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## NATURAL PHILOSOPHY: AN INTERMEDIATE BETWEEN TWO REVIVALS\*

As the term Revival in the title of sub-topic of present Conference: «Development of the philosophical thought in the Balkan countries since Revival up to present day», cannot be looked upon as a mere boundary stone with a disjuncting role<sup>1</sup>, but as a time semantic, implying references both to the past and the future, I feel obliged to start my paper from the points of reference in the past, significant for the development of Natural Philosophy. Such points are the two great philosophical quarrels, which shook the intellectual world throughout the Middle Ages, namely the question of the immutability of the elements in the chemical connections and that of the Universals.

In the first of these fervent intellectual quarrels we recognize the unclear definition of Aristotle's matter and form<sup>2</sup>, disputable to our times<sup>3</sup>. The Universals on the other hand go back to Plato's theory of ideas developed to a problematic by Aristoteles' relevant critique<sup>4</sup>. The outcome of these stormy debates was indeed crucial for our culture. The decision of the medieval minds to side for the immutability of the elements in the chemical solution and for Nominalism manifests the trend of thought leading through Renaissance to the triumph of science. The emancipation of the mind from any authorities was thus attained. Aristotle's Physics ceased to be the guide in the approach of the physical world. Already Albertus Magnus (1200-1280) and Roger Bacon (1294) declare Aristotle's concept of form as mere name without any cover<sup>5</sup>. Self conscious, after their liberation from the yoke of the traditional thinking,

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1. Respective bibliography in Δ. Ζακυθηνός, *Ἀναγέννησις καὶ Ἀναγεννήσεις. Ἑλληνικαὶ ἀνακεφαλαιώσεις*, Athens 1978, 228 p.

2. Aristotle, *Physics* B 3,7; *Metaphysics* XIII. More complicated through the arabic translations and scholia.

3. Fr. Lieben, *Vorstellungen vom Aufbau der Materie im Wandel der Zeiten*, Wien 1953; Schöndorfer, *Philosophie der Materie*, Graz 1954. Also the Greek philosopher mentioned in this paper were still dealing with the problem.

4. Aristotle, *Metaphysics* VII.

5. J. Reiners, *Der Nominalismus in der Früh-Scholastik*, 1910.





the late medieval thinkers enjoy fully the Revival of their thought. So when much later (1348) men like Nikolaus von Ultricuria openly oppose to the pre-occupation with the authorities, such as Aristotle and Averroes, and recommend «the concentration of the intellect on the thing itself, the observation of which alone would reveal the real essence of Nature», only follow the movement started during the Middle Ages.

Plato's ideas, transmuted to Aristotle's general concepts<sup>6</sup>, also lost influence over the human intellect, when the early Nominalism in the person of Roscelin de Comptene (Abelard's teacher, 1050-1120) first denied the existence of any Universals. The denial of the Universals is important for the Natural Philosophy insofar as it recalls the attention from the abstract concepts to the very concrete thing. The same end was also achieved by the belief in the immutability of the elements<sup>7</sup>. The reality of this concrete thing is expressly defended two centuries later (1347) by Wilhelm von Occam in the argument that «the observation of the thing itself and not the artificially introduced form or any hidden qualities will enable the cognition of Nature»<sup>8</sup>.

Striking in both quotations is the word «observation», which is indeed, the innovation of the Renaissance mentality and introduces those thinkers as forerunners of the modern scientists.

Striking and impressive, at the same time, is also the fact that this daring undertaking, to stimulate the study of physical processes and to direct the attention to the nature of things themselves, started from the very narrow circles of the church, where the two already mentioned debates on the Universals and on the Immutability of the elements were carried out side by side with pure theological discussions, pertaining to God's nature, to His will, to His Plan etc. However impressive this may sound, yet it is not a paradox. And we realize, that it is not a paradox, if we recall that the majority of the thinkers at that time belonged to the clergy; Such examples include Albertus Magnus, who belonged to the Dominican Order, was later bishop of Ratiston in Bavaria and then canonized, Roscelin de Comptegne, canon of Comptegne, Roger Bacon, who was a franziscan monk like Wilhelm von Occam, and Nikolaus von Cues, commonly known as Cusanus, who was Cardinal and Bishop of Brixen. In connection with this, it is essential to emphasize also that even

6. A. Potaga, «Überblick über das Schicksal des Begriffes «Materie», bzw. der Atomistik, und die dazu führenden Motive im Wandel der Zeit», in *Zur Philosophie Demokrits*, Diss. Innsbruck 1961.

7. Ibid.; Also Moisioudax expressly refers to the immutability of Elements in his *Ἀπολογία*, p. 135.

8. Wilhelm von Occam, *Philosophia naturalis* (1494).



the purest theological questions were interwoven with man's destiny, insofar as they were forming man's metaphysical identity and, in the long term, were tracing the paths through which man would seek thereafter his physical and historical Ego. One could very well maintain, that it was from the heart of the theological debates, that such questions emerged, which formed the Renaissance Humanism<sup>9</sup>, allowed the intellectual emancipation of man and led to the anthropocentric mentality of Renaissance. On the other hand, we should not forget the historical truth, that philosophy had for centuries contributed towards the formation of the religious credo, which justifies the designation of Philosophy as the servant of Theology<sup>10</sup>.

Anyway, the given time, the two previously mentioned controversies, supplementing the project undertaken for centuries by the church, were tracing distinctly the human cosmic course within its immediate environment: «Nature is the book, where God has written His will and His law», declares Nicolaus von Cues (1401-1464)<sup>11</sup>. The Renaissance man conscious of his metaphysical significance could now proceed to decipher this book. Yet Nominalism in its effort to free man's intellect from all surplus concepts had in its turn undermined the hypostasis of the things to such an extent, that non-existence hung threatening over them. But even if things were existing objectively they were now unable to relate anything. The agents, relating man and things, Plato's ideas and Aristotele's concepts had been abolished with the fall of the Universals. Hence man found himself deserted among faceless and sphynxlike objects with no means of access to them. The link to enable communication with the things and observation of them was missing.

Of course, Roger Bacon (1294) had already suggested «measurement» as the new approach to Nature. Yet this method still needed to be calibrated on a firm basis. And this basis, the key to the scientific dialogue between man and nature was offered at this crucial moment in the History of the mind again from within the antique Treasury.

The Byzantine Empire, although out of breath, was at that time transferring and committing its hereditary treasures, enriched with its spirit, to the care of the Western European scholars. This spirit, had, of course, already reached Occident through other channels long before the dramatic hours of Byzantium.<sup>12</sup> However, it was now expressed as a synthesis of Timaios' ma-

9. Abolishing the boundaries between heaven and earth and sanctioning Nature. See A. Potaga as cited above.

10. Ancilla Theologiae Philosophia.

11. Nicolaus von Cues, *De Idiota* 1 I, p. 137.

12. See D. Zakythinos as above (Note 1); E. Papanoutsos as cited in Note 19.



thematical relations of the platonic ideas confined in the Matter, of the Stoic Pneuma, of Plotin's cosmic soul, of pre-socratic traits.

In the above synthesis, this spirit pervaded most of the contemporary philosophical works and reanimated the muted physical world. The very popular term «Spiritus Mundi»<sup>13</sup> demonstrates the mathematical structure of the Universe. God is the Great Mathematician, but man, as God's image, is similarly mathematically minded<sup>14</sup>. He can, therefore, decipher the Book of Nature, wherein God has written His will and His rules.

The method is, indeed, measurement, as Roger Bacon has suggested, but now Cusanus adds that the measurement is a spiritual act, is an assimilation — a comparison of the intellect with the thing to be conceived<sup>15</sup>. The standard for all measurement is none other than the single Unit, the One.<sup>16</sup> This is the principle of all numbers, the means to order, to distinction, to harmony, to proportionality. It is the principle of life itself, as Bruno (1548-1600) underlines, and, at the same time, is the true key to the things and the Universe. Needless to say, this kind of syllogism had also led to the revival of the antique atomic theory, which under various forms has survived to our days.

The gnoseologic optimism was also strengthened by the theory of the affinity between Universe and Man, a theory developed from the philosophical thesis, that man and universe are created from the same material—Paracelsus, (1473-1541) names it Limbus—and the idea of the emanation of the things from the infinite Monas, which is God. This gnoseologic optimism, a characteristic feature of natural philosophical systems, is also the nucleus of the Renaissance humanism: Having abolished the boundaries between heaven and earth and being able to move on his intellectual vehicle both in the microscopic and the macroscopic worlds at the leisure of an olympic god, man regained his selfrespect. The Renaissance literature on Man's dignity is not irrelevant<sup>17</sup>.

The beneficiary role of Natural Philosophy in the restoration of Man's dignity is exemplarily demonstrated in the history of our philosophy during the Ottoman occupation<sup>18</sup>. However depressing it may be, it is nevertheless

13. We meet this term in Agrippa von Nettesheim, Paracelsus, Cusanus, Bruno, F. Bacon, Basso, Kepler and even Newton. See A. Potaga as cited above.

14. Galileo Galilei.

15. The Parmenidean motive in his theory of knowledge.

16. A. Potaga as cited above, p. 153-156.

17. Giannozzo Manetti, «Über die Erhabenheit und Würde des Menschen»; then Ficino, Pico. See Paul Oskar Kristeller, *Humanismus und Renaissance II*, München 1976 (V. Die Stellung des Menschen im Universum bei Ficino und Pomponazzi).

18. *Νεοελληνική Φιλοσοφία*, Α'. Είσαγωγή Ε. Π. Παπανούτσος, Ἀθήνα (Βασική,



true, that the development of philosophy in our area after the fall of Byzantium cannot be considered as the uninterrupted continuation of the byzantine humanism of the Palaeologian time. This had escaped together with its promoters to the West.

In the Patriarchal Academy, now only a «phantom»<sup>19</sup> of the famous Oecoumenic School of Constantinople, the few elements of Rhetoric, Dialectic and Aristotelian Ethics<sup>20</sup> taught to the clergymen immediately after the fall of Byzantium cannot be regarded as philosophical activity. The Orthodox church, the only spiritual authority of the enslaved balkan peoples, following the earlier example of Saint Basil, used the greek letters and more specifically «the power of the Dialectic as a protective wall against any and all contrivances» threatening its flock. These crumbs of philosophy, however, together with the holy letters, which aimed primarily at the protection of the Christian Orthodox against their religious alienation, in reality constituted the firm basis, or at least the first layer thereof, whereupon the historical identity of the enslaved people would lean and further develop.

The philosophical activity would start much later, when the circumstances would allow the greek scholars to return home and transfer, to the possible extent, the philosophical excitement of the Western European Universities, where they were active and enjoyed the Renaissance fruits. The center of such activity, radiating its influence over the whole balkan peninsula, is from the 16th century onwards the Patriarchal Academy, which in 17th century reaches almost the old byzantine splendor. An eminent student of that period, Dimitri Cantamir, the Roumanian erudite, names his professors «Geniuses comparable to the ancient Greek sages»<sup>21</sup>.

The predominant figure of this philosophical atmosphere was the philosopher, who, even if not always in his genuine spirit, for centuries had moulded the European thought. Aristotle was again entrusted with the heavy task of arousing the tortured intellect of the slaves. His works, systematically taught and interpreted by the Athenian philosopher Theophilos Korydaleus, were the most suitable propaedeutik and the most rigid discipline for the formation of the balkan logical thought. More specifically, the organon towards these

Βιβλιοθήκη 35) 1959 (= *Modern Greek Philosophy*, vol. 1. Introduction by E. Papanoutsos Athens (Basic Library 35), 1959.

19. Cl. Tsourkas, *Les debuts de l'Enseignement philosophique et de la libre pensée dans les Balkans. La vie et l'oeuvre de Théophile Corydalee*, Thessalonique 1967<sup>2</sup>, p. 27.

20. Μ. Γεδεών, *Χρονικά της Πατριαρχικῆς Ἀκαδημίας*, Κωνσταντινούπολις 1883.

21. Cl. Tsourkas, as cited above, p. 378 (Annexe 10: L'Académie du Phanar au XVIIe s. d'après Dem. Cantamir).



ends could be nothing else but Aristotele's Logic, which Korydaleus expounded and interpreted in a masterly way<sup>22</sup>.

It is on this occasion and by the discussion of Porphyrios' introduction to the Aristotelian Categories, that we also learn Korydaleus' personal opinion on the famous medieval controversy of the Universals. Siding with the progressivists Korydaleus rejects the existence of the general concepts outside the human intellect<sup>23</sup>. Hence his knowledge theory, which regards the single, the tangible, concrete thing as the starting point of our knowledge and as providing access to the study of nature and its principles, comes as a matter of consequence and presupposes the central role, which Physics play in Korydaleus' system. Aristotle's works, notably: Physics, De Generatione et Corruptione, De Coelo, De Anima, taught and interpreted by Korydaleus, provide the relevant testimony.

The significance, which Korydaleus ascribes to this part of the theoretical philosophy, to this *exi dianoitiki*<sup>24</sup>, as he, following Aristoteles, characterizes Physics, also derives indirectly from his statement, that the final end of philosophy is man's resemblance to God which is impossible without the knowledge of Beings<sup>25</sup>. From this point of view, as well as with reference to his inductive method, Cleovoulos Tsourkas is right, when he considers Korydaleus as the first philosopher, who introduced the Renaissance spirit to this South-Eastern part of Europe, and in addition put an end to our spiritual Dark Ages and cultivated the intellectual susceptibility of mind for more advanced concepts<sup>26</sup>.

Such advanced scientific concepts were, indeed, introduced to this area by Eugenius Voulgaris (1716-1806), hundred and fifty years later when the minds were sufficiently matured by the systematic philosophical training established by Theophilos Korydaleus<sup>27</sup>.

Eugenius Voulgaris, a true representative of Renaissance, a brilliant scholar, emancipated but at the same time cautious descends to the very heart of the discussed problems and critically confronts both his reverant ancestors, as well as the modern precocious progressivists<sup>28</sup>, whom he, nevert-

22. Korydaleus, «Logic», p. 133.

23. Ibid, p. 92: *Περὶ γενέσεως καὶ φθορᾶς*, p. 24-25.

24. Korydaleus, «Physics», p. 43.

25. Ibid. p. 72; «Logic», p. 133.

26. Cl. Tsourkas, as cited above, p. 28.

27. Korydaleus reorganized the Patriarchal Academy and systematized the teaching of Philosophy, wherever he had to teach it, i. e. Athens, Zakynthos, Constantinople, Crete

28. I.e. of the Enlightenment.



less, greatly admires<sup>29</sup>. And while Korydaleus tried to initiate his students to the secrets of Nature through Aristotle's Logic and Physics, which he interpreted in his Neo-Aristotelian spirit, i.e. based on the ancient scholiast, Voulgaris praises mathematical calculus and experiment, as the method with the highest probability for obtaining evidence in the study of the natural phenomena. Sceptical, however, towards the absolute evidence of the experiment, he demands verifications and counterverifications of its result<sup>30</sup>. Voulgaris' concern about «evidence» is demonstrated by the heading of chapter 9 in his «Logic»: «To hunt the principles of the phenomena in the Beings with probability»<sup>31</sup>.

Striking here is, of course, the expression «with probability» by which Voulgaris may be placed on a level with our contemporary scientists, whose theories have in the first place a hypothetical character. Therefore in his Work, On Physics and Cosmology, the fact, that he favors the atomic theory in the Neutonian form, may not mean, that it represents for him any definite cosmological thesis. According to his arguments in the «Logic», a hypothesis can become a thesis only after the principle set to explain a certain phenomenon is proved beyond dispute<sup>32</sup>.

On the contrary, Nikolaos Zerzoulis, (1710-1773), the undisciplined but philosophy loving student of Eugenius Voulgaris, and his successor in the direction of the Constantinople, Jassy and Athos Academies, defends fervently the objectivity of the atomic theory of Democritus, who, according to him, had taken the right path towards the secrets of Nature<sup>33</sup>. Such objectivity is a consequence of Zerzoulis' natural philosophical realism: «I have a duty to philosophise according to nature on natural things, which we first perceive through the senses and then through the intellect, and not on non-existing things or on such of doubtful existence»<sup>34</sup>. In this way, he concludes his polemic against the meaningless scholastic-aristotelian concept of emptiness, on the occasion of a dispute held between him as representing the new scientific philosophical thought and the conservative scholastic Aristotelians. It is

29. Eugenios Voulgaris, *Tà aréskonta toĩs φιλοσόφοις*, Wien 1805, ch. 30, from the Presocratics to Gassendi, Newton, Wolff, Gravessande, Huyens, and Voltaire too.

30. Voulgaris, «Logic», «*Elements of Metaphysics*», Venezia 1805, ch. 9.

31. Voulgaris, «Logic», ch. 9.

32. Ibid.

33. Λ. Μπενάκης, «Ἀπὸ τὴν ἱστορία τοῦ μεταβυζαντινοῦ Ἀριστοτελισμοῦ στὸν ἐλληνικὸ χῶρο», «Φιλοσοφία» 7 (1977), 416-454 (p. 451-4 Summary in German: Aus der Geschichte des nachbyzantinischen Aristotelismus im griechischen Raum).

34. Ibid. p. 439.



noteworthy here, that Zerzoulis supported his argumentation on Aristotele's own passages, thus relieving the Stagirite from the entire responsibility for the turmoil caused by the Universalia controversy in the Western Europe during Middle Ages, reanimated with such a delay in his country. To a great extent Zerzoulis imputes this anomaly to the frivolity of the Philosopher's interpreters<sup>35</sup>.

Zerzoulis by no means considers his Democritian natural philosophical convictions as inconsistent with or touching his Christian faith. Neither had Newton, whose «Elements of Physics» Zerzoulis was the first to translate in greek<sup>36</sup>, nor Boyle or Gassendi<sup>37</sup>, or any other of the Christian thinkers before him sharing Democrit's atomic theory had considered this as an inconsistency. Rather emphasizing his faith, Zerzoulis proceeds to praise God as Demiourg in a Cusanus like mode. He trusts that the divine Word, set forth in the Creation, can be grasped little by little to the glory of God, thanks to the grace and the power of human intellect.<sup>38</sup> The Renaissance humanistic motive and the consequent gnoseologic optimism looms for the first time out of the fog of the slavery.

Nikiphoros Theotokis, who was cleric philosopher and for a time head of the Jassy Academy, believes that man as a logical being has access to the Logical Creation, the Logos of Nature, which is the illustration of the wisdom and the creative power of the invisible Divinity<sup>39</sup>. But Physics, that branch of Philosophy dealing with this Logos, is only accessible through mathematics, the easiest and most direct way thereto<sup>40</sup>.

Adopting the atomic theory as the most fruitful hypothesis to constitute the basis of his Physics, Theotokis reserves, however, a certain autonomy to the intellect and inconformity with Nature in the way he accepts the violation of the natural law by the divine Intellect, as in the case of miracles<sup>41</sup>. He can, therefore, consider Democrit's atoms indivisible in reality but divisible theoretically<sup>42</sup>.

Iosipos Moisiodax, another zealot of the natural philosophical trend and professor of philosophy at the Jassy Academy at the time of Gregoire Ale-

35. Ibid. p. 437 and 442.

36. Ibid. p. 423.

37. A. Potaga, as cited above, p. 167-178.

38. Α. Μπενάκης, as cited above, p. 442, ft. 64.

39. Nikiphoros Theotokis, «*Elements of Physics*», vol. 1, Lipsiae 1766 (Introduction, p. 3); «*Elements of Mathematics*», Moscow 1798 (Preface).

40. Ibid., «*Elements of Physics*», Introduction, p. 3.

41. Ibid. p. 6.

42. Ibid. ch. A, p. 12.



xandre Ghika, identifies the autonomy of the intellect with its capacity for limitless abstraction<sup>43</sup>. This intellectual capacity, however, although the essence of Mathematics<sup>33</sup> and hence fundamental to the development of the natural sciences, may lead to a confusion similar to that, which bred the Scholastic-Aristotelian phantoms, if the criteria for its verification are lent from the noetic instead of the pragmatic sphere. An example of such confusion is demonstrated by the idea of the ad infinitum divisibility of atoms. Moisioudax rejects this idea of the ad infinitum divisibility of atoms and instead regards them as indivisible units, if they are to explain the phenomena<sup>45</sup>.

Following Voulgaris and Theotokis, he too considers the atomic theory as the most appropriate, the most suitable of all other philosophical theories and hence indispensable for the explanation of Nature. Neither does this theory contradict his religious piety, since he shares Aristotle's concept of the Prime Mover. For Moisioudax anticipates, entrusting only God, in His natural capacity as Creator, as the Supreme and First Principle of Nature, with the power to set the atoms in motion and thus proceed to the Creation of the Universe<sup>46</sup>.

After Theotokis and Voulgaris, in his turn Moisioudax (1730-1800) in order to exalt the significance of Physics, as presupposition for the knowledge of God refers to Paul's teaching, that God is revealed in His creatures<sup>47</sup>. (This comprises the well known natural proof for God's existence). The human Ethics is, therefore, also closely aligned with the natural law, established by the almighty Ruler of the Universe. Hence, the knowledge of Physics is once more indispensable. So Ethics, as the first level of what Moisioudax calls his Sound Philosophy<sup>48</sup>, is interrelated with the third level, namely: Physics. In this respect, he is following Democritus, and charges this discipline to order man's life through reason, and in accordance with the primordial principles, which God's wisdom had planted in Nature<sup>49</sup>.

Against the ignorant phanatics Moisioudax argues, that not the principles in themselves, but the loss of a sense of proportion and the dependence on senses alone are responsible for man's fallacies and selfdeception, the real

43. Iosipos Moisioudax, *Ἀπολογία*, Wien 1780 (New edition by A. Angelou, Athens 1976): «Speech on Mathematics», p. 91.

44. Ibid., «Speech on Philosophy», p. 134-135.

45. Ibid. p. 136.

46. Ibid. p. 139.

47. Ibid. p. 121.

48. Ibid. p. 97.

49. Ibid. p. 98. Democritus Fr. 191.



cause of his misery<sup>50</sup>. Finally, the Natural Philosophy eliminates, according to Moisioudax, human fear and superstition, the worst of all Erinies, that enrages the nations and sometimes convert the cities to cemeteries<sup>51</sup>. As necessary propaedeutic, however, Moisioudax, like Voulgaris and Theotokis before him, considers mathematics in its double role as the mind's tutor, which may become truth's arbiter and the founder of science through the mathematic proof<sup>52</sup>. Generally, as it was for the Renaissance thinkers in West Europe, Mathematics is once again seen as the access to Nature and indirectly the discipline restoring human dignity.

So Benjamin of Lesbos (1762-1824), the well known philosopher in the balkan area, whose teaching activity in the Academy of Kydonies in the Eastern Aegean area, attracted students from all over the balkan peninsula, expresses again a Renaissance motive<sup>53</sup>, when he justifies Plato's refusal to allow admission of the ignorant of geometry to the Academy and also shares Plato's characterization of God as the Geometer<sup>54</sup>. For if man, thanks to mathematics, can penetrate the secrets of Nature, subdue the celestial and terrestrial bodies to his understanding and perceive the Divine Wisdom, he then fulfills the word of Genesis, which characterizes man as God's image and is raised to a God's status.<sup>55</sup> Hence mathematics is indispensable for man's emancipation and dignity. More specifically, mathematics provides man with the pedestal on which to stand and distinguish both himself and the rest of the universe as entities. This pedestal is, of course, the idea of Monas, which is the basis of Man's Existence and of his Autonomy. Benjamin can, therefore, expressly declare: Remove mathematics from the earth and you will behold man creeping upon the earth, unable to raise himself from its surface or to emerge from the situation into which he was born<sup>56</sup>. Through mathematics man becomes distant to nature, but is not necessarily estranged from it.

Homogeneity between man and Universe is secured in Benjamin's Natural Philosophy thanks to the Pantachikinton, i.e. the common cosmic current

50. 'Απολογία, p. 97.

51. Ibid. p. 95, 40. Also Rigas Velesinlis, commonly known Ferraïos, driven by his love to his compatriots, wrote his «*Physics*» in order to free them from fear and superstition.

52. Moisioudax, 'Απολογία, p. 90, 113.

53. Galileo Galilei: «God is the Great Mathematician, but also man as God's image is mathematically minded».

54. Benjamin of Lesbos, «*Elements of Euclids Geometry*», Preface. Voulgaris had also referred to the same platonic aphorism (*Τὰ ἀρέσκειντα τοῖς φιλοσόφοις*, p. 5).

55. Benjamin of Lesbos, «*Elements of Arithmetic*», p. i, «*Elements of Euclids Geometry*», Preface; «*Elements of Metaphysics*», ch. A 1.

56. «*Elements of Arithmetic*», p. i; also ch. B.



ceaselessly flowing from and into every object, including the human body<sup>57</sup>. Within this field of the perpetual interchange of the Pantachikinton effluxes, wherein he is involved, man develops his intellect and his will, which leads indirectly to his emancipation. For even the disposition of his own Pantachikinton particles is determined by man himself and is an expression of his Autonomy<sup>58</sup>. For Benjamin this Autonomy is the essence of humanity<sup>59</sup>.

This autonomy, a concept developed throughout the steep philosophical path, which the thinkers had led since Korydaleus, is unveiled at last in Benjamin's philosophy and is presented with such clarity and intensity, that there is no longer doubt that man is indeed the master of his destiny. Man's duty is now to gather the strength to fulfil this natural endowment and transform it to freedom<sup>60</sup>.

First the Greeks and later the other enslaved balkan peoples had indeed, gathered such strength and Benjamin lived to see his theory on human independence truly verified and practiced on a national level. The gradual intellectual Revival, accomplished under often tragic circumstances in this South-Eastern part of Europe, could not remain just a sterile theoretical affair, for the price paid was usually too high to be forgotten. In addition, the popularization of knowledge achieved through the numerous greek schools, spread from Constantinople to Mount Athos, Athens, Carpenissi, Jannina, Arta, Castoria, Agrafa, Cozani, Siatista, Moschopolis, Smyrna, Kydonies, Chios, Patmos, Cos, Cyprus, Galatsi, Braila, Costanza, Tulcea, Philippopolis, Bucarest, Jassy, Varna, especially since the 17th century, contributed towards transferring the message from the theoretical to the practical sphere and gave impetus with due results to the awakening of the national consciousness and the struggle for national independence.

57. «*Elements of Metaphysics*», p. 41; «*Elements of Physics*», p. 36. See M. Στεφανίδης *Εἰσαγωγή εἰς τὴν Ἱστορίαν τῶν φυσικῶν ἐπιστημῶν*, Ἀθῆναι 1938.

58. «*Elements of Metaphysics*», p. 12.

59. «*Elements of Ethics*», p. 28.

60. See M. Dragona-Monachou, *Benjamin of Lesbos. Freedom, the Power for Fulfillment of «Autexousion»*, «*Deucalion*» Nr. 21/1978 (in Greek); «*Elements of Metaphysics*», p. 257.

61. Τρ. Εὐαγγελίδης, *Ἡ παιδεία ἐπὶ Τουρκοκρατίας*, Ἀθῆναι 1936. Μ. Παρανίκας *Σχεδιάσμα περὶ τῆς ἐν τῷ ἐλληνικῷ ἔθνει καταστάσεως τῶν γραμμάτων ἀπὸ τῆς ἀλώσεως μέχρι τῶν ἀρχῶν τῆς ἐνεστώσης ἐκατονταετηρίδος*, Ἀθῆναι 1867. Cf. Tsourkas, as cited above, *passim*.



## Η ΦΥΣΙΚΗ ΦΙΛΟΣΟΦΙΑ ΑΝΑΜΕΣΑ ΣΕ ΔΥΟ ΑΝΑΓΕΝΝΗΣΕΙΣ

### Περίληψη.

Σύμφωνα με τὸν τίτλο τοῦ φιλοσοφικοῦ Συμποσίου «Ἡ ἐξέλιξη τῆς φιλοσοφικῆς σκέψεως στὶς Βαλκανικὲς Χῶρες ἀπὸ τὴν Ἀναγέννηση μέχρι σήμερα», μέσα στὰ πλαίσια τῆς ὁποίας ἐγίνε ἡ ἀνακοίνωσή μου κατὰ τὸ Βαλκανικὸ Συνέδριο τοῦ 1981 στὴ Βάρνα, ἡ μεγάλη Εὐρωπαϊκὴ Ἀναγέννηση χρησιμεύει ὡς ἀφετηρία γιὰ ἀναδρομὲς στὸ παρελθόν, ὅπου ἀναζητοῦνται καὶ ἐντοπίζονται — στὶς ἀριστοτελικὲς ἐννοιες μορφῆς καὶ ὕλης, καθὼς καὶ στὴν ἀριστοτελικὴ κριτικὴ τῶν πλατωνικῶν ἰδεῶν — οἱ ρίζες τῶν βασικῶν γιὰ τὴ Φυσικὴ Φιλοσοφία προβλημάτων, καὶ ἀποφασιστικῶν στὴ διαμόρφωση τοῦ Ἀναγεννησιακοῦ πνεύματος γενικώτερα, καὶ συγκεκριμένα τῶν προβλημάτων τῶν σχετικῶν μετὰ τὴ διατήρηση τῶν στοιχείων στὶς χημικὲς ἐνώσεις καὶ μετὰ τίς καθόλου ἰδέες.

Ἡ θέση τῶν στοχαστῶν τοῦ Μεσαίωνα ἀπέναντι στὰ θέματα αὐτά, ἐνισχυμένη ἀπὸ τοὺς φιλοσοφικοὺς παραδοσιακοὺς θησαυροὺς — ὅπως τοὺς προσφέρει, ἀναχωνευμένους καὶ χυμένους σὲ νέα μορφή, τὸ Βυζάντιο, ἀκόμη καὶ ὅταν αὐτὸ πνέει τὰ λοιπὰ — ὁδηγεῖ ἀπὸ τὸ ἀδιέξοδο μακροχρόνιων φιλοσοφικῶν ἐρίδων στὴν ἀναγεννησιακὴ ἀνθρωπιστικὴ σκέψη καὶ στὸ θρίαμβο τῆς ἐπιστήμης.

Στὴ συνέχεια ἰχνηλατεῖται ἡ πορεία τοῦ Ἀναγεννησιακοῦ αὐτοῦ πνεύματος στὸ συγκεκριμένο χῶρο τῆς Νοτιοανατολικῆς Εὐρώπης καὶ ἰδιαίτερα στὸ στοχασμὸ τῶν ὑπόδουλων Ἑλλήνων, μέσα ἀπὸ τὰ ἔργα τῶν ὁποίων — Κορυδαλέα, Βούλγαρη, Θεοτόκη, Ζερζούλη, Μοισιόδακα καὶ Βενιαμὶν Λεσβίου — σταχυολογοῦνται καὶ προβάλλονται οἱ σκέψεις ποὺ τὸ ἐκφράζουν καὶ συντελοῦν καὶ ἐδῶ στὴν πνευματικὴ Ἀναγέννηση καὶ στὴν ἀνάκτηση τῆς ἀνθρώπινης ἀξιοπρέπειας τῶν ὑπόδουλων λαῶν τῆς περιοχῆς.

Ἀθῆναι

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