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Cecilia Panti, *Boethius and Ptolemy on harmony, harmonics and human music* (pp. 3-36)

The contribution analyzes how Boethius elaborates the concepts of *vis* or *facultas armonicae* (power of the harmonics) and *vis armonica* (harmonic power), both derived from Ptolemy's *dynamis harmonikē*, namely the power to grasp the distinctions between high and low sounds and produce an immediate judgment of pleasure or distrust. The essay aims to demonstrate that this concept provides the theoretical equipment for the study of the Boethian second *genus* of music, the *musica humana*, and consequently that Boethius' famous threefold division of music (*instrumentalis*, *humana* and *mundana*) implies a special methodological approach for each area. In particular, with the unfinished book 5 of the *De institutione musica*, Boethius turns to the practical usefulness of music, and shifts from a pure mathematical science, the *instrumentalis*, to an intermediate one, the *humana*, which involves also ethics and physics. For Boethius, this second kind of music concerns human wellness and good government, and its knowledge is particularly recommended to rulers and those who have political responsibilities.

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Varvara Zharkaya, *The challenged harmony Byzantine dispute over the form of the Universe* (pp. 37-46)

Throughout the whole Byzantine era we witness the coexistence of the spherical conception of the universe which has its' roots in ancient science and the pattern of tabernacle based on the Holy Writ. Only once in 6th century the opposite views became a subject for a dispute, but even then rather as a part of a broader theological controversy. Since that time the two conceptions survived in different cultural milieus and thence had no point of intersection. Only in 12 century Michael Glycas writing

his chronicle in a simple language approaches the issue. Proving that the universe has a shape of a sphere he tries to make scholar knowledge available to a general public. By doing so he even dares to come into contradiction with John Chrysostom himself.

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Valery V. Petroff, «*Armonia rerum*» in *John Scottus' Aulae sidereae* (pp- 47-66)

The paper examines John Scottus' poem «The Starry Temple» (c. 869/77), supposedly written in response to Charles the Bald's plans to construct at Compiègne a new church which could rival Aachen's Palatine Chapel. By means of sophisticated poetical imagery John Scottus proposes multilayer vision of the harmonic universe the hearth of which constitutes an ideal temple. It is shown that arithmology, the sacred history, and eschatology are interwoven in *Aulae sidereae's* worldview. The poem's sources are under consideration. It is stated that John Scottus deliberately draws parallels between Charles' church and the Biblical temple of Solomon. Among his sources are Bede's *De tabernaculo* and *De templo*, as also Alcuin's verse inscriptions for the altars and churches dedicated to Virgin Mary. Affinity between *Aulae sidereae's* prologue and philosophical hymns of Late Antiquity is indicated: Proclus' *Hymn to Helios*, Synesius' *Letter to Paeonius* and *Hymn IX* are observed here. Insular traits of Eriugena's vocabulary appear in a set expression *titania lampas*, which might have been borrowed from Aldhelm of Malmesbury. Close lexical parallels between *Aulae sidereae's* astronomical prologue and Martianus Capella's *De nuptiis* are pointed out. It is suggested also that verses 82-92 of the *Aulae Sidereae* may allude to Lucretius' prologue to the *De Rerum Natura*.

Among topics discussed is the cosmic harmony manifest in the order of things, which sings along (*concinit*) to what is told by Scripture (*mundus gestans symbola Christi*); as also the harmony of the octaves (*octonus numerus divinos symfonat actus*) which is symbolized by the harp of King David (*nabla sonorum*). It is argued that the *templum* (*aedes, domus*), dedicated to the Mother of God (*dei genitrix*) and consecrated on Christmas Day, becomes in John Scottus' poetical masterpiece a symbol and image of harmonically structured universe and emblemizes at once the starry temple of the Sun (*aula sidera*), the transcendent House of the Wisdom of God (*aula superna, remota domus*), the Bethlehem's manger (*sancta domus*), and the Heavenly Jerusalem as *visio pacis*. The figure of King Charles seated on his lofty

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throne is loaded with symbolism too: he is presented as an ideal ruler and a personification of the visible Sun, Kings David and Solomon, Christ, and Charlemagne.

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Jean-Patrice Boudet, *L'harmonie du monde dans le «De radiis» attribué à al-Kindī* (pp. 67-86)

Fourty years after the publication of the critical edition made by Marie-Thérèse d'Alverny and Françoise Hudry and more than fifteen years after Pinella Travaglia's issue, *Magic, Causality and Intentionality, The Doctrine of Rays in al-Kindī*, the *De radiis* keeps all its mystery and continues to be considered a hapax. This speculative text, where celestial and elementary bodies are supposed to emit rays reciprocally within the cosmic harmony, has been in fact well studied, particularly his theory of prayer. But it seems useful to examine the reasons for its dissemination and to try to better understand its full implications. Why such a treatise, also entitled *Theorica artium magicarum* and totally incompatible with the doctrine of the omnipotence of God and human free will, has been preserved in at least 26 Latin manuscripts? The answer is probably that it was fascinating for its coherence and its global conception of natural causality, but also as one of the finest forbidden fruits of learned culture promoted by the Arabic-Latin translations.

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Anna Litvina - Fjodor Uspenskij, *Dynastic Power and Name-giving Principles in Kievan and Muscovite Rus' (10th - 16th centuries)* (pp. 87-106)

Dynastic life in medieval Europe was subject to a complex network of norms, rules, and prohibitions. Some of these were recorded in writing, although, as a rule, with a significant delay, when the rules themselves were about to fall out of use. Others, despite remaining unwritten, regulated many aspects of everyday dynastic life, which repeatedly confirmed their existence. This refers not only to ceremonial

and dynastic etiquette, but also to a kind of family predestination compelling various dynasty members and their immediate circle to take on certain roles and behave in certain ways and not others. One of the spheres regulated by such unwritten but very effective norms was that of name-giving. Based on evidence from various European royal courts between the 9th and early 13th centuries, we can identify a set of parameters according to which names could be given to members of the ruling family and establish which of these parameters were relevant to each dynasty.

In Rus', Scandinavia, and other countries converted in the tenth and eleventh centuries, the gradual adoption of Christian names did not at first have a negative or destructive impact on the pagan tradition of naming. The traditional pagan corpus of names showed an extreme viability, and name-giving remained one of the most stable, conservative spheres of culture. Perhaps the most fully retrievable paired corpora of pagan and Christian names are those of the dynasty that ruled Rus'. The choice of a name for any individual is of great significance in any tradition. But if a name must be chosen for the prince, for a future ruler, then this naming becomes central to the existence of the dynasty, and, sometimes, to the existence of the country where the dynasty is ruling. The name (or names) of a royal heir determine his place in the dynasty and the status that he may hope to achieve according to the expectations of his parents. In general, the process of name giving was closely connected with strategies of power.

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Agostino Paravicini Bagliani, *La papauté médiévale et le concept d'harmonie* (pp. 107–20)

In the register of the letters of Gregory VII and Innocent III the word *harmonia* does not appear. A study of the concept of harmony inside the papal ideology is therefore possible only through terms like *concordia*, *pax*, *consensus*, *unitas* or *amicitia*. In the letters of Innocent III (particularly in the *Regestum Innocentii papae super negotio Romani Imperii*) the word *concordia* appears very often as a synonyme of arbitrage and judgement, the pope being considered the guarantor of harmony

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(*concordia*) inside the christian society in a judiciary perspective. The word *concordia* does not appear in the *Repertorium iuris* of Petrus de Monte, which offers however more than 250 definitions of the large spectrum of activities of the papal *plenitudo potestatis*. Such a terminological absence sheds a light on an important evolution of the papacy towards the end of the Middle Ages: the exercise of the *plenitudo potestatis* eliminates the role of the pope as guarantor.

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Irene Caiazzo, *Harmonie et mathématique dans le cosmos du XII^e siècle* (pp. 121-48)

This article focuses on twelfth-century philosophical theories of cosmological harmony, built on mathematical proportions. The late-ancient authors Calcidius, Macrobius, and Boethius are the background of the twelfth-century harmonic cosmos. Mathematical proportions underlie the constitution of the world-soul and of world. The four elements bind them through mathematical proportions, and different parts of cosmos and their rational animals.

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Franscesco Santi, *How, when and why the so-called Chirping of Birds pointed out the Harmony of the World* (pp. 149-68)

In a famous essay Leo Spitzer studied the theme of birds chirping, arguing that in literary composition it represents and expresses the harmony of the world. In fact in European literature birdsong it served to represent different situations. In the classical tradition predominates (without being exclusive) a more aggressive, annoying and disturbing feeling about the singing of the birds. The buzzing of bees must have seemed more harmonious. In the medieval tradition the chirping is then called upon to represent more and more insistently the harmony of the world. It will become evident in the poetic tradition Romance and Germanic. Even in the twelfth century, however, the singing of birds could represent markedly different views on what

was harmonious: we try to show it, in particular, comparing the description and evaluation of the song of the birds in *De avibus* of Hugh of Fouillooy with some texts of the *Carmina Burana*, in particular *Altercatio Phyllidis et Flore* (CB 92), which could refer to the *Aviarium* parodying. In the post-medieval the literary tradition manifests knows these contradictions and differences (medieval and pre-medieval) and subtly playing with them and develops it. This is exemplified quickly with cases that lead us to our times. The expression Shakespearean put to epigraph – that’s what our research promises – may finally be read with greater pleasure and *gusto*.

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Oleg Voskoboynikov, *Deux harmonies en comparaison: Michel Scot et Grégoire du Mont Sacré* (pp. 169-96)

This article analyses different aspects of the concept harmony in two texts that marked the intellectual life of Southern Italy under Frederick II, ca. 1230: the Michael Scot’s *Liber introductorius* and the *De hominum deificatione* by Gregory Mont Sacré, first being an encyclopedic introduction to the sciences of stars, the second a monumental theological and didactic poem on the six days of Creation, i.e. a kind of Hexameron. It emphasizes the expressive methods applied by these two contemporaries, apparently unacquainted with each other, though writing in the same geographical area. While Michael Scot makes broad use of etymology, combines christian theological speculation with calculations and mythological imagery, Gregory is a master of all kinds of poetical and retoric figures, demonstrated in his *opus magnum* as well as, in a condensed way, in a little vers, translated at the end of the article.

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Nicolas Weill-Parot, *Nature universelle et harmonie du monde (XIIIe-XIVe siècle)* (pp. 197-222)

The universal nature, as different from the particular nature, is a concept used by Avicenna in order to reintegrate within nature such phenomena as the errors of nature (or the generation of monsters) or the individual death. Roger Bacon makes use of this concept when he explains the way that nature abhors a vacuum. But

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whereas Bacon explains the production of a sixth finger in a hand as the last resort solution found by nature, when worst comes to worst – i.e. the universal nature avoids the putrefying of the five other fingers if the matter comes to be overabundant – Albert of Saxony, in his commentary on *Physics*, understands the production of natural defaults and monsters by the universal nature as a completely assumed operation for the ornament of the universe. In so doing he takes up again and develops an idea uttered by S. Augustine in *De ordine*. Some scholars such as Pseudo-Grosseteste – the author of *Summa philosophiae* –, and John of Paris (Quidort), suggest an identification between the *natura universalis* and such platonic or neo-platonic concepts as the *anima mundi* or the *catena aurea*. Henry of Langenstein (of Hassia), in his *De habitudine causarum*, gives a central role to the *natura communis* (another form of the universal nature), but critically evaluates the identification of this with the *catena aurea*; nevertheless, he sets forth the idea of *consonancia*.

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Jean Wirth, *La notion médiévale d'harmonie et ses applications artistiques* (pp. 223-42)

Hors de la théorie musicale, la notion d'harmonie n'est guère plus aujourd'hui qu'une vague métaphore. Au Moyen Age, son extension était encore plus large, mais elle ne semble pas s'être faite aux dépens de sa cohérence. D'un auteur à l'autre se dégagent des critères formels de définition qui semblent très stables, quel que soit le domaine d'application. L'harmonie est une propriété d'un tout dont les parties sont proportionnées et ordonnées. La multiplicité que l'harmonie doit unifier ne va pas sans générer des contradictions, comme en témoigne l'engouement pour les expressions paradoxales du type *concordantia discordantium*. Mais le paradoxe se résout dans la structure hiérarchique qui entre également dans sa définition: c'est au niveau hiérarchique englobant que ce qui apparaît localement comme dissonant devient harmonieux, dans une sorte de dépassement dialectique.

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Maria Sorokina, *Le ciel des empyrées une fonction harmonique? Un débat théologique au XIII^e siècle* (243–302)

Was the empyrean heaven, which became part of the cosmology from the end of the twelfth century onwards, thought to cause effects in the sublunary world? The article addresses the debates concerning a specific function attributed to this celestial sphere: the «harmonization» of the human body for the reception of the rational soul. Although several authors display the idea that the celestial light is a material part of the complexion of the human body, John of La Rochelle is the first one who refers to the light of the empyrean heaven in this context. His opinion was criticized for different reasons. On the one hand, those who accepted the idea that the celestial light was an organizing principle in the human body in order to make it ready to the reception of the soul thought that looking for the concrete origin of this light was useless (e.g., Pseudo-Alexander of Hales). On the other hand, the doctrine was unacceptable according to the supporters of the theory of the immediate union between the soul and the body (e.g., Thomas Aquinas, John of Paris). Thanks to the development of the doctrine supporting the influence of the empyrean heaven, this theory became admissible (e.g., Bonaventure), but it lost one of its main components, namely the corporeity of light. Such an interpretation allowed some authors to solve several problems at the same time: in the anthropological framework, they were able to explain the reconciliation between the different natures of the elements by this celestial influence, while keeping the idea of an immediate union between soul and body (e.g., Peter of Tarentaise); in the cosmological framework, they were able to ascribe the nobler function to the supreme sphere (e.g., Roger Marston) and even to justify its immobility (e.g., an anonymous commentary on *Sentences*, ms. Paris, BnF lat. 15903).

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Tiziana Suarez-Nani, *Les anges et les cieux, figures de l'harmonie universelle* (pp. 303–20)

The Concept of Harmony, a keystone of Leibniz's philosophical System, results from a tradition that is deeply rooted in the ancient and medieval thought. In the wake of the Augustinian concept of «*ordo rerum*», medieval thinkers saw the Universe as an ordered and well structured whole that is both the result and the reflect of the Unity of God. In such a Universe, Angels have an intermediary function between the first principle and the material world; they namely act as celestial movers, thus determining the course of natural processes and the becoming of

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the material world. Insofar as circular movement of celestial Spheres is the greatest reflection of the fundamental harmony within the whole divine creation, angels contribute, more than any other creature, to the universal harmony.

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Mikhail Khorkov, *Harmony of Intellect and Disharmony of Soul in German mystical texts of the Late Middle Ages* (pp. 321-34)

The paper provides a detailed analysis of the discourse on the problem of the complexity and disharmony of the soul presented in the treatise entitled *On the Eternal Word*. This anonymous German text is preserved as a part of the huge manuscript M I 476 of the University Library in Salzburg; it is regarded as a sort of encyclopedia of the German mystics of the Late Middle Ages. The anonymous compiler of this text faces with the necessity to recognize and even to enforce the idea of the inner multiplicity of the human soul. However, it is this idea that makes the birth of the Eternal Word in the human soul necessary as it is deeply rooted in the intellectual nature of the soul, because the human soul can never achieve harmony only by itself due to its inherent complexity. The concept presented in the treatise *On the Eternal Word* is compared with anonymous Latin *quaestio* «*Utrum beatitudo consistat in intellectu agente?*» (Basel, UB, ms B III 22), book *Geistlicher Herzen Bavngart*, a compilation based on the writings by the German Franciscan David of Augsburg, as well as with the German sermons by Meister Eckhart.

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Mikhail Boytsov, *Seeking for harmony after chaos political ceremonies in the first «ceremonial section» of the Golden Bull of 1356* (pp. 335-54)

This study concentrates on the first of three «ceremonial sections» within the text of the Golden Bull of Emperor Charles IV. This section (now chapters III-VI), being the oldest part of the Bull, appeared as contamination of two originally independent edicts. Nevertheless, the main idea of ceremonies described in both of them is the same: establishing of a *concordia*, political harmony, within the

small group of leading princes of the empire. To achieve this harmony, some changes of hierarchical relations were necessary. The authors of the Golden Bull imagined the reformed Empire visualised as a symmetric figure, built by the princes' seats and bodies as if seen from above, by drawing a plan of their collocation at ceremonial acts. At the same time, the authors strongly emphasized parity between the three archbishops, but secured two sorts of inequality via symbolical means. Firstly, the ecclesiastical electors appear to stand higher in the hierarchy than the secular ones. Secondly, the hierarchy within the group of secular electors was substantially transformed for the benefit of the King of Bohemia and to the prejudice of Count Palatine of the Rhine. It seems also that the authors were preparing for a possible «ceremonial confrontation» with the French court in the near future.

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Danielle Jacquart, *L'harmonie des parties du corps entre Moyen Âge et Renaissance* (pp. 355-72)

This paper explores how some medieval authors, from the thirteenth century onwards, dealt with the organization of the parts of the human body and the harmonious whole they formed. During the Renaissance, it is well known that anatomical knowledge, pictorial or sculptural techniques and the tradition of physiognomy happened to join together in an innovative manner. Nevertheless, some trends prepared this convergence during the last centuries of the Middle Ages. Whereas words as *fabrica* or *elegans* were applied to the human body and its parts well before Andreas Vesalius, the junction between anatomy and physiognomy was made extensively by Albert the Great in his *De animalibus*. The concept of *compositio* was at the heart of the description of the harmonious whole formed by the different parts. If Albert the Great related closely this fabricating process to the powers of the soul, Pietro d'Abano in his *Conciliator* considered *compositio*, also named *coequalitas*, as the work of the complexion. The new translation, from the Greek, of Galen's *De usu partium*, available from 1317, gave a new status to the anatomical science. Its influence is particularly visible in Jacques Despars' commentary on Avicenna's *Canon*, written in the first half of the fifteenth century: the anatomical science is not only praised for the information it provides to physicians, but for its demonstration of the beauty of the human body and the organization of its parts. Contemporary to Jacques Despars – and to Leon Battista

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Alberti – Michele Savonarola, in his *Speculum phisionomiae*, alluded to *simmetria corporis* and to the measures of body parts used by painters, a topic that was more succinctly dealt with by Pietro d'Abano before him.

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Mikhail V. Shumilin, «*At uidete quam concinne*». *Changing Attitudes to Metrical Harmony in Giovanni Pontano's Actius* (pp. 373-90)

Traditional approach to Latin metrics, inherited from Classical Antiquity, was based on evaluating every verse according to few unchanging rules. This trend, however, contradicted one very popular attitude to classical texts, known to the Middle Ages, e.g., from Servius' commentaries, that presupposed commentator's ability to mention ever new beautiful features in the *a priori* perfect works of Latin classics, and so to deduce new ways of making text beautiful (*et bene dixit, quia...*). This conflict resulted in the new theory of Latin metrics, based on the latter approach, formulated in Giovanni Pontano's dialogue *Actius* (1495-1499). Instead of applying external rules to verses, Pontano tries to deduce their internal rules; the main goal of poetry is for him to arouse *admiratio*, and while admiring Virgil's perfectly harmonious verses (which, of course, reminds of Servius' posture), the characters of the dialogue try to understand what exactly produces this perfect harmony. Thus in *Actius* unaccountable beauty must first be felt, and only later tentative explanations can be given, while for ancient scholars you determine whether a verse is harmonious or not once you have checked if it observes the rules. Pontano's approach turns out to be very productive and helps him to introduce several new notions, such as *alliteratio*.

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Galina Zelenina, *Harmonizing the Spanish Inquisition in Castilian and Sephardi historical schemes and in messianic scenarios* (pp. 391-412)

A prominent Spanish scholar Américo Castro described medieval Iberian history by coining the expression «harmonious coexistence of three faiths/nations/cultures». His life-long vehement opponent Claudio Sánchez-Albornoz challenged all

Castro's statements and even pointed at his presumably Jewish origins as a cause for his xenophilia, while agreeing with Castro on a single item – ascribing to the Spanish Inquisition some Jewish roots. At the same time, Jewish historians holding opposite views on the true nature of Conversos or true goals of the Inquisition agree in refuting Castro's and Sánchez-Albornoz's claim. In this way the Inquisition appears a harmonizer in two historiographic debates. Leaving this observation as an epigraph and after a short survey of Spanish Catholic sources conceptualizing the Inquisition, the paper addresses Jewish and Converso sources, namely, Isaac Abravanel's exegetical writings, chronicles of the generation of Spanish exiles, and the poetry of Western Sephardi diaspora, and examines how they picture the Converso problem and inquisitorial persecutions. The paper focuses on the ways in which the Inquisition could harmonize the conflict between the ideal of religious devotion and tendencies for actual assimilation, and on how it fostered messianic expectations.

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Olga Togoëva, *Sorcellerie comme disharmonie dans l'univers de Jean Bodin* (pp. 413–28)

This article is an attempt to specify more precisely the meaning of the «sorcery» concept in the *Demon-Mania of Witches* (*De la démonomanie des sorciers*) of Jean Bodin published in 1580. Jean Bodin was one of the most important French writers of the second half of the sixteenth century. His works, dealing with history, politics, and religion, pay special attention to the problem of the harmony of the world and to the necessary instruments and measures to keep everything in good order. That was one of the main themes of all his works, including the *Demon-Mania*. Bodin believed that sorcery presented an extraordinary danger to a well-ordered state, its rulers and its citizens. That's why he tried to systematize his own knowledge of this subject, to reveal all the particularities of the sorcery in order to produce a sort of classification of its types, to warn his readers of its various manifestations. Thus Jean Bodin hoped to prevent the expansion of this disharmony in the world.

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Katrin Bauer, *How to imagine the Harmony of the World in the Seventeenth Century*
The Harmonice mundi by Johannes Kepler (pp. 429-48)

In 1619 Johannes Kepler published one of his most famous works, the *Harmonice mundi*⁶⁶. This opus consists of five volumes dealing with different inter-related topics and it is widely known that it contains the third law of planetary motion. The connection of the celestial harmonious patterns with the sublunar world are of Kepler's interest during all of his scholarly life and the *Harmonice mundi* is like a compendious overview over his professional work after he crossed the vertex of his career. Dealing with geometry, music, astrological aspects, and politics Kepler shows his interest to find universal laws to explain God's all-embracing plan. In the focus of this article Kepler's exchange with his coeval Robert Fludd was presented. Both scholars dedicated their works on harmony to the English King, James I. As the part of the work where the author could reveal his intention regarding the reception of his work the dedication plays the second main role of this short study. Therein the scholar made great efforts to show that all of his scientific ideas could be understood as intertwining parts of one leading theory and could be useful especially in political contexts.

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