosophical understanding of "Order," the "unconditioned *arkhē*" defines by the noun *génesis*. This decision is due to the predominance of the *gignomai*²⁷ symmetry over *phtheirō*.²⁸ The above Greek verbs and their inflection define two fundamental physical phenomena: "come to be" and "cease to be."

According to Myles Fredric Burnyeat, the verb *gignomai* "is that of a verb which is complete on its own, but which is further completable without

change of meaning."²⁹ It marks the dominant physical phenomenon "come to be," which is complete on its own. (1a) "x come to be" and (1b) "x come to be F_0 " where x is a subject, and F is some predicate, are allowed.

The "come to be" phenomenon is (i) to become, i.e. to come into existence, begin to be and receive being and (ii) to become equivalent to come to pass, happen, of events. These are "to come to be is to come to be (predicatively) a being/something that is "31 and "to bring to light $(phain\bar{o})$ " upon itself according to the formula (1c) "everything that comes to be comes to be (i) by the agency of something and (ii) from something and (iii) something." 33

The verb *phtheirō* defines the opposite and subordinate physical phenomenon "cease to be." Similarly for *gignomai*, I use *phtheirō* as a technical term. It gives me the right to extend Burnyeat's idea to this verb.³⁴ I claim that the "cease to be" phenomenon is complete on its own, and I admit that (2a) "x ceases to be" and (2b) "x ceases to be F." I am guided by the law of conservation of energy and Noether's theorem. Hence, the "cease to be" phenomenon is "to cease to be (predicatively) a being/something that is" and "to bring to light" on itself according to the formula (2c) "everything that ceases to be ceases to be (i) by the agency of something and (ii) from something and (iii) something."

The result of the *génesis* and the apparent opposition between the dominant "come to be" phenomenon and the subordinate "cease to be" 35 phenomenon is the third phenomenon. The Greeks defined it by the verb eimi, to be, exist, and its inflections: participle \acute{ontos} , participle and noun \acute{on} , noun $ousi\bar{a}$, 36 etc. According to Burnyeat, eimi defines "to be" as (3a) "x exists" and (3b) "x is F," 37 i.e., as a phenomenon that is complete on its own. There is no concept of existence as such, for subjects of an indeterminate nature. 38 "To be is to be (predicatively) a being/something that is." 39 Moreover, the "to be" phenomenon brings the light on itself according to the formula (3c) "everything that exists 40 exists (i) by the agency of something and (ii) from something, and (iii) something." 41

The "to be" phenomenon is the result of *génesis* and the confrontation between *gígnomai* and *phtheírō*. Therefore, it excludes the existence of "come to be purely" 42 and/or "cease to be purely." All "x exists" and "x is F" are always a regulatory compromise between the "come to be" and "cease to be" phenomena. Hence, the "to be" phenomenon is "always is purely" as the upward path. It always brings to light a new compromise symmetry of the whole and its parts.

The "to be" phenomenon, the result of *génesis*, which is "always is purely," and which always brings to light the compromise symmetry of the upward path, shows forth itself as *alētheia*. Hence, *alētheia* is the unconcealed (*alēthēs*) unity and opposition between three fundamental physical phenomena: "come to be," "cease to be" and "to be." *Alētheia* is the "to be" phenomenon both as a whole and parts of the whole. It is something that "is" (*eimi*) *dúnamai*, "to be able, strong enough to do." "For I put a boundary which defines being (*ónta*), that it is (*estin*) nothing else but *dúnamis*." "44

Therefore, alētheia defines the commensurability of three physical phenomena, denoted by us with the verbs gignomai, phtheiro and eimi. By itself, as a definition, it brings to light the "to be" phenomenon and its upward path, i.e., on something which "always is purely" as a whole and as dúnamai.

§ 27. The question "What is aletheia?" is not idle. It is a matter of selfpreservation of anything that "comes to be and to beget." 45 It is the only way to follow (*méthodos*) to the pure phenomenon "to be" to fasten as far as possible and "to be" simultaneously the whole and the part of the whole, the upward path and the dúnamai.

The way to follow (méthodos) "What is alētheia?" is, first of all, "to go through" "the realm of the things that are 'never in the same state;"46 to define pure dúnamai, where dúnamai is the energy and space-time, or a certain range of physical meanings, which demonstrate (i) intrinsic and extrinsic properties, i.e. always "to be" something, and the contrast between the physical meanings (ii) "come to be" and (iii) "cease to be." However, more critical and defining is that the question "What is alētheia?" leads the way (hēgeomai) "to be" as the upward path, i.e., "to be like" (hómoios⁴⁹) to the whole, and, therefore, "to be" something that is "always is purely."

The way to follow (*méthodos*) "What is *alētheia*?" fastens/binds $(h\acute{a}pt\bar{o})^{50}$ to the "to be" phenomenon as a whole and forms an image/likeness (eikon) of its upward path. Anything that "came to be and beget" and which was able to fasten to the "to be" phenomenon as a whole acquires its upward path or, as we call it, "its story."

In the Academy, the way to follow (méthodos) to the pure phenomenon "to be" or, equivalently, the question "What is aletheia!" promoted as the necessity to fasten to philosophia and pursue/practise (epitēdeúō) the dying and being dead.⁵¹ Philosophers developed and used a *Platone philosophandi ratio* triplex⁵² to purify (kathaírō⁵³) to their primary nature and, through it, gaze on (contemplate) (theáomai⁵⁴), discern (theōréō), fasten and pursue/practise (epitēdeúō) pure phenomenon "to be" as the upward path and dúnamai.

Over the past two-and-a-half millennia, the way to follow (méthodos) "What is alētheia?" has changed little. It is just as large scale and time-consuming and includes the following work:

- 1 It is necessary to go through the boundaries of the "to be" phenomenon, which was defined by the predecessors.
- 2 It is to seek in the *lēthē* (concealment) and show forth⁵⁵ new meanings of the real phúsis, which establishes the cosmos.⁵⁶
- 3 It is to define new boundaries of dúnamai and fasten to them. It is equal to "turning"⁵⁷ towards "to be" itself and rising to it, ⁵⁸ to "be like" (*hómoios*) dúnamai, therefore, to be (predicatively) a being/something that always is purely.
- 4 Finally, it is to pursue/practise (epitēdeúō) the pure dúnamai as the energy and space-time. This personal and social "to be" is not "a capability of merely being present-with, but rather a capability of acting and being acted upon."59

§ 28. Plato created his philosophy on the foundation of the Pythagoreans system advanced for his time. This allowed him to formulate the ontological dichotomy⁶⁰ in which the subject-predicate relation "Order-*hēgéomai*" or *agathós* took the key place. If the dichotomy is changed following the FLRW metric,⁶¹ the Hubble-Lemaître law⁶² and the "Evolving matter" theory, then it can be formulated as follows:

What is that which "comes to be (gignomai) and always is purely (δn)," and what is that which "comes to be (gignomai) and not ever is (δn)"?

In the new formulation, the basic ontological dichotomy constrains and obliges all *dúnamai* that comes to be and begets in the cosmos to seek the only possible way to fasten to the *phúsis*, which causes the cosmos. Thus, *dúnamai* avoids its destroying (*phtheírō*).

Phúsis causes a continuous and non-linear complication of the whole and its parts. *Phúsis* begets different dúnamai, which either "comes to be (gígnomai) and always is purely (ón)" or "comes to be (gígnomai), but not ever is (ón)." Only a tiny part of the dúnamai has its history.⁶³

Thus, phúsis is both what causes the cosmos and what causes the dúnamai:

3a(i) x(cosmos) exists.

3b(ii) x(cosmos) is F(dúnamai).

3c(iii) the cosmos exists (i) by the agency of dúnamai and (ii) from dúnamai and (iii) dúnamai.

In general, 3a(i)–3c(iii) is philosophy of the cosmos or, equivalently, the expression of the subject-predicate relation "Order- $h\bar{e}g\acute{e}omai$." I call "philosophy of the cosmos" the totality of rational and irrational meanings, "known" and "unknown" in the *phúsis*, which, on the one hand, creates the cosmos and, on the other hand, "leads the way and judges" ($h\bar{e}g\acute{e}omai$) $d\acute{u}namai$.

In philosophy of the cosmos, the history of the Universe, presented, for example, by NASA's Science Mission Directorate, 64 is only a small part of the knowledge that forms the meanings of the noun "cosmos" and the verb $kosm\dot{e}\bar{o}$. The Greek $k\dot{o}smos$ means an "ordered system," and metaphorically, it is an ornament. The verb $kosm\dot{e}\bar{o}$, derived from $k\dot{o}smos$, means literally "to put in order," and metaphorically, it means to ornament. Both meanings are not used as an "either/or" but complement and enrich each other. 65

In philosophy of the cosmos, on the one hand, the "Order" is exhibited in the standard Big Bang model, which advances predominantly rational meanings. On the other hand, philosophy of the cosmos shows forth the way to follow (méthodos) "What is alētheia?" as a predicate construction hēgéomai. The méthodos "What is alētheia?" advances irrational senses of phúsis, where special attention is paid to the subject-predicate relation "dúnamis-phúsis," where dúnamis is studied as a subject and phúsis as extended meanings in the

predicate construction "to lead the way and judge" (hēgéomai). As a result, researchers reveal and examine in phúsis the ability to "beget dúnamai" and, at the same time, "divide dúnamai," or in other words, its property to choose among the dúnamai of a few "winners" and many "losers."

Thus, the *méthodos* "What is *alētheia*?" brings to light the difference between a few dúnamai, which become "unmixed/pure (eilikrinēs)," and many dúnamai, which mix and become "not to be" (not óntos).66

In philosophy of the cosmos, phúsis bases the agon. The cosmos/agon defines three boundaries⁶⁷:

- 1 The alētheia of the cosmos/agōn. Dúnamai that comes to be in the cosmos/agon brings to light the compromise symmetry between the gignomai and phtheiro. That is, the expanding cosmos/agon is alethes (unconcealed).
- 2 "Live or die." A Euripides quote defines that it is not enough to "come to be" and "to be like" (hómoios) phúsis and the metric of the cosmos. In real time, the cosmos/agon selects dúnamai with a competitive advantage. Only competitive dúnamai can have its history in the expanding cosmos/agōn, which seeks more efficiently than others, fastens and, as far as possible, assimilates with the unmixed/pure (eilikrinēs) phúsis.
- 3 The dike of the cosmos/agon. Dike, 69 on the one hand, defines and subordinates all actions (interactions) in the expanding cosmos/agon. Díkē "declares" dúnamai that it either "always is purely (ón)" and has its history in the chronology of the Universe or "not ever is (δn) " and therefore does not have its history. On the other hand, dikē is determined and controlled by the phenomena "come to be" and "cease to be." $Dik\bar{e}$ is nothing more than a compromise symmetry between gignomai and phtheiro, which brings to light itself and leads the way (hēgeomai).
- § 29. Modern science has been clear about that the expanding cosmos consists of dark energy and material forms (dark matter and baryons).⁷⁰ Phúsis leads (hēgeomai) all forms, so each of them is an image/likeness (eikōn) of a paradigm.⁷¹

Hence, the form is *dúnamai* that "comes to be and beget" as "to be like" to the metric of the expanding cosmos/agon. The "form" definition is "to be like" (hómoios) to the whole and its parts, specifically, to the unmixed/pure (eilikrinēs) phúsis and the competitive dúnamai. It is "to be" alēthēs (unconcealed), and, therefore, to pursue/practise (epitēdeúō) every new way/manner (trópos) of the rightness $(dikaiosún\bar{e})$, 72 to "live or die" in the existing $dik\bar{e}$ of the cosmos/agon.

Any form consists of arkhē, anánkē and nóos.

1 If phúsis is a factual and particular basis that leads the way (hēgeomai) to the cosmos and any form, then arkhē is defined as a providential and directive beginning/origin, determined by the unmixed/pure (eilikrinēs) phúsis. Arkhē brings to light a stable set of intrinsic and extrinsic properties of "to be like" and, therefore, "to be" of a specific form. Let us pay attention to the essential connotation of the noun arkhē, which is transmitted to it from the verb árkhō.⁷³ It is a beginning/origin, which leads, rules, governs and commands.⁷⁴ Thanks to the arkhē, the phúsis is represented as a hierarchy of díkaios⁷⁵ forms or the chronology of the Universe. Moreover, this "command" connotation is caused by the real phúsis, which, for the most part, remains hidden but always represents itself in arkhē.

- 2 Anánkē⁷⁶ is the force of the phúsis,⁷⁷ which forms the constraints and necessity for each form. Anánkē guarantees that the form will always be "an open system"⁷⁸ (alēthēs), but, at the same time, its phúsis will be constrained and limited by the particular force. Thanks to anánkē, the competing variety of forms in the cosmos have a common focus or dikaiosúnē (rightness) of the interactions. Anánkē represents the competition between forms as an opposition between dikaios (righteous) and ádikos (unrighteous) interactions (forces).
- 3 Nóos is the form's ability of self-organisation (self-assembly). Nóos puts into order/ornaments (kosméō) and arranges (with or together)/puts together (syntássō) the components that come to be into an organised structure, a form. Moreover, it is the "intending and perceiving" of "always to be purely," by which the components that come to be are organised into the form without external direction. In this physical aspect, the meanings of nóos and nómoi demonstrate their affinity. Nóos exhibits the competition between the forms as the competition between díkaios and ádikos selforganisation (self-assembly).

Phúsis of any form guarantees the possibility "to come to be" in the cosmos/ $ag\bar{o}n$. However, the victory in $ag\bar{o}n$, and therefore "always is purely (δn) ," ⁸¹ can only be guaranteed by the *phúsis*, which has a fundamental competitive advantage.

The *phúsis* that leads (*hēgeomai*) the history of forms in the expanding cosmos and hence the competitive *dúnamai* is called the meaningful *phúsis*.

2.4 The idea tou agathou

§ 30. Philosophy of the cosmos excludes the static "Order." It shows forth the *phúsis* expression, which is exactly what "comes to be and is always (δn) " and "comes to be and not ever is (δn) ." It is a continuous and non-linear complication of the whole and its parts, specifically, the cosmos/ $ag\bar{o}n$ and the forms $(d\hat{u}namai)$ competing in it.

Philosophy of the cosmos demonstrates *phúsis* as the "Order," which both begets (*gígnomai*) and "leads the way and judges, estimates" (*hēgeomai*).

More important, however, is that in philosophy of the cosmos, the phúsis expresses agathós.

Philosophy of the cosmos shows forth the immanent presence of *agathós* in everything that comes to be. For this reason, cosmologists' current theories, mathematically modelling the functions of the brain, and any other "science" that is strictly rational, on the one hand, and the *méthodos* "What is *alētheia*?" and the liberal arts that practise and advance it, on the other hand, all do one job. They "turn" the hominin form to the agathós, or in other words, to the unmixed/pure (eilikrinēs) phúsis.

The history of the agathós study, or the subject-predicate relation "Orderhēgéomai," reveals to us the value of these "turns." The two axioms of philosophy of the cosmos establish the absolute value of the "turns" to the agathós:

The first axiom: agathós is immanently present in everything that is coming into being and begetting in the cosmos.

The second axiom: agathós leads the way and judges all forms.

The *agathós* is the highest authority and the "ideal" image to imitate in the "to be" phenomenon. Its absolute value lies in the fact that it exhibits a phúsis, which creates a few dúnamai that "comes to be and is always (ón)" and many *dúnamai* that "come to be and never are (δn) ."

At the same time, no less important in agathós is the "work" of its predicative construction of the verb hēgéomai. Due to the hēgéomai, all forms in the "to be" phenomenon have an innate property to express "What is alētheia?" and, thus, independently and without external influence, to "turn" towards unmixed/pure (eilikrinēs) phúsis and follow it.

The way to follow (*méthodos*) "What is *alētheia*?" is to trust the providential and directive beginning (arkhē) and follow the upward path, which "turns" into the past, to the ultimate beginning. The méthodos "What is alētheia?" is to develop and advance new ways/manners (trópos) to discern (theōréō) and come to know (qinōskō) the meaningful phúsis, to pursue/practise (epitēdeúō) it and "always is purely."

The absolute value of the "turns" to agathós is that they fasten to the unmixed/pure (eilikrinēs) phúsis and make it possible to practise right/ righteous (díkaios). The ability to "turning' to agathós" and to pursue/ practise (epitēdeúō) physically clean (katharós) should be viewed as the competitive advantage of the form that contributes to its victory in the cosmos/agōn.

From the foregoing, it becomes clear that everything right/righteous (díkaios) is only that which "turns" hominin to agathós. It follows that the subject-predicate relation "Order-hēgéomai," which philosophers develop and advance, underpins the value of politeia and paideia as agon. Agon, developed by the sophists, is like (hómoios) the "Order," only on the basis of agathós. Only in this case, it ceases to serve "closed" political regimes and creates products and services that support and legitimise physically clean (*katharós*) and, therefore, right/righteous (*díkaios*).

The *agathós* constrains and obliges politeia and paideia to guarantee the right of the hominin (society) "always is purely." It unites politeia and paideia of different states and ideologies and directs all their potential to serve one main goal, "to be (predicatively) a particular being/something that is particular." And that means "to have its history" in the cosmos/agōn.

Actually, the value of any political or educational theory lies in how pure it represents the subject-predicate relation "Order-hēgéomai."

Let us formulate the first axiom of education "Those who transform the Universe" in the Laconian style: the "*Agathós* Above All."

§ 31. Philosophy of the cosmos actualises new meanings in the understanding of the evolution of the Universe, which I have designated by a metaphor "Those Who Transform the Universe." From my point of view, the metaphor fully conveys the modern meanings of the subject-predicate relation "Order-hēgéomai."

It follows from philosophy of the cosmos that Intelligent Matter is one of the five possible states of matter that form the Universe. Regular Intelligent Matter is an important part of the complicated "Order." Its meaningful presence forms a new regulatory compromise in the Universe. Intelligent Matter comes into being in specific physical and chemical conditions of a cosmic object in order to subsequently transform it into a starting point for cosmic expansion. Man and his way of life are considered in philosophy of the cosmos as potency (dúnamis) of Intelligent Matter.

The comparison of Living Matter and Intelligent Matter of the Earth reveals the following features in their meaningful phúsis. The energy of Living Matter's meaningful phúsis is solely aimed at the transformation of a cosmic object. Over the last 3 billion years of continuous and non-linear complication on Earth, Living Matter manifested itself primarily as a planetary force, purposefully turning the Earth into a self-regulating system.⁸³ Intelligent Matter of the Earth (noosphere) is a "daughter" state of Living Matter of the Earth (biosphere). It took only a few million years for man to assert oneself as a planetary force. During this short period of continuous and non-linear complication (in fact, further ahead, 3 billion years!), the meaningful phúsis of Intelligent Matter of the Earth clearly demonstrated its intention to know the Universe and develop its resources. The structure and functions of Intelligent Matter of the Earth are created for the intelligibility of the Universe and using the results of intelligibility in special practice, technologies. Intelligent Matter of the Earth differs from other states of matter by phrónēsis. Phrónēsis allows a man to disclose the complexity of the Universe and use the results obtained to assert its meaningful presence in a previously created "Order," i.e., to transform the Universe.

It follows from philosophy of the cosmos that the Earth's noosphere is one of the sets of cosmic noospheres that naturally emerged in one of the "hotbeds" of our Universe. The existence of a certain number of "hotbeds" in a single Universe is allowed, which are at different stages of complication: from several million to billions of years. Given the propensity of Intelligent Matter to migration in the Universe, I can allow a certain influence of highly developed cosmic civilisations on less developed ones, as well as communication between them.

The exploration of the Solar System reveals that complication of Intelligent Matter of the Earth occurs through the competitive struggle:

- 1 With continuously and non-linearly complicating "mother" system of Living Matter. This means competition between the biosphere and the noosphere for the resources of the "mother" system and the domination on planet Earth.
- 2 With continuously and non-linearly complicating system of Inert Matter. It concerns the fixation of Intelligent Matter at the Solar System and Milky Way scale.
- 3 With cosmic noospheres, i.e., highly developed systems of Intelligent Matter for the Universe resources.

It follows that Intelligent Matter of the Earth is complicated in the competitive environment of cosmic force. The major competition unfolds not on a planetary scale with the force of nature and between different political systems. It will take place in the cosmos for its resources and the right "to be purely." As space activity increases, Intelligent Matter of the Earth will face with an uncompromising, not always equal and safe for it competition in the cosmos. The real danger for Intelligent Matter of the Earth is beyond the Earth and has an extraterrestrial nature. In the near future, humanity will face those who are already transforming the Universe!

Notes

- 1 ἀλήθεια δὴ πάντων μὲν ἀγαθῶν θεοῖς ἡγεῖται, πάντων δὲ ἀνθρώποις [Laws 5.730c1-2]. Translated by R.G. Bury.
- 2 Lēthē (λήθη, noun, from verb λανθάνω [also λήθω], I am concealed [hidden]), concealment, oblivion, closedness; opposite alētheia.
- 3 ἀρχὴν ἀνυπόθετον [Republic 6.510b6]. The "unconditioned arkhē" is understood from Plato's dialogues or (1) conceptually as the agathou idea (τοῦ ἀγαθοῦ ίδέαν) [Republic 6.505a-6.509c; 6.510a-6.511d; 7.518a-7.518d; 7.532c-7.532c; 7.534c; 10.621c-d; Timaeus 29a] or (2) mathematically as one (one, $\tilde{\epsilon i} \epsilon$) [Republic 7.524e-7.525a]. "Some of the names for the principles – one, many, indefinite dyad - show that Plato frequently thought of the highest, immaterial world in numerical terms. It is no surprise because he treated the entire universe, not just its immaterial component, as a chain of numbers" [Kalvesmaki, 2013].
- 4 Arkhē (ἀρχή, noun) beginning, origin.
- 5 ποιεῖν μύθους [*Phaedo* 61b3]. These are *Gorgias* [522d–527b], *Phaedo* [107c–114c], Republic [10.614a-621b] and Phaedrus [245c-249d]. See the review by Alexey Losev [Plato, Volume 1, 1990: 810-813].

- 6 "Plato greatly advanced mathematics in general and geometry in particular because of his zeal for these studies." Translated by Paul Kalligas and Voula Tsouna [Philodemus' History, 2020: 283]. According to Vlastos, "the most important point of disagreement between Plato and Aristotle" is that "Aristotle wants to provide an explanation of nature that is based on ordinary language, whereas Plato wants to leave such an explanation up to mathematics, which, in ever-changing sensible things, represents the traces of intelligible stability" [Vlastos, 2005: xviii]. For mathematics in Plato's dialogues, see Kalvesmaki [2013], Karasmanis [2020], Fierro [2003] and Philodemus' History [2020: 282-283].
- 7 γνῶναι ἂν ὅτι ἐκεῖνός ἐστιν ὁ ἀληθῶς οὐρανὸς καὶ τὸ ἀληθινὸν φῶς καὶ ἡ ὡς ἀληθῶς yñ [Phaedo 109e5–110a1]. Translated by Gwenda-lin Grewal. The italicised words are the inflection Alēthēs (ἀληθής, adjective) unconcealed.
- 8 The upward path [Republic 2.364d] and the path above [Republic 7.514b]. See Schur [2015], Gill [2010: 172] and Gonzalez [2009: 244–245].
- 9 Epitēdeúō (ἐπιτηδεύω, verb), pursue or practise a thing, make it one's business [Liddell & Scott, 1940].
- 10 Dikaiosúnē (δικαιοσύνη, noun. From δἴ καιος [díkaios] + -σὕ νη [-súnē], rightness, righteousness): it refers to a person; as an adverb – duly, rightly [Liddell & Scott, 1940].
- 11 Republic [10.621c4–5]. I deliberately omitted μετά φρονήσεως (phronēseōs).
- 12 Apology [18b6–18c1], Edmunds [2006] and Tell [2010].
- 13 Nagy [2002: 32].
- 14 Sagan [2013].
- 15 The Lambda-CDM Cosmological Model currently represents this period's most authoritative argument [Sagan, 2013].
- 16 "dark energy, in the form of a cosmological constant, makes up 71.4% of the universe, causing the expansion rate of the universe to speed up." See https://map. gsfc.nasa.gov/
- 17 https://map.gsfc.nasa.gov/
- 18 Vernadsky [1975, 1977, 1987], Lovelock [2010], Kaku [2008] and Bazaluk [2005, 2016].
- 19 Bazaluk [2005]. The basic provisions of the theory and the model of evolution based on them have been presented in many authors' articles and books. The historiography of this issue is in the book [Bazaluk, 2016]. The final version of the theory is in the book "The Theory of Evolution: From a Space Vacuum to Neural Ensembles and Moving Forward," which was published in Russian and English languages [Bazaluk, 2016].
- 20 We shall consider only those provisions of the "Evolving matter" theory, which are necessary for building the theory of education. The arguments of these provisions, as well as the theory of evolution itself, can be found in the books [Bazaluk, 2016].
- 21 Bazaluk [2016: 35].
- 22 Plotinus [1952].
- 23 Bazaluk [2016: 129-130].
- 24 Bazaluk [2016].
- 25 Bazaluk [2016].
- 26 For example, see http://humanityplus.org/
- 27 Gígnomai (γίγνομαι, verb) to come into being; opposite (i) phtheírō, "We should all agree that the opposite of gignesthai is phtheiresthai, should we not?" [Philebus 55a]. Translated by Harold N. Fowler. See the discussion [Ademollo, 2018; Burnyeat, 2003; Gonzalez, 2009; Vlastos, 2005]; (ii) eimí [Timaeus 27d–28a; Republic 6.485a-b]. See the discussion [Burnyeat, 2003: 22-23; Ademollo, 2018: 59].
- 28 Phtheírō ($\varphi\theta$ είρω, verb), to pass away, perish, be destroyed.

- 29 Burnyeat [2003: 10]. Therefore, gignomai "is used sometimes with, sometimes without a complement: (1a) 'x γίγνεται' and (1b) 'x γίγνεται F" [Burnyeat, 2003: 9], γίγνεται is the third-person singular present mediopassive indicative of gígnomai.
- 30 Thayer [1995].
- 31 Burnveat [2003: 23]. Burnveat relied on γενέσθαι ποτὲ ὄν [Sophist 245d1].
- 32 Phaínō (φαίνω, verb), to bring to light, to cause to appear.
- 33 Burnyeat [2003: 18; 22–23].
- 34 In fact, "in ordinary Greek you do not say 'X φθείρεται F to mean 'X ceases to be F" [Ademollo, 2018: 63].
- 35 φθορὰν καὶ γένεσιν [*Philebus* 55a].
- 36 From $\mathring{\omega}v$, \mathring{ovo} ă, \mathring{ov} ("being"), the present participle of eimi ("to be"), + -ĭ ā (-iā, abstract noun suffix).
- 37 'x ἐστι' is, "uncontroversially, complete statements"; the pass from "x ἐστι" to "x έστι F" "is not to change the meaning of the verb, but to add a complement to a verb that was already complete, but further completable." Where x is a subject and F is some predicate [Burnyeat, 2003: 9–10]. Platonic Greek for "X exists" is "X is something, εἶναί τι. For examples of this use of εἶναί τι, see Phd. [74a9–12, 102b1], Rep. [9.583c5, 584d3], Tht. [157a3 and 5], Soph. [246e5, 247a9], Tim. [51b7–8], *Phlb.* [37a2–9]" [Burnyeat, 2003: 16].
- 38 Burnyeat [2003: 16].
- 39 Burnveat [2003: 23].
- 40 Pay attention that in English, "to exist," was a late-comer in 1602 [Burnyeat, 2003: 21].
- 41 Burnyeat [2003: 18].
- 42 See *Phaedrus* [245d] and the discussion [Burnyeat, 2003: 23].
- 43 Liddell and Scott [1940].
- 44 τίθεμαι γὰρ ὅρον ὁρίζειν τὰ ὄντα ὡς ἔστιν οὐκ ἄλλο τι πλὴν δύναμις [Sophist 247e3]. Translated by Harold N. Fowler with the modifications. The noun dúnamis (δύναμις) is a derivative of the verb dúnamai.
- 45 γιγνόμενα καὶ γεννητὰ [Timaeus 28c2]. The verb γεννάω means to beget (procreate a descendant), produce offspring; (passive) be born, "begotten" [Thayer, 1995].
- 46 Phaedo [78c6–8, 79a9–10, 79c6–7]. For discussion, see Ademollo [2018: 36–40].
- 47 Francesco Ademollo notes that Plato's "contrast between 'coming to be' and 'being' (γένεσις and οὐσία: e.g., Republic 7.525b-c, 7.526e, 7.534a), sometimes as a contrast between 'what comes into being' and 'what is' (τὸ γιγνόμενον and τὸ ὄν: e.g., Republic 6.518c, 6.521d) and sometimes as a contrast between 'what comes and goes' and 'what always is' or simply 'what is' (τὸ γιγνόμενον καὶ ἀπθλλύμεν ὀν and just τὸ ὄν: e.g., Republic 6.508d, 7.521e, 7.527b)" [Ademollo, 2018: 59].
- 48 For "the contrast between the realm of being (eimi) and that of coming to be (gignomai) and passing away (phtheirō)" in the Republic, see Ademollo [2018: 62–64].
- 49 The etymology of the adjective hómoios from the adjective ὁμός (homós), one and the same, common, joint [Liddell & Scott, 1940].
- 50 ή ψυχὴ τῆς ἀληθείας ἄπτεται [*Phaedo* 65b7].
- 51 κινδυνεύουσι γὰρ ὅσοι τυγχάνουσιν ὀρθῶς ἁπτόμενοι φιλοσοφίας λεληθέναι τοὺς ἄλλους ὅτι οὐδὲν ἄλλο αὐτοὶ ἐπιτηδεύουσιν ἢ ἀποθνήσκειν τε καὶ τεθνάναι [*Phaedo* 64a4-6].
- 52 Cicero [1933: 1.19] and Horky [2020: 171–181].
- 53 Kathaírō (καθαίρω, verb, from *katharós*), to make physically clean and free from admixture (katharós), cleanse/purify. καθήρασθαι ἀνάγκη [Phaedrus 243a2-3], literally a force/constraint/necessity (anánkē) cleanse/purify (kathaírō) myself.

- 54 Theáomai (θεάομαι, verb, from tháomai, "to gaze at a spectacle"), properly, gaze on (contemplate) as a spectator; to observe intently, especially to interpret something (grasp its significance); to see (concentrate on) to significantly impact (influence) the viewer [Thayer, 1995].
- 55 ζητοῦντι καὶ ἐμφανίζοντι [Sophist 218b9-c1].
- 56 "That *physis* is even more basic than kosmos is evident from the fact that the discoverers of the cosmos came to be called *physiologoi*, not *kosmologoi*, and that 'nature' occurs much more frequently in tides of their treatises than does 'cosmos'" [Vlastos, 2005: 18].
- 57 περιαγωγή [Republic 7.518d3, 7.521c5].
- 58 τοῦ ὄντος οὖσαν ἐπάνοδον [Republic 7.521c6].
- 59 Gonzalez [2009: 324] and *Phaedrus* [247d-e].
- 60 Timaeus [27d6-28a1].
- 61 The Friedmann-Lemaître-Robertson-Walker metric (the FLRW metric) underlies the Big Bang cosmology.
- 62 In physical cosmology, it is the observation that galaxies are moving away from Earth at speeds proportional to their distance.
- 63 The discussion of "the 'δύναμις of presence' (or co-presence)" [Gonzalez, 2009: 325].
- 64 https://universe.nasa.gov/universe/basics/
- 65 "In English, cosmos is a linguistic orphan, a noun without a parent verb. Not so in Greek which has the active, transitive verb, *kosméō*: to set in order, to marshal, to arrange" [Vlastos, 2005: 3].
- 66 Republic [5.479d4], Burnyeat [2003: 12–16] and Ademollo [2018: 61–62].
- 67 I follow Wang Daqing [2010: 6809] and Hakan Tell [2011], with the modifications.
- 68 ψυχῆς ἀγῶνα τὸν προκείμενον πέρι δώσων, ἐν ῷ ζῆν ἢ θανεῖν ὑμᾶς χρεών [Euripides *Orestes* 847–848]; "to stand the appointed trial (agōn) for his life, in which he and you must live or die." Translated by E. P. Coleridge [1938]. According to Wang Daqing, agōn follows the "first-only rule," i.e., one event, one winner. It corresponds to the famous saying at that time: "either the wreath or death" [Daqing, 2010: 6806]. Unfortunately, at the moment, I could not find confirmation in the ancient Greek texts. Therefore, I am quoting Euripides.
- 69 Díkē (δίκη, noun), custom, right (as self-evident), especially a judicial verdict which declares something that is approved or disapproved [Thayer, 1995].
- 70 "dark energy, in the form of a cosmological constant, makes up 71.4% of the universe, causing the expansion rate of the universe to speed up. (...) completed a census of the universe and finds that dark matter (matter not made up of atoms) is 24.0%," whereas "ordinary atoms (also called baryons) make up only 4.6% of the universe." https://map.gsfc.nasa.gov/
- 71 According to Plato, forms were an *eikōn* for the demiurge (God), who created the cosmos [*Timaeus* 51a–52a; *Phaedo* 109a–111c; *Cratylus* 439c–440d; *Symposium* 211b; *Republic* 10.596a–10.598d].
- 72 Republic [10.621c4–5]. I deliberately omitted μετὰ φρονήσεως.
- 73 Arkhē is derived from $\alpha \rho \chi \omega$ (árkhō, "to begin") + - η (-ē, verbal noun suffix).
- 74 Liddell and Scott [1940]. See especially [Statesman 260e8–9; 275a3–6; 304b11–304c1] and discussion [Gill, 2010: 186].
- 75 Díkaios (δίκαιος, adjective, derived from díkē), right, righteous; opposite ádikos.
- 76 Anánkē (ἀνάγκη, noun), necessity, force, constraint [Liddell & Scott, 1940].
- 77 Currently, the four fundamental interactions, also known as fundamental forces, are defined: the gravitational and electromagnetic interactions and the strong and weak interactions.

- 78 Modern open systems models link the organismic, thermodynamics and evolutionary models.
- 79 Examples of self-organisation are crystallisation, thermal convection of fluids, chemical oscillation, animal swarming and neural circuits. In recent decades, related modelling emergence has been developed along with the self-organisation (self-assembly) models.
- 80 I used the result of the discussion [Gonzalez, 2009: 29].
- 81 According to Burnyeat, Frege's logic, in particular, logical notation (3x)(Fx A Gx), means "the way one language or another expresses (what we call) existence" [Burnveat, 2003: 21].
- 82 A different number of states of matter are also allowed.
- 83 The meanings of this system are sufficiently expounded in the scientific hypotheses of Vladimir Vernadsky and James Lovelock [Vernadsky, 1975, 1977, 1987; Lovelock, 2010].

3 The Theory of Noogenesis and the Foundations of Ethics

Philosophy of the cosmos expresses the idea of a man who transforms the Universe as neuro-evolution. Ethics, for its part, generalises and systematises the key results of the study on neuro-evolution and human beings. In the "threefold scheme of philosophy," Ethics develops and bestows with meaning the idea of human being and human rights. It specialises in discursive thinking through of the meaningful *phúsis* of Intelligent Matter and discloses the view on the question, "What is man, and what is the meaning of his presence in the Universe?" In this chapter, ethics and its *méthodos* "What is it?" will help us to investigate *aretē alēthinē* and to formulate the second axiom of education (and politeia): "*Aretē* and *Agathós*, Unite!"

3.1 Current understanding of neuro-evolution

- § 32. We draw attention to three key complications of modern discursive thinking through of the meaningful *phúsis* of Intelligent Matter.
- 1 The effectiveness of discursive thinking through of the meaningful phúsis of any form directly depends on the amount and quality of knowledge about it. For example, the discursive thinking through of the cosmos in the *Timaeus* directly depended on the quality of astronomical observations of the Greeks and the geocentric system of the world developed by them. The results of thinking through of the chronology of the Universe directly depend on the "Evolving matter" theory and on the quality of the Big Bang Theory, the synthetic theory of evolution and the theory of noogenesis that define it. However, I have to admit that the "theory of noogenesis" as such does not exist in nature. Pierre Teilhard de Chardin introduced in 1955 the term "noogenesis," although it is not used in modern neuroscience and Ethics. I use "noogenesis" as a technical term to refer to the theory of complication of Intelligent Matter, which is only being developed.
- 2 Discursive thinking through of the meaningful *phúsis* of Intelligent Matter is further complicated by the fact that neuroscience has not yet established

DOI: 10.4324/9781003450726-4

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itself as a recognised and self-sufficient scientific discipline. The meanings of the term "neuroscience" develop and change so rapidly that their understanding differs in different linguistic areas.² In a broad sense, neuroscience is a multidisciplinary science that combines physiology, anatomy, molecular biology, developmental biology, cytology, computer science, mathematical modelling etc. for neuro-evolution scientific research. Neuroscience focuses on the study of the following topics of the brain and nervous system research3.

- a Behavioural/Cognitive;
- b Cellular/Molecular;
- c Development/Plasticity/Repair;
- d Neurobiology of Disease;
- e Systems/Circuits.

Neuroscience develops and uses a variety of approaches, methods and tools to study the fundamental and coming into being properties of neurons, glia and neuronal circuits, from molecular and cellular studies of individual neurons to visualisation of sensory, motor and cognitive tasks in the brain.⁴

- 3 Unstable meanings of neuroscience as a scientific discipline, the rapid complication of knowledge about neuro-evolution, the absence of a theory of noogenesis designed to systematise and generalise "born knowledge" and other causes have a direct influence on the quality of philosophical comprehension of the meaningful phúsis. Nowadays, discursive thinking through of neuroscience is carried out by philosophy of neuroscience and neurophilosophy.⁵ They develop as directions in the philosophy of science. In the modern understanding, "philosophy of neuroscience" explores fundamental neuroscience questions, while "neurophilosophy" specialises in the implementation of neuroscience concepts in the development of traditional philosophical questions.
- § 33. The theoretical and empirical research studies into the meaningful phúsis of Intelligent Matter define it as neuro-evolution. All the physiological and anatomical changes that have occurred in *hominins*, in comparison with the scale and importance of the changes that have occurred in their brains, are secondary.6

Neuro-evolution as a phenomenon was discovered in molecular genetics in the second half of the 20th century. In molecular biology, neuro-evolution is considered a complication of neurons, neuronal connections and neuronal populations. Modern approaches and methods of neuroscience differentiate research studies in this area into many directions. Neuroanatomy, neurophysiology, neurogenesis etc. study various aspects of neuro-evolution.

Also, mathematicians study neuro-evolution. They calculate its possibilities in mathematical models of artificial neural networks. Mathematicians represent neuro-evolution as a formal process, the complication of which leads to the explanation of brain function, the construction of mathematical models of artificial neural networks, cyborgs etc.

Neuro-evolution research has reached its highest development in transhumanism. Modern transhumanism is an international and intellectual movement that combines neuro-evolution research in molecular biology and mathematics, philosophy, biology, genetic engineering etc.⁸ Transhumanism declares "... the possibility of broadening human potential by overcoming aging, cognitive shortcomings, involuntary suffering, and our confinement to planet Earth." The results of neuro-evolution research in transhumanism are used in nanotechnology, nanomedicine, biotechnology, genetic engineering, cloning, transgenesis, bionics etc.¹⁰

Discursive thinking through of modern neuro-evolution research reveals an important fallacy. Namely, researchers neglect the fundamental difference between the meaningful *phúsis* of Living Matter and Intelligent Matter, i.e., between continuous and non-linear complication of neurons, neuronal connections and neuronal populations in the mammalian brain and the human brain. Let us clarify the meanings of the terms "BioIntelligent Matter" and "Intelligent Matter" in order to explain the difference between neuro-evolution in Living Matter and Intelligent Matter.

§ 34. The term "BioIntelligent Matter" was introduced into scientific usage in 2005. 11 By analogy with the term "BioInert Matter," 12 the new term designated the transitional structures between Living Matter and Intelligent Matter. BioIntelligent Matter includes the structures of Living Matter, which possess the nervous system, up to the neural ensembles of the subconsciousness of *hominins*. All the diversity of multicellular organisms, from cnidarians and ctenophores to mammals, is neuro-evolution stages relating to the *BioIntelligent* transition state of matter.

There are three main stages in the continuous and non-linear complication of BioIntelligent Matter:

- 1 The initial formation of nerve cells: a continuous and non-linear complication of the structure, functions and manifestations of neurons in ontogeny.
- 2 Cell adhesion: a continuous and non-linear complication of the structure, functions and manifestations of the simplest diffuse nervous systems in ontogeny.
- 3 Complication of the simplest neuron systems to the level of the multifunctional structures of the central nervous systems of mammals.

Thus, the neuro-evolution of BioIntelligent Matter is a continuous and non-linear complication of the structure and functions of neurons, neuronal populations and neuron systems, including the formation of a multifunctional structure of the central nervous system.¹³

The central nervous system is the highest achievement of the neuro-evolution of BioIntelligent Matter. The nervous system coming into being is what

has caused the species diversity of biological organisms on Earth. The complication of the structure, functions and manifestations of the central nervous system is controlled by genetic programs, which proves that the structures of BioIntelligent Matter belong to Living Matter. The unconditioned and conditioned reflex activities of mammals are the highest levels of functional abilities of the central nervous system.

According to the "Evolving matter" theory, BioIntelligent Matter on Earth (by analogy with BioInert Matter) has become complicated for about a billion years, providing interactions with other highly developed structures of Inert Matter and Living Matter, as well as with the simplest structures of Intelligent Matter. BioIntelligent Matter as a transitional state of matter, on the one hand, embodies the highest perfection of the structure and functions of the "mother" Living Matter. On the other hand, the basic features of BioIntelligent Matter form the basis for the neuro-evolution of the "daughter" state of matter that is Intelligent Matter.

The term "Intelligent Matter" was introduced into scientific usage in 2000. 14 By analogy with the terms "Inert Matter" and "Living Matter," 15 the term "Intelligent Matter" combines the scientific component of information about the nature of man and society. The structures of Intelligent Matter were formed as a result of neuro-evolution based on BioIntelligent Matter. Two-layer structures of Living Matter, reaching the limit of perfection of the internal structure, types of interaction and environments, caused the variability of universal factors and causes of complication. As a result, three-layer block structures of Intelligent Matter were formed. In the model "Evolving matter," it was postulated that the principle of block continuous combination is a universal factor that is inherent of any state of matter. The difference lies only in the variations of this factor.

The result of the block continuous combination of the structure, the types of interaction and the environments of any state of matter is a continuous complication of the structure and functions of the blocks themselves. The singlelayer organisation of elementary particles is inherent in blocks of Inert Matter. The two-layer organisation is inherent in blocks of Living Matter that are formed by two function blocks: molecules and genes. The two-layer organisation is able to perform the functions of self-replication, self-organisation and self-regulation. The further complication of Living Matter occurred as a result of combinations of two-layer blocks. The continuous and non-linear complication of two-layer blocks has created a new complexity account, i.e., the three-layer block organisation of Intelligent Matter. The blocks of Intelligent Matter are formed by (1) molecular-genetic structure, (2) neuralensembles and (3) knowledge and technology based on it. The three-layer block organisation of Intelligent Matter is notable for the fact that, for the first time, the information in the form of knowledge and technology took the form of the material structure of the brain. I called the primary threelayer block organisation of the meaningful phúsis of Intelligent Matter the neural ensemble of subconsciousness.

The three-layer block organisation of the hominin brain ceased to depend on the dominant influence of genetic programs, which ultimately ensured the significance and meaningful presence of Intelligent Matter in the "to be" phenomenon. The Intelligent Matter of the Earth has become the third state of matter in the Solar System.

The three-layer block organisation of the neural ensemble of subconsciousness endowed the Earth's Intelligent Matter with two basic qualities that are necessary for the fixation and creation of its own system in the "mother" state of matter:

- 1 The possibilities to fully disclose and use the material, energy and information resources of what is occurring.
- 2 The possibilities to transform what is occurring in order to create conditions for continuous and non-linear block complication of its own structure and functions, i.e., to create the noosphere.

Due to the new structure and functions of the brain, hominins outcompeted mammals, whose brain was still complicated under the control of the genetic programs in ontogeny. Mammals remained transitional structures in the system of Living Matter, and hominins occupied the only possible niche in continuous and non-linear block complication of the "mother" system. For the last 7 million years, the neuro-evolution of the Earth's Intelligent Matter has been a continuous and non-linear complication of the neural ensemble of subconsciousness and its ability to perceive/think (noiéō) and come to know (qinōskō) "Order" in order to assert one's own meaningful presence.

- § 35. Thus, discursive thinking through of the meanings of neuro-evolution discloses three key stages (accounts of complexity) in its development on Earth:
- 1 The formation and development of neurons and the nervous systems in Living Matter of the Earth. The continuous and non-linear complication of Living Matter created the conditions for the coming into being and meaningful presence of transitional BioIntelligent structures. According to modern ideas, this process on Earth lasted up to a billion years.
- 2 The transformation from the central nervous system of mammals (from the two-layer block organisation) into the neural ensembles of the subconsciousness of *hominins* (into the three-layer block organisation). Approximately 6-7 million years ago, biological evolution on Earth transformed into noogenesis, i.e., it passed the point of singularity, which, in its own way, was the image of the cosmological singularity.
- 3 The complication from the neural ensembles of the subconsciousness of hominins to the neural ensemble of consciousness, and further to more complicated neural organisations. It concerns noogenesis, i.e., a continuous and non-linear complication of the meaningful phúsis of Intelligent Matter of the Earth.

Unfortunately, the revealed neuro-evolution complexity account is often ignored, which causes unreasonable transfer of research results from the neuro-evolution of BioIntelligent Matter to the neuro-evolution of Intelligent Matter, and vice versa.

The structures of transitional BioIntelligent Matter, at first view, erase the difference between the structures of Living Matter and Intelligent Matter. BioIntelligent structures are linked with Living Matter by (a) a community of morphological and physiological characteristics; (b) the dominance of genetic programs, eukaryotic cells and their populations; etc. BioIntelligent structures are linked with Intelligent Matter by cephalisation 16 and reflection. However, discursive thinking through of this issue reveals the fundamental difference between the structure and functions of the mammalian brain and the human brain. Here are some proofs:

- 1 According to Konstantin Anokhin and Tatyana Chernigovskaya, during 6–7 million years of neuro-evolution, in the human brain in comparison with the brain of a chimpanzee, which is structurally similar to the human one, the following changes occurred¹⁷:
 - a Changes in a genome. In forty-nine different parts of the human genome, the rate of changes was significantly higher than the average for the genome. Moreover, in some of them, the changes occurred seventy times faster than on average for the genome. As a result of detailed studies, the gene that had undergone the most significant changes was isolated. This gene, HAR1, was encoding a small part, some RNA, but it contained 118 (!) differences between a human and a chimpanzee. It turned out that this gene works in the cerebral cortex from the seventh to the nineteenth week of embryonic development when the upper layers of the cerebral cortex that determine the horizontal links are formed.
 - b The principal differences in the anatomy of the brain. The human brain is three times larger than the chimpanzee brain and has a different structure.
 - c The principal differences in neurophysiology, namely, the organisations of processes between "old" and "new" neural ensembles, as well as their inner structure.

If the unconditioned and conditioned reflex activities of the nervous system are the limit of the possibilities of the central nervous system in the structures of BioIntelligent Matter, then they are a common function, which is performed by the neural ensemble of subconsciousness along with other more complicated functions in Intelligent Matter. Subconsciousness controls the biological functions of the organism and performs simple reflex actions through reflection. Thinking, designing virtual worlds and translating them into reality, different ways of isolating knowledge from general information, creating technology for working with knowledge etc. are the result of the neuro-evolution of the brain over the past few million years. This is a continuous and nonlinear block complication of the neural ensemble of subconsciousness into the structure and functions of consciousness specialising in working with complex sign systems.

- 2 Neuro-evolution in BioIntelligent Matter and Intelligent Matter are two different processes that differ in structure and functions:
 - a Neuro-evolution in BioIntelligent organisms is a continuous and nonlinear complication of neurons, neuronal populations and neuronal connections, i.e., this is an evolutionary path from the simplest neurons to the multifunctional mammalian central nervous system. Neuro-evolution of Intelligent Matter is mainly a continuous and non-linear complication of organisationally large and complex blocks, i.e., the neural ensembles, which are only in the human brain.
 - b The functions of neuro-evolution in BioIntelligent Matter are a process of intermediation between basic genetic programs and the external environment. In essence, neuro-evolution only expands the functionality of genetic programs. In Intelligent Matter, neuro-evolution is the basic process that complicates the functions to perceive/think (noiéō) "Order."

The fundamental differences between the brains of higher animals and humans are considered in the works of Vilayanur S. Ramachandran, Marco Iacoboni, Stephen Kosslyn and others. ¹⁸ The current level of scientific knowledge allows us to formulate the following difference between the central nervous system of mammals and the neural ensembles of the subconsciousness of hominins:

- a The main function of the central nervous system is to provide conditioned and unconditioned reflexes, i.e., typical biological organisms' reactions to stimuli.¹⁹ Ontogeny of Living Matter is determined by genetic programs, the highest form of manifestation of which is a variety of reflexes.
- b The main function of the neural ensemble of subconsciousness, as the initial and defining structure of Intelligent Matter, is to comprehend (phroné \bar{o}) the complexity of the "Order." Intelligibility is a set of mental processes, procedures and methods of acquiring knowledge about the phenomena and processes of physical reality to create a special practice.

The formal programming language describes the central nervous system of biological organisms and the neural ensembles of the subconsciousness of *hominins* as two completely different programming devices of individual organisms' development. The programming language of the BioIntelligent Matter's brain is a particular set of genetic codes that is common to all living organisms. It is based on methods for encoding a sequence of amino acid

residues in proteins using a sequence of nucleotides in the nucleic acid. The programming language of the Intelligent Matter's brain is the language of complex natural or artificial sign systems, which provide a relation between the meaning and typical sound or writing. Due to the fact that Intelligent Matter comes into being from "mother" Living Matter, the basics of complex sign systems language are written in the language of genetic codes. However, a further complication of language in the ontogeny proceeds according to its own laws and depends on the influence of the social environment, primarily on the quality and effectiveness of educational technologies. The first scientific evidence of the relationship between the quality of the development of the neural ensemble of subconsciousness and education was obtained by the French physician Jean Itard. In 1800, Itard published a research result of a case of a boy who had been isolated from human society for the first twelve years of ontogeny.²⁰ Despite the efforts of scientists, the brain of Victor of Avevron has failed to master the language of complex sign systems, which is a distinctive trait of the human brain.

The possibility of hereditary transmission of the basics of complex sign systems explains the nature of two discoveries in psychology: (1) psychological recapitulation,²¹ or the idea that a child's mental development repeats the basic stages of development of society; and (2) archetypes discovered by Carl Gustay Jung, which are the universal basic innate mental structures that form the content of the collective unconscious.²²

3.2 The subject of neuroscience

§ 36. Thus, discursive thinking through of neuro-evolution reveals the uniqueness of the continuous and non-linear complication of the neural ensemble of subconsciousness. Philosophy of neuroscience discloses it as a particular architectonics of the brain that perceives/thinks (noiéō) and comes to know (ginōskō) the complexity of "Order."

Philosophy of neuroscience purifies (kathaírō) a view of the question "What is man, and what is the meaning of his presence in the Universe?" and defines the subject of neuroscience.

The subject of neuroscience is the study of the meaningful phúsis of Intelligent Matter (neuro-evolution) as a continuous and non-linear block complication of the structure of the neural ensemble of subconsciousness and its functions to perceive/think (noiéō) "Order." Neuroscience develops the theory of noogenesis that (1) explains the transformation of the neural ensemble of subconsciousness into its modern form, i.e., the "neural ensemble of consciousness," and (2) predicts further complication of the neural ensemble of consciousness.

Let us consider the above mentioned subjects of neuroscience.

The pace of development of the subject of neuroscience is impressive. For example, it is enough to compare the reviews of neuroscience achievements published in 1979 with those in 2008.²³

The modern understanding of the structure and functions of the human brain is represented by various theories and models. However, only four theories claim to take the place of the conditional "theory of noogenesis." These are (1) Global Neuronal Workspace Theory, (2) Recurrent Processing Theory, (3) Higher Order Theories of Consciousness and (4) Information Integration Theory of Consciousness.24

Modern neuroscience does not give a clear answer to the question, "Are the neural ensembles of subconsciousness and consciousness two separate and self-sufficient structures of the brain or one structure that performs two functions?" For example, Bernardo Kastrup argues that unconscious processes are actually manifestations of consciousness, 25 i.e., the neural ensemble of consciousness. In turn, renowned neurobiologist Ran Hassin describes the variety of the functional abilities of the human unconscious and considers them to be the manifestations of subconsciousness.²⁶

Indeed, over 6–7 million years of continuous and non-linear block complication, the neural ensemble of subconsciousness has been transformed into a new qualitative state, i.e., the neural ensemble of consciousness, which forms the modern structure of the brain. Neurobiological recapitulation enables neuro-palaeontology to reconstruct the stages of human brain complications and expose them as a disclosed account of the complexity.²⁷ I affirm that the modern structure of the human brain is an integral and indivisible organisation that performs the functions of the subconscious and consciousness.

An analysis of world history helps to establish that the transformation of the neural ensemble of subconsciousness into consciousness was completed about a hundred thousand years ago. Neuro-evolution has caused a new account of complexity in the brain architectonics. The research of Vileyanaur Ramachandran (2012), John G. Nicholls (2008), Marco Iacoboni (2011) and others show that the main changes occurred in the following areas of the brain:

- 1 The frontal lobes.
- 2 The prefrontal cortex.
- 3 The inferior parietal lobule. Its major part in the human brain splits into the supramarginal and angular gyrus. The inferior parietal lobule receives data from all sensory modalities due to its location at the intersection between vision (occipital lobes), touch (parietal lobes) and hearing (temporal lobes). It is supposed that the inferior parietal lobe is involved in such specifically human activities as naming, reading, writing and counting.
- 4 The visual areas of the brain. In the human brain, there are thirty visual areas, while in the brains of other mammals, there are no more than ten.
- 5 Wernicke's and Broca's speech areas.
- 6 The molecular mechanisms of interneuronal and internal neuronal connections. On the one hand, molecular connections provide the development of short and long-term memory, and on the other hand, they form new integrative connections between the various brain structures.

The modern structure of the brain continues to perform the functions of subconsciousness, namely:

- 1 Unconscious motives, the true meaning of which is not realised because of their social unacceptable nature or their contradiction with other motives.
- 2 Behavioural automatisms and stereotypes, acting in a habitual manner, the realisation of which is excessive because of their full usage.
- 3 Subliminal perception, which, due to a significant amount of other information, is not understood.
- 4 Over conscious processes: intuition, creative impulse and inspiration.

At the same time, the transformation of the neural ensemble of subconsciousness into the neural ensemble of consciousness significantly expanded the brain's functions to perceive/think ($noi\epsilon\bar{o}$) "Order." Its new functions are the following:

- a The ability to adjust basic psychological attitudes and stereotypes in order to form more flexible behavioural programs.
- b The ability to designate the environment with signs, give them meanings and work with signs and meanings, i.e., carry out the thought process.
- c The ability to extract knowledge from information and use it as "the guide to the realm of the Divine,"28 i.e., to achieve both abstract and concrete
- d The ability to produce new images and concepts by using imagination, thinking and intuition.
- e The ability to conduct an activity that is characterised by sensation, emotion, volition or thought.
- f The ability to form a temporary "world picture." To memorise the past, as well as to form imagination-based and knowledge-based models of the
- g The ability to create a virtual reality as a new space for the self-realisation of the psukhē.
- h The ability to perform intentionality; introspection, including self-awareness, self-knowledge and self-appraisal, as well as phenomenological reduction.

The achievements of modern experiential and theoretical neuroscience can be assessed in different ways, just like the achievements of physics, chemistry, biology and other applied disciplines. However, if the Big Bang Theory reveals the stages of continuous and non-linear complication of the Universe, and the synthetic theory of evolution reveals the complication of Living Matter, then there is no single and commonly accepted scientific theory that reveals the complication of the human brain's functions and structure. The development of a conditional "theory of noogenesis" is at the initial stages.

I have deliberately shortened and simplified the presentation of the fundamental organisational and functional principles of the nervous system and their influence on thinking and emotions. The study of modern models and theories developed by neuroscience is a separate research, with its own conceptual apparatus, methodology and structure of presentation of the material.²⁹ A brief review of the transformation from the neural ensemble of subconsciousness into the neural ensemble of consciousness has been made in order to prove that, on the one hand, current neuroscience research studies are the empirical basis of the "theory of noogenesis." On the other hand, they determine the quality of discursive thinking through of neuro-evolution by philosophy.

The upward beginning (arkhē) of Ethics

§ 37. At first glance, there is an irreducible difference between creating cosmological and anthropological models. However, as we have shown above, the subject-predicate relation "Order-hēgéomai" is common to all forms. Therefore, predicative expressions are common to both the cosmos and any other subject that comes to be in the FLRW metric.

It follows that cosmology investigates the subject-predicate relation, where the cosmos³⁰ and all forms are the subject. Whereas anthropology investigates the same relationship but where the subject is a particular form.³¹ We will refer to it as the hominin form. Both the cosmos and the hominin form express the unmixed/pure (eilikrinēs) phúsis and, therefore, demonstrate general predicative expressions.

I consider only the "threefold scheme of philosophy" (a Platone philosophandi ratio triplex). 32 That is why, in my opinion, Ethics is not the equivalent of moral philosophy. As a branch of philosophy, Ethics accumulates the study of neuroscience, the philosophy of neuroscience, anthropology and any other discipline that explores human beings.

Ethics shows forth the meaningful phúsis of the hominin form. At the same time, the fundamental philosophical principle "Agathós Above All" constrains and obliges ethical research.

As a branch of philosophy, Ethics purifies (kathaírō) the meaningful phúsis of Intelligent Matter of the Earth. The main way of "to make physically clean" (kathaírō) was inscribed on the pronaos of the Temple of Apollo at Delphi. It is "Know thyself." The correct formulation of the question provides a "turn" to the meaningful phúsis and an "eternal return" to it in order to preserve its disclosedness (alētheia).

The aletheia of the meaningful phúsis is achieved by discursive thinking through - dialégesthai and dialégomai - rather than by answering the question posed. Philosophical life is self-transformation and forced transformation of others in accordance with "inner politeia."34 Socrates not only himself was a devoted executor of "God's behest" and "followed in God's footsteps," but he also "gave aid to (helped) the God" and showed others that they were not sophós. 35 Philosophían alēthê (literally the disclosed [real] philosophy), 36 created by Plato, corresponded to the real (disclosed) agathou dúnamis that cared about its disclosedness in the lives of not only the individual but also society as a whole.

In modern philosophy, the alētheia of the meaningful phúsis of Intelligent Matter is denoted by the terms "aboutness" or "consciousness of something,"37 "Dasein"38 etc.

Ethics exhibits the meaningful *phúsis* of Intelligent Matter as part of a whole or an image/likeness ($eik\bar{o}n$) of Y-Matter. Its appearance has been caused by the factors and causes of the complication of "Order" as a process. Therefore, Ethics makes it possible to identify the meaningful phúsis of the hominin form as a new way/manner (trópos) of the "Order-hēgéomai," i.e., the potential of cosmic force or, in other words, the unmixed/pure (eilikrines) agathou dúnamis.

§ 38. The *phúsis* of the hominin form is still in the *lēthē*, but continuous rising to it has purified (kathaírō) the arkhē. Man defines the arkhē of the form as neuro-evolution, which, approximately 7 million years ago, caused the formation of the phylogeny of hominin species.³⁹

The first investigations of the meaningful *phúsis* of the hominin form, which have come down to our times, are found in Plato's Meno. 40 Starting with Meno, Plato analysed and discussed three important problems.⁴¹ "The first concerns what counts as a good definition, the second what is to be defined, the third the variety of permissible definitions."42 Moreover, Plato's dialogues care for/ attend (epimeléomai) a new way/manner (trópos) of each hominin and the hominin form in general.⁴³ They bring to light the need for "a fundamental change in orientation"44 and the "turn" to the results of the phúsis, the cosmos and dúnamai. Plato's Republic (Polīteia) and Laws (Nómoi) represent the physically clean (katharós) whole and its parts⁴⁵ and persuade (peithó⁴⁶) to pursue/practise (epitēdeúō) them "to be like" (hómoios) them. Kallipolis⁴⁷ and Magnesia⁴⁸ should be regarded as the pure *phúsis* and the particular rightness (dikaiosúnē), which corresponds to the metric expansion and the "Evolving matter" theory.

Thus, already 2,500 years ago, hominin represented the image/likeness (eikōn) of the global whole and its parts, the very hominin form included.

In the paradigm of the expanding cosmos, self-organisation (self-assembly) of the hominin form and its meaningful phúsis is caused by the nóos, 49 which contemporaries understand as "mind, as employed in perceiving and thinking,"50 or in the abbreviated "perceiving/thinking" form. Hence, the meaningful phúsis of the hominin form and the history it causes is the work of perceiving/thinking (nóos).

Plato denoted by the term $n \delta o s$, what distinguished rational thinking from emotions and allowed "to search out the pure, absolute essence of things."51 *Nóos* discerned (*theōréō*) and came to know ($gin\bar{o}sk\bar{o}$) forms.⁵² It made forms and things intelligible. Nóos was an important part of a Living Creature.⁵³ Therefore, Plato considered it a cosmic phenomenon, which Gods, daímōns, and humans possessed to a varying degree.⁵⁴ In the *Philebus*, Plato made clear that *nóos* ruled the cosmos from the very beginning.⁵⁵

We consider nóos to be the neural structure of the brain with a specific structure and function. At the current stage of the complication of the Earth's Intelligent Matter, nóos is represented by the neural ensemble of consciousness. Neural ensembles can be at different stages of complication in the Intelligent Matter system. Therefore, the term $n \delta o s$ abstracts the neural structure. Nóos points to the key function of the continuously becoming complicated psukhē: to perceive/think (noiéō) "Order" as a process and "to benefit" from the intelligible.

Nóos has the ability to contemplate something, which produces itself from itself. It provides the situation "once the sun itself could be truly seen" or "once the highest idea could be caught sight of." 56 Noos is formed in such a way that its ability to comprehend "Order" is improving through practice. The basic structure of consciousness is not enough to ensure the quality of intelligibility. Nóos should learn to purify (kathaírō) agathós from hiddenness, and this learning by practice is equivalent to the ability to beget arete alethine and grow it up. 57 This important peculiarity of the neural ensemble turns $n \delta o s$ not into an obvious fact of neuro-evolution but into the potency (dúnamai).

§ 39. Hominins thoroughly investigate their meaningful phúsis. At the moment, it is evident that perceiving/thinking (nóos) leads (hēgeomai) two combined groups of actions (interactions).

The first group combines actions (interactions), which are called etymologically related verbs noiéō and ginōskō, 58 and their inflection. 59 Where noiéō means "perceive by the $no\hat{u}s$," to perceive/think, and $gin\bar{o}sk\bar{o}$ - "experientially know,"61 to come to know. Noiéō and ginōskō represent the evolutionary history of the hominin form as the way to follow (méthodos) "What is it?"62 The upward path of hominin is to ask "What is aletheia?" as "What is it?" concerning the phúsis and its products.

The hominin form seeks $(z\bar{e}te\bar{e})^{63}$ and shows forth/manifests, makes clear or plain $(emphaniz\bar{o})^{64}$ by computation⁶⁵ x(cosmos) and F(dúnamai). The way to follow (méthodos) "What is it?" brings to light the formulas 3a(i)-3c(iii) as the work, in which the hominin themselves are implemented, and not "some" unclassifiable predicate. 66 Hominin thus define phúsis and competitive dúnamai as the characteristic activity and the thing itself.⁶⁷ Moreover, they show forth/manifest (emphaniz \bar{o}) them as an intelligible whole⁶⁸ and that one something in which all cases of F (including [predicatively] the hominins themselves) are F.⁶⁹

That is, the hominin form perceives/thinks ($noie\bar{o}$) and comes to know (ginōskō) x(cosmos) and F(dúnamai) in formulas 3a(i)-3c(iii) as x(agathós) and F(agathou dúnamis):

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3a(iv) x(agathós) exists
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³b(v) x(agathós) is F(agathou dúnamis)

³c(vi) the agathós exist (i) by the agency of agathou dúnamis and (ii) from agathou dúnamis and (iii) agathou dúnamis.

where the adjective agathós means the first and foremost characteristic of the intelligible phúsis. Agathós is the most important thing in a human being -"the Agathós Above All!" – because it is the "to be" phenomenon itself.

The hominin form perceives/thinks (noiéō) and comes to know (qinōskō) agathós as the providential and directive arkhē. Agathós leads (hēgeomai) all forms (including the hominin form) to be fixed steadily on alētheia and the "to be" phenomenon.⁷⁰

Hence, it is *agathós* that determines perceiving/thinking ($n\delta os$) and the way to follow (méthodos) "What is it?" Agathós allows being embraced by lógos and phrónēsis⁷¹ and, thereby, it helps hominin to define itself⁷² as a particular complexity, or the agathou idea or, equivalently, agathou form. 73

Plato considered the idea tou agathou in the Timaeus, the Parmenides and the Republic. To reveal the idea tou agathou, he used the analogy of the sun,⁷⁴ the analogy of the divided line⁷⁵ and the allegory of the cave.⁷⁶ In Plato's view, the idea tou agathou was "the cause of episteme and of aletheia" and defined the "to be" phenomenon and everything that was available and not vet available to knowledge.⁷⁸

The phrase agathou dúnamis⁷⁹ is the second significant characteristic of the intelligible phúsis. The agathou dúnamis is that one something, which is always the answer to the question "What is to be defined?" Specifically, the agathou dúnamis [A] is that one something in (3b) "x is F," which [B] is graspable without specialised knowledge; [C] is such that if one does not know it, one cannot know any other feature of F; and [D] is such that if one does know it, one will be able to distinguish on its basis any case of F from any case which is not F.81

Hominin perceive/think (noiéō) and come to know (ginōskō) the agathou dúnamis as the dominant anánkē, which determines the capability of acting and being acted upon. Hominins define this dominant connotation as "the acts or actions of the agent"82; it creates a contrast "between the things that merely happen to people – the events they undergo – and the various things they genuinely do."83 Moreover, the agathou dúnamis produces the acts/actions of the hominin not in any manner, for example, the "action for the sake of action,"84 but with a specific focus and limits of collective and individual self-realisation. In particular, the *agathou dúnamis* leads the way (*hēgeomai*) hominin to procreate in a biological and/or cultural sense⁸⁵ and transform into a technologically advanced space civilisation⁸⁶ based on the agonistic tradition.

§ 40. The second group of actions (interactions), which is produced by the meaningful *phúsis* of the hominin form, persuades (*peithó*) and cares for/ attends (epimeléomai) the way/manner (trópos) follow x(agathós) and F(agathou dúnamis).87 Perceiving/thinking (nóos) leads the way (hēgeomai) of each hominin to pursue/practise (epitēdeúō) alēthēs F(agathou dúnamis) as "the highest existential possibility of man"88 and use all cases of F to overcome the evil of ignorance⁸⁹ and for personal self-motion along the upward path "What is it?"

The result of the second group of actions (interactions) is the discovered agathón, which is just "the sun during an eclipse," but it is it that fastens to itself and leads the way (hēgeomai) as far as possible "always is purely." The hominin form reveals itself as a work that is implemented in the agathós and the agathou dúnamis and, therefore, into the phúsis and dúnamai:

3a(vii) x(agathou dúnamis) exists

3b(viii) x(agathou dúnamis) is F(aretē)

3c(iii) the *agathou dúnamis* exist (i) by the agency of *aretē* and (ii) from *aretē* and (iii) *aretē*.

where arete91 is the third characteristic of the intelligible phúsis.

In modern literature, *aretē* is translated as a "virtue." In fact, in ancient Greece, *aretē* had a different, deeper meaning. The Greeks used this word to mean the total sum of all the ideal perfections of the mind and body. Aretē meant "being the best you can be," "reaching your highest human potential" or "an ideal fulfillment of human nature and its potential."

Plato offered the Greek world a new understanding of *aretē*, which later became entrenched in the NeoPlatonist interpretations of Plato and Christianity. According to Plato, the disclosed *aretē* (*aretē alēthinē*) meant "to become like God," i.e., to transcend human nature and "to become another kind of being altogether in a quest for perfection." *Aretē alēthinē* (the disclosed *aretē*) supposed the abandonment of everyday life in favour of a philosophical one, which disclosed the subject-predicate relation "Order-*hēgéomai*" and transformed a man according to it.

Aretē is the arkhē of the hominin form as a whole and its parts, behind which hides the real work of the meaningful phúsis or perceiving/thinking ($n\delta os$). Hominin experience "the reason to pursue an aretē" as moving towards it perfects the personal "to be like" ($h\delta moios$) of the agathou dúnamis endowing it with a competitive advantage and making it better than others. 96

Plato created the philosophy for the "turn of the *psukhē*" to *aretē* and *agathós*. The equivalence of *aretē* and *agathón* was disclosed in the *Laws*, when the understanding of the foundations of the cosmos, or *the genesis of ousia*, was clarified. "... this circumference of Heaven is of necessity driven round under the care and ordering" by one or more *psychēn* endowed with whole *aretēn*." That is, the complexity of the existing "Order" was created by the *psukhē* (or several *psukhē*), the structure of which was identical to the *psukhē* of man. Therefore, the disclosed *aretē* of man (*aretē alēthinē*) represented the *aretē* of the *psukhē* that created the cosmos.

Aretē is the only thing that leads, rules and governs¹⁰¹ biology, neuroscience and evolutionary history of *Homo sapiens*. Moreover, hominin refer to their best representatives as the *agathós* man,¹⁰² and his crucial characteristic is the ability to beget *aretē alēthinē* and grow it up.¹⁰³

§ 41. Plato compared philosophy with maieutic art, thus emphasising its main purpose. 104 Philosophy brought agathós into the world. Philosophy helped the agathou dúnamis, concentrated in aretē, to overcome the hiddenness and to be realised in the meaningful presence of what is occurring. Philosophy purified (kathaírō) the particular way/manner (trópos) – "Know thyself!" – that disclosed aretē. The philosophical life was the most effective way of transforming the potency of the coming into being into the energy of the meaningful presence. The philosophical life focused the psukhē on the intelligibility of its own account of complexity, thereby "turn of the psukhē" towards aretē and agathós.

Plato wrote, "... the psukhē of the philosopher greatly despises the body and avoids it and strives to be alone by itself,"105 basically because the body is an obstacle "to share in the search for phrónēsis." 106 The psukhē has been created in the body, just as the noosphere has been created in the "body" of the biosphere. The *psukhē* and the Earth's Intelligent Matter system (*the noosphere*) created by it are now being liberated from the influence of the "mother" Living Matter, defending their own meaningful presence in what is occurring. The psukhē aims "to be purely!"

Plato created philosophy as a way of transforming the psukhē from the potency (dúnamai) into the meaningful presence of what is occurring, or the unmixed/pure (eilikrinēs) phúsis. Philosophy as a specific discourse and way of life purified (kathaírō) the highest aretē that is phrónēsis. Hence, phrónēsis is the unmixed/pure (eilikrinēs) phúsis in the hominin form.

Plato clarified the main meanings of the term phrónesis in the Symposium. 107 They are much richer than the meanings that are conveyed by the words "prudence" or "practical wisdom" used in modern translations. Following Plato, we consider phrónēsis as the intelligibility of "motion and flowing," 108 so as the "benefit of motion." 109 Phrónēsis conveys the inseparable connection between intelligibility and practice, which resulted in the creation of kalós and "brought to perfection" forms (things). 110 *Phrónēsis* is an inherent property of the *aretē*.

The philosopher is "one who longs for and able to provide of phrónēsis." 111 It is phrónēsis that transforms the nature of Intelligent Matter of the Earth into the high-tech cosmic civilisation, as it can be significantly present in the cosmos only in this quality. The products of phrónēsis are modern information and communication technologies, including nanotechnology, biotechnology, information technology, cognitive science, simulated reality, artificial intelligence, superintelligence, cryonics etc. In the last decade alone, phrónēsis has promoted individual and collective meaningful presence in simulated reality technologies, artificial intelligence, superintelligence, 3D bioprinting, mind uploading, chemical brain preservation etc. 112

§ 42. Modern ethics enriches and concretises Plato's ideas. Self-knowledge remains the main way, which reveals the complexity of the meaningful phúsis of the hominin form. Based on it, the psychoanalytic approach¹¹³ and cognitive behavioural therapy¹¹⁴ have been developed, which have proven their

effectiveness in psychiatry. However, professors' of philosophy major achievement is the strengthening of discursive thinking through of the meaningful *phúsis* by phenomenology.¹¹⁵ The principal works of the classical phenomenologists have proved that the intelligibility of *psukhē* "makes physically clean and free from admixture (*kathaírō*)" the source of the meaningful presence.

The source of the meaningful presence of the hominin form is its unmixed/pure (eilikrinēs) phúsis or aretē alēthinē.

All the above facts purify ($kathair\bar{v}$) the view of the two key questions posed in the epigraph of the book: "What is virtue ($aret\bar{e}$)?" and "Can it be taught?"¹¹⁶

With regard to the first question, aretē, the disclosed aretē (aretē alēthinē) and phrónēsis as the highest aretē are different images/likenesses (eikōn) of the subject-predicate relation "Order-hēgéomai." I use aretē alēthinē and phrónēsis as synonyms in this study. 117 As a result, aretē and aretē alēthinē (phrónēsis) denote two different abilities to express the unmixed/pure (eilikrinēs) phúsis in the hominin form. Aretē and aretē alēthinē (phrónēsis) are a different openness (alētheia) of the "Order" and its potency (the agathou dúnamis), which both "lead the way and judge" (hēgéomai).

The meaningful *phúsis* of the hominin form is the continuous and non-linear birth of *psukhē*, where each *psukhē* includes the *aretē* as the potency (dúnamai).

From this follows the understanding of the second question, "Can aretē be taught?"

Aretē is an image/likeness ($eik\bar{o}n$) of the $agath\acute{o}s$. Therefore, the "turns" to $aret\bar{e}$ have equal value with "turns" to $agath\acute{o}s$. This is because,

The first axiom: $aret\bar{e}$ is immanently present in all $psukh\bar{e}$ that is coming into the hominin form.

The second axiom: aretē leads the way and judges all psukhē.

Aretē is the authority and an "ideal" image to imitate in the hominin form, which is second only to the authority and significance of agathós. The concept "aretē" separates and identifies a reduced copy of the subject-predicate relation "Order-hēgéomai." For this reason, on the one hand, aretē shows forth about itself as a particular directive principle. However, on the other hand, it either "comes to be and is always $(\acute{o}n)$ " or "comes to be and not ever is $(\acute{o}n)$." That is, the psukhē can exist without disclosed aretē. These are the psukhē that José Ortega y Gasset's "mass-man" or Martin Heidegger's "the They" ("das-Man")119 characterise.

In fact, politeia and paideia as the *agōn* are not required to disclose *aretē*. The Sophists created these two spheres of activity for another purpose. The mission of paideia is to eliminate the opposition between child's play (*paidiá*) and "serious engagement" (*spoudē*) and, therefore, between individual actions (interactions) in childhood and adulthood, which is subordinate to politeia. Moreover, politeia always strives to subdue paideia. It is now called "State Education Policy." In this case, politeia constrains and obliges paideia to grow up *psukhē* with hidden *aretē* or with "correctness of the view," which is both

adequate and suitable for the ideology of a particular political regime. Such *psukhē* are willingly guided and controlled.

Plato created a philosophy and the Academy to produce the opposite result. While the agon proclaims that it is "important to live in the present!" and qualitatively affects everyday life, the way of life, called "philosophical," practices and advances the upward way into the past. It is the méthodos of a physically cleansing/purification (kátharsis¹²⁰), first of all, of one's aretē as the ultimate beginning of the particular psukhē. Philosophy shows forth the absolute value "to be (predicatively) a particular being" or, equivalently, aretē alēthinē.

For a philosopher, politeia and paideia are nothing more than tools that he uses to help himself first of all, and only then his disciples, to beget and grow up aretē alēthinē. The "Agathós Above All" principle constrains and obliges philosophers "discursively think through" the kalós, including that produced *in* politeia and paideia. As a result, philosophers discern (*theoréo*) and come to know (ginōskō) in politeia and paideia what the sophists cannot "see." This is the agathou dúnamis, which is common to both politeia and paideia, as well as to any other spheres of human activity.

Philosophers practice the agathou dúnamis and achieve results that surpass the "best" practices of the sophists and any other.

Paradoxically, it is the philosophy and its instrumental view that find kalós in politeia and paideia. Moreover, philosophy gives agon their meaning and value. Thanks to the philosophers and the outstanding results of the way of life they advance, politeia and paideia, as spheres of activity, gain their special value in ordinary everyday life. But more importantly, politeia and paideia receive the power and moral authority both to "lead the way and judge, estimate" others.

Let us again refer to Philodemus' History of the Academy to point out the difference between "to advance philosophy and also finish it off." 121

On the one hand, the absolute value of the "turns" to aretē is beyond doubt in the hominin form. Moreover, modern politeia and paideia use their and philosophical vision to show forth "the authoritative judgment" about aretē and agathós man, whose crucial characteristic is the ability to beget aretē alēthinē and grow it up. The inspiring influence of Plato's dialogues and other authoritative philosophers is an important part of the argumentation of any political and educational theory created in the $ag\bar{o}n$ and, especially, legitimised as "sophia." However, all of that is what "finishes philosophy off" and the philosophical vision of aretē and the agathós man, whatever they are called in world history. Because, firstly, all these "theories" proclaim that aretē can be taught and, secondly, because they are created for the agon.

In fact, on the other hand, philosophy is advanced by the close relationship between the scholarchēs and the disciples throughout the life and up to the death of the scholarchēs. A distinctive Platonic heritage, Philodemus, Diogenes Laertius and the Platonic corpus draw attention to this. It is the *sholarchēs* or, equivalently, the agathós man, i.e., the man who has attained and pursues/practises

(epitēdeúō) the aretē alēthinē, who leads his disciples on the upward path into the past. And, just as importantly, the disciples themselves choose the scholarchēs and follow him without coercion. They are guided solely by their inner desire and respect. As a result, the relationship between the scholarchēs and his disciples becomes more like that between friends on a long joint ascent to agathós.¹²²

However, for our study, it is not even this fact that is important, but the fact that *aretē*, just like *agathós*, is *kátharsis*. It is to continuously and non-linearly express a particular way to follow (*méthodos*) "What is *alētheia*?" as unmixed/pure (*eilikrinēs*) *phúsis*.

Aretē is a continuous and non-linear physically cleansing/purification ($k\acute{a}$ -tharsis) of the $psukh\bar{e}$. It is "Know thyself!" for one purpose only. "We shall hold ever to the upward way and pursue/practise ($epit\bar{e}de\acute{u}\bar{o}$) the rightness ($dikaios\acute{u}n\bar{e}$) with $phron\bar{e}se\bar{o}s^{123}$ always and ever."¹²⁴

Thus, only what pursues/practises (epitēdeúō) the aretē alēthinē and agathós always and ever advance philosophy. A philosopher ironically observes politeia and paideia, which seek to teach aretē in the agōn. At the same time, philosophers discern (theōréō) and use the "best" political and educational practices, kalós, to pursue/practise (epitēdeúō) aretē alēthinē. For them, politeia and paideia are tools that, along with other tools, help them "be ever climbing aloft" on "the ladder of love," gaze upward and neglect the things below." 126

Thus, $aret\bar{e}$ $al\bar{e}thin\bar{e}$ for a philosopher is his personal discourse and way of life that he pursues/practices ($epit\bar{e}de\acute{u}\bar{o}$), always and ever, to fasten to $agath\acute{o}s$ and, thereby, connect two equal halves, which "in mutual embraces yearn to be grafted together."¹²⁷

All the foregoing statements give the opportunity to formulate the second axiom of education (and politeia) "Those who transform the Universe." In Laconian style, we will formulate it as "Aretē and Agathós, Unite!"

3.4 To gaze on (contemplate) the perceiving/thinking (nóos)

§ 43. Ethics concretises and fills with meaning the axiom "Aretē and Agathós, Unite!" It expresses the meaningful phúsis of the hominin form. It implies that, first, ethics purifies (kathaírō) it to proclaim everything unmixed/pure (eilikrinēs) and physically clean (katharós), which is characteristic of the hominin form. Second, ethics puts in order/ornaments (kosméō) and arranges (with or together)/puts together (syntassō) all information about a human being to show forth the paradigm for the hominin form or, in other words, the idea of human being and human rights. Third, ethics transforms all who follow this path. Ethics is a kátharsis that purifies (kathaírō) aretē alēthinē and helps to pursue/practise (epitēdeúō) one's pure phúsis. Finally, fourth, ethics impacts society through a particular kátharsis. We must never forget that the charge against Socrates pointed to his active life position, which included, among other things, changing young people's lives. 128

Thus, ethics, like all philosophy, performs the functions of a *sholarchēs*. It inspires its disciples to follow the upward path into the past of the hominin form. Ethics uses the most significant philosophical works and modern technologies to guide and encourage the best representatives of hominin and to pursue/ practise (epitēdeúō) their pure phúsis, aretē alēthinē and, thereby, transform society, making it "free from feud and happy (eudaímōn)."129

Ethics mobilises and guides the best hominin to the fundamental question for all forms. Namely, there is no doubt that the hominin form is a completed result of the *génesis*. The hominin form continuously and non-linearly "comes to be" into the kósmos/agōn and expresses the particular way/manner (trópos) of the meaningful phúsis. However, with all these, the fundamental question for every hominin is the question,

The hominin form comes to be (gignomai) and always is purely (ón),

or

The hominin form comes to be (gignomai) and not ever is (δn) ?

As a matter of fact, it is a question of the hominin form as a "winner" or "loser" in the cosmos/agōn. Maybe the hominin form comes to be (gígnomai) for several million years, to become then "not to be" (not *óntos*)?¹³⁰ Could the hominin era in the solar system be approaching its twilight?

To answer this fundamental question, ethics gazes on (contemplates) everything that expresses the meaningful phúsis of the hominin form. It is mainly and above all, itself. Thus ethics paves the way to the beginning/origin ($arkh\bar{e}$) of the hominin form.

Ethics is the scholarches that ascends on its own and leads fellow travellers and friends (his disciples) along "a certain long, jagged and uphill road" 131 to the unmixed/pure (eilikrinēs) phúsis. Ethics purifies (kathaírō) the history of the hominin form in the $k \acute{o}smos/ag\bar{o}n$ and "exhibits side by side/compares" ¹³² it with the history of other forms.

Ethics offers its disciples a life-long upward path. That is because the ascent to the fundamental question of ethics does not need an answer. Ethics specifies and clarifies the "philosophical" life and invites disciples to follow the trópos, which ensures victory in the cosmos/ $\alpha g \bar{o} n$, i.e., "always is purely (δn) ." It transforms disciples into the agathós man and friend (philos)133 of a way of life that "gives (offers) in an 'up-close-and-personal' way" (paréchō)¹³⁴ the "peace $(eir\bar{e}n\bar{e})^{135}$ and modesty and eunomía and right $(dik\bar{e})$ without stint." ¹³⁶

As a sholarchēs, ethics teaches its disciples, first of all, theáomai, i.e., to gaze on (contemplate) the perceiving/thinking ($n\delta os$). The disciple learns to think discursively through his nóos, equivalent to his nature. "Know thyself!"

The upward path of ethics begins with "What is it?" and "goes through" (dierkhomai¹³⁷) the structure of the psukhē into the aretē.

Moreover, the Greek verb *theáomai* is derived from another verb, *tháomai*, "to gaze at a spectacle." It should be understood as the learning to observe intently, especially to interpret (grasp its significance)¹³⁸ actions (interactions) in one's own perceiving/thinking ($n\acute{o}os$). The disciple learns to discern ($theor\acute{e}o$) and comes to know ($gin\bar{o}sk\bar{o}$) the groups of actions (interactions) that $n\acute{o}os$ produces and imitate them. It helps him, on the one hand, to arrange (with or together)/put together ($synt\acute{a}ss\bar{o}$) all the actions (interactions) of hominin and put in order/ornament ($kosme\bar{o}$) them. On the other hand, the disciple perfects his $k\acute{a}tharsis$. He accumulates experience, and his expression becomes perfect and physically cleaner.

The disciple forms two subject-predicate relations: nóos-noiéō and nóos-peithó, which help him to gaze on (contemplate) (theáomai) nóos and imitate his actions (interactions) at a new qualitative level. In particular, the disciple begins to pursue/practise (epitēdeúō) "What is it?" as "What is alētheia?" which means understanding nóos as an image/likeness (eikōn) of the "Order-hēgéomai," and not the ultimate beginning of the hominin form.

The *méthodos* "What is *alētheia*?" fastens/binds (*háptō*)¹³⁹ a rising man to the *agathós*. *Aretē* of the disciple unites with the *agathós*, and he becomes a friend (*phílos*) of ethics and, moreover, a philosopher, and therefore a *sholarchēs*. The "*Aretē* and *Agathós*, Unite!" principle has triumphed and reproduced itself.

A friend (*philos*) of ethics is always actively participating in the spectacle that the upward path into the past reveals to him. It is vital for a philosopher not only to "go through" (*dierkhomai*¹⁴⁰) $n\acute{o}s$ and "discursively think through" as $n\acute{o}s$ "comes to be" in the cosmos/ $ag\bar{o}n$ and performs its actions (interactions). It is equally essential for a philosopher to interpret and express what he sees through his way of life – $arete~al\bar{e}thin\bar{e}$.

§ 44. There is an obvious difference between Australopithecus and modern humans (*H. sapiens*). The generation of *H. sapiens*, *aware* of the rate of the complication of Intelligent Matter of the Earth, should understand that after 6–7 million years of development, the generation of the Man of the Future will perceive the quality of life of *H. sapiens* in much the same way as we now perceive the quality of life of Australopithecus. Ethics exhibits the unity of Australopithecus, *H. sapiens* and the Man of the Future.

The "Aretē and Agathós, Unite!" principle, which ethics promotes and imbues with meaning, proclaims the absolute value "to be (predicatively) a particular being" or, equivalently, aretē alēthinē. As a result, each friend (phílos) of ethics pursues/practices (epitēdeúō) "What is this?" and contemplates (gazes on) (theáomai) nóos as a particular physical cleansing/purification (kátharsis).

At the same time, ethics develops and promotes technologies that make it possible to compare particular *kátharsis* to improve them and unite them, on the one hand, and, on the other hand, to constrain and oblige them.

Here are some examples of my kátharsis:

1 The first stages of the *kátharsis* awaken the fear of philosophy. The intelligibility of the complexity of *my psukhē* consistently liberated *aretē* from

oblivion. Cognitive and behavioural reactions, hidden in the darkness of the subconscious, became transparent to being and the Others. Initially, the nature of fear was explained by the expectation of evaluation of my psukhē by the Others. Much later, this fear was replaced by the horror to find yourself acting like a "mass-man" or a "das-Man" ("the They"). 142 Pierre Hadot divided philosophers into those who are doing philosophy and producing discourse about philosophy. 143 The former move towards the meaningful phúsis, transforming their discourse and way of life in accordance with the agathou dúnamis liberated from aretē. According to Heidegger, they continuously increase the degree of alert awareness of their Dasein. 144 The latter have lost touch with the inner source (aretē), so they are lost and err in what is occurring. They "firmly rooted themselves in their grand constructions, their worlds of values and metaphysical back-worlds."145 I was afraid to find myself among the latter.

- 2 The kátharsis is accompanied by eudaimōnia and is perceived as liberation, freedom. A physically cleansing/purification of the aretē liberated the agathou dúnamis that focused and expanded the limits of individual self-realisation. I heard the voice of my daímon. I have experienced enlightenment and detected lighting that helped me overcome my fear of philosophy and continue the kátharsis. The enlightenment was accompanied by eudaimōnia, which gave confidence in the transformations that had begun and convinced of the correctness of the chosen way of life. Eudaimonia exalted above ignorance and endowed with the qualities of daímōn: to inspire people with an idea and to lead them. Eudaimonia set me free and motivated me to help others liberate the agathou dúnamis from aretē and use it for my own benefit. *Eudaímōnia* helped to put into order/ornament (kosméō) the meaningful presence of my psukhē in what was occurring. In fact, eudaimōnia turned my psukhē's daily struggle with social exclusion and "existential vacuum" 146 into an obsession to do my own business, namely, to "persuade and serve" the agathós.
- 3 The kátharsis liberated the historical man in me. I saw myself as a fragment of the fluidity and permeability of the agathós. This allowed me to form "nóos-noiéo" and "nóos-peithó" as the méthodos "What is aletheia?" I mastered the skill of holistic intelligibility of the nóos. In this projection, the historical man was revealed as psukhē with various limits of permeability. The historical man was notable only for the possibilities to use the agathou dúnamis. Australopithecus, H. sapiens, the Man of the Future and any other form of the historical man differ from each other only by "the restraint of letting-be,"147 or by the quality of phrónēsis. Phrónēsis, as the unmixed/pure (eilikrinēs) meaningful phúsis of the hominin form, divides and, at the same time, unites generations of Intelligent Matter on any and between any natural and/or artificial cosmic objects. I saw myself among historical men, and it made me respect my past, appreciate the present and live for the sake of the future.

- 4 The *kátharsis* revealed *time*, i.e., it sharpened the perception/thinking of the fluidity and eventfulness. At first, each disclosed account of the complexity of *my psukhē* seemed the last to me. I perceived/thought (noiéō) it as the ultimate abode and total freedom. There was a desire to stop and settle in it forever. However, Heidegger was right in writing about "a false timelessness." Behind the disclosed account of the complexity, a new account was found. It declared itself and required (*motivated*) disclosure. The *kátharsis* continuously and non-linearly moved towards the meaningful *phúsis*. It transformed the intelligibility of the meaningful *phúsis* into a need and a way of life. Disclosure of each new account of complexity made the *value* of time evident. The fluidity of time defined the eventfulness of my presence. I learned to control the eventfulness: to obey and subordinate the "inner politeia" to what was accompanied by *eudaimōnia*. As a result, I have found my rhythm of life, corresponding to the focus and limits of self-realisation of my *psukhē*.
- 5 The *kátharsis* revealed the reasons why the philosophy of "Being and Time" is often perceived as a memento mori and Heidegger's existentialism as a philosophy of despair. 149 I have not experienced the "horror" of life Heidegger warned about. The state "I went astray" (die Irre) sometimes occurred, 150 but I have not experienced fear and confusion about it. According to Koyre, Heidegger used the term "die Irre" to describe "a state or area of complete confusion, vague darkness in which a person finds neither support nor means to continue his journey, and where he errs as a victim of chaos." 151 However, I have experienced opposite emotions: excitement, exaltation or eudaimonia. Heidegger warned that "Dasein always has some mood," and it is somehow located. 152 Indeed, my kátharsis was initially conditioned to the search for an answer to "What is man, and what is his place in the Universe?" Posing the question creates a "correct vision" in the hiddenness, while the absence of the question causes despair and memento mori. My mood to the question *guided* me through the coming into being states of "I went astray" and did not allow me to "astray in errancy." My physically cleansing/purification and then my actions in disclosedness were always accompanied by the conviction of their correctness and necessity. They were always accompanied by eudaimonia. I perceived actions not accompanied by eudaimōnia as erroneous and immediately corrected myself. I listened to only arete's "behests."
- 6 The *kátharsis* liberated the "Order-*hēgéomai.*" *Agathós* was present in the *aretē*, the *psukhē* and Intelligent Matter. It purified (*kathaírō*) the view to the question, "What is man, and what is the meaning of his presence in the Universe?" *The perspective* of answers to the question consisted of two parts, resulting from the rethinking of Heidegger's definition of humanism.
- (a) "Why the essence of the human being is essential for the *alētheia* (disclosedness) of being?" ¹⁵⁴ It is because the meaningful *phúsis* of the hominin

form is an important part of the phúsis of what is occurring. The kátharsis reveals that the *psukhē* from birth concentrates in itself a power that surpasses the functions of neural structures. This power is transmitted by the primordial agathou dúnamis that has created the "Order" and takes care of it, transforming the potency (dúnamai) of the coming into being forms into the energy of the meaningful presence of what is occurring. Ethics proves that the ontogeny of the psukhē should be considered the liberation of the highest aretē, and not a continuous complication of the structure and functions of neural ensembles. Phrónēsis characterises the meaningful phúsis as the self-care shown by agathós, i.e., as the potential of cosmic force.

Modern liberal political theories promote the free choice of a way of life. However, what kind of freedom of choice can we talk about if the subjectpredicate relation "Order-hēgéomai" determines the focus and limits of the self-realisation of psukhē? The psukhē is an emanation of Intelligent Matter of the Earth, up to the initial state of Y-Matter. The hominin form, like any other form, is a way of caring for the "Order," shown by the agathou dúnamis.

The agathós of what is occurring determines the individual discourse and way of life. It motivates the kátharsis, which liberates the agathou dúnamis from aretē and thereby promotes care for the meaningful presence of what is occurring. The intelligibility of each new account of perceiving/thinking (nóos) reinforces the psukhē's meaningful presence in the Universe. The more the psukhē succeeds in moving forward with the holistic intelligibility of the cosmos, the more it shows an obsession to transform hiddenness ($l\bar{e}th\bar{e}$) into disclosedness (alētheia) or to fulfil its mission which is to master and use phrónēsis. The individual way of life proposed by nature is the ouroboros as a symbol of eternal cyclic renewal. Heidegger called this state "fundamental," in the most literal sense. It "is driving one and what, time and again, makes one the beginner of one's life."155

Thus, the idea of the meaningful phúsis of the hominin form is disclosed in phrónēsis. Phrónēsis is a new way/manner (trópos) to use the agathou dúnamis to transform the cosmos and achieve a new regulatory compromise. The idea of human being consists in the most complete expression the agathou dúnamis, or the kátharsis. Man does not observe events in the Universe. He is an important actor in continuous and non-linear complications of the Universe.

(b) "Why what matters is not the human being simply as such?" 156 For the subject-predicate relation, "Order-hēgéomai" defines the focus and the limits of the particular kátharsis. The influence of agathós as a source of meaningful presence is providential and directive for any form. What is occurring determines the agathou dúnamis of the coming into being forms and creates the conditions for their transformation into the energy of the meaningful presence. Consequently, phrónēsis, as a moulding motion and care for kalós and agathós, is not man-made. It is created by the unmixed/pure (eilikrinēs) phúsis, i.e., by the Universe, and has a predetermined focus and limits of permeability in physically clean (katharós).

§ 45. An essential result of the philosopher's training is the ability to "speak about past events as if he had actually been present." The philosopher gazes on (contemplates) (theáomai) the hominin form not as what it is, i.e., like the present, which, it would seem, is frozen in time. For the philosopher, the hominin form is a competitive dúnamai that continuously and non-linearly "comes to be" (gígnomai) in the cosmos/agōn with the "always is purely (ón)" goal.

Moreover, the philosopher's kátharsis expresses this competitive dúnamai. The way of life, called "philosophical," was created just for this purpose. It is as far as possible "to be like" (hómoios) the unmixed/pure (eilikrinēs) phúsis and, therefore, to be right/righteous (díkaios). Since Plato, all who devote themselves to philosophy develop and advance the fundamental idea of the "Agathós Above All," which means to imitate what comes to be (gígnomai) and always is purely (ón) or, equivalently, pursue/practise (epitēdeúō) aretē alēthinē always and ever.

At this point, I want to emphasise the unique feature of the "Agathós Above All" principle, revealed only in ethics. As a branch of philosophy, ethics exhibits two different connotations that exponentially reinforce each other. Ethics is both the inspiring influence of philosophy, peculiar to the sholarchēs, and the natural need of the disciple. These connotations, or perhaps natural forces, find each other and unite for the same purpose. The "Aretē and Agathós, Unite!" principle "continuously connects insight (enlightened inner perspective) to the necessary outward behaviour" to care for attend (epimeléomai) about the hominin form. 159 It means "to give (offer) in an 'up-close-and-personal' way" peace (eirēnē) and modesty and eunomía and right (díkē) without stint. 160 Moreover, it is to promote dikaiosúnē (rightness), homónoia 161 (likemindedness 162) and philíā. 163

Thus, a philosopher does not even allow the "losing" of the hominin form in the cosmos/ $ag\bar{o}n$. His $k\acute{a}tharsis$ demonstrates the philosopher's mission to be "the guardian of mortal men." ¹⁶⁴ In its turn, the individual missions collectively represent the mission of the whole philosophy to guarantee the hominin form "always is purely $(\acute{o}n)$ " in the expanding cosmos.

That is why to pursue/practise (epitēdeúō) an aretē alēthinē is to "finish off, complete, bring to perfection" the hominin form and, therefore, to make it "free from feud and happy (eudaímōn)." That is why "those who pursue philosophy aright study nothing but dying and being dead." While the agōn of politeia and paideia decides matters of war and peace in the present and bases its decisions solely on the analysis of current events, ethics and its friends gaze on (contemplate) and discursively think through events in the hominin form completely different. For them, it is an upward path to a fundamental question of ethics. Peace and war are the right/righteous (dikaios) and unright/unrighteous (ádikos) way/manner (trópos) to pursue/practise (epitēdeúō) alētheia, 168 which, as a consequence, determines the future of the entire hominin form. It is either "to be unmixed/pure (eilikrinēs)" or "not to be" (not óntos). 169

Émile Benveniste showed the difference between peace and war in modern and ancient societies. 170 "For us peace is the normal condition, which is interrupted by a state of war; for the ancients, the normal state was war, to which peace puts an end."171 An important reason that has changed the relationship between peace and war is the increased influence of politeia and paideia. At the same time, philosophy and its studies play an essential role in this influence.

Philosophy, on the one hand, underpins the value of any political and educational theory. On the other hand, and this is more important, philosophy continuously proclaims eunomía, i.e., "ideal" (kalós) political and social systems in which the laws of the cosmos determine people's way of life.

What leaders today express as "World Peace!" Plato described much more forcefully and convincingly, "at the same time, eudaimon (truly happy) and agathós should go together."172 That is, the happiness of people and the laws of the cosmos are one.

Therefore, the "Agathós Above All" principle makes people eudaimon (truly happy). It harmonises the laws of the cosmos and society. It thereby unites arete and agathós to exhibit this unity as that which "comes to be" (gígnomai) and "always is purely" (ón). Philosophers live and die for the sake of this higher idea.

Philosophers express their way of life with Kallipolis, Magnesia, the City of God, and other eunomos. It is the only way/manner (trópos) to show forth the right/righteous (díkaios) peace. Peace is always only that which "is like" (hómoios) to the unmixed/pure (eilikrinēs) phúsis and, consequently, to the fact that there "always is purely." While "war" is always something that violates the principle "Do not step over the equal/equivalent (isos¹⁷³) and right/righteous (dikaios)."174 War humiliates and destroys the hominin form, making it "not to be" (not *óntos*).

However, the méthodos "What is alētheia?" which philosophers show forth and pursue/practise (epitēdeúō) is having a hard time finding loyal backers in the mass culture. Philosophers are átopos: their discourse is lacking in clarity and unnecessarily complicated, and their way of life is not cool and popular. Philosophy is at all times unadapted and awkward for the agon.

Hominin are "always is purely (δn) " and have a history in the expanding cosmos due to the phúsis that causes their form. Ethics defines the meaningful phúsis as an ouroboros, or "eternal" cyclic seek (zēteō) of the pure phúsis to fasten/bind (háptō) to it and pursue/practise (epitēdeúō) it, as far as possible "to be like" (hómoios) it.

Moreover, Ethics defines the very hominin form as a competitive dúnamai that causes the expanding cosmos. Ethics argues that the best representatives of hominin, the agathós man, can go through (dierhomai) the lēthē into the arkhē of the hominin form and further towards the ultimate arkhē.

The agathós man seeks ($z\bar{e}te\bar{o}$), fastens/binds to ($h\acute{a}pt\bar{o}$) and, as far as possible, assimilates (homoió \bar{o}) with the pure phúsis. ¹⁷⁵ Moreover, in everyday life, he cares for/attends (epimeléomai) a new way/manner (trópos) of each hominin and the hominin form as a whole to follow the norms about kalón, dikaíon

and agathôn. 176 That is, in other words, the agathós man transforms the hominin form into a competitive dúnamai, which is not only "always is purely (δn) " and has its history but is also a part of the pure *phúsis* that causes the expanding cosmos.

Notes

- 1 Teilhard de Chardin [1987] and Semenova [2009].
- 2 https://www.sfn.org/
- 3 https://www.jneurosci.org/content/about-jneurosci
- 4 Nicholls et al. [2008] and Kosslyn and Miller [2015].
- 5 See especially Bickle et al. [2019].
- 6 The author relied on a broad empirical and theoretical basis upon this matter. See Bibliography.
- 7 For example, Edelman and Mountcastle [1978], Vernon B. Mountcastle [1998], Terrence Deacon [1998], Torkel Klingberg [2010] and Konstantin Anokhin [1978] etc.
- 8 See Bell [2006], Borsboom [2005], Bostrom [2005], Castells [2009], Chorost [2016], Clarke [2000], Kurzweil [2006], Castells and Himanen [2014], More and Vita-More [2013], etc.
- 9 Bostrom [2005].
- 10 http://humanityplus.org/
- 11 Bazaluk [2005].
- 12 For example Vernadsky [1987].
- 13 The stages of neuro-evolution in BioIntelligent structures are considered in research works of John Nicholls [Nicholls et al., 2008], Kenneth O. Stanley [Stanley & Miikkulainen, 2002], Risto Miikkulainen [Gomez & Miikkulainen, 1999], Martin Mandischer [Mandischer, 1995] and others.
- 14 Bazaluk [2005].
- 15 For example, Vernadsky [1977, 1987].
- 16 Cephalization (from the Greek kephalē, κεφαλή head) enhanced development of the head part of the body in bilaterally symmetric animals in the process of their evolution.
- 17 Anokhin and Chernigovskaya [2008].
- 18 Ramachandran [2012], Iacoboni [2011], Anokhin and Chernigovskaya [2008], Kosslyn [1980], Kosslyn and Miller [2015], Dehaene [2011], Pinker [2009] and Stanley and Miikkulainen [2002].
- 19 The first appearance of the concept of reflex dates back to the physics of René Descartes. Later it has been developed by such physiologists and medics as Ivan Sechenov, Ivan Pavlov, Charles Scott Sherrington etc.
- 20 The boy became well known as "Victor of Aveyron."
- 21 This idea was proposed and developed by the classics of American psychology Granville Stanley Hall and James Baldwin at the end of the 19th-the beginning of the 20th century.
- 22 Jung [1981] and Semetsky [2012].
- 23 Stephen Kuffler and John G. Nicholls [Kuffler & Nicholls, 1979] and John G. Nicholls, Robert Martin, Bruce Wallace, and Paul Fuchs [Nicholls et al., 2008].
- 24 Wu [2018].
- 25 Kastrup [2019].
- 26 Hassin [2013].
- 27 Porshney [2006].
- 28 "For Plato, knowledge is the guide to the realm of the divine" [Jaeger, 1947: 173].

- 29 Nicholls et al. [2008] and Wiesel [2009].
- 30 "Cosmology is the study of the nature and origin of the universe" (Cambridge Dictionary). "Cosmology is the scientific study of the universe and its origin and development" (Oxford Learner's Dictionaries). "Cosmology, field of study that brings together the natural sciences, particularly astronomy and physics, in a joint effort to understand the physical universe as a unified whole" (Encyclopedia Britannica).
- 31 "Anthropology is the study of the human race, its culture and society, and its physical development" (Cambridge Dictionary). "Anthropology is the study of the human race, especially of its origins, development, customs and beliefs" (Oxford Learner's Dictionaries). "Anthropology, 'the science of humanity,' which studies human beings in aspects ranging from the biology and evolutionary history of Homo sapiens to the features of society and culture that decisively distinguish humans from other animal species" (Encyclopedia Britannica).
- 32 Cicero [1933: 1.19] and Horky [2020: 171–181].
- 33 Protagoras [343b2], Alcibiades [1 124a7-b1] and Phaedrus [229e5].
- 34 Republic [9.591e].
- 35 Apology [23b].
- 36 φιλοσοφίαν άληθη [Republic 7.521c]. The adjective άληθη, alēthê is also translated as "unhidden."
- 37 Bewußtsein-von-etwas [Husserl, 2004].
- 38 Martin Heidegger used this term to designate the gaze on the disclosedness of the psukhē as being itself. See Heidegger [1997], Gonzalez [2009] and Sheehan [2014].
- 39 See McNulty [2016].
- 40 Meno [72c].
- 41 Especially see Definition in Greek Philosophy. Edited by David Charles [2010].
- 42 Charles [2010: 3].
- 43 Apology [36c4–36d1].
- 44 Gonzalez [2009: 330].
- 45 See Annas [2017].
- 46 Peithó (πείθω), to persuade, usually by fair means [Liddell & Scott, 1940]. πείθων ύμῶν καὶ νεωτέρους καὶ πρεσβυτέρους, (Socrates) "persuading you, young and old" [Apology 30a6–7]. Peithó ($\pi \epsilon i\theta \omega$) – is the basis of rhetoric [Gorgias 453a1–7]. See Mintz [2018: 52-53].
- 47 Καλλίπολις [Republic 2.369b-4.445e].
- 48 Μαγνήτων πόλει. The first mention [Laws 9.860e].
- 49 Nóos (νόος, noun; contracted form: Noûs, νοῦς), mind, as employed in perceiving and thinking; an act of mind (thought) [Liddell & Scott, 1940] is equal to intellectus and intellegentia (from Latin).
- 50 Liddell and Scott [1940].
- 51 Phaedo [66a].
- 52 Timaeus [51d].
- 53 ζῶον [*Timaeus* 30b].
- 54 For example, Plato used the expression "θεοῦ νόησις," "intelligence of God" [Cratylus 407b].
- 55 νοῦς ἄρχει σύμμαχος ἐκείνοις [*Philebus* 30d].
- 56 Heidegger [1998]. Translated by Thomas Sheehan.
- 57 Symposium [212a4-5]. Translated by Harold N. Fowler with modification. For discussion, see Annas [2002, 2017], Capra [2015], Fierro [2003] and Haake [2020].
- 58 Through the noun noûs [Thayer, 1995].
- 59 For example, ἐνόησέν τε καὶ ἔγνω αὐτὸ [Republic 6.508d5].
- 60 The noun noûs, which forms the verb $noi\acute{e}\bar{o}$, is a shortened form of the noun $n\acute{o}os$.
- 61 "to know, especially through personal experience (first-hand acquaintance)" [Thaver, 1995].

- 62 τίποτ' ἔστι. "Socrates' most significant philosophical innovation, in Aristotle's view, was to focus on the search for definitions, raising and attempting to answer his famous 'What is it?' question (*Metaphysics* 1078b22ff)" [Charles, 2010: 1].
- 63 "getting to the bottom of a matter" [Thayer, 1995].
- 64 "to exhibit (in person) or disclose (by words)" [Thayer, 1995].
- 65 ζητοῦντι καὶ ἐμφανίζοντι λόγω τί ποτ' ἔστι [Sophist 218b9-c1].
- 66 The fact that a Verb usually forms the predicate is explained by Aristotle (Arist. Int. 16b6) [Liddell & Scott, 1940].
- 67 τὸ πρᾶγμα αὐτὸ [Sophist 218c]. See discussion [Gill, 2010: 174].
- 68 *Timaeus* [52a-b]. See, in particular, Ademollo [2018: 67-69] and Zeyl and Sattler [2022]. According to Plato, "there is, indeed, continuous change in the sensible world, but there is also some stability, and there are patterns and regularities in the change. He thinks that he is in a position to recognise these elements of stability because he, unlike his opponents, admits in his ontology the universal properties of the changing things, namely the forms, by participating in which the changing things are whatever they are" [Ademollo, 2018: 77-78].
- 69 See *Meno* [72c7ff.], Charles [2010], Brown [2010] and Gill [2010]. "A good definition of F must give that one thing which is common to all and only Fs, and which is that through which all the Fs are F. A definition must give the 'what is it', the essence of F, i.e. that which explains why all the Fs are F" [Brown, 2010: 151–152].
- 70 Republic [6.508d4-5].
- 71 Timaeus [29a5-6].
- 72 δηλοῖ γὰρ ἤδη που τότε περὶ τῶν ὄντων ἢ γιγνομένων ἢ γεγονότων ἢ μελλόντων, καὶ οὐκ ὀνομάζει μόνον ἀλλά τι περαίνει, συμπλέκων τὰ ῥήματα τοῖς ὀνόμασι [Sophist 262d4–6]. "For when he says that, he makes a statement about that which is (ὄντων) or is becoming (γιγνομένων) or has become (γεγονότων) or is to be (μελλόντων); he does not merely give names (ὀνομάζω), but he concludes by combining verbs with nouns." Translated by Harold N. Fowler. See the discussion [Gill, 2010: 183–184].
- 73 For the synonymy of εἶδος and ἰδέα to refer to forms in Plato's dialogues and discussion, see Gonzalez [2009: 85–127]. Hominin realise their limitations [Republic 6.509a]. Due to the varying quality of the lógos [Sophist 262e–264a] and the difficulty with the "to conceive and bring forth" the phrónēsis [Symposium 209a].
- 74 Republic [6.508b-6.509c].
- 75 Republic [6.509d-6.511e].
- 76 Republic [7.514a-7.520a].
- 77 αἰτίαν δ' ἐπιστήμης οὖσαν καὶ ἀληθείας [Republic 6.508e].
- 78 Republic [6.509b].
- 79 τοῦ ἀγαθοῦ δύναμις [*Philebus* 64e6].
- 80 I follow David Charles, "In the *Meno*, when Socrates seeks an account which will answer his 'What is F?' question, his target is described in the following terms:
 - [A] it is that one thing in virtue ($aret\bar{e}$) of which all cases of F are F (72c7ff.);
 - [B] it is graspable without specialised knowledge by intelligent interlocutors (75d2–7);
 - [C] it is such that if one does not know it, one cannot know any other feature of F (71b3–7);
 - [D] it is such that if one does know it, one will be able to distinguish on its basis any case of F from any case which is not F (72c8–d1)" [Charles, 2010: 5–6].
- 81 See Charles [2010: 5-6].
- 82 See Wilson and Shpall [2016].
- 83 Wilson and Shpall [2016].
- 84 "Act! act! it is to that end we are here." Johann Gottlieb Fichte formulated this imperative at the end of the 18th century [The Christian Pioneer, 1842: 182].

- 85 Fierro [2003: 67].
- 86 Bazaluk [2016].
- 87 "I must beware lest I might undergo (paskhein) the very thing which those ones undergo (paskhein) who theōrein and to look at (σκοπέω) the sun during an eclipse" [Phaedo 99d5-6]. Translated by Gwenda-lin Grewal with modifications.
- 88 Gonzalez [2009: 29–30].
- 89 Plato called ignorance the worst of evils [Gorgias 527e].
- 90 Phaedo [99d5].
- 91 The word aretē comes from the adjective áristos, the superlative degree of agathós. It means the personal quality of being agathou, See Robinson [1995] and Burnyeat [2003]. "In Apology (Socrates' defence speech), Crito, and Gorgias) we have seen that virtue ($aret\bar{e}$) is not just one good thing ($agath\acute{o}s$) for me to have, something that might be measured against other good things (agathós), such as wealth or security. Rather, virtue ($aret\bar{e}$) is a «divine» good ($agath\acute{o}s$) – it is either the only unconditional good (agathós) or the only thing which is good (agathós) at all" [Annas, 2002: 55] with modification.
- 92 Jaeger [1946: 286].
- 93 See Annas [2017].
- 94 Annas [2017: 58].
- 95 ἀρετὴν δὲ διώκειν [Theaetetus 176b-c].
- 96 "Thus aretē amounts to 'success, supremacy, being better' than others" [Griffith, 1990: 1881.
- 97 "a turn of the psukhē (ψυχῆς περιαγωγή) from a day whose light is darkness to the veritable day" [Republic 7.521c]. Translated by Paul Shorey.
- 98 Laws [1.631b-e].
- 99 τὴν δὲ οὐρανοῦ περιφορὰν ἐξ ἀνάγκης περιάγειν φατέον ἐπιμελουμένην καὶ κοσμοῦσαν [Laws 10.898c]. Translated by R.G. Bury with modification.
- 100 Laws [10.898c]. ἀρετὴν, accusative singular of arete. Translated by R.G. Bury with modification.
- 101 Actions (interactions), which are indicated by the verb árkhō (ἄρχω).
- 102 ἀγαθὸς ἀνὴρ. See *Laws* [2.660e]. According to Plato, the *agathós* man is an example to mīmēsis [Republic 6.500c; 9.590e-9.591].
- 103 Symposium [212a4-5].
- 104 Theaetetus [210b].
- 105 φιλοσόφου ψυχὴ μάλιστα ἀτιμάζει τὸ σῶμα καὶ φεύγει ἀπ' αὐτοῦ [*Phaedo* 65d].
- 106 Phaedo [65a].
- 107 Symposium [202a, 209a].
- 108 ή "φρόνησις": φορᾶς γάρ ἐστι καὶ ῥοῦ νόησις [Cratylus 411d].
- 109 εἴη δ' ἂν καὶ ὄνησιν ὑπολαβεῖν φορᾶς [Cratylus 411d].
- 110 Cratylus [416d].
- 111 φρονήσεως ἐπιθυμητής καὶ πόριμος [Symposium 203d5].
- 112 We recommend one of the recent generalizing studies in this field, a collective monograph edited by leading experts in transhumanism Max More and Natasha Vita-More [More and Vita-More, 2013].
- 113 Freud [1922, 1989] and Jung [1981].
- 114 For example, a National Health Service (England) initiative "Improving Access to Psychological Therapies (IAPT)." See https://www.nice.org.uk/about/ what-we-do/our-programmes/nice-advice/iapt
- 115 Husserl [1998, 2004], Derrida [1999] and Heidegger [1949, 1961, 1997, 1998].
- 116 Bury [1937: 304–305].
- 117 In fact, their meanings are different, but this difference is the subject of our next study.

- 118 At the beginning of the 20th century, Jose Ortega y Gasset gave the following definition of a mass-man: "The mass is all that which sets no value on itself good or illbased on specific grounds, but which feels itself 'just like everybody,' and nevertheless is not concerned about it; is, in fact, quite happy to feel itself as one with everybody else" [Ortega y Gasset, 1932: 7].
- 119 In "Being and Time" Heidegger wrote: "The Others' whom one thus designates in order to cover up the fact of one's belonging to them essentially oneself, are those who proximally and for the most part 'are there' in everyday Being-with-one-another. The "who" is not this one, not that one, not oneself [man selbst], not some people [einige], and not the sum of them all. The "who" is the neuter, the "they" [das Man]" [Heidegger, 1997: 151].
- 120 Kátharsis (κάθαρσις, noun, from *kathaírō*), physically cleansing/purification [Liddell & Scott, 1940; *Sophist* 230b–e]. See discussion [McPherran, 2007: 92–93; Capra, 2015].
- 121 PHerc. 1021. Col. I 9–17 [*Plato's Academy*, 2020: 280–281]. Translated by Paul Kalligas and Voula Tsouna.
- 122 "Hence, the teaching and training of philosophy were intended not simply to develop the intelligence of the disciple, but to transform all aspects of his being intellect, imagination, sensibility, and will. Its goal was nothing less than an art of living, and so spiritual exercises were exercises in learning to live the philosophical life. Spiritual exercises were exercises because they were practical, required effort and training, and were lived; they were spiritual because they involved the entire spirit, one's whole way of being. The art of living demanded by philosophy was a lived exercise exhibited in every aspect of one's existence" [Hadot, 1995: 21].
- 123 Phronēseos (φρονήσεως), genitive singular of phrónēsis.
- 124 τῆς ἄνω ὁδοῦ ἀεὶ ἐξόμεθα καὶ δικαιοσύνην μετὰ φρονήσεως παντὶ τρόπω ἐπιτηδεύσομεν [Republic 10.621c4–5]. Translated by Francisco J. Gonzalez with modification [Gonzalez, 2009: 244].
- 125 See Carone [2007: 216–221], Fierro [2003: 72–74], McPherran [2007: 77–92] and Sheeley [2021].
- 126 Phaedrus [249d]. Translated by Harold N. Fowler.
- 127 Symposium [191a-b]. Translated by Harold N. Fowler.
- 128 The third paragraph of the official charge ran, "He also does wrong by corrupting the young" [Parker, 2000: 41].
- 129 ἀστασίαστα καὶ εὐδαίμονα τὰ τῶν ἀνθρώπων ἀπηργάζετο γένη [Laws 4.713e3]. Translated by R.G. Bury with modification.
- 130 Republic [5.479d4].
- 131 τινα όδὸν μακράν τε καὶ τραχεῖαν καὶ ἀνάντη [Republic 2.364d3]. Translated by Paul Shorey with the modifications.
- 132 Meanings of the verb παραδείκνυμι [Liddell & Scott, 1940].
- 133 "The uses, especially the Homeric ones, of Gr. *phílos* and its derivatives point in the same direction, however unsure we may be about the full sense. The social meaning is prior and connected in particular with hospitality the guest is *phílos* and benefits from the specific treatment designated by *philein* 'to be hospitable' but also with other forms of attachment and mutual gratitude: *philein*, *philótēs* may imply the exchange of oaths and *phílēma* denotes the 'kiss,' the regular form of greeting or welcome among *phíloi*. Emotional values appear when the term is used with reference to relations within a family group: *phílos* 'dear', *philótēs* 'love'" [Benveniste, 1973: 384].
- 134 Paréchō (παρέχω), (from pará, "from close-beside" and έxō, "have") properly, have close beside, i.e., give (offer) in an "up-close-and-personal" way. Note the force of the prefix (para) [Thayer, 1995].
- 135 Eirēnē (εἰρήνη), (from eirō, "to join, tie together into a whole") properly, wholeness, i.e., when all essential parts are joined together; peace [Thayer, 1995].

- 136 εἰρήνην τε καὶ αἰδῶ καὶ εὐνομίαν καὶ ἀφθονίαν δίκης παρεχόμενον [Laws 4.713e1-2]. Translated by R.G. Bury with modification.
- 137 Dierkhomai (διέρχομαι, verb, from δἴα-, through, thoroughly + ἔρχομαι, érkhomai, to come, go), to go through, pass through [Schur, 2015; Gonzalez, 2009: 207–208; McPherran, 2007: 92].
- 138 See Thaver [1995].
- 139 [Phaedo 65b7].
- 140 "In its literal and etymological senses, prattō 'to do, fare' is an impeccable synonym for dierkhomai, inviting a comparison between paths of discourse and method. And pratto is aptly translated by the English word fare because both words, like dierkhomai, are anchored in the semantic idea of 'passing through'" [Schur, 2015].
- 141 Ortega y Gasset [1932: 7].
- 142 Heidegger [1997: 151].
- 143 Hadot [1995].
- 144 Heidegger regarded philosophy as the art of "existence's alert awareness for itself" [Safranski, 2005: 207].
- 145 Safranski [2005: 229].
- 146 Frankl [1990].
- 147 Heidegger [1961].
- 148 Safranski [2005: 300].
- 149 Kovré [1999].
- 150 "Man errs. Man does not merely stray into errancy. He is always astray in errancy, because as eksistent he in-sists and so already is caught in errancy" [Heidegger, 1961].
- 151 Kovré [1999].
- 152 Heidegger [1997].
- 153 Heidegger [1998]. Translated by Thomas Sheehan.
- 154 Heidegger [1949: 263].
- 155 Safranski [2005: 165].
- 156 Heidegger [1949: 263].
- 157 Benveniste [1973: 771].
- 158 These are the meanings of the verb φροντίζω (phrontízō) [Thayer, 1995], which is one of the key verbs in philosophy.
- 159 ἐπιμελούμενον ἡμῶν [*Laws* 4.713e1].
- 160 Laws [4.713e1–2]. Translated by R.G. Bury with modification.
- 161 Homónoia as an important political goal at which lawgivers aim can be found see Statesman [311b], Alcibiades 1 [126c-127d] and Republic [351d]. I follow Thornton C. Lockwood [Lockwood, 2020].
- 162 I follow Sarah Broadie, Christopher Rowe and Thornton C. Lockwood in translating ὁμόνοια literally as "like-mindedness" rather than the more common "concord." See Lockwood [2020].
- 163 ή δὲ δικαιοσύνη ὁμόνοιαν καὶ φιλίαν [*Republic* 1.351d5]. Philíā (φιλία, noun), "affection, gratitude, and admiration, feelings that are grouped together under the term *philiā*" [Brisson, 2007: 234].
- 164 Cratylus [398a].
- 165 ἀπηργάζετο, [Liddell & Scott, 1940; Laws 4.713e3].
- 166 Laws [4.713e3]. Translated by R.G. Bury with modification.
- 167 Phaedo [64a]. Translated by Harold N. Fowler.
- 168 Apology [36c4–36d1] and Phaedo [66b3–6].
- 169 τε μὴ ὄντος καὶ τοῦ ὄντος είλικρινῶς [*Republic* 5.479d4]. See discussion [Burnyeat, 2003: 12-16; Ademollo, 2018: 61-62]. The adverb είλικρινῶς is derived from the adjective εἰλικρινής (eilikrinēs).
- 170 Benveniste [1973: 426–427].

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- 171 Benveniste [1973: 427].
- 172 εὐδαίμονας ἄμα καὶ ἀγαθοὺς ἀνάγκη γίγνεσθαι [Laws 5.742e4–5]. Translated by R.G. Bury with modification.
- 173 Ísos (ἴσος, adjective, probably from οἶδα), equal, "equality; having the same (similar) level or value; equivalent, equal in substance or quality"; "(*isos*) is the root of the English terms, '*isometric*' and '*isosceles*' referring to *equivalencies*" [Thayer, 1995]; "repeated to denote equal relations; equal in rights" [Liddell & Scott, 1940; *Laws* 6.774c4].
- 174 τὸ δὲ ζυγὸν μὴ ὑπερβαίνειν, τουτέστι τὸ ἴσον καὶ δίκαιον μὴ ὑπερβαίνειν [Diogenes Laertius, 1972: 8.1.18].
- 175 Discussion on Plato's vision on the possibility of contemplating the unconcealed form, see Carone [2007: 216–221] and Fierro [2003: 218–221].
- 176 τὰ νόμιμα καλῶν τε πέρι καὶ δικαίων καὶ ἀγαθῶν [Republic 6.484d2-3].

4 The Hominin Form as a Competitive *Dúnamai*

4.1 The particular *trópos* of philosophy

§ 46. The way of life institutionalised in the Academy allows us to assert that Plato may have been the first to realise the significance of the proclaimed "... the universally valid model of humanity which all individuals are bound to imitate" in the control of the focus and limits of collective self-realisation. In any case, philosophy, "as both a specific discourse linked to a way of life, and as a way of life linked to a specific discourse," used the philosophical life of Socrates as a proto-type and "ideal" image to imitate.

We should always remember that an important place in the understanding of Plato is occupied by the historical context in which he created his dialogues. In particular, Plato's Academy was located in a place with a fundamental ideological value in the *paideia* of Athenian citizens.³ Since the 6th century B.C., long before Plato, "the gymnasium of the Academy was the focus of the education of the Athenian elite." The cult of Eros was established in the Academy, which retained its relevance even under Plato.⁵ It was defined as "paideia of *sophía* and *aretē*." Eros was considered a prerequisite of *philia*, *homónoia* (like-mindedness) and liberty (*eleutheria*) and, no less important, as a deity who most contributes to the salvation of the polis. Along the road linking the asty to the Academy were monuments (the *Dēmosion Sēma*) commemorating the fallen soldiers. The road to the Academy symbolised the path of warriors who previously went to the gymnasium to train always to be ready militarily to defend Athens and die on the battlefield with honour and glory.

All this unique "history" constrained and obliged Plato¹⁰ and the disciples of his "private" Academy.¹¹ Each disciple sought not only to receive an extraordinary education from Plato¹² but also prepared to become a *sholarchēs* for his disciples¹³ to lead them to a higher idea and die for it.¹⁴

Plato's Academy taught that "human sophía" was "of little or no value" compared to God's sophía. At the same time, the movement towards it transformed man into a "guardian of mortal men," or equivalently, into the statesman. The imitation of God's sophía turned a philosopher into an agathós man who was eudaímōn and blessed. 18

An important distinguishing feature of the way/manner (trópos) institutionalised at Plato's Academy were individual actions: dialégesthai and dialégomai, i.e., to practice dialectic or discursively think through. Discursive thinking through was valued on par with ethics and physics in the threefold scheme of philosophy (a Platone philosophandi ratio triplex). However, the Platonic corpus at present clarifies Cicero and states that Plato's dialectic is the fundamental difference that displaced rivalling conceptions of philosophy and shaped philosophy in its proper sense. ²⁰

Thus, philosophy is complete on its own only because it uses dialectics. "Where there is philosophy, there will always be dialectics!" This principle underlies the third fundamental characteristic of the philosopher's approach to education (and politeia).

The principle "Where there is philosophy, there will always be dialectics!" represents the particular $aret\bar{e}$, which consciously constrains and obliges to express itself in a particular way/manner ($tr\acute{o}pos$), called "philosophical."

"Know thyself!" The philosophical *trópos* begins with "What is it?" and "goes through" (*dierkhomai*) the structure of the *psukhē* into *aretē*. On this stretch of the upward path into the past, it both "leads the way and judges, estimates" (*hēgéomai*), a fundamental question for every hominin:

What is the meaningful *phúsis* that guarantees the hominin form "always is purely" (δn) in the cosmos/ $ag\bar{o}n$?

Recall that philosophers are "guardians of mortal men"; therefore, they study only the path of "winners" in *agōn*.

4.2 What is the meaningful *phúsis* of the hominin form?

§ 47. The term *aretē* denotes a reduced image/likeness (*eikōn*) of the subject-predicate relation "Order-*hēgéomai*," or *agathós*. Any *psukhē* that comes to be in the hominin form (society) carries *aretē* and, therefore, *agathós*.

My guess is that *psukhē* can carry different *aretē*. Most cases are caused by a genetic component, which forms the magnitude of the *agathou dúnamis* concentrated in the *aretē*. Therefore, each *psukhē* carries an *aretē* with a different magnitude of the *agathou dúnamis*.

Moreover, I allow the begetting of a small number of psukhē, which can carry aretē with an anomalous or the highest possible magnitude of agathou dúnamis. These aretē demonstrate the superiority of the subject-predicate relation "Order-hēgéomai" frankly and directly and show forth the particular méthodos "What is alētheia?"

The reason for the begetting of these *aretē* is apparent. The meaningful *phúsis* of any form pursues/practises (*epitēdeúā*) unmixed/pure (*eilikrinēs*) *phúsis*, which in turn becomes more complex continuously and non-linearly. Therefore, the *psukhē* that are begotten with the "abnormal" *aretē* are nothing but continuous and non-linear "turns" of the meaningful *phúsis* of the

hominin form to the changes that occur in unmixed/pure (eilikrinēs) phúsis. Any "anomaly" in what is happening is the result of the work of the meaningful phúsis, which cares for/attends (epimeléomai) the way/manner (trópos) to follow x(cosmos) and F(dúnamai) in formulas 3a(i)-3c(iii) or x(agathós) and F(agathou dúnamis) in formulas 3a(iv)-3c(vi).

Not all changes in genetic material are progressive for the hominin form. However, the progressive changes in the newborn *psukhē* and the *aretē* mainly are kalós for the hominin form. The adjective kalós denotes new progressive changes in the subject "Order" in the subject-predicate relation "Orderhēgéomai." Kalós is a new physical reality that "leads the way and judges, estimates" (hēgéomai) the hominin form.

Kalós is "motion and flowing,"21 which is "praiseworthy and rational and useful and proper and becoming"22 for the hominin form and, therefore, is definitely the right/righteous (dikaios).

All arete with the highest possible magnitude of the agathou dúnamis, which "are like" (hómoios) to the changing "Order" and, therefore, are progressive and right/righteous (dikaios) for the hominin form, are represented by a new subject-predicate relation "kalós-hēgéomai."

In "kalós-hēgéomai", the subject of kalós contains new physical characteristics that "Order" represents, and which, in turn, pursue/practice (epitēdeúō) all competitive dúnamai so as not to be among the "losers" and not become "not to be" (not *óntos*). Therefore, the *kalós* subject includes the work of the meaningful phúsis.

In the hominin form, the kalós subject expresses a particular aretē with new genetic material. This genetic material shows forth/manifests (emphaníz \bar{o}) a new right/righteous (dikaios) way/manner (trópos) "to be." At the same time, the predicative construction of the verb hēgéomai in "kalós-hēgéomai" indicates an essential property of this new genetic material. It can "turn" each hominin, and the hominin form to a new physical reality in the expanding cosmos, that is, to kalós.

Essentially, the subject-predicate relation "kalós-hēgéomai" conveys the meanings of Socrates' daimon,23 or méthodos "What is aletheia?", or giftedness,24 or any other thing that expresses unmixed/pure (eilikrinēs) phúsis and that which allows the hominin form to "come to be" (gignome) and "always is purely" (ón). It is kátharsis, that is, any physically clean (katharós) expression that only the agathós man can produce.

A particular way/manner (trópos) "to be," which builds on the work of the subject-predicate relation "kalós-hēgéomai", is called "sophist" or, equivalently, sophós. 25 The term "sophós refers to the agathós man, which expresses the kalós and thus "turns" the hominin form to the unmixed/pure (eilikrinēs) phúsis.

The sophists' discourse and way of life constrain and oblige the hominin to act (interact) in strict accordance with the changing "Order." For these purposes, the sophists created and developed the politeia and subordinated the paideia to it. The predicative construction of the verb hēgéomai obliges the sophists to care for/attend (epimeléomai) the trópos of the hominin form, which means "to lead, to be the chief, to guide, to precede others in some action."²⁶

§ 48. Just the same, among the limited genetic material, which is represented by the subject-predicate relation "kalós-hēgéomai", the meaningful phúsis of the hominin form creates an even smaller number of aretē, in which the predicative construction of the verb hēgéomai changes. That is, in "kalós-hēgéomai", the kalós subject remains unchanged. At the same time, the predicate hēgéomai and, therefore, the highest possible magnitude of the agathou dúnamis is directed not at the external and the present but instead at the internal and the past, that is, at the kalós itself. The term "introvert" remotely conveys the work of this relatively rare subject-predicate relation.

The "contrary actions" of the predicative construction, that is, directed at the *kalós* itself, I will denote by the verb "dialégesthai", i.e., to practice dialectics or discursively think through. "Dialégesthai" is based on the meanings that Plato put into the verbs "dialégesthai" and "dialégomai", and the noun dialektikē, as well as new meanings developed in the philosophical tradition.

Thus, we are dealing with the subject-predicate relation "kalós-dialégesthai", which creates a particular way/manner (trópos) "to be." This trópos is called "philosophical," and the psukhē who pursues/practises (epitēdeúō) is always and ever called "philosopher."

The relation "kalós-dialégesthai" characterises the kalós, which continuously and non-linearly produces the highest possible magnitude of the agathou dúnamis, which purifies (kathaírō) itself. For kalós, this is the only trópos to be complete on its own.

Overall, we see here an essential part of the grandiose picture, specifically, the action (interaction) of the competitive dúnamai.

The meaningful *phúsis* of the hominin form is revealed as the work of two subject-predicate relations, "*kalós-hēgéomai*" and "*kalós-dialégesthai*." Through this work, the hominin form seeks ($z\bar{e}te\bar{o}$), fastens/binds to ($h\acute{a}pt\bar{o}$) and, as far as possible, assimilates ($homoió\bar{o}^{31}$) with the unmixed/pure ($eilikrin\bar{e}s$) phúsis to "come to be" ($g\acute{a}gnomai$) and "always is purely" ($\acute{o}n$).

"Kalós-hēgéomai" and "kalós-dialégesthai" are two key properties of the meaningful phúsis, which I also call "the agathós man." "Sophists" or the first property continuously and non-linearly "turns" the hominin form to unmixed/pure (eilikrinēs) and physically clean (katharós), that is, to agathos. In this case, kalós performs the dominant function that leads the way (hēgeomai) in the history of the hominin form in the expanding cosmos. "Philosophers" or the second property continuously and non-linear discursively think through unmixed/pure (eilikrinēs) and physically clean (katharós) and show forth/manifests, make clear or plain (emphanízō) by computation³² of the agathós. In this case, kalós performs the dominant function that purifies (kathaírō) as far as possible the history of the hominin form in the expanding cosmos.

In general, the meaningful *phúsis* of the hominin form, "the *agathós* man," is the ouroboros, or "eternal" cyclic seek $(z\bar{e}te\bar{o})$ of the unmixed/pure $(eilikrin\bar{e}s)$ phúsis to fasten/bind $(h\acute{a}pt\bar{o})$ to it and as far as possible "to be like" $(h\acute{o}moios)$

it. It is the upward path of the competitive *dúnamai*, which has the ability "to come to be" (*gígnomai*) and "always is purely" (*ón*) in the cosmos/ $ag\bar{o}n$.

4.3 What do philosophers do?

§ 49. The work of philosophers and sophists does not overlap. The sophists are focused on advancing the *kalós* into the external and the present. The *agōn* of politeia and paideia is their outstanding invention, which they continuously and non-linearly develop for the good of society. Sophists do not have the physical ability to ask, "What is *kalós*?" Their physical property is to "turn" the hominin form to a new physical reality always and ever to make hominin be like the unmixed/pure (*eilikrinēs*) *phúsis* as far as possible.

At the same time, philosophers are focused on discursively thinking through the $kal\acute{o}s.^{33}$ They are abstracted from the external and present. Moreover, "those who rightly philosophize are practising dying." The "threefold scheme of philosophy," or physics, ethics and logic based on dialectics, is the outstanding invention of philosophers, with which they purify ($katha\acute{i}r\bar{o}$) the unmixed/pure ($eilikrin\bar{e}s$) $ph\acute{u}sis$ and fasten/bind ($h\acute{a}pt\bar{o}$) to it to pursue/practise ($epit\bar{e}de\acute{u}\bar{o}$) it as $aret\bar{e}$ $al\bar{e}thin\bar{e}$. Philosophers do not have the physical ability to lead ($h\bar{e}g\acute{e}omai$) the hominin in $ag\bar{o}n.^{35}$ Their physical property is to care for/attend ($epimel\acute{e}omai$) the $kal\acute{o}s$ always and ever, which means to exist/be ($eim\acute{i}$) personally as $agath\acute{o}s$ and $phronim\acute{o}tatos$ as far as possible. 36

As a result, due to the sophists, the *kalós* is institutionalised in the hominin form, while due to the philosophers, it is complete on its own.

However, what does the phrase "kalós is complete on its own" mean?

It is pretty apparent that the sophists concretise *kalós* in scientific achievements and advanced innovation practices. Their work is better known and more visual. Sophists constrain and oblige the hominin form "to be like" (*hómoios*) *kalós*.

However, the work of philosophers remains far from clear. What do philosophers do for hominins?

We find in Plato's dialogues the first written evidence of the joint practice of sophists and philosophers. In his time, *kalós* was considered *sophía*, so the sophists and philosophers "turned" hominin towards her. They did typical work, but each did it in their manner.

In the Academy, sophía promoted as the specific "ideal" practice: both "to acquire phronēseōs itself" and "to pursue/practise (epitēdeúō) the rightness (dikaiosúnē)." Its meanings disclosed the skill of the demiurge, who had created the kalós "Order." In Plato's understanding, to imitate this practice meant "to follow in the steps of the God," namely, to be taught "both to rule and be subject of a right (díkē)." 40

According to Plato, the "ideal" (kalós) social system is eunomos, in which the laws of the cosmos determined the people's way of life. The "ideal" societies (states) of Kallipolis and Magnesia considered by Plato were eunomos, in which the laws of the polis (state) strictly corresponded to the laws of the cosmos.

"For all human laws are dependent upon one divine Law, for this rules as far as it wills, and suffices for all, and overabounds."

Analysis of world history shows that all the key changes in the history of mankind were related to a change in the meanings of the "ideal" image, *kalós*. Immanuel Kant, rethinking the "ideal" image of the Modern Age, has called it the "transcendental ideal."⁴²

One of the last fundamental studies in this field is the work of Martin Heidegger "Plato's Doctrine of Truth." According to Heidegger, the essence of the idea is determined by *alētheia*. Heidegger translated the word as "unconcealment." "If we translate *alētheia* as 'unconcealment' rather than 'truth,' this translation is not merely more 'literal'; it contains the directive to rethink the ordinary concept of truth in the sense of the correctness of statements and to think it back to that still uncomprehended disclosedness and disclosure of beings." 44

In Heidegger's view, the main problem of modern philosophy is that it does not see the difference between disclosedness ($al\bar{e}theia$) and truth and perceives their essence as identical.⁴⁵ In his understanding, the idea gains dominance over $al\bar{e}theia$: "she herself is mistress in that she bestows unhiddenness (on what shows itself) and at the same time imparts apprehension (of what is unhidden)."⁴⁶ According to Heidegger, the dominance of Plato's images of the Sun and the ascent as symbols of idea and education suggests that truth is no longer understood as the simple unhiddenness of the being. It becomes dependent on the apprehension of the idea drawn up by education (and politeia). "A λ ήθεια comes under the yoke of the ι 0έα."⁴⁷ A ι 0ētheia as "truth," captured and carried away by the idea, breaks away from $al\bar{e}theia$ as "disclosedness" and begins an independent journey.

§ 50. Thus, *kalós* is a new physical reality. In different ages and nations, *kalós* was called and understood differently. The only consistent guiding property of the *kalós* is to express the changed "Order" for the hominin form as the highest idea or an "ideal" image to imitate or a transcendental ideal.

The *kalós* subject names the changed "Order," while the two subject-predicate relations "*kalós-hēgéomai*" and "*kalós-dialégesthai*" express the work of the meaningful *phúsis* in connection with the implementation of these changes into the hominin form. In particular, the predicates *hēgéomai* and *dialégesthai* constrain and oblige individual and collective self-realisation in the hominin form. These actions (interactions) force the hominin to conform to *kalós*.

"Sophists" and "philosophers" represent two critical properties of the meaningful *phúsis*. In everyday life, sophists and philosophers are two classes of real people who legalise and institutionalise the changed "Order," *kalós*, as the highest idea for all hominins. It is the idea of "to be like" (*hómoios*) the unmixed/pure (*eilikrinēs*) *phúsis*, and therefore "to be pure" and not "cease to be" (*phtheirō*). Sophists and philosophers develop and implement this idea as a categorically binding law in the hominin form.

Sophists and philosophers mutually supplement each other and work simultaneously. On the one hand, the *kalós*, which philosophers pursue/

practise (epitēdeúō) as aretē alēthinē, is what founds the work of the sophists. Sophists come to know (ginōskō) their physically clean/free from admixture (katharós) aretē in aretē alēthinē and pursue/practice (epitēdeúō) it as hēgéomai. Sophists do not have the physical ability to gaze on (contemplate) (theáomai) the kalós, aretē, and any other "past" that constrains and obliges them to "lead the way and judge, estimate" in the hominin form. Instead, they take as a basis and try to "be like" (hómoios) what is closer to their "nature." As a result, the sophists follow their trópos, but this trópos is based on the aretē alēthinē that the philosophers express. The sophists begin their upward path from the place which the philosophers purify (kathaírō) and express through their kátharsis. Where the philosophers' work ends, the sophists' work only begins.

The subject-predicate relation "kalós-hēgéomai", "sophists," develops and advances aretē alēthinē in agōn. In "kalós-hēgéomai", the kalós subject is a particular interpretation of the aretē alēthinē, which the sophists express as their trópos.

Moreover, aretē alēthinē is a pure dúnamai itself, which makes the sophists competitive in the agon and guarantees them victory. For the sophist, victory in the agon is authority and glory, which enhances the work of the predicative construction hēgéomai. Hominin voluntarily "turn" to the "best" sophists and their products and imitate them. As a result, the complete hominin form is changed. It begins to pursue/practise (epitēdeúō) the way/manner (trópos), which began as átopos, arete alēthinē, but due to the sophists and their victory in the agon became "sophia," the path of victory.

In this way, the meaningful phúsis does the final part of its work. The hominin form actually "turns" to the new physical reality and assimilates (homoióō). The result is that the hominins outperform less flexible forms and continue their "history" in the cosmos/agōn.

Let us consider another property of the meaningful phúsis, which is more obscure and less accessible to analysis than the sophists. It is expressed by the subject-predicate relation "kalós-dialégesthai" or the "philosophers."

As noted above, the trópos of philosophy is to show forth/manifest (emphanízō) an image/likeness (eikōn) of the unmixed/pure (eilikrinēs) and physically clean (katharós). Philosophers beget and grow up aretē alēthinē, and this is their decisive contribution to the ability of the hominin form to "come to be" (gígnomai) and "always is purely" (ón).48

Aretē alēthinē represents the organic connection (authentic unity) between arete and agathós49 or, equivalently, between the hominin form and the expanding cosmos. The reunion of the two halves allows the philosopher to regulate (moderate) his participation in the performance from within $(phron \ell \bar{o})$, 50 where phenomena operate (interact) denoted by the verbs gignomai, phtheirō and eimi, and where all sophia is created and exists as the ascending path of the few "winners" in the cosmos/agon. For this reason, the philosopher declares himself the beloved (philia) of sophia.⁵¹ Unlike the sophists and other hominins, the philosopher knows (epistamai⁵²) how "to be purely," and how

insignificant the actions (interactions) of the hominin are in comparison with *sophia* or, which is equal to *dúnamai*, which causes the expanding cosmos.

Aretē alēthinē is a continuous and non-linear particular kátharsis spanning several human generations. The particular "kalós-dialégesthai" work summarises, enriches and changes general kátharsis. As a result, kátharsis becomes "to be like" (hómoios) the unmixed/pure (eilikrinēs) phúsis as far as possible and shows forth/manifests (emphanízō) it as a kalós or the highest idea. Sophists recognise the greatness of this kátharsis and kalós (the idea) and develop their trópos on its basis. Only sophists can discern (theōréō) and come to know (ginōskō) the philosophical trópos and its decisive contribution to the hominin form. This capacity is a fundamental and indispensable condition for their victory in the agōn.

In each new generation of hominin, *psukhē* are begotten who carry the *aretē* based on the "*kalós-dialégesthai*." These *aretē* in every situation follow their guiding perspective, always "seeing the whole together" (synoptikós).⁵³ Like all the others, these *aretē* asks, "What is it?" However, simultaneously, the questioning constrains and obliges by the *méthodos* "What is *alētheia*?" That is, a philosopher from birth has in his *psukhē* a visible paradigm, ⁵⁴ which "leads the way and judges, estimates" his actions (interactions).

Unlike the overwhelming majority of *psukhē*, the philosopher (and the sophist) is entirely independent in his decisions. The genetic material that establishes the "*kalós-dialégestai*" makes the philosopher obsessed only with his *trópos*.

"Kalós-dialégesthai" produces the highest possible magnitude of the agathou dúnamis. However, regardless of the current needs and preferences, all these "natural" powers focus on knowing the source of meaningful presence, that is, one's past.

Méthodos "What is alētheia?" leads the philosopher into arkhē and teaches him to gaze on (contemplate) the perceiving/thinking (nóos) and his actions (interactions). Discursive thinking "What is kalós?" "goes through" (dierkhomai) the border of pure agathou dúnamis, or formulas 3a(vii)–3c(ix), in which the sophists operate. The philosopher achieves greater clarity in understanding everything "which comes to be (gígnomai) and always is purely (ón)" than dóxa55 about alēthēs,56 which the sophists proclaim. Moreover, philosophers are the only ones of the hominin form who can "turn" from gígnomai and, consequently, anánkē, to being: ón and ontos.57 As a result, only philosophers can discover the force that always remains in the shadow of anánkē but determines the intending and perceiving of "always to be purely." Philosophers are looking for nóos, which causes self-organisation (self-assembly) in the cosmos and is akin to the fundamental laws of the cosmos, nómoi.

Only the *dialégesthai* brings to $n\acute{o}os^{58}$ and the actions (interactions) that this force causes: " $n\acute{o}os$ - $noi\acute{e}\bar{o}$ " and " $n\acute{o}os$ - $peith\acute{o}$." As a result, philosophers learn to imitate the laws of the phenomenon of "to be" $(n\acute{o}moi)^{59}$ and "to be $arkh\bar{e}$ of all" through logou and apart from all sense-perception. 61

The property of persecuting/practising (epitēdeúō) of arete alēthinē directly depends on the quality of politeia and paideia that the sophists develop and advance. However, at the same time, the sophists, politeia, paideia and any other kalós that the philosopher discovers and examines in the present and external have no chance of captivating the philosopher and distracting him. For the philosopher, they are all steps on the upward path to the past, which is called "Know thyself." Thus, the philosopher "not only prepares, but provides a partial vision of the things themselves precisely in."62 The philosopher learns to work with what "always is purely (δn) " and not with its likeness, for example, the intelligible fragmentary identity of diánoia and lógos and any other self-evident hypotheses. 63 Thus, he "psychically stabilizes himself" 64 and transforms existentially 65 "to be (eimi) always and immortal." 66

For a long time, the philosopher does not know about his destiny or realise the purpose and importance of his trópos. However, his aretē has such strong dúnamai that the philosopher consistently isolates himself from everyday social life and becomes an átopos. However, simultaneously, he gazes (contemplates) (theáomai) on entirely new and exciting views, which more than compensate for social rejection. The philosopher perceives/thinks (noiéō) and comes to know (ginōskō) the "Order," that is, which "always is purely." However, the most important thing about it is that the philosopher (i) begets and grows up it as aretē alēthinē and (ii) cares for/attends (epimeléomai) to them, which means "gives (offers) in an 'up-close-and-personal' way" "peace (eirēnē) and modesty and eunomía and right (díkē) without stint."67 That is, the philosopher creates the necessary basis for the work of the sophists and, consequently, for the hominin form "to be like" (hómoios) a competitive dúnamai.

Each new step of "kalós-dialégesthai" deepens the neglect of earthly realities, which have no actual existence, 68 and motivates a philosopher to fasten (háptō) to that which "always is purely (ón)." Dialégesthai protects the philosopher from "pigments and ever so much more of mortal nonsense" 69 and helps to grow up aretē alēthinē, that is, to assimilate (homoióō) with agathós as far as possible 70 and pursue/practise (*epitēdeúō*) the unmixed/pure (*eilikrinēs*) phúsis.

Kalós-dialégesthai directs philosophers to "be" atopōtatos⁷¹ and, therefore, singularity. However, at the same time, the philosopher's kátharsis is pure agathós, which is always available for the sophists.

On top of that, the subject-predicate relation "kalós-dialégesthai" represents Érōs,72 which guides philosophers "go through" (dierhomai) the lēthē into alēthēs by the particular trópos and practice. 73 It resembles the straight trópos to the Academy and "goes through" (dierkhomai) the monuments (the Dēmosion Sēma) that commemorated the fallen soldiers, 74 due to which the hominin form continues to have a history in the cosmos/agōn.

Reunion with agathós is carried out through the "parturition of a kālôi⁷⁵ by means of both the body and the psukhē."⁷⁶ Érōs is not kalós.⁷⁷ It is its génnēsis⁷⁸ and parturition.⁷⁹ It is the personal guiding perspective to connect and "to be"

with agathós itself forever.⁸⁰ It is to pursue/practise (epitēdeúō) the meaningful phúsis itself, which "is" (eimí) both the unmixed/pure (eilikrinēs) phúsis and something defined, which is an object (x) in the formulas 3a(i) "x(cosmos) exists," and 3a(iv) "x(agathós) exists."⁸¹

Given the above, we can formulate the third axiom of education (and politeia). "Where there is philosophy, there will always be dialectics; and where there is dialectics, there will be the unmixed/pure (eilikrinēs) phúsis."

§ 51. In everyday life, philosophers learn to beget and grow up $aret\bar{e}$ $al\bar{e}thin\bar{e}$, while sophists learn to create an effective politeia and paideia on it to "lead the way and judge, estimate" ($h\bar{e}g\acute{e}omai$) the hominin form. The result of this coordinated work is the "history" of the hominin form in the expanding cosmos, where "history" is, first of all, higher ideas, images to imitate, transcendental ideals and other $kal\acute{o}s$ that have fulfilled their work and lost their relevance.

The relevance of any highest idea, *kalós*, and therefore the political and educational theories that promote it, precisely lasts until a new "turn" is needed. In this case, new generations of philosophers and sophists will begin to express the changed "Order." As a result, the *kátharsis* of philosophers and sophists will show forth a new higher idea and begin to "turn" the hominin form towards a new physical reality. The emerging political and educational theories will advance a new "ideal" (*kalós*) image to imitate that will lead the way (*hēgéomai*) for the hominin form to the unmixed/pure (*eilikrinēs*) *phúsis*. The "old" *kalós* and all the theories and practices that developed and advanced it will become "history."

It follows that the highest value of the "idea" lies in the fact that it is an effective way to "turn" the collective discourse and way of life to the intelligible complexity of the "Order." The ability to put into order/ornament (kosm'eo) and to arrange (with or together)/put together ($synt\'ass\bar{o}$) "the state and the citizens and themselves throughout the remainder of their lives, each in his turn"⁸² in accordance with the proclaimed highest idea is a competitive advantage of the hominin form in the cosmos/ $ag\bar{o}n$.

It should be noted in this connection that the transcendental ideal (the idea) of "Those Who Transform the Earth" has often been criticised in recent decades. Researchers point to the discrepancy between the meanings concentrated in it and modern knowledge.⁸³ We shall highlight three main directions of criticism.

1 For the past four centuries, rationalism has been one of the key research methods in the hominin form. René Descartes has formulated the idea of rationalism as follows: "I Doubt, Therefore I Think, Therefore I Am." Rationalism clarifies and enriches the meanings of the Platonic principle "know thyself." Over the past four centuries, the ideas of René Descartes, Gottfried Wilhelm Leibniz and Benedict Spinoza have occupied an honoured place among classical ideas, and rationalism itself and its derivatives, such as humanism and metaphysics, have received a new empirical

- and theoretical basis. However, rationalism denies the méthodos "What is alētheia?" Moreover, it does not correspond to "What is it?" and its ability to purify (*kathaírō*) is irrational.
- 2 In the Modern Age, there was a change of epistēmē. 85 Epistēmē turned into consumer knowledge, and it began to be considered in meanings close to that of the sophists.⁸⁶ Modern knowledge has become universal and accessible. Its value is substantiated by achieving material and social benefits, providing welfare and recreation, building a career etc. An "intelligent man" considers knowledge as an everyday attribute that can be bought with money on different digital media forms. For example, buy knowledge from books, television programs, an Internet provider, a tutor or an educational or advisory service. Knowledge has ceased to be understood as the birth ("to bring forth")87 of aletheia and agathós and, accordingly, does not make agathós transparent to being. This begs the natural question: can consumer knowledge, temporary material values and benefits determine the psukhë's meaningful presence? Of what value is the culture of daily life, entertainment and information in the meaningful phúsis of Intelligent Matter?
- 3 The ideas of rationalism and empiricism have disproportionately enhanced the significance of tekhnē.88 In the 20th century, the cult of engineering specialities, objective knowledge of reality, engineering and technology reached its apogee, calling into question the possibilities of philosophy as a way of life and dialectics as the méthodos "What is aletheia?" The difference between tekhnē and phrónēsis was erased. The physically cleansing/ purification (kátharsis) was considered the mastery of tekhnē, i.e., as a craft. However, the *tekhnē* is a skill that is acquired as a result of learning and does not provide for the aretē liberation and mastering the agathou dúnamis concentrated in it. The popularisation of the *tekhnē* violates the regulatory compromise in the nature of the *psukhē* and Intelligent Matter. The reasons for World War I and II were that the tekhnē tried to pass off as the agathós of what was occurring. However, the value of sophia and God's Lógos, as "ideal" images to imitate, was in their focus on the liberation (clearing) of the highest arete and mastery of the highest ordering force, i.e., the agathou dúnamis. They "turned" to "Aretē and Agathós, Unite!"

In general, the scale of criticism of the idea "Those Who Transform the Earth" indicates the inconsistency of its meanings with the modern intelligibility of the complexity of the subject-predicate relation "Order-hēgéomai" or agathós.

The idea of a man who transforms the Universe

§ 52. The transcendental ideal of "Those Who Transform the Earth" was created on the basis of the results of the intelligibility of the new complexity of the cosmos, disclosed by professors of philosophy at the beginning of the 16th century. The ideal remained relevant for the next four centuries. Obviously,

the *psukhēs* that *came into being* at the beginning of the 21st century differ from the *psukhēs* that came into being in the 16th century. Besides, the main difference lies in *phrónēsis* (*aretē alēthinē*), with the help of which the hominin form affirms the significance of its presence in the Universe.

The modern man perceives/thinks (noiéō) the expanding cosmos as a chronology of a single universe. However, discursive thinking through of current knowledge of the observable Universe discloses a new complexity of the changing "Order." The psukhēs of modern generations are on the verge of revealing the chronology of Y-Matter, represented by a continuous and nonlinear complication of the universes.

The new intelligible complexity of "Order" is represented by the idea of a man who transforms the Universe. The idea is based on philosophy of the cosmos and Fundamental Rights, which philosophers discern ($the\bar{o}r\acute{e}\bar{o}$) and come to know ($gin\bar{o}sk\bar{o}$) in the unmixed/pure ($eilikrin\bar{e}s$) $ph\acute{u}sis$.

For philosophers, unmixed/pure (*eilikrinēs*) *phúsis* is expressed by the subject-predicate relation "Order-*hēgéomai*" or "philosophy of the cosmos." In philosophy of the cosmos, all *dúnamai* which "come to be and to beget" bring to light (*phaínō*) themselves as whole and parts of this whole.

Philosophers discursively think through philosophy of the cosmos. The way/manner (trópos) to express unmixed/pure (eilikrinēs), physically clean (katharós) and unmingled⁸⁹ is called the "philosophy of the cosmos" and not "physics" or "cosmology" for one reason only. Philosophers continuously and non-linearly purify (kathaírō) in unmixed/pure (eilikrinēs) phúsis, first of all, the meaningful phúsis, that is, what guarantees dúnamai "come to be (gígnomai) and always are purely (ón)." Philosophers prefer to gaze on/contemplate (theáomai) primarily competitive dúnamai, which win in the cosmos/agōn.

Including and for this reason, philosophers call the subject-predicate relation "Order- $h\bar{e}g\acute{e}omai$ " with the adjective $agath\acute{o}s$, and any changes in it with $kal\acute{o}s$. Philosophy discerns ($the\bar{o}r\acute{e}\bar{o}$) and comes to know ($gin\bar{o}sk\bar{o}$) in the expression of the unmixed/pure ($eilikrin\bar{e}s$) $ph\acute{u}sis$ both "good" (useful) and "beautiful" (ideal), rational and irrational. Philosophy seeks ($z\bar{e}te\bar{o}$) in the changing "Order" everything that can help the hominin form to be physically clean ($kathar\acute{o}s$) or "to be $kathar\acute{o}s$."

Philosophy does not specialise in space exploration. The *trópos* of philosophy is really "political" and "pedagogical." Philosophy forms *daímōn*, real people who develop in themselves the ancestral connection with the cosmos or the *cosmic consciousness*. For 2,500 years, the mission of these people has remained unchanged. They "turn" society into a fundamental question for every hominin,

In which way/manner ($tr\acute{o}pos$) is it necessary to live⁹¹ "to come to be ($g\acute{i}gnome$) and always is purely ($\acute{o}n$)" in the cosmos/ $ag\bar{o}n$?

Moreover, *sholarchēs* teach their disciples to express the answer with their discourse and way of life. The *trópos*, which the philosophers pursue/practise

(epitēdeúō), is to beget and grow up aretē alēthinē continually. Philosophers "should be able to make physically clean and free from admixture" themselves and the external always and ever.

Philosophers know (ginōskō) that any dúnamai can "be (predicatively) a particular being/something particular" only up to as long as it expresses the "to be katharós" property, that is, it performs kátharsis. That is why philosophers develop and pass from generation to generation dialectics as a particular *trópos* and practice. To seek for *kalós* in the present and past and think discursively about it always and ever is the only possible way to follow (méthodos) "What is it?" which turns into the méthodos "What is alētheia?" and ends with aretē alēthinē. "To practice dialectic" (dialégesthai) is to express the "to be katharós" property personally.

§ 53. "Where there is philosophy, there will always be dialectics; and where there is dialectics, there will be the unmixed/pure (eilikrinēs) phúsis." The kátharsis of philosophers and the scholarchēs who pursue/practise (epitēdeúō) "gives (offers) in an 'up-close-and-personal' way" (paréchō) three Fundamental Rights and peremptory norms (ius cogen), which separate dúnamai and, therefore, forms into a few "winners" and many "losers" in the cosmos/agōn. Only philosophers can gaze on (contemplate) the physical spectacle called *The* "To Be" Phenomenon. Moreover, philosophers are the only ones who can be among the dúnamai, which "come to be (gígnomai)" and "are (eimí) always the unmixed/pure (eilikrinēs)" and those who "come to be (gignomai)" and become "not to be" (not *óntos*).92

The first Fundamental Right defines the meanings of arkhē of any form. It brings to light $(phain\bar{o})$ a providential and directive beginning/origin and a particular way/manner (trópos) of expressing the "to be katharós" property. In physical reality, an arkhē of any form exhibits a cluster of predicative changeability dominated by three actions (interactions). It is (i) to lead (hēgéomai) the particular méthodos "What is alētheia?", (ii) "to go through" (dierkhomai) lēthē and (iii) to show forth/manifest (emphanizō) the kátharsis.

The first Fundamental Right ultimately culminate in the first peremptory norm (ius cogen):

The form either "comes to be in the cosmos/ $ag\bar{o}n$ and is always" or "comes to be and never is."

The second Fundamental Right defines the meanings of anánkē in the kátharsis of any form. It brings to light (phaino) the first key "to be katharós" property. More specifically, any form strives to have/hold $(ech\bar{o})^{93}$ the physically clean/free from admixture (katharós) phenomenon "come to be" or anánkē. This cluster of predictive changeability is dominated by three activities (interactions): (i) to seek (zēteō), (ii) to fasten/bind to (háptō) and (iii) pursue/practise (epitēdeúō). All of them are connected with the subject "equal/equivalent" (isos).

The second Fundamental Right culminates in the second peremptory norm (ius cogen):

The form expresses the "to be *katharós*" property in such a way/manner (*trópos*) that either "do not step over the equal/equivalent (*isos*) and is always" or "step over the equal/equivalent (*isos*) and not ever is."

The third Fundamental Right defines the meanings of $n\acute{o}s$ in the $k\acute{a}tharsis$ of any form. It brings to light $(pha\acute{i}n\bar{o})$ the second "to be $kathar\acute{o}s$ " fundamental property. It is the need to care for/attend $(epimel\acute{o}mai)$ the physically clean/free from admixture $(kathar\acute{o}s)$ "cease to be" phenomenon, or $n\acute{o}s$. This cluster of predictive changeability is dominated by actions (interactions): (i) to put into order/ornament $(kosm\acute{e}\bar{o})$, (ii) to arrange (with or together)/put together $(synt\acute{a}ss\bar{o})$ or (iii) to make like/resemble $(homoi\acute{o}\bar{o})$. All of them are connected with the subject "right/righteous" $(d\acute{i}kaios)$.

The third Fundamental Right ultimately culminate in the third peremptory norm (ius cogen):

The form expresses the "to be *katharós*" property in such a way/manner (*trópos*) that either "do not step over the right/righteous (*díkaios*) and is always" or "step over the right/righteous (*díkaios*) and not ever is."

Consequently, as a result, in the paradigm of the expanding cosmos, philosophy shows forth/manifests ($emphaniz\bar{o}$) the hominin form as a competitive $d\acute{u}namai$. Philosophy discerns ($the\bar{o}r\acute{e}\bar{o}$) and comes to know ($gin\bar{o}sk\bar{o}$) hominin not only and not so much as the "first people," whose history began 6–7 million years ago. He is just one of the past events in which the philosopher "had actually been present." More critical is that philosophy purifies ($katha\acute{u}r\bar{o}$) the meaningful $ph\acute{u}sis$ of the Intelligent Matter of the Earth. Philosophy discerns ($the\bar{o}r\acute{e}\bar{o}$) the hominin form as the "history" of neuro-evolution. In this case, its beginning/origin ($arkh\bar{e}$) dates back to the development of the nervous system in multicellular animals and, possibly even earlier, to the birth of the first nerve cells. It is an entirely different vision of the historical man and understanding of his history.

Philosophy gazes on (contemplates) (*theáomai*) the historical man as neuro-evolution. Neuro-evolution began on Earth over half a billion years ago, and in "modern history," natural neural networks reproduce themselves in artificial neural networks. The hominin form in this story is only a fragment that Intelligent Matter expresses on the solar system's scale.

The physical ability to gaze on (contemplate) (theáomai) the sequential transformation of neurons into nervous systems, then into neural ensembles and, finally, into artificial neural networks, is expressed in a continuous and non-linear kátharsis spanning several human generations. This particular kátharsis shows forth/manifests (emphanízō) the changing "Order," kalós, and

the new idea of man and human rights in it. It is the idea of a man who transforms the Universe.

The idea of "Those Who Transform the Universe" is based on a new understanding of the "to be" phenomenon and philosophy of the cosmos, in which the meaningful *phúsis* of the hominin form expresses itself. The idea "gives (offers) an 'up-close-and-personal' way" (*paréchō*) the meaning of the *génesis* and, more importantly, understanding "What is a completed result of the *génesis*?"

Now it turns out that the most important thing for any form is to "come to be (gignomai) and always is purely (in)," instead of just "to be." In practice, this means that "to be" can both a few "winners" and many "losers" forms. The most important thing is "to be pure" or, equivalently, "to be katharis."

It follows from the idea of a man who transforms the Universe that the hominin form can have a different duration of its "history" in the cosmos/agōn. The hominin form can refer to many "losers," and therefore, it can "come to be" in the cosmos/agōn for several million years to lose it and become "not to be" (not ôntos). At the same time, the history of our form can last "forever." The latter is possible only if the hominin form learns to "be like" (hómoios) kalós, that is, continuously and non-linearly "turn" towards the changing "Order." It is equivalent to learning to understand and control one's meaningful phúsis and, therefore, to exist/to be (eimí) complete on its own.

The idea of a man who transforms the Universe implies the involvement of the hominin form in cosmic processes, and therefore, the Fundamental Rights constrain and oblige it.

§ 54. The philosophers express the idea of a man who transforms the Universe as far as possible, while the sophists base their $tr\acute{o}pos$ on it in the $ag\bar{o}n$ of politeia and paideia and "turn" the hominin form to it as far as possible.

In Plato's view, justice, or rather, rightness (dikaiosúnē), is the opportunity "doing one's own work and not meddling with what isn't one's own."96 Philosophers taught (moulded) citizens by their kátharsis,97 thereby forming the "right/righteous (dikaios) vision" of kalós and agathós.98 "It is better for everyone to be subject to the divine and the phrónimou,99 wise."100 The combat against ignorance transformed the polis (state) into Kallipolis, the main feature of which was the citizens' "right/righteous (dikaios) vision" of happy (eudaimōn) life. According to Julia Annas, "Kallipolis presents a radical alternative to actual societies, rather than merely an improvement on some of them."101 Thus, in philosophy, politeia was thought through as a tool of eunomía, providing a universal (global) "right/righteous (dikaios) vision"102 upon happiness (eudaimōnia). At the same time, thinking through politeia a priori included thinking through education as an equivalent tool.

We take Plato's definition of the right/righteous (*dikaios*) as a basis. Rightness (justice) and happiness are "doing one's own work and not meddling with what isn't one's own." 103

Philosophers "do their work and not meddle with" the work of the sophists. Their job is to learn to express *kalós-dialégesthai*. It is equivalent to, first of all,

developing the "to be *katharós*" property, which means the ability to gaze on (contemplate) (*theáomai*) one's perceiving/thinking (*nóos*) and imitate his actions (interactions). In other words, they form "*nóos-noiéō*" and "*nóos-peithó*." The result of their learning is expressed in the skill (i) to lead (*hōgéomai*) the particular méthodos "What is *alētheia*?", (ii) to go through (*dierhomai*) the *lēthē* into *alēthēs* and (iii) to show forth/manifest (*emphanizō*) the unmixed/pure (*eilikrinēs*) *phúsis* in its *kátharsis*.

The philosopher follows his mission. He begets and grows up the *aretē alēthinē*, which he pursues/practises (*epitēdeúō*) as the highest idea of "Those who transform the Universe." In essence, the philosopher expresses a *universal* "right/righteous (*dikaios*) vision" of happiness (*eudaimōnia*).

The philosopher's kátharsis develops and advances three fundamental principles:

- 1 The "Agathós Above All!"
- 2 The "Aretē and Agathós, Unite!"
- 3 "Where there is philosophy, there will always be dialectics!"

As a result, the philosopher "gives (offers) an 'up-close-and-personal' way" ($par\acute{e}ch\bar{o}$) the personal experience "to be $kathar\acute{o}s$," to be the one who transforms the Universe.

The philosopher persuades (peithó) "young and old"¹⁰⁴ that constraining and obliging themselves "to be katharós" is equivalent to "be complete on its own." Therefore, this is the only right/righteous (díkaios) understanding of a happy (eudaimōn) life. The philosopher concludes this because the highest value and goal of any form, including any definitions of rightness (justice) and happiness, "come to be" (gígnomai) and "always is purely (ón)." Those who transform the Universe "are like" (hómoios) the unmixed/pure (eilikrinēs) phúsis as far as possible.

It is why philosophers are obsessed with their *kátharsis* and the mission dictated to them by their genetics and "*kalós-dialégesthai*." Philosophers know $(gin\bar{o}sk\bar{o})$ how important it is for the hominin form "to be like" (hómoios) the unmixed/pure $(eilikrin\bar{e}s)$ phúsis. However, for this, it is necessary to learn to discern $(the\bar{o}r\acute{e}\bar{o})$ and control the meaningful *phúsis*. Before the sophists can lay down the idea of "Those Who Transform the Universe" into politeia and paideia, philosophers must first learn to pursue/practise $(epit\bar{e}de\acute{u}\bar{o})$ the $aret\bar{e}$ $al\bar{e}thin\bar{e}$ or a particular $k\acute{a}tharsis$.

Philosophers' kátharsis "gives (offers) in an 'up-close-and-personal' way" (paréchō) a comprehensive understanding of the work of the meaningful phúsis. Its absolute value lies in the personal experience of seeking ($z\bar{e}te\bar{o}$) the physically clean ($kathar\dot{o}s$), fastening/binding ($h\acute{a}pt\bar{o}$) to it, pursuing/practising ($epit\bar{e}de\dot{u}\bar{o}$) it and being like ($h\acute{o}moios$) it as far as possible. The idea of a man who transforms the Universe, which philosophers pursue/practise ($epit\bar{e}de\dot{u}\bar{o}$), is the idea of managing the meaningful $ph\acute{u}sis$ of the hominin form. The idea

shows forth/manifests (emphanízō) in which way/manner (trópos) is it necessary to live to come to be (qiqnomai) and "always is purely (ón)" in the cosmos/agōn.

In turn, the sophists "do their work and do not meddle with the work" of philosophers. Their job is to learn how to express "kalós-hēgéomai." It is the same as (i) to seek (zēteō) the equal/equivalent (isos) and (ii) to fasten/ bind (háptō) to it so that together in unity and harmony, (iii) to pursue/ practise (epitēdeúō) the aretē alēthinē that the particular philosopher expresses. The sophist learns to discern (theōréō) and come to know (ginōskō) among the "philosophical" kátharsis the most competitive dúnamai to assimilate (*homoióō*) with it and become competitive in $ag\bar{o}n$.

The sophist fulfils his mission, which is determined by his genetics and the predicative construction of the verb hēgéomai. The "kalós-hēgéomai" constrains and obliges the sophist, first of all, to find his *kalós* to have/hold (*échō*) the highest possible magnitude of agathou dúnamis.

That is why the sophists always "turn" to the philosophers. The two properties of the meaningful *phúsis* are inextricably linked and turned towards each other. While the *kalós* created by the sophists helps the philosophers "to go through" (dierkhomai) the present into the beginning/origin (arkhē) of their trópos and further into the past, the sophists seek (zēteō) the arkhē of their trópos in the present and the meaning of the arete alethine. "Nature" limited the sophists to the search for a ready-made "philosophical" product. However, it did this on purpose so that the "sophists," as a property of meaningful phúsis, would have the opportunity to express themselves as much as possible in hēgéomai, that is, to be stratēgós, 105 the world leaders, those who lead and direct the hominin form.

The sophists base their arete, with the highest possible magnitude of the agathou dúnamis on the aretē alēthinē that the philosophers grow. The result of adding the two extreme magnitudes of the agathou dúnamis is the competitive dúnamai, which wins the agon and becomes an "ideal" image to imitate.

The straight trópos of the sophists is to assimilate (homoióō) aretē alēthinē with politeia and paideia and, thus, "turn" hominin to the unmixed/pure (eilikrinēs) phúsis, which philosophers express in the idea of a man who transforms the Universe.

The outstanding result of the sophists' work is the new theories of political education based on the idea of a man who transforms the Universe. Sophists adapt the idea to the mass perception and existing reality. They replace the "fertile" dialectical words¹⁰⁶ and grammatical accuracy of philosophers with the idea of "communicative competence." They drastically reduce the complexity of philosophical reasoning and transform their perspective from the past into Futures Studies. The sophists divide continuous and non-linear discursive thinking through - dialégesthai and dialégomai - into fragments to advance philosophical epistēmē "resulting from prolonged practice and sustained, personal effort" 107 as consumer knowledge. Moreover, they interpret the individual experience of "to be *katharós*" and present it as step-by-step instructions for day-to-day use.

Sophists must go through (*dierkhomai*) many different things that philosophers can never find and do. The finalisation of the work of the sophists is their victory in the $ag\bar{o}n$. Their success means that the idea of a man who transforms the Universe, which philosophers express in their $k\acute{a}tharsis$, albeit in a significantly modified form, becomes an intrinsic part of the daily culture in the hominin form. Hominins imitate it en masse as it makes them competitive in the $ag\bar{o}n$.

Only by doing so do sophists and philosophers act (interact) as properties of the meaningful *phúsis*. The essence of the meaningful *phúsis* is "doing one's work and not meddling with what is not one's own." The results of its work are continuous and non-linear "turns" of the hominin form to a changing "Order" and controlled neuro-evolution in strict accordance with the Fundamental Rights.

The meaningful *phúsis* constraints and obliges the form "to be like" ($h\acute{o}$ moios) the unmixed/pure ($eilikrin\bar{e}s$) $ph\acute{u}sis$ as far as possible. It is a leading and directing force that fastens/binds ($h\acute{a}pt\bar{o}$) the form to the upward path of the "to be" phenomenon and guarantees its possibility to "come to be ($g\acute{u}gnomai$) and always is purely ($\acute{o}n$)" in the changing "Order."

Notes

- 1 Jaeger [1946: xiv].
- 2 Hadot [1999: 39].
- 3 See Marchiandi [2020].
- 4 Marchiandi [2020: 21].
- 5 "Athenaeus' comment is enlightening: 'The Athenaeus were so far from believing that Eros represents sexuality of any kind that, even though the Academy was explicitly dedicated to Athena, they established a cult of Eros there and sacrificed to him as well" [Marchiandi, 2020: 26].
- 6 "He depends on earlier sources, classical and Hellenistic: a lost tragedy written by Euripides, in which Eros is defined as the παίδευμα of σοφία and ἀρετή; (E. fr. 897 Nauck)" [Marchiandi, 2020: 25].
- 7 "the Politeia drafted by Zeno of Citium, the founder of the Stoic school, where the god is considered as a prerequisite (παρασκευαστικόν) to φιλία, ὁμόνοια and ἐλευθερία. In this perspective, Zeno indicates Eros as the deity who most contributes (συνεργός) to the salvation of the polis" [Marchiandi, 2020: 25].
- 8 Asty (ἄστυ, ásty) is an ancient Greek word denoting the physical space of a city or town, especially as opposed to the political concept of a polis, which encompassed the entire territory and citizen body of a city-state (wikipedia.org).
- 9 Marchiandi [2020] and Lygouri-Tolia [2020].
- 10 "When Plato established his philosophical school in the setting of the Academy after his return from his first journey to Sicily in 388/7, his choice of a gymnasium as a place for philosophical teaching was no novelty, but indeed a well-established practice. For example, Socrates liked philosophising in the Lyceum, Antisthenes instructed his pupils in the Cynosarges from around 400, and Plato himself had occasionally taught in the gymnasium of the Academy before his first journey to Sicily" [Haake, 2020: 71].

- 11 "So great was the school's reputation that it was identified with the name of the place. In 347 B.C. Plato was buried in the Academy, after forty years of teaching" [Lygouri-Tolia, 2020: 48].
- 12 "On the outskirts of Athens, Plato and his friends laid foundations for science and mathematics, drew plans for reforming education and society, and emulated their intellectual and moral model" [White, 2000: 168].
- 13 "Philosopher-rulers in the ideal city will carry out their duties rationally owing to the extraordinary education they will have received. They will have had mentors in the art of rule—as Socrates has not—and they will be able to foster future philosopher-rulers on whom the state may rely—as Socrates has not done in Athens. So philosophers in Kallipolis would satisfy two of the criteria for expert knowledge: they have teachers, and they have students. (34 Socrates appears to hold that having an expert teacher would support a claim to expertise (La. 189d and, with some irony, Euth. 5a-b), and that no one can reasonably claim to be an expert unless he is able to teach his wisdom to his children or students (Meno 99b-c)" [Woodruff, 2000: 1401.
- 14 "I have always conceived of philosophy as a transformation of one's perception of the world" [Hadot, 2005a: 26].
- 15 Apology [23a].
- 16 Cratylus [397e-398c].
- 17 "for Plato political science (πολιτική ἐπιστήμη) is genuine wisdom (σοφία) and the statesman (πολιτικός) is the true philosopher (φιλόσοφος)" [Gonzalez, 2009: 30].
- 18 Laws [2.660e].
- 19 Cicero, Academica [1.19].
- 20 "These literary texts were part of a highly agonistic and polemic dispute in the still arising philosophical field, in which former followers of Socrates, by drawing on the authoritative resource of Socrates himself, competed in terms of 'pegging out claims' for the establishment of their own philosophical schools. However, Plato not only wrote with a sharp pen in the intra-Socratic 'wars of the Diadochi', but he also displaced rivalling conceptions of philosophy from the field that was to become - very essentially due to Plato - philosophy in the proper sense" [Haake, 2020: 71].
- 21 I follow Cratylus [411d7–8] and an allusion to Heraclitus' motto Πάντα ῥεῖ, "everything flows."
- 22 Diogenes Laertius [3.1.79].
- 23 "Debate on the primary issue, [P Socrates' trust in the daimonion is greater than the trust that he can or would put in the products of ratiocination. (Letter 22, September 5, p. 199 below)], reveals that the correspondents have different global views about Socrates and his project, each compatible with the explicit textual evidence and well supported in the letters below. Vlastos finds in Socrates, a cautious rationalist; the others see in him a religious believer who makes good use of reason. It is not a historical question in the letters as edited; it is a question about Plato's Socrates" [Socrates and His Daimonion, 2000: 178].
- 24 Mottron and Dawson [2021].
- 25 σοφιστήν, πολιτικόν, φιλόσοφον [Sophist 217a5]. Plato distinguished the three most general genus of the agathós man. In this study, I combine "sophón and politikón," i.e., sophists and statesmen.
- 26 Benveniste [1973: 167]. "From this comes stratēgós 'chief of the army', a title of which we probably have a calque in the Germanic compound noun, Old High German heri-zogo 'he who leads the army' (a military title which became an aristocratic one, Herzog), and this term in its turn has produced in Old Slavic vojevoda 'chief of the army', 'voivod'" [Benveniste, 1973: 167].

- 27 "dialégesthai is key to the survival of Socrates' language and of his message" [Nagy, 2002: 32].
- 28 "Plato is fond of exploring the lonely feeling of helplessness on the part of any author who worries about the future life of his written words, which cannot defend themselves if they come under attack (*Phaedrus* 275e, 276c8). One way out is to use the *tekhnē* 'art' that Socrates calls dialectic, *dialektikē* (276e5). The user of this art can plant words into a receptive *psukhē* (e6), and these words will be fertile (277a1) and not sterile (akarpoi: a1) like the words planted on a writing surface (276c8). Unlike those written words, these dialectical words can defend not only themselves but also the one who planted them (276e8–277a1), and they can even reproduce themselves into eternity (277a2–3)" [Nagy, 2002: 32].
- 29 Regarding this verb, I quote the following, "/dialégomai ("getting a conclusion across") occurs 13 times in the NT, usually of believers exercising "dialectical reasoning." This is the process of giving and receiving information with someone to reach deeper understanding a "going back-and-forth" of thoughts and ideas so people can better know the Lord (His word, will). Doing this is perhaps the most telling characteristic of the growing Christian!" [Thayer, 1995].
- 30 Dialektikē (διαλεκτική, noun), dialectic, "asking itself questions and answering, affirming and denying" [*Theaetetus* 189e–190a]. Translated by Harold N. Fowler.
- 31 Homoióō (ὁμοιόω, verb, from *hómoios*), to assimilate, to become similar be (make) like, resemble [Thayer, 1995].
- 32 Sophist [218b9-c1].
- 33 That is why a philosopher is (i) a schemer after (ἐπίβουλος) the *kalós* and *agathós* τοῖς καλοῖς καὶ τοῖς ἀγα θοῖς [Symposium 203d3-4].
- 34 οἱ ὀρθῶς φιλοσοφοῦντες ἀποθνήσκειν μελετῶσι [*Phaedo* 67e4; 81a1]. Translated by Harold North Fowler.
- 35 The Seventh Letter and other sources describe the reasons for "Plato's transition from homo politicus to an unworldly philosopher" [Haake, 2020: 68–69].
- 36 Apology [36c4-6].
- 37 αὐτὴν τὴν τῆς φρονήσεως κτῆσιν [*Phaedo* 65a8].
- 38 Republic [10.621c4-5].
- 39 Laws [4.716b].
- 40 Laws [1.643e4-6].
- 41 Heraclitus, fragment DK B114. Translated by G.T.W. Patrick [1889].
- 42 According to Kant, "It is, therefore, a transcendental *ideal* which forms the basis of the complete determination of everything that exists, and is the highest material condition of its possibility a condition on which must rest the cogitation of all objects with respect to their content. Nay, more, this ideal is the only proper ideal of which the human mind is capable; because, in this case alone a general conception of a thing is completely determined by and through itself, and cognized as the representation of an individuum" [Kant, 1964: 506–507]. Translated by Paul Guyer and Eric Matthews.
- 43 Heidegger [1998].
- 44 Heidegger [1961].
- 45 Heidegger [1998].
- 46 Heidegger [1998]. Translated by Thomas Sheehan.
- 47 Heidegger [1998]. Translated by Thomas Sheehan.
- 48 "Diotima bids us to transcend, as far as possible, not just our gender but, ultimately, even our humanity itself, in an attempt to have intercourse with and perhaps emulate, as far as we can, the non-human and non-gendered Forms" [Hobbs, 2007: 271].
- 49 Note that the adjective ἀληθινός derived from the adjective *alēthēs* [Thayer, 1995]. At the same time, *aretē* and *agathós* are also related by etymology and meanings. See Annas [2002: 55].

- 50 The verb *phronéō* is the primary verb, while the verb $\varphi povti\(\zeta \omega$, to consider, ponders is its derivative.
- 51 "I think, Phaedrus, that the epithet "sophón" is too great and befits God alone; but the name "philósofon," or something of the sort would be more precisely (μᾶλλόν) and at harmony with itself (ἀρμόττοι) and suitably (ἐμμελεστέρως)" [Phaedrus 278d5–7]. Translated by Harold N. Fowler with the modifications.
- 52 Epistamai (ἐπίσταμαι, verb, from ἐπί, fitting on, which intensifies ἴστημι, to make to stand), know how to do [Symposium 223d3-4; Republic 4.420e1], knowledge "resulting from prolonged practice" (Thayer, 118) and sustained, personal effort [Thaver, 1995].
- 53 εἰς μίαν τε ἰδέαν συνορῶντα ἄγειν τὰ πολλαχῆ διεσπαρμένα [*Phaedrus* 265d5]; πεῖρα διαλεκτικής φύσεως καὶ μή: ὁ μὲν γὰρ συνοπτικὸς διαλεκτικός, ὁ δὲ μὴ οὔ [Republic 7.537c5-6]. "In Republic, then, for all its grander and more elaborate metaphysical ambitions, dialectic still involves, at least in part, that search for the essence described and pursued in the earlier dialogues. What *Republic* adds [*Republic* 7.537c] is the point that the dialectician must be sunoptikos (συνοπτικός), capable of an overview of reality, of discerning the structure of the whole" [Brown, 2010: 152].
- 54 ἐναργὲς ἐν τῆ ψυχῆ ἔχοντες παράδειγμα [Republic 6.484c7]. Also, see footnote 2, Paul Shorey (Cf. Polit. 277b, 277d, etc., Soph. 226c, Parmen. 132d). "The philosopher in the Republic has a clear model in his soul (psukhē) that distinguishes him from the soul (psukhē) that is blind ($\tau \nu \varphi \lambda \tilde{\omega} \nu$) (Republic VI.484c6). It is precisely this blindness of soul (psukhē) that dialectic is meant to overcome. The goal is similar in the *Phaedo* (99d4–e6)" [Ambury, 2018: 91–92].
- 55 Dóxa ($\delta\delta\xi\alpha$, noun, from $dok\epsilon\bar{o}$), opinion, expectation. "Dóxa is the final result of diánoia" [Sophist 264b1]; opposite episteme [Meno 97b; Theaetetus 187b, 201b-c; Republic 6.506c].
- 56 ἐναργεστέρου μὲν ἢ δόξης [Republic 7.533d4-5].
- 57 οὕτω σὺν ὅλῃ τῆ ψυχῆ ἐκ τοῦ γιγνομένου περιακτέον εἶναι, ἕως ἂν εἰς τὸ ὂν καὶ τοῦ ὄντος τὸ φανότατον δυνατή γένηται ἀνασχέσθαι θεωμένη [Republic 7.518c6-8].
- 58 νόμος ὃν τὸ διαλέγεσθαι περαίνει [Republic 7.532a1-2].
- 59 νόησιν δὲ περὶ οὐσίαν [Republic 7.534a2-3].
- 60 τοῦ παντὸς ἀρχὴν ἰών [Republic 6.511b6].
- 61 διαλέγεσθαι ἐπιχειρῆ ἄνευ πασῶν τῶν αἰσθήσεων διὰ τοῦ λόγου ἐπ' αὐτὸ [Republic 7.532a4–5]. Pay attention to Note 4 by Paul Shorey (Cambridge, 1969).
- 62 "Plato describes dialectic as a mediation between λέγειν and νοεῖν that not only prepares, but provides a partial vision of the things themselves precisely in, and not after, the destruction or refutation of concealing and distorting λόγοι" [Gonzalez, 2009: 27].
- 63 It is the difference between "geometry and calculation and such subjects," γεωμετρίας τε καὶ λογισμούς καὶ τὰ τοιαῦτα (6.510c2)) and dialectics [Republic 6.510c–6.511b]. Mathematics, as the highest quality of the work of the sophoi, which formalizes the *doxa* of *alēthēs*, does not explore the nature of hypotheses and dokéō as such. It takes them as a basis, as self-evident, and follows them. Whereas the méthodos of dialégesthai uses dokéō and its products "like steps of a stair" to arkhē, where, as Paul Shorey pointed out (Note 4, *Republic* 6.511b), the verb ἐπίβασις (to step on, stepping upon (6.511b5) is equivalent to the phrase ὥσπερ ἐπαναβάσμοις (like steps of a stair (*Symposium* 211c2). See Karasmanis [2020: 120–123].
- 64 "One engages in dialectic, therefore, not solely to grasp an eternally stable object of cognition, but also to psychically stabilize oneself and maintain that condition when faced with the threat of wandering. (48 Cf. Parmenides 135b5-e7, in which Parmenides is impressed by young Socrates' insistence on the existence of forms and his refusal to allow Zeno to remain among visible things and observe their wandering (τὴν πλάνην) between opposites (135e2)" [Ambury, 2018: 92].

- 65 "I have argued that for Plato, dialectical self-cultivation disciplines psychic wandering and establishes a healthy intellectual disposition. To love wisdom is not just to love a particular epistemic object but to value and desire a specific comportment. (...) It is of course, true that dialectic can yield important epistemological results, but it is equally true that it does so because it engenders an existential transformation in the interlocutor" [Ambury, 2018: 94].
- 66 θνητή φύσις ζητεῖ κατὰ τὸ δυνατὸν ἀεί τε εἶναι καὶ ἀθάνατος [Symposium 207d1-2]; "the mortal phúsis seeks for (ζητέω), as far as possible, to be always and immortal." See Ademollo [2018: 40-41].
- 67 Laws [4.713e1-2]. Translated by R.G. Bury with modification.
- 68 That is why *philósophos* is always poor (πένης ἀεί, 203c5), not tender and not *kalós* (δεῖ ἀπαλός τε καὶ καλός, 203c5), he is like a vagrant [203c6–203d1], he ever dwells with want [203d2–3] [*Symposium* 203c5–d3].
- 69 χρωμάτων καὶ ἄλλης πολλῆς φλυαρίας θνητῆς [Symposium 211e2]. Translated by Harold N. Fowler with modification.
- 70 Theaetetus [176b5-177b7].
- 71 ἀτοπώτατός [Theaetetus 149a13; Phaedrus 230c6], ἀτοπίαν ἄνθρωπος [Symposium 221d2]. A primary word ἀ- + τόπος (atopos)
- 72 As a whole, "érōs desires what it lacks (191a5-6); that érōs is of kalós (197b8); that érōs for the psukhē is more valuable than érōs for the body (184a1); that agathós things arise from the love of kalós things (197b8-9); that érōs aims at aretē (178c5-6, 179a8, 180b7-8, 188d5-6, 178c5-6, 179a8, d1-2, 180b7-8, 184d7, 185b5, 188d4-9, 196d4-e6), the agathós (188d5) and eudaimōnia (180b7, 188d8, 193d5, 194e6, 195a5); that érōs must be governed by knowledge (188d1-2; cf. 184d1-e1); that it has some intimate relationship to phrónēsis (182b7-c2, 184d1) epistēmē (187c4-5) sophiā (196d5-6), and that érōs brings together the human and the divine (188d8-9)" [Sheffield, 2007: 37] with modifications.
- 73 τῶν τίνα τρόπον διωκόντων αὐτὸ καὶ ἐν τίνι πράξει ἡ σπουδὴ καὶ ἡ σύντασις ἔρως ἂν καλοῖτο [Symposium 206b1-2].
- 74 Marchiandi [2020] and Lygouri-Tolia [2020].
- 75 Masculine/neuter dative singular of kalós.
- 76 ἔστι γὰρ τοῦτο τόκος ἐν καλῷ καὶ κατὰ τὸ σῶμα καὶ κατὰ τὴν ψυχήν [Symposium 206b6–7]. Translated by Harold N. Fowler. See Gerson [2007: 48].
- 77 ὧ Σώκρατες, ἔφη, οὐ τοῦ καλοῦ ὁ ἔρως, ώς σὺ οἴει [Symposium 206e2].
- 78 Related term of génesis.
- 79 τῆς γεννήσεως καὶ τοῦ τόκου ἐν τῷ καλῷ [Symposium 206e4].
- 80 ὁ ἔρως τοῦ τὸ ἀγαθὸν αὐτῷ εἶναι ἀεί [Symposium 206a9] μ εἴπερ τοῦ ἀγαθοῦ ἑαυτῷ εἶναι ἀεὶ ἔρως ἐστίν [Symposium 207a1-2].
- 81 "Because this is something ever-existent and immortal in our mortal life" [Symposium 206e6–7]. Translated by Harold N. Fowler.
- 82 Republic [7.540b].
- 83 Ilyin [1993], Motroshilova [2013], Nietzsche [1994, 1990] and Troubetzkoy [1994].
- 84 Dubito ergo cogito, cogito ergo sum (in Latin) [Davies, 2001].
- 85 Epistēmē (ἐπιστήμη, noun, from *epistamai*), knowledge of abstract and general ideas, certainty; opposite *dóxa*.
- 86 Hadot [1999, 2005].
- 87 ἐκτετόκαμεν [Theaetetus 210b].
- 88 "What is a *tekhnē*? It is a reasoned capacity to achieve a (worthwhile) goal. Qua possessing a *tekhnē*, the expert must understand the causes of success or failure, and as such must be able to teach the expertise to another" [Brown, 2010: 164–165].
- 89 Symposium [211e1].

- 90 Hadot [2005a].
- 91 όντινα τρόπον χρῆ ζῆν [*Republic* 1.352d]. See Torri [2017: 32].
- 92 I present below an excerpt from my next study, "The Fundamental Rights of That Which Is Always."
- 93 τῆς ἄνω ὁδοῦ ἀεὶ ἑξόμεθα [Republic 10.621c4], to have/hold (έchō) the upward way/road (hodós).
- 94 The phylogeny of Hominin varieties was formed in the Miocene 6–7 million years ago [McNulty, 2016].
- 95 Benveniste [1973: 771].
- 96 Republic [4.433a]. "In Plato's Republic, Socrates has the objective of formulating a conception of justice ($dikaiosún\bar{e}$) and defending the just life as always being better, i.e. happier, than the unjust life (2.358b-c). He articulates his conception of justice (rightness ($dikaiosún\bar{e}$)) variously in the following ways:
 - [T1] "We've heard many people say and have often said ourselves that dikaiosúnē (δικαιοσύνη ἐστί) is doing one's own work (τὸ τὰ αὐτοῦ πράττειν) and not meddling with what isn't one's own (μὴ πολυπραγμονεῖν)." (4.433a)
 - [T2] "Then, it turns out that this doing one's own work (τὸ τὰ αὑτοῦ πράττειν) provided that it comes to be in a certain way—appears to be dikaiosúnē (κινδυνεύει [...] ή δικαιοσύνη εἶναι)." (4.433b)
 - [T3] "Is it (the thing that will make the city good by its presence), above all, the fact that every child, woman, slave, freeman, craftsman, ruler, and ruled each does his own work (ἔπραττε) and doesn't meddle with what is other people's (οὐκ ἐπολυπραγμόνει)?" (4.433d)
 - [T4] "Exchange and meddling is injustice. Or to put it the other way around: For the money-making, auxiliary, and guardian classes each to do its own work (tò αὐτοῦ πράττοντος) in the city, is the opposite. That's dikaiosúnē, isn't it, and makes the city right/righteous (dikaios)?" (4.434c)
 - [T5] "One who is just does not allow any part of himself to do the work of another part (μὴ ἐάσαντα τάλλότρια πράττειν) or allow the various classes within him to meddle with each other (μηδὲ πολυπραγμονεῖν)" (4.443d)" [McDavid, 2022: 96].
- 97 Plato wrote in the Allegory of the Cave τὸν ἐπιχειροῦντα λύειν τε καὶ ἀνάγειν [Republic 7.517a], i.e., philosophers "tried to liberate (citizens from the shackles of ignorance, cave) and lead them up (to the Sun against their desire to stay in the cave)."
- 98 Philosophers forced the citizens of Kallipolis to come the way that they themselves had been forced to come. Namely, "... someone should drag him thence by force up the ascent which is rough and steep, and not let him go before he had drawn him out into the light of the sun" [Republic 7.515e]. Translated by Paul
- 99 Genitive singular of φρόνιμος (phrónimos).
- 100 άλλ' ώς ἄμεινον ὂν παντὶ ὑπὸ θείου καὶ φρονίμου ἄρχεσθαι [Republic 9.590d]. Translated by Paul Shorey with modification.
- 101 Annas [2017: 25].
- 102 Republic [2.357a-2.369b]. I disagree with David Miller, who cited Aristotle's dialogues as the source of the idea of justice, and called the *Institutes of Justinian* (the 6th century A.D.) the basic book where justice is defined as "the constant and perpetual will to render to each his due." See Miller, David. Justice. The Stanford Encyclopedia of Philosophy, Fall 2017 Edition, Edward N. Zalta (ed.). https://plato.stanford.edu/archives/fall2017/entries/justice/
- 103 I follow McDavid [2022: 96]. "The two parts of Socrates' conception of justice in the Republic are not variations on the same idea. They each specify a

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distinct aspect of the nature of justice and, accordingly, each should be specified in any discussion of the account of justice on offer in that dialogue. The insistence that justice consists, in part, in "not meddling in the work of another" has much greater force than first appears. It is built on the observation that justice is found in entities that have parts and that these parts are themselves distinguished through their each having a unique work that is proper to them. 'Not meddling in the work of another' is a prohibition on any part taking up work that is proper to another. The prohibition turns a blind eye to any meddlesomeness that may occur inside of a part, taking inter-class or inter-part meddling to be the activity that is essentially inconsistent with justice" [McDavid, 2022: 105].

- 104 Apology [30a6-7].
- 105 See Benveniste [1973: 167].
- 106 See Nagy [2002: 32].
- 107 Meanings of the verb epístamai (ἐπίσταμαι) [Thayer, 1995].

Conclusions

Discursive thinking through refers to leaving something incomplete and unsaid. The force of discourse/dialectics lies in *continuous* "thinking through." Therefore, written exposition, as the fixed gaze on the changing "Order," is called to provoke and continue the discourse and not to evoke a sense of impasse and completeness.

The book proposes the way/manner (*trópos*) "to go through" (*dierkhomai*) the modern paradigm of politeia and paideia to the idea of a man who transforms the Universe.

The idea of a man who transforms the Universe is based on five key questions that continually "turn" and return to the beginning/origin $(arkh\bar{e})$ of the upward path. They allude to the ouroboros, a symbol of eternal cyclic renewal.

The first question is, "What is *alētheia*?" It is a particular *méthodos* that brings to light (*phaínō*) the *génesis* and philosophy of the cosmos. Equally important is the fact that this *méthodos* "goes through" (*dierkhomai*) the second key question, "What is that which comes to be (*gígnomai*) and always is purely (*ón*), and what is that which comes to be (*gígnomai*) and not ever is (*ón*)?"

The second question turns and returns to the most critical value in the "to be" phenomenon. This value is the "to be *katharós*" property or, equivalently, to exist/to be (*eimî*) complete on its own. The study of this question allowed us to formulate the first axiom of education (and politeia) of "Those who transform the Universe." It is the "*Agathós* Above All!"

Understanding the fundamental value in the "to be" phenomenon turns the researcher directly to the idea of human beings and human rights. The ontological dichotomy directs to examine the beginning/origin $(arkh\bar{e})$ of the upward path of ethics. Discursive thinking through the second question purifies $(kathair\bar{e})$ view on the fundamental question for each person:

The hominin form comes to be (gignomai) and always is purely (δn) ,

or

The hominin form comes to be (gignomai) and not ever is (ón)?

DOI: 10.4324/9781003450726-6

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The third question helps to purify $(kathair\bar{v})$ the history of the hominin form in the expanding cosmos and to formulate the second axiom of education (and politeia) of "Those who transform the Universe." It is the " $Aret\bar{v}$ and Agathós, Unite!"

The upward path of ethics and *méthodos* "What is it?" again "turned" and brought us back to the *méthodos* "What is *alētheia*?" We found the fourth question, "What is the meaningful *phúsis* of the hominin form?" It is a question about how the form works and how it continuously and non-linearly "turns" towards a changing "Order." It is a question, among other things, about peace and war, as peace and war result from these "turns."

Research of the work of the meaningful *phúsis* found two fundamental properties. We called them "sophists" and "philosophers." The fifth question, "What do sophists and philosophers do?", "turned" us to study the work of the sophists and philosophers, as well as the higher idea by which they actually "turn" the hominin form to the unmixed/pure (*eilikrinēs*) *phúsis*.

Thus, discursively thinking through education (and politeia) is to learn to be sophists and philosophers and, therefore, continuously and non-linearly "turn" the hominin form towards the highest idea. The development and advancement of the idea of a man who transforms the Universe convert the hominin form into a competitive *dúnamai* and guarantee it "to come to be (gígnomai) and always be pure $(\acute{o}n)$ " in the cosmos/ $ag\bar{o}n$.

Glossary

Agathós (ἀγαθός, adjective); **Agathou** (αγαθού, masculine/neuter genitive singular); **Agathón** (ἀγαθόν, neuter nominative/accusative/vocative singular), good.

Agōn (ἀγών, noun, from verb ἄγω, I lead, bring [a person, or animal], guide). *Agōn* "was a unique creation of the Greeks in the ancient world. In the all kinds of agōn of Greece, they showed an unflinching spirit of antagonism, the Greeks made it legalization, rationalization and formalization. It is from this kind of spirit that the western thinking tradition of binary opposition was formed," including *dialektikē*.

Alētheia (ἀλήθεια, noun), unconcealment, non-oblivion. **Alēthēs** (ἀληθής, adjective) unconcealed; opposite *lēthē*.

Anánkē (ἀνάγκη, noun), necessity, compulsion, constraint.

Aretē (ἀρετή, noun), the personal quality of being *agathou*. Plato considered *aretē* as the essence of *psukhē*, "the flow of *agathes psychis*."²

Arkhē (ἀρχή, noun) beginning, origin.

Dialégesthai (διαλέγεσθαι, verb) and **Dialégomai** (διαλέγομαι, verb), "to practice *dialektikē*," "to reveal results in discussion," or "to think discursively." Gregory Nagy states, "*dialégesthai* is key to the survival of Socrates' language and of his message."³

Dialektikē (δἴάλεκτἴκή, noun), dialectic, "asking itself questions and answering, affirming and denying."⁴

Dierkhomai (διέρχομαι, verb, from δἴά-, through, thoroughly + ἔρχομαι, érkhomai, to come, go), to go through, pass through.⁵

Díkaios (δίκαιος, adjective, derived from *díkē*), right, righteous; opposite *ádikos*. **Díkē** (δίκη, noun), custom, right (as self-evident), especially a judicial verdict which declares something that is approved or disapproved⁶; as a **Dikaiosún**ē (δικαιοσύνη, noun. From δἴκαιος [*díkaios*] + -σύνη [-súnē], rightness, righteousness) it refers to a person; as an adverb. – duly, rightly.

Dúnamai (δύναμαι, verb) to be able, strong enough to do.⁷

Dúnamis (δύναμις, noun, from *dúnamai*), potency, i.e. a special ability to do a particular thing (a natural ability, *dúnamai*); the total amount that can be contained or produced (capacity). The Romans translated *dúnamis* as potentia, which has formed the root of the English word "potential."

Échō ($\xi \omega$, verb), to have, hold.

Eilikrinēs (εἰλικρινής, adjective; from heilē, "shining of the sun" and / krystallízō, "to judge"), rightly judged because seen in full light; unmixed, without alloy, pure.

Eikōn (εἰκών, noun), image, likeness.

Eimí (εἰμί, verb), exist, be; и Ón (ὄν, participle, noun) the things which actually exist, the present, reality; opposite gignomai and phtheirō.

Emphanízō (ἐμφανίζω, 9 verb), show forth, manifest, to become visible. 10

Epimeléomai (ἐπιμελέομαι, verb, from ἐπί, fitting on, which intensifies μέλει, care for, take an interest in), to care for (physically or otherwise), attend to.

Epístamai (ἐπίσταμαι, verb, from ἐπί, fitting on, which intensifies ἵστημι, to make to stand), know how to do, knowledge "resulting from prolonged practice" (Thayer, 118) and sustained, personal effort.¹¹

Epistēmē (ἐπιστήμη, noun, from *epistamai*), knowledge of abstract and general ideas, certainty; opposite *dóxa*.

Epitēdeúō (ἐπιτηδεύω, verb), pursue or practise a thing, make it one's business. ¹² **Epôidê** (ἐπωδή, noun), incantation (the saying of words believed to have a magical effect when spoken or sung). "ἐπωδή is a compound of ἐπί- and ἀδή. ἀδή means "song," and the prefix ἐπἰ means that the action accom-

plished is "in favour of.""13

Eudaimōnia (εὐδαιμονία, noun) and **Eudaimōn** (εὐδαίμων, adjective), happiness, well-being, outward prosperity, to be happy, in the sense of living a good life, etc. The adjective *eudaimōn* literally translates as "blessed with the *daimōn*." In understanding ancient thinkers, *eudaimōnia* meant the quality of life deserving respect, approval and imitation in society.

Eunomia (εὐνομία, noun), *kalós* system of laws and government, *kalós* legislation, *kalós* order.

Génesis (γένεσις, noun, from *gignomai*) coming into being, production, generation.

Gígnomai (γίγνομαι, verb) to come into being; opposite (i) *phtheírō* and (ii) *eimí*.

Ginōskō (γινώσκω = γιγνώσκω, verb), come to know, perceive, and in past tenses, know, ¹⁵ "to know, especially through personal experience (first-hand acquaintance)." ¹⁶

Háptō (ἄπτω, verb), fasten or bind to. 17

Hēgéomai (ἡγέομαι, verb) lead the way, command and the figurative sense "believe, judge, estimate." ¹⁸

Homoióō (ὁμοιόω, verb, from *hómoios*), to assimilate, to become similar – be (make) like, resemble.¹⁹

Hómoios (ὅμοιος, adjective, from the same as ὁμοῦ – together, at the same place and time), like, resembling, the same as.

Homónoia (ὁμόνοια, noun), like-mindedness.²⁰

Ísos (ἴσος, adjective, probably from οἶδα), equal, "equality; having the same (similar) level or value; equivalent, equal in substance or quality"; "(*isos*) is the root of the English terms, '*isometric*' and '*isosceles*' – referring to equivalencies;"²¹ "repeated to denote equal relations; equal in rights."²²

- **Kalós** (καλός, adjective; neuter **Kalón**, καλόν), moral beauty, of fine quality; and **Kállos** (κάλλος, noun), beauty. According to Plato, the *kalós* meanings followed from the *agathós* meanings: "All that is *agathón* is *kalón*, and the *kalón* is not excessive."²³
- **Kathaírō** (καθαίρω, verb, from *katharós*), to make physically clean and free from admixture (*katharós*), cleanse/purify.
- **Katharós** (καθαρός, adjective, a primitive word, akin to Latin castus [spotless], English chaste), physically clean, free from admixture.²⁴
- **Kátharsis** (κάθαρσις, noun, from $katha ir\bar{o}$), physically cleansing/purification.
- **Kosméō** (κοσμέω, verb, from *kósmos*), to put in order, arrange, make ready, prepare; to ornament, adorn.²⁵
- **Lēthē** (λήθη, noun, from verb λανθάνω [also λήθω], I am concealed [hidden]), concealment, oblivion, closedness; opposite *alētheia*.
- **Lógos** (λόγος, noun, from $l\acute{e}g\bar{o}$), (i) that which is said: word, sentence, speech; (ii) that which is thought: reason, consideration, computation.
- **Méthodos** (μέθοδος, noun), path (hodos) of pursuit (meta-), to pursue one's enquiry, or literally "the way to follow."
- **Noiéō** ($voé\omega$, verb, from noûs), perceive by the noûs, to think, to apply mental effort (noûs) needed to reach "bottom-line" conclusions, to understand, mean, consider, intend.
- **Nómos** (νόμος, noun); **Nómoi** (νόμοι, plural), custom, law. The original title of Plato's *Laws* is *Nόμοι* (*Nómoi*).
- **Nóos** (vóo ς , noun; contracted form: **Noûs**, voũ ς), mind, as employed in perceiving and thinking; an act of mind (thought).²⁶
- **Paideia** (παιδεία, noun) and **Paideú**ō (παιδεύω, verb) are derived from the noun **Paîs** (παῖς), child. They are translated as rearing of a child, child-training.²⁷
- **Paidiá** (παιδιά, noun), child-play; opposite *spoudē*.
- **Peithó** $(\pi ε iθω, verb)$, ²⁸ prevail upon, persuade, usually by fair means. ²⁹
- **Phaínō** ($\varphi\alpha$ ív ω , verb), to bring to light, to cause to appear.
- **Phrónēsis** (φρόνησις, noun; **Phronēse**ōs [φρονήσεως], genitive singular of *phrónēsis*), thoughtfulness, sagacity, insight.
- **Phrónimos** (φρόνιμος, adjective) and **Phronimótatos** (φρονιμώτατος, adjective, superlative of *phrónimos*), "thoughtful, i.e. sagacious, 'how we size things up'; reflecting our personal ('visceral') opinions."³⁰
- **Phronéō** (φρονέω, verb). It is literally "personal perspective regulating outward behavior"; ³¹ opposite $dok\'e\bar{o}$. ³²
- **Phtheírō** (φθείρω, verb), to pass away, perish, be destroyed.³³ On the one hand, it was opposed to *gignomai*; on the other hand, it opposed to *eimí*.
- **Phúsis** (φύσις, noun), the energy that causes the expansion of the cosmos.³⁴ "That *physis* is even more basic than *kósmos* is evident from the fact that the discoverers of the *kósmos* came to be called *physiologoi*, not *kosmologoi*, and that 'nature' occurs much more frequently in tides of their treatises than does 'cosmos.'"³⁵
- **Politeía** (πολιτεία, noun). The term is used in a broad sense, from "civil order, constitution of a polis (state)" to a "form of government." Its meanings are equivalent to Plato's *Politeia* (Πολιτεία, but the *Republic* in English).

Politeia means a popular or relatively popular form of government in the public interest.

Psukhē (ψῦχή, noun). Plato's research was aimed at affirming the two main meanings of *psukhē*: (1) the *psukhē* is immortal, ³⁶ and its nature differs from the nature of the body. ³⁷ (2) *Epistēmē* is stored in the *psukhē*, therefore to seek for something and to know, in general, was called *anamimnēskō*. ³⁸

Sophia (σοφία, noun), "wisdom/skill/artistry/cleverness/taste." The term "covers three broad categories: (a) knowledge and factual accuracy; (b) moral and educational integrity; (c) technical skill and aesthetic/emotional impact." But in a special sense he (*Plato*) considers *sophiān*⁴⁰ to be the knowledge of those things which are objects of intelligence (νοῦς) and really existent, which, he says, is concerned with God and the *psychēn* as separate from the body. And especially by idea of *sophiān* he means philosophy, which is a yearning for divine *sophiās*."

Sophós (σοφός, adjective), **Sophoí** (σοφοί, nominative/vocative plural masculine) is the name of one who practices *sophiā*.

Spoudē (σπουδή, noun), seriousness; opposite *paidiá*.⁴²

Syntássō (συντάσσω, verb, from σύν and τάσσω), to put in order with or together, to arrange; to (put together), constitute, i.e. to prescribe, appoint.⁴³

Theáomai (θεάομαι, verb, from tháomai, "to gaze at a spectacle"), properly, gaze on (contemplate) as a spectator; to observe intently, especially to interpret something (grasp its significance); to see (concentrate on) so as to significantly impact (influence) the viewer.⁴⁴

Theōréō (θεωρέω, verb, from *theáomai*), to be a spectator of, i.e. discern, gaze on for the purpose of analysing (discriminating), behold.⁴⁵

Trópos (τρόπος, noun, from τρέπω, turning, adopting a new manner), a new direction from taking a turn or adopting a new way/manner.⁴⁶

Zētéō (ζητέω, verb), to seek by enquiring, to investigate to reach a binding (terminal) resolution, "getting to the bottom of a matter." 47

Notes

- 1 Daqing [2010: 6809].
- 2 ροὴν τῆς ἀγαθῆς ψυχῆς [Cratylus 415d].
- 3 Nagy [2002: 32].
- 4 Theaetetus [189e–190a]. Translated by Harold N. Fowler.
- 5 See Schur [2015], Gonzalez [2009: 207–208], and McPherran [2007: 92].
- 6 Thaver [1995].
- 7 Liddell and Scott [1940].
- 8 Thayer [1995].
- 9 From $\dot{\epsilon}v$, in (inside, within) + phaínō.
- 10 Liddell and Scott [1940].
- 11 Thayer [1995].
- 12 Liddell and Scott [1940].
- 13 Brisson [2020: 66-68].
- 14 *Daímōn* was understood as "the bearer of human destiny." ἦθος ἀνθρώπῳ δαίμων, a man's character (ethos) is his fate (*daímōn*)/the destiny (*daímōn*) of man is in his own character (ethos). Herodotus (fr. B 119 Diels).

- 15 Liddell and Scott [1940].
- 16 Thayer [1995].
- 17 Liddell and Scott [1940].
- 18 Benveniste [1973: 164–167].
- 19 Thayer [1995].
- 20 I follow Sarah Broadie, Christopher Rowe and Thornton C. Lockwood in translating ὁμόνοια literally as "like-mindedness" rather than the more common "concord." See Lockwood [2020].
- 21 Thaver [1995].
- 22 Liddell and Scott [1940] and Laws [6.774c4].
- 23 πᾶν δὴ τὸ ἀγαθὸν καλόν, τὸ δὲ καλὸν οὐκ ἄμετρον [Timaeus 87c].
- 24 Liddell and Scott [1940] and Thayer [1995].
- 25 Thayer [1995].
- 26 [Liddell & Scott, 1940].
- 27 În understanding παιδεία and παιδιά, I follow R.G. Bury and Plato: (i) I am "mindful of the original native meaning and kinship of these terms" [Bury, 1937: 311]; (ii) μούσας παιδείαν τε καὶ παιδιάν [Lows 2.656c].
- 28 The noun πίστις, pistis, persuasion, belief. "Always avoid 'faith' in translating Plato" [*Republic* 7.534a1, Footnote 1, Paul Shorey].
- 29 [Liddell & Scott, 1940]. *Peithó* is the basis of rhetoric [Gorgias 453a1–7].
- 30 [Thayer, 1995].
- 31 Thaver, 1995.
- 32 [Liddell & Scott, 1940].
- 33 Unlike the verbs *gignomai* and *eimi*, the verb *phtheirō* "can only be used without a complement": "in ordinary Greek you do not say 'X φθείρεται *F*' to mean 'X ceases to be *F*" [Ademollo, 2018: 63].
- 34 I follow Gregory Vlastos [2005: 4–19] and Werner Jaeger [2014: 44–45], which indicate the difference between the meanings of *phúsis* and naturalism.
- 35 [Vlastos, 2005: 18].
- 36 ἀθάνατος ἂν ἡ ψυχὴ εἴη [Meno 86b].
- 37 For example, [Phaedo 115c-116a; Phaedrus 245c-249d; Timaeus 34c].
- 38 [Meno 81d].
- 39 [Griffith, 1990: 188]. I follow Mark Griffith [Griffith, 1990: 188–189] and not Aristotle. See discussion [Tell, 2011: 15–17].
- 40 Accusative singular of sophiā.
- 41 Ιδιαίτατα μὲν σοφίαν ἡγεῖται εἶναι τὴν τῶν νοητῶν καὶ ὄντως ὄντων ἐπιστήμην, ἥν φησι περὶ θεὸν καὶ ψυχὴν σώματος κεχωρισμένην. ἰδίᾳ δὲ σοφίαν καὶ τὴν φιλοσοφίαν καλεῖ, ὄρεξιν οὖσαν τῆς θείας σοφίας [Diogenes Laertius, 3.1.63]. Edited by Robert Hicks [1972].
- 42 I follow R.G. Bury: "Plato would abolish the distinction between παιδιά and σπουδή by combining these two apparent opposites under the wider unity of παιδεία" [Bury, 1937: 312].
- 43 [Thayer, 1995].
- 44 [Thayer, 1995].
- 45 [Thayer, 1995].
- 46 [Thayer, 1995].
- 47 [Thayer, 1995].

Bibliography

- Ademollo, Francesco. On Plato's Conception of Change. Oxford Studies in Ancient Philosophy, Vol. 55, 2018: 35–84. https://doi.org/10.1093/oso/9780198836339. 003.0002
- Ambury, James M. Dialectical Epimeleia: Platonic Care of the Soul and Philosophical Cognition. In *Plato Journal*, Vol. 17, 2018: 85–99. https://doi.org/10.14195/2183-4105_17_6
- Annas, Julia. *A Very Short Introduction*. New York: Oxford University Press, 2002. http://ai-makurdi.org/wp-content/uploads/2020/03/Julia-Annas-Ancient-Philosophy-A-Very-Short-Introduction.pdf
- Annas, Julia. Virtue and Law in Plato and Beyond. New York: Oxford University Press, Oxford: New York, 2017.
- Anokhin, Pyetr. Selected Works: Philosophical Aspects of the Theory of Functional Systems. Moscow: Nauka, 1978.
- Anokhin, Konstantin, and Tatyana Chernigovskaya. Mirror for the Brain. In *V Mire Nauki*, Vol. 5, 2008: 68–73.
- Araújo, Carolina. ΦΙΛ- Names as Character Disposition. In *Stylos*, Vol. 29 (29), 2020: 51–73.
- Arendt, Hannah. Eichmann in Jerusalem: A Report on the Banality of Evil. New York: Viking Press, 1965.
- Aries, Philippe. Images of Man and Death. Moscow: Progress-Academy, 1992.
- Aries, Philippe. The Child and Family Life in the Old Regime. Ekaterinburg: Ural University Press, 1999.
- Augustine of Hippo. *The City of God.* St. Petersburg: Aletheia, 1998. https://azbyka.ru/otechnik/Avrelij_Avgustin/o-grade-bozhem/
- Augustine of Hippo. *Confession*. Moscow: Dar, 2007. http://azbyka.ru/otechnik/ Avrelij_Avgustin/ispoved/
- Baev, Konstantin. Copernicus. Moscow: Zhurnalnogazetnoe Obedinenie, 1935.
- Barber, Michael. *Instruction to Deliver: Fighting to Transform Britain's Public Services*. Moscow: Publishing House of the Higher School of Economics, 2011.
- Bazaluk, Oleg. The Universe: Living and Intelligent Matter (The Historical-Philosophical and Natural-Science Analysis on Basis of the New Cosmological Concept). Dnepropetrovsk: Porogi, 2005.
- Bazaluk, Oleg. Philosophy of Education on Basis of the New Cosmological Concept. Kyiv: Condor, 2010.
- Bazaluk, Oleg. *The Theory of Evolution: From a Space Vacuum to Neural Ensembles and Moving Forward.* Newcastle upon Tyne: Cambridge Scholars Publishing, 2016.

- Bell, David. Cyberculture Theorists: Manuel Castells and Donna Haraway. London: Routledge, 2006.
- Benveniste, Émile. Indo-European Language and Society. Miami Linguistics Series no. 12. London: University of Miami Press, 1973.
- Bickle, John, Peter Mandik, and Anthony Landreth. The Philosophy of Neuroscience. The Stanford Encyclopedia of Philosophy. Edited by Edward N. Zalta. 2019. Stanford, CA: Stanford University, https://plato.stanford.edu/archives/fall2019/entries/ neuroscience/
- Bim-Bad, Boris. Pedagogical Anthropology. Introduction to the Scientific and General Cultural Debate about the Person as an Educator and Educability, the Ways of Its Improvement. Moscow: RAO, 2005.
- Bloom, Benjamin S. All Our Children Learning: A Primer for Parents, Teachers, and Other Educators. New York: McGraw-Hill, 1980.
- Borsboom, Denny. Measuring the Mind: Conceptual Issues in Contemporary Psychometrics. Cambridge: Cambridge University Press, 2005.
- Bostrom, Nick. A History of Transhumanist Thought. In Journal of Evolution and Technology, Vol. 14 (1), 2005: 1–25. http://www.nickbostrom.com/papers/history.pdf
- Bourdieu, Pierre. Practical Reason: On the Theory of Action. St. Petersburg: Aletheia, 2001.
- Bowen, James. A History of Western Education (Volumes 1, 2 and 3). London: Routledge, 2003.
- Brisson, Luc. Agathon, Pausanias and Diotima in Plato's Symposium: Paiderastia and Philosophia. Plato's Symposium: Issues in Interpretation and Reception. Edited by James Lesher, Debra Nails, and Frisbee Sheffield. Hellenic Studies Series 22. Washington, DC: Center for Hellenic Studies, 2007, 229-251.
- Brisson, Luc. The Prologue of the Charmides. Framing the Dialogues: How to Read Openings and Closures in Plato. Leiden; Boston: Brill, 2020: 63-69. https://doi.org/10.1163/ 9789004443990 006
- Brown, Lesley. Definition and Division in Plato's Sophist. Definition in Greek Philosophy. Edited by David Charles. New York: Oxford University Press, 2010: 151–171.
- Burnet, John (ed.). Oxford Classical Texts: Platonis Opera. Vol. 2: Tetralogia III-IV. Oxford: Oxford University Press, 1901; Oxford Classical Texts.
- Burnet, John (ed.). Oxford Classical Texts: Platonis Opera. Vol. 3: Tetralogia V-VII. Oxford: Oxford University Press, 1903; Oxford Classical Texts.
- Burnet, John (ed.). Oxford Classical Texts: Platonis Opera. Vol. 4: Tetralogia VIII. Oxford: Oxford University Press, 1978; Oxford Classical Texts.
- Burnyeat, Myles Fredric. Apology 30b 2-4: Socrates, Money, and the Grammar of γίγνεσθαι. In The Journal of Hellenic Studies, Vol. 123, 2003: 1-25. https://doi. org/10.2307/3246257
- Bury, Robert Gregg. Theory of Education in Plato's "Laws." In Revue des Études Grecques, tome 50, fascicule 236–237, 1937: 304–320. https://doi.org/10.3406/reg.1937.2825
- Capra, Andrea. Plato's Four Muses: The Phaedrus and the Poetics of Philosophy. Hellenic Studies Series 67, 2015. Washington, DC: Center for Hellenic Studies. http://nrs. harvard.edu/urn-3:hul.ebook:CHS_CapraA.Platos_Four_Muses.2014.
- Capra, Fritjof. The Web of Life: A New Scientific Understanding of Living Systems. Kyiv: Sofia, 2003.
- Carone, Gabriela Roxana. The Virtues of Platonic Love. Plato's Symposium: Issues in Interpretation and Reception. Edited by James Lesher, Debra Nails, and Frisbee Sheffield. Hellenic Studies Series 22. Washington, DC: Center for Hellenic Studies, 2007: 208–228.

- Castells, Manuel. The Rise of the Network Society: The Information Age: Economy, Society, and Culture Volume I. 2nd edition. Cambridge, MA/Oxford, UK: Wiley-Blackwell, 2009.
- Castells, Manuel, and Pekka Himanen (eds.). Reconceptualizing Development in the Global Information Age. Oxford: Oxford University Press, 2014.
- Cavell, Stanley. Must We Mean We Say? A Book of Essays. Cambridge: Cambridge University Press, 1976.
- Changeux, Jean-Pierre, and Alain Connes. Conversations on Mind, Matter, and Mathematics. Princeton NJ: Princeton University Press, 1998.
- Charles, David. Introduction. *Definition in Greek Philosophy*. Edited by David Charles. New York: Oxford University Press, 2010, 1–30.
- Chizhevsky, Alexander. The Terrestrial Echo of Solar Storms. Moscow: Mysl, 1976.
- Chizhevsky, Alexander. Space Pulse of Life: The Earth in the Embrace of the Sun. Moscow: Mysl, 1995.
- Chorost, Michael. World Wide Mind: The Coming Integration of Humanity, Machines, and the Internet. Free Press, 2016.
- Cicero. De Natura Deorum, Academica. Translated by Harris Rackham. London: Heinemann, 1933.
- Clarke, Arthur. Profiles of the Future: An Inquiry into the Limits of the Possible. Nanjing: Phoenix, 2000.
- Daqing, Wang. On the Ancient Greek αγων. In *Procedia Social and Behavioral Sciences*, Vol. 2 (5), 2010: 6805–6812. https://doi.org/10.1016/j.sbspro.2010.05.031
- Davies, Richard. Descartes: Belief, Scepticism and Virtue. London: Routledge, 2001.
- Dawkins, Richard. The Selfish Gene. Oxford: Oxford University Press, 1989a.
- Dawkins, Richard. The Extended Phenotype: The Long Reach of the Gene. Oxford: Oxford University Press, 1989b.
- Deacon, Terrence. The Symbolic Species: The Co-Evolution of Language and the Brain. New York: W. W. Norton & Company, 1998.
- Dehaene, Stanislas. The Number Sense. Oxford: Oxford University Press, 2011.
- Derrida, Jacques. Speech and Phenomena: And Other Essays on Husserl's Theory of Signs (Studies in Phenomenology and Existential Philosophy). Translated by. Svetlana Kalinina, and Natalia Suslova. St. Petersburg: Aleteyya, 1999.
- Derrida, Deconstruction and Education. *Ethics of Pedagogy and Research*. Edited by Peter Pericles Trifonas, and Michael A. Peters. Oxford: Wiley-Blackwell, 2004.
- Derry, Jan. Vygotsky, Philosophy and Education. Oxford: Wiley-Blackwell, 2013.
- Dewey, John. How We Think. Mineola, New York: Dover Publications, 1997.
- Dimitriadis, Greg, and George Kamberelis. *Theory for Education*. New York: Routledge, 2006.
- Diogenes Laertius. *Lives of Eminent Philosophers*. Edited by Robert Drew Hicks. Cambridge: Harvard University Press, 1972.
- Dmitriev, Igor. The Temptation of Saint Copernicus: The Unscientific Structure of Scientific Revolution. St. Petersburg: St. Petersburg University Press, 2006.
- Duke, E.A., W.F. Hicken, W.S.M. Nicoll, D.B. Robinson, and J.C.G. Strachan (eds.). Oxford Classical Texts: Platonis Opera, Vol. 1: Tetralogiae I–II. Oxford: Oxford University Press, 1995; Oxford Classical Texts.
- Edelman, Gerald, and Vernon B. Mountcastle. *The Mindful Brain: Cortical Organization and the Group-Selective Theory of Higher Brain Function*. Cambridge, MA: MIT Press, 1978.

- Edmunds, Lowell. What Was Socrates Called? In The Classical Quarterly, Vol. 56 (2 Dec.), 2006: 414-425.
- Esbjörn-Hargens, Sean, Jonathan Reams, and Olen Gunnlaugson (eds.). Integral Education: New Directions for Higher Learning. New York: State University of New York Press, 2010.
- Fenwick, Tara, and Richard Edwards. Actor-Network Theory in Education. London: Routledge, 2010.
- Fierro, Maria Angelica. Plato's theory of desire in the Symposium and the Republic, Durham theses, Durham University, 2003.
- Filipchenko, Yuri. Evolutionary Idea in Biology. Historical Overview of Evolutionary Teachings of the 19th Century. Moscow: Nauka, 1977.
- Frankl, Viktor. Man's Search for Meaning. Moscow: Progress, 1990.
- Freire, Paulo. Formation of a Critical Consciousness. Kviv: Universe, 2003.
- Freud, Sigmund. Group Psychology and the Analysis of the Ego. New York: Boni and Liveright, 1922.
- Freud, Sigmund. Psychology of the Unconscious. Moscow: Prosveshenie, 1989.
- Gerson, Lloyd P. A Platonic Reading of Plato's Symposium. Plato's Symposium: Issues in Interpretation and Reception. Edited by James Lesher, Debra Nails, and Frisbee Sheffield. Hellenic Studies Series 22. Washington, DC: Center for Hellenic Studies, 2007, 47–70.
- Gill, Mary-Louise. Method and Metaphysics in Plato's Sophist and Statesman. Definition in Greek Philosophy. Edited by David Charles. New York: Oxford University Press, 2010, 172–199.
- Gindilis, Lev. S.E.T.I.: Search for Extraterrestrial Intelligence. Moscow: Publishing House of the Physical and Mathematical Literature, 2004.
- Gomez, Faustino, and Risto Miikkulainen. Solving Non-Markovian Control Tasks with Neuroevolution. Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI99, Stockholm, Sweden). Denver: Morgan Kaufmann, 1999. http://nn.cs.utexas.edu/downloads/papers/gomez.ijcai99.pdf
- Gonzalez, Francisco J. Plato and Heidegger. A Question of Dialogue. University Park, PA: The Pennsylvania State University Press, 2009.
- Gopnik, Alison, and Laura Schulz (eds.). Causal Learning: Psychology, Philosophy, and Computation. Oxford: Oxford University Press, 2007.
- Griffith, Mark. Contest and Contradiction in Early Greek Poetry. Cabinet of the Muses. Edited by Mark Griffith, and D.J. Mastronarde. Chisinau, MD: Scholars Press, 1990: 185-207.
- Grinin, Leonid. The Big History of the Evolution of World: Space Evolution. Volgograd: Teacher, 2013.
- Haake, Matthias. The Academy in Athenian Politics and Society Between Disintegration and Integration: The First Eighty Years (387/6-306/5). Plato's Academy: Its Workings and Its History. Edited by Paul Kalligas, Chloe Balla, Effie Baziotopoulou-Valavani, and Vassilis Karasmanis. Cambridge: Cambridge University Press, 2020, 65–88.
- Hadot, Ilsetraut. Liberal Arts and Philosophy in Ancient Thought. Moscow: Greco-Latin Cabinet by Yu.A. Shichalina, 2002.
- Hadot, Pierre. Philosophy as a Way of Life: Spiritual Exercises from Socrates to Foucault. Edited with an introduction by Arnold I. Davidson. Translated by Michael Chase. Oxford: Blackwell, 1995.

- Hadot, Pierre. What Is Ancient Philosophy? Moscow: Publishing House of Humanities, 1999.
- Halvorson, Hans, and Helge Kragh. Cosmology and Theology. *The Stanford Encyclopedia of Philosophy*. Stanford, CA: Stanford University. Edited by Edward N. Zalta. Winter 2021 Edition. https://plato.stanford.edu/entries/cosmology-theology/
- Hassin, Ran. Yes It Can: On the Functional Abilities of the Human Unconscious. In *Perspectives on Psychological Science*, Vol. 8 (2), 2013: 195–207. https://doi.org/10.1177/1745691612460684
- Hatzimichali, Myrto. The Academy through Epicurean Eyes: Some Lives of Academic Philosophers in Philodemus' *Syntaxis. Plato's Academy: Its Workings and Its History.* Edited by Paul Kalligas, Chloe Balla, Effie Baziotopoulou-Valavani, and Vassilis Karasmanis. Cambridge: Cambridge University Press, 2020: 256–275.
- Hegel, Georg Wilhelm Friedrich. *Encyclopedia of the Philosophical Sciences in Basic Outline*. Cambridge: Cambridge University Press, 2010. https://academiaanalitica.files.wordpress.com/2016/10/georg-wilhelm-friedrich-hegel-encyclopaedia-of-the-philosophical-sciences-in-basic-outline_-part.pdf
- Heidegger, Martin. *Letter on "Humanism.*" 1949: 239–276. http://pacificinstitute.org/pdf/Letter_on_%20Humanism.pdf
- Heidegger, Martin. On the Essence of Truth. Translated by John Sallis, 1961. https://aphelis.net/wp-content/uploads/2011/02/Martin-Heidegger-On-the-Essence-of-Truth.pdf
- Heidegger, Martin. Being and Time. Moscow: Ad Marginem, 1997.
- Heidegger, Martin. Plato's Doctrine of Truth. English translation by Thomas Sheehan. Martin Heidegger. Pathmarks. Edited by William McNeill. Cambridge: Cambridge University Press, 1998, 155–182. https://doi.org/10.1017/ CBO9780511812637.009
- Henningsen, Bernd, Jürgen, Schlaeger, and Heinz-Elmar. Tenorth (eds.). *Humboldt's Model: The Future of Universities in the World of Research.* Berlin: BWV Berliner Wissenschafts-Verlag, 2013.
- Hick, Peter, Ruth Kershner, and Peter Farrell (eds.). *Psychology for Inclusive Education: New Directions in Theory and Practice.* New York: Routledge, 2009.
- Hobbs, Angela. Eleven: Female Imagery in Plato. Plato's Symposium: Issues in Interpretation and Reception. Edited by James Lesher, Debra Nails, and Frisbee Sheffield.
 Hellenic Studies Series 22. Washington, DC: Center for Hellenic Studies, 2007: 252–271.
- Holbrook, David. Education and Philosophical Anthropology: Toward a New View of Man for the Humanities and English. Vancouver: Fairleigh Dickinson University Press, 1987.
- Horky, Phillip Sidney. Approaches to the Pythagorean *Acusmata* in the Early Academy. *Plato's Academy: Its Workings and Its History*. Edited by Paul Kalligas, Chloe Balla, Effie Baziotopoulou-Valavani, and Vassilis Karasmanis. Cambridge: Cambridge University Press, 2020: 167–187.
- Husserl, Edmund. Cartesian Meditations: An Introduction to Phenomenology. St. Petersburg: Nauka, 1998.
- Husserl, Edmund. The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy. St. Petersburg: Vladimir Dal, 2004.
- Iacoboni, Marco. Mirroring People: The Science of Empathy and How We Connect with Others. Moscow: United Press, 2011.

- Ilyin, Ivan. Path to the Evidence. Moscow: Republic, 1993.
- Isocrates. Antidosis. Isocrates with an English Translation in Three Volumes, by George Norlin. Cambridge, MA: Harvard University Press; London, William Heinemann Ltd., 1980. http://www.perseus.tufts.edu/hopper/text?doc=Isoc.%2015
- Jaeger, Werner. Paideia: The Ideals of Greek Culture: Volume I: Archaic Greece: The Mind of Athens. Oxford: Basil Blackwell, 1946. https://archive.org/stream/werner-jaegerpaideia-the-ideals-of-greek-culture-voll#page/nl/mode/2up
- Jaeger, Werner. Paideia: The Ideals of Greek Culture: Volume II: In Search of the Divine Centre. Oxford: Basil Blackwell, 1947. https://archive.org/stream/werner-jaegerpaideia-the-ideals-of-greek-culture-vol2#page/n1/mode/2up
- Jaeger, Werner. Paideia: The Ideals of Greek Culture: Volume III: The Conflict of Cultural Ideals in the Age of Plato. New York: Oxford University Press, 1986.
- Jaeger, Werner. Early Christianity and Greek Paidea. Moscow: Greco-Latin Cabinet by Yu.A. Shichalina, 2014.
- Johnson, Kent, and Elizabeth M. Street. Response to Intervention and Precision Teaching: Creating Synergy in the Classroom. New York: Guilford Press, 2013.
- Jung, Carl Gustav. The Archetypes and the Collective Unconscious. 2nd edition. Princeton NJ: Princeton University Press, 1981.
- Kaku, Michio. Parallel Worlds: A Journey through Creation, Higher Dimensions, and the Future of the Cosmos. Moscow: Sofia, 2008.
- Kalligas, Paul. Introduction. Plato's Academy: Its Workings and Its History. Edited by Paul Kalligas, Chloe Balla, Effie Baziotopoulou-Valavani, and Vassilis Karasmanis. Cambridge: Cambridge University Press, 2020, 1–11.
- Kalligas, Paul, Chloe Balla, Effie Baziotopoulou-Valavani, and Vassilis Karasmanis (eds.). Plato's Academy: Its Workings and Its History. Cambridge: Cambridge University Press, 2020.
- Kalvesmaki, Joel. The Theology of Arithmetic: Number Symbolism in Platonism and Early Christianity. Hellenic Studies Series 59. Washington, DC: Center for Hellenic Studies, 2013.
- Kant, Immanuel. Kant on Education (Ueber Paedagogik). Boston, MA: D.C. Heath and Co., 1900. http://oll.libertyfund.org/titles/kant-kant-on-education-uberpadagogik
- Kant, Immanuel. Works in Six Volumes. Moscow: Mysl, 1964.
- Karasmanis, Vassilis. Plato and the Mathematics of the Academy. Plato's Academy: Its Workings and Its History. Edited by Paul Kalligas, Chloe Balla, Effie Baziotopoulou-Valavani, and Vassilis Karasmanis. Cambridge: Cambridge University Press, 2020, 108-140.
- Kastrup, Bernardo. The Idea of the World: A Multi-Disciplinary Argument for the Mental Nature of Reality. Iff Books, 2019.
- Kaznacheev, Vlail. Vernadsky's Theory of the Biosphere and the Noosphere. Novosibirsk: Nauka, 1989.
- Kaznacheev, Vlail, and Eugeniy Spirin. Cosmoplanetary Phenomenon of the Human: Problems of a Comprehensive Study. Novosibirsk: Nauka, 1991.
- Klingberg, Torkel. The Overflowing Brain: Information Overload and the Limits of Working Memory. Moscow: Lomonosov, 2010.
- Kordjum, Vitaliy. Evolution and Biosphere. Kyiv: Naukova Dumka, 1982.
- Kosslyn, Stephen. Image and Mind. Cambridge: Harvard University Press, 1980.
- Kosslyn, Stephen M., and G. Wayne Miller. Top Brain, Bottom Brain: Surprising Insights into How You Think. New York: Simon & Schuster, 2015.

Kozulin, Alex, Boris Gindis, Vladimir S. Ageyev, and Suzanne M. Miller (eds.). Vy-gotsky's Educational Theory in Cultural Context. Cambridge: Cambridge University Press, 2003.

Kraut, Richard. Socrates, Politics, and Religion. Reason and Religion in Socratic Philosophy. Edited by Nicholas D. Smith, and Paul B. Woodruff. New York: Oxford University Press, 2000, 13–23.

Krichevsky, Sergey. Prospects for Human Space Exploration: New Ideas, Projects, Technologies. Moscow: LENAND, 2021.

Kuffler, Stephen W., and John G. Nicholls. From Neuron to Brain. Moscow: Mir, 1979. Kurzweil, Ray. The Singularity Is Near: When Humans Transcend Biology. New York: Penguin Books, 2006.

Lazzari, Margaret, and Dona Schlesier. *Exploring Art: A Global, Thematic Approach*. Belmont, CA: Wadsworth Publishing, 2011.

Liddell, Henry George, and Robert Scott. A Greek-English Lexicon. Oxford: Clarendon Press, 1940.

Locke, John. Some Thoughts Concerning Education. Petersburg: Sckola and Zhizn, 1913.

Lockwood, Thornton C. ὁμόνοια: The Hinge of Aristotle's Ethics and Politics? In *Dialogue: Canadian Philosophical Review/Revue canadienne de philosophie*, Vol. 59 (1), March 2020: 7–30. https://doi.org/10.1017/S0012217319000337

Lovelock, James. *The Ages of Gaia: A Biography of Our Living Earth.* New York: Oxford University Press, 2010.

Lygouri-Tolia, Eutychia. The Gymnasium of the Academy and the School of Plato. *Plato's Academy: Its Workings and Its History*. Edited by Paul Kalligas, Chloe Balla, Effie Baziotopoulou-Valavani, and Vassilis Karasmanis. Cambridge: Cambridge University Press, 2020, 46–64.

Lyubishchev, Alexander. *Lines of Democritus and Plato in the History of Culture*. St. Petersburg: Aletheia, 2000.

Makarenko, Anton. Pedagogical Poem. Kyiv: Veselka, 1986.

Mandischer, Martin. Evolving Recurrent Neural Networks with Non-binary Encoding. In Proceedings of the 2nd IEEE Conference on Evolutionary Computation (ICEC), volume 2, pages 584–589, Perth, Australia, Nov. 1995.

Marchiandi, Daniela. In the Shadow of Athena Polias: The Divinities of the Academy, the Training of *Politai* and Death in Service to Athens. *Plato's Academy: Its Workings and Its History*. Edited by Paul Kalligas, Chloe Balla, Effie Baziotopoulou-Valavani, and Vassilis Karasmanis. Cambridge: Cambridge University Press, 2020, 11–27.

Marrou, Henri-Irenee. History of Education in Antiquity (Greece). Moscow: Greco-Latin Cabinet by Yu.A. Shichalina, 1998.

McDavid, Brennan. "Meddling in the work of another": πολυπραγμονεῖν in Plato's *Republic*. In *Plato Journal*, Vol. 23, 2022: 95–107. https://doi.org/10.14195/2183-4105_23_7

McDermott, John J.(ed.). *The Philosophy of John Dewey: Two Volumes in One.* Chicago: University of Chicago Press, 1981.

McNulty, Kieran P. Hominin Taxonomy and Phylogeny: What's In a Name? In *Nature Education Knowledge*, Vol. 7 (1), 2016: 2.

- McPherran, Mark L. Does Piety Pay? Socrates and Plato on Prayer and Sacrifice. Reason and Religion in Socratic Philosophy. Edited by Nicholas D. Smith, and Paul B. Woodruff. New York: Oxford University Press, 2000, 89-114.
- McPherran, Mark L. Medicine, Magic, and Religion in Plato's Symposium. Plato's Symposium: Issues in Interpretation and Reception. Edited by James Lesher, Debra Nails, and Frisbee Sheffield. Hellenic Studies Series 22. Washington, DC: Center for Hellenic Studies, 2007, 71-95.
- Mikeshina, Lyudmila. The Philosophy of Knowledge: The Polemic Chapters. Moscow: Progress-Tradition, 2002.
- Mintz, Avi I. Plato: Images, Aims, and Practices of Education. Cham: Springer, 2018. https://doi.org/10.1007/978-3-319-75898-5
- Mishra, Ramesh. Theory of Education Administration. New Delhi: APH Publishing Corporation, 2009.
- Moore, Terence. Educational Theory: An Introduction. New York: Routledge, 2012.
- More, Max, and Natasha Vita-More (eds.). The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy of the Human Future. Oxford: Wiley-Blackwell, 2013.
- Morrow, Allen, and Carlos Alberto Torres. Social Theory and Education: A Critique of Theories of Social and Cultural Reproduction. Albany, NY: State University of New York Press, 1995.
- Motroshilova, Nelly. Martin Heidegger and Hannah Arendt: Being-Time-Love. Moscow: Academic Project; Gaudeamus, 2013.
- Mottron, Laurent, and Michelle Dawson. Giftedness. Encyclopedia of Autism Spectrum Disorders. Cham: Springer, 2021. https://doi.org/10.1007/978-3-319-91280-6_520
- Mountcastle, Vernon. Perceptual Neuroscience: The Cerebral Cortex. Cambridge, MA: Harvard University Press, 1998.
- Mungazi, Dickson. The Evolution of Educational Theory in the United States. Westport, CT: Praeger Publishers, 1999.
- Nagy, Gregory. Plato's Rhapsody and Homer's Music: The Poetics of the Panathenaic Festival in Classical Athens. Hellenic Studies Series 1. Washington, DC: Center for Hellenic Studies, 2002.
- Nazaretyan, Akop. Intelligence in the Universe: Sources, Formation, and Prospects. Moscow: Nedra, 1991.
- Nazaretyan, Akop. Nonlinear Futures: Mega-History, Complexity Theory, Anthropology & Psychology for Global Forecasting. Moscow: Argamak-Media, 2015.
- Nicholls, John, Robert Martin, Bruce Wallace, and Paul Fuchs. From Neuron to Brain. Moscow: LKI, 2008.
- Nietzsche, Friedrich. Works in Two Volumes. Moscow: Mysl', 1990.
- Nietzsche, Friedrich. The Will to Power: Attempt at a Revaluation of All Values. Moscow: REFL-book, 1994.
- Null, Wesley. Curriculum: From Theory to Practice. Rowman & Littlefield Publishers, Lanham: MD, 2016.
- Origen. De Principiis. Translated by Frederick Crombie. Buffalo, NY: Christian Literature Publishing Company, 1885. http://www.newadvent.org/fathers/0412.htm
- Ortega y Gasset, José. The Revolt of the Masses. W. W. Norton & Company, New York. 1932. http://pinkmonkey.com/dl/library1/revolt.pdf
- Panov, Alexander. Universal Evolution and Problems of the Search for Extraterrestrial Intelligence (SETI). Moscow: LKI, 2008.

- Parker, Robert. The Trial of Socrates: And a Religious Crisis? *Reason and Religion in Socratic Philosophy*. Edited by Nicholas D. Smith, and Paul B. Woodruff. New York: Oxford University Press, 2000, 40–54.
- Patten, Kathryn, and Stephen Campbell (eds.). *Educational Neuroscience*. Oxford: Wiley-Blackwell, 2011. http://onlinelibrary.wiley.com/book/10.1002/9781444345827
- Piaget, Jean. Speech and Thinking of the Child. Moscow: Pedagogika Press, 1994.
- Pinker, Steven. The Language Instinct. Moscow: Librokom, 2009.
- Philodemus' History of the Philosophers: Plato and the Academy (PHerc. 1021 and 164). Translated with Introduction by Paul Kalligas and Voula Tsouna, and Notes by Myrto Hatzimichali. *Plato's Academy: Its Workings and Its History*. Edited by Paul Kalligas, Chloe Balla, Effie Baziotopoulou-Valavani, and Vassilis Karasmanis. Cambridge: Cambridge University Press, 2020, 276–383.
- Plato: In Twelve Volumes, Vol. 12 translated by Harold N. Fowler. Cambridge, MA: Harvard University Press; London: William Heinemann Ltd. 1921. http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.01.0172
- Plato: In Twelve Volumes, Vol. 9 translated by W.R.M. Lamb. Cambridge, MA: Harvard University Press; London: William Heinemann Ltd. 1925. http://www.perseus.tufts.edu/hopper/text?doc=urn:cts:greekLit:tlg0059.tlg025.perseus-eng1:281a
- Plato: In Twelve Volumes, Vol. 8 translated by W.R.M. Lamb. Cambridge, MA: Harvard University Press; London: William Heinemann Ltd. 1955. http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.01.0176
- Plato: In Twelve Volumes, Vol. 1 translated by Harold North Fowler; Introduction by W.R.M. Lamb. Cambridge, MA: Harvard University Press; London: William Heinemann Ltd. 1966. http://www.perseus.tufts.edu/hopper/text?doc=Perseus: text:1999.01.0170
- Plato: In Twelve Volumes, Vol. 3 translated by W.R.M. Lamb. Cambridge, MA: Harvard University Press; London: William Heinemann Ltd. 1967.
- Plato: In Twelve Volumes, Vols. 10 and 11 translated by R.G. Bury. Cambridge, MA: Harvard University Press; London: William Heinemann Ltd. 1967 and 1968. http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.01.0166
- Plato: In Twelve Volumes, Vols. 5 and 6 translated by Paul Shorey. Cambridge, MA: Harvard University Press; London: William Heinemann Ltd. 1969. http://www.perseus.tufts.edu/hopper/text?doc=Perseus:text:1999.01.0168
- Plato. Collected Works in 4 Volumes. Edited by Aleksey Losev. Moscow: Mysl, 1990–1994.
- Platonov, Vladimir. Education as a Sociocultural System: The Methodological Problems of the Theory and History of Education. Moscow: Uchebnik, 2013.
- Plotinus. *The Six Enneads*. Translated by Stephen MacKenna, and B.S. Page. Chicago, IL: Encyclopaedia Britannica, 1952. http://www.sacred-texts.com/cla/plotenn/index.htm
- Porshnev, Boris. About the Beginning of the Human History. Problems of Paleopsychology. Moscow: Feri-V, 2006.
- Ramachandran, Vilayanur. The Tell-Tale Brain: A Neuroscientist's Quest for What Makes Us Human. Moscow: Career Press, 2012.
- Readings, Bill. *The University in Ruins*. Moscow: Publishing House of the State University, 2010.
- Reeve, C.D.C. Socrates the Apollonian? *Reason and Religion in Socratic Philosophy*. Edited by Nicholas D. Smith, and Paul B. Woodruff. New York: Oxford University Press, 2000, 24–39.

- Reeve, C.D.C. A Study in Violets: Alcibiades in the Symposium. Plato's Symposium: Issues in Interpretation and Reception. Edited by James Lesher, Debra Nails, and Frisbee Sheffield. Hellenic Studies Series 22. Washington, DC: Center for Hellenic Studies, 2007, 124-146.
- Robinson, Thomas More. Plato's Psychology. 2nd edition. Toronto: University of Toronto Press, 1995.
- Rousseau, Jean-Jacques. Selected Works. Moscow: Goslitizdat, 1961.
- Rubinstein, Moisey. On the Meaning of Life. Works on the Philosophy of Value, Theory of Education and University Issue. Moscow: Territory Budushchego, 2008.
- Rybalka, Valentin. Theories of Personality in Domestic Philosophy, Psychology and Pedagogy. Zhytomyr: Zhytomyr University Press, 2015.
- Safranski, Rüdiger. Heidegger: A Master from Germany and His Time. Moscow: Molodaya Gvardiya, 2005.
- Sagan, Carl. Cosmos. New York: Ballantine Books, 2013.
- Salimova, Kadriya, and Nan L. Dodde (eds.). International Handbook on History of Education. Moscow: Orbita-M, 2000.
- Schmalhausen, Ivan. Ways and Regularities of Evolution Process. Selected Works. Moscow: Nauka, 1983.
- Schur, David. Plato's Wayward Path: Literary Form and the Republic. Hellenic Studies Series 66, 2015.
- Sellars, John. What Is Philosophy as a Way of Life? In Parrhesia: A Journal of Critical Philosophy, Vol. 28, 2017: 40–56. https://pure.royalholloway.ac.uk/portal/ files/28691384/What_is_PWL_Preprint.pdf
- Semenova, Svetlana. Philosopher of the Next Century: Nikolai Fyodorov. Moscow: Pashkov Dom, 2004.
- Semenova, Svetlana. Pilgrim in the Future. Pierre Teilhard de Chardin. St. Petersburg: Russian Christian Humanitarian Academy, 2009.
- Semenova, Svetlana. Paths of Heartfelt Thoughts: Sketches, Fragments, Excerpts from the Diary. Moscow: PoRog, 2012.
- Semetsky, Inna (ed.). Jung and Educational Theory. Oxford: Wiley-Blackwell, 2012.
- Sheehan, Thomas. Making Sense of Heidegger: A Paradigm Shift. London & New York: Rowman & Littlefield International, 2014.
- Sheeley, Kristian. Moral Virtue as a Requisite for Illumination in the Platonic Tradition. In Religions, Vol. 12 (10), 2021: 838. https://doi.org/10.3390/rel12100838
- Sheffield, Frisbee. Two: The Role of the Earlier Speeches in the Symposium: Plato's Endoxic Method? Plato's Symposium: Issues in Interpretation and Reception. Edited by James Lesher, Debra Nails, and Frisbee Sheffield. Hellenic Studies Series 22. Washington, DC: Center for Hellenic Studies, 2007, 22-46.
- Shklovsky, Iosif. The Universe, Life and Mind. Moscow: Nauka, 1987.
- Smeenk, Christopher, and George Ellis. Philosophy of Cosmology. The Stanford Encyclopedia of Philosophy. Stanford, CA: Stanford University. Edited by Edward N. Zalta. 2017 Edition. https://plato.stanford.edu/cgi-bin/encyclopedia/archinfo. cgi?entry=cosmology
- Smith, Nicholas D., and Paul B. Woodruff (eds.). Reason and Religion in Socratic Philosophy. New York: Oxford University Press, 2000.
- Socrates and His Daimonion: Correspondence among Gregory Vlastos, Thomas Brickhouse, Mark McPherran, and Nicholas Smith. Reason and Religion in Socratic Philosophy. Edited by Nicholas Smith, and Paul Woodruff. New York: Oxford University Press, 2000, 176–204.

- Stanley, Kenneth, and Risto Miikkulainen. Evolving Neural Networks through Augmenting Topologies. In In *Evolutionary Computation*, Vol. 10 (2), 2002: 99–127.
- Steiner, Rudolf. Waldorf Education and Anthroposophy 2: Twelve Public Lectures, November 19, 1922–August 30, 1924. Anthroposophic Press, 1996.
- Teilhard de Chardin, Pierre. The Phenomenon of Man. Moscow: Nauka, 1987.
- Tell, Hakan. Anytus and the Rhetoric of Abuse in Plato's Apology and Meno. May 14, 2010. http://dx.doi.org/10.2139/ssrn.1608124
- Tell, Håkan. *Plato's Counterfeit Sophists*. Hellenic Studies Series 44. Washington, DC: Center for Hellenic Studies, 2011.
- Thayer, Joseph (ed.). Thayer's Greek-English Lexicon of the New Testament: Coded with Strong's Concordance Numbers. Peabody: Hendrickson Academic, 1995.
- The Christian Pioneer. Vol. 16. Edited by George Harris. Edinburgh: R.R. Nelson, 1842. https://books.google.es/books?id=fo0VAAAAYAAJ&pg=PP7&lpg=PP7&dq=The+Christian+Pioneer.+Vol.+16.+Edited+by+George+Harris.+Edinburgh:+R.R.+Nelson&source=bl&ots=MSj1Ao4cAk&sig=ACfU3U0MaQwenLcSnGiYUhIrXDzuMzoBAw&hl=ru&sa=X&ved=2ahUKEwihz8yNubOAAxUyRqQEHd5sA0kQ6AF6BAgjEAM#v=onepage&q=The%20Christian%20Pioneer.%20Vol.%2016.%20Edited%20by%20George%20Harris.%20Edinburgh%3A%20R.R.%20Nelson&f=false
- The Montessori Method. Origins of an Educational Innovation: Including an Abridged and Annotated Edition of Maria Montessori's the Montessori Method. Edited by Gerald Lee Gutek. Lanham, MD: Rowman & Littlefield Publishers, 2004. https://www.arvindguptatoys.com/arvindgupta/montessori-new.pdf
- Toporov, Vladimir N. Once Again about Dr. Greek. ΣΟΦΙΑ: The Origin of the Word and Its Inner Meaning. In EINAI: *Problems of Philosophy and Theology*, Vol. 2 (2), 2012: 456–477. https://einai.ru/2013-02-Toporov.html
- Torri, Paolo. Homoiōsis Theōi. A Study of the Telos in Middle Platonism. Milan: Università degli Studi di Milano, 2017.
- Troubetzkoy, Eugene. The Meaning of Life. Moscow: Republic, 1994.
- Trubetskoy, Sergei. *The Doctrine of the Logos in Its History: Philosophical and Historical Research.* Moscow: G. Lissner and D. Sobko Typography, 1906.
- Tsiolkovsky, Konstantin. Outside the Earth: a Collection of Popular Science and Science Fiction Works. Moscow: Luch, 2008.
- Ullrich, Carsten. Pedagogically Founded Courseware Generation for Web-Based Learning. An HTN-Planning-Based Approach Implemented in PAIGOS. Berlin Heidelberg: Springer-Verlag, 2008.
- Ursul, Arkady. Humanity. Earth. The Universe. Philosophical Problems of Indirect Astronautics. Moscow: Mysl', 1977.
- Ursul, Arkady. The Phenomenon of the Noosphere: Global Evolution and Genesis of the Noosphere. Moscow: Lenand, 2015.
- Ursul, Arkady, and Tatiana Ursul. Evolution, Space and Man (the General Laws of Development and the Concept of Antropocosmism). Kishinev: Shtiintsa, 1986.
- Vernadsky, Vladimir. Philosophical Thoughts of a Naturalist: In 2 Book. *Book 1: Space and Time in the Animate and Inanimate Nature*. Moscow: Nauka, 1975.
- Vernadsky, Vladimir. Philosophical Thoughts of a Naturalist: In 2 Book. *Book 2: Scientific Thought as a Planetary Phenomenon*. Moscow: Nauka, 1977.
- Vernadsky, Vladimir. Chemical Structure of the Earth's Biosphere and Its Surroundings. Moscow: Nauka, 1987.
- Vlastos, Gregory. Socratic Piety. *Reason and Religion in Socratic Philosophy*. Edited by Nicholas D. Smith, and Paul B. Woodruff. New York: Oxford University Press, 2000, 55–73.

- Vlastos, Gregory. Plato's Universe. With a new introduction by Luc Brisson. Las Vegas NV: Parmenides Publishing, 2005.
- Weinberg, Steven. Cosmology. Moscow: Librokom, 2013.
- Wexler, Philip. Social Theory in Education. New York: Peter Lang Publishing, 2009.
- Wiesel, Tatiana. Fundamentals of Neuropsychology. Moscow: AST, 2009.
- Wilson, George, and Samuel Shpall. Action. The Stanford Encyclopedia of Philosophy. Edited by Edward N. Zalta. Winter 2016 Edition. https://plato.stanford.edu/ archives/win2016/entries/action/
- White, Stephen A. Socrates at Colonus: A Hero for the Academy. Reason and Religion in Socratic Philosophy. Edited by Nicholas D. Smith, and Paul B. Woodruff. New York: Oxford University Press, Oxford. 2000, 151-175.
- Woodruff, Paul. Socrates and the Irrational. Reason and Religion in Socratic Philosophy. Edited by Nicholas D. Smith, and Paul B. Woodruff. New York: Oxford University Press, Oxford. 2000, 130-150.
- Wu, Wayne. The Neuroscience of Consciousness. The Stanford Encyclopedia of Philosophy, 2018. https://plato.stanford.edu/entries/consciousness-neuroscience/
- Zeyl, Donald, and Barbara Sattler. Plato's Timaeus. The Stanford Encyclopedia of Philosophy. Edited by Edward N. Zalta. Summer 2022 Edition. https://plato.stanford. edu/entries/plato-timaeus/index.html#ref-32

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