

Newsletter



for the History of Science in Southeastern Europe

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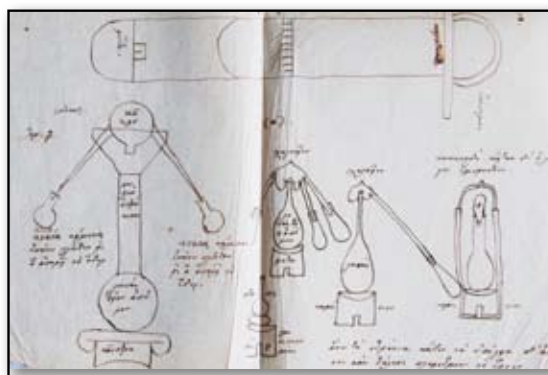
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PROGRESS OF THE DACALBO RESEARCH PROJECT

*Digital archive concerning alchemy in Byzantium
and in Greek-speaking communities
of the Ottoman Empire and educational as well as
cultural utilization of this archive*

The three-year DACALBO research project, run by the Institute of Historical Research (National Hellenic Research Foundation), in collaboration with the National and Kapodistrian University of Athens (Faculty of Primary Education), the University of Ioannina (Department of Chemistry) and the Center for History and Paleography of the National Bank of Greece Cultural Foundation, under the direction of Professor Nicolaidis, is now in its final stage. The four groups involved in this project have already gone through most of the steps required for the creation of a comprehensive, open access, digitized, and searchable archive of texts relevant to alchemy, written in Medieval or Modern Greek, from the period of Byzantium to the 18th century, which is the principal objective of DACALBO.



*The manuscript No. 3458 of the National Library of
Greece*

The compilation of a catalogue of manuscripts preserved in libraries of Greece containing Greek alchemical texts has been brought near completion. Most of the manuscripts that will be included in this catalogue have been examined by autopsy and their contents are studied and described in detail. With the help of Professor Alain Touwaide, an inventory of manuscripts preserved

in libraries of Greece, Balkans, and Russia containing Greek texts that are relevant to alchemy is also underway, through systematic examination of the published manuscript catalogues against specific selection criteria, defined after surveying how alchemy historically interacted with other fields of knowledge.

The available primary and secondary bibliographies for Byzantine and post-Byzantine alchemy have been collected, as well as the bibliography on the authors of Greek alchemical texts. Biographical notes on each of the alchemical authors are also being compiled.

A database has already been designed and developed, through the use of the internet infrastructure and information network of the NHRF/ National Documentation Centre, in order to store the corpus of the texts that constitute the subject of the research project and the collected bibliographical and biographical data in a comprehensive, navigable and well structured manner, providing thus a functional map both to the interested scholar and to the general public.

At the same time, the section of the research group working in the National and Kapodistrian University of Athens, under the direction of Professor Skordoulis, is developing educational activities for educators of natural sciences and of life sciences. Furthermore, a series of educational material and interactive diffusion activities on the cultural heritage are being planned.

Another section of the DACALBO research group, working in the University of Ioannina (Department of Chemistry), under the direction of Professor Efthymios Bokaris, is currently preparing a critical edition of the alchemical treatises attributed to Stephanus of Alexandria.

Leading historians of alchemy and medicine, such as Jennifer Rampling, Matteo Martelli and Alain Touwaide, have visited Athens, delivering lectures and working together with the members of the DACALBO research group on some of the most complex philological, historical and methodological key questions that have been raised through the research process so far.

The results of the research undertaken will be presented and critically discussed with invited scholars in a three day event on Greek Alchemy organised in Athens, 25-27 June 2015, which will include a workshop and a symposium. At the workshop the following themes will be discussed: a) the catalogue of Greek alchemical manuscripts and the inventory of manuscripts containing Greek texts that are relevant to alchemy, b) the critical edition of the alchemical treatises attributed to Stephanus of Alexandria, c) the relationships between alchemy and

natural philosophy in Byzantine times, and the mutations of alchemy and the development of “chymistry” in the post-Byzantine era, d) the educational applications of the historical material and on the reproduction of alchemical procedures. The workshop will be followed by a public, international symposium, under the title “Greek alchemy: From the late antiquity to the early modernity”, where the invited scholars that will have taken part in the two-day internal discussion will present their own contributions.

Vangelis Koutalis
National Hellenic Research Foundation

HPDST IN THE 6TH IESHS CONFERENCE

Lisbon, Portugal, 4-6 September 2014

The 6th International Conference of the European Society of the History of Science took place in Lisbon, Portugal, from 4-6 September 2014. The conference was organized by the Interuniversity Centre for the History of Science and Technology (CIUHCT), a research centre associated with the Faculty of Sciences of the University of Lisbon and the Faculty of Sciences and Technology of the New University of Lisbon, and its theme was “Communicating Science, Technology and Medicine”.

The History, Philosophy and Didactics of Science and Technology Program had a strong presence in this congress. Members of the Program were co-organisers of symposia and presented several papers. In details:

Symposium on Greek Alchemy

Gianna Katsiampoura and Remi Franckowiak, from the Project Thales – Digital archive concerning alchemy in Byzantium and in Greek-speaking communities of the Ottoman Empire (DACALBO), organized a symposium under the title “Circulation and communication of the chemical knowledge in the Greek-speaking communities from Antiquity to the 17th century”.

During this symposium, Gianna Katsiampoura, in her presentation “Natural philosophy and alchemy in the Byzantine period: a controversial relationship” addressed a significant void in the current historiography of science by surveying and mapping a previously unexplored area: the relationship between alchemy and natural philosophy in the Byzantine era. The study was based on the examination of the life and works of the scholars who had written works on both natural philosophy and alchemy.



Gianna Katsiampoura

Remi Franckowiak, in a presentation titled “Athanasius Rhetor’s Chemistry in the midst of several worlds” referred to Athanasios, who, following the spirit of his time, became interested in chemistry – an increasingly fashionable science at the time – and did not contend himself with neither old nor new writings but frequented particular places and mingled with his contemporaries (scholars and craftsmen). He was in the midst of several networks of people of different social status and with varied interests. His handwritten chemical papers expressed vividly this mixture as well as the complex result of the diffusion of byzantine chemical practices and concepts until the 17th century.



Remi Franckowiak

Vangelis Koutalis and Konstantinos Palaiologos (University of California, Irvine), in their paper “Operating in and through the word of God: Reading the alchemical treatises of Stephanus of Alexandria and the cosmological-theological works of John Philoponus side by side”, aimed at contributing to the apprehension of the histori-

cal significance that could be ascribed to certain syncretistic intellectual traditions, as well as social-cultural movements, which flourished during the Late Antiquity and the Early Byzantine Era, by opening up an intertextual domain crossing the (retrospectively applied and firmly established) boundaries between theological and natural-philosophical discursive practices.



Vangelis Koutalis

The last paper of the symposium, “Design and Development of Educational Activities based on the History of Alchemy”, by Kostas Skordoulis and Kostas Exarchakos, consisted of two parts: in the first part a short account of the role of History of Science in Science Teaching was given underlying the merits of the historical approach in the science classroom. In the second part, the paper reported on the design and development of a series of teaching activities based on the History of Alchemy (4th-17th century) as it is reconstructed through the collections of primary and secondary literature in the data bases of the project DACALBO.



Kostas Skordoulis

Symposium on Science-Religion

Efthymios Nicolaidis co-organised with Vincent Jullien (Université de Nantes) the symposium “Religions as a means for/against communicating sciences: Orthodoxy, Catholicism, and reformation”. During this symposium, in the frame of the Project NARSES (Nature and

Religion in South Eastern European Space) the following papers were presented:

Ronald L. Numbers, University of Wisconsin, Madison, “The cultural revolution of dinosaurs among conservative Christians: from evidence of evolution to symbol of creationism”, Stephen Gaukroger, University of Sydney, “The early-modern Idea of scientific doctrine and its origins in Christianity”, Vincent Jullien, Université de Nantes, “Two Christian scientists of the 17th century, Descartes and Pascal observed by one of the 20th, Pierre Duhem”, Efthymios Nicolaidis, National Hellenic Research Foundation, Athens, “The involvement of science in the debate on Hesychasm”, Eudoxie Delli, National Hellenic Research Foundation, Athens, “The earthquakes in byzantine writers. Interpretations between natural and supernatural”, Stefaan Blancke, Department of Philosophy and Moral Sciences, Ghent University, “Catholic responses to evolution, 1859-2009: local influences and mid-scale patterns”, Hans Henrik Hjermitsev, University College South Denmark, Aabenraa, “The circulation of scientific knowledge among Protestants in rural Denmark in the decades around 1900”, Torsten K. D. Himmel, Department of History, Section for History of Science & Technology, University of Stuttgart, “Networks Of authors, collectors, publishers, and illustrators exemplified By Scheuchzer’s copperplate Bible”, Matthieu Husson, CNRS-Observatoire de Paris, “Communicating sciences in Catholic contexts: the choices of two medieval scholars”.

Symposium on the History of Science for Science Education



Dinner of participants

Kostas Skordoulis, as member of Interdivisional Teaching Commission, co-organized the symposium “History of Science for Science Education”. His presentation “Investigating the historical development of the concept of matter from ancient atomism to quantum mechanics”

was about the concept of matter in different historical and scientific contexts.

For more details and the Book of Abstracts: <http://eshs2014.ciuht.com/>

*Gianna Katsiampoura
National Hellenic Research Foundation*

PROGRESS OF THE NARSES RESEARCH PROJECT

Nature and Religion in South-eastern European Space: mapping Science and Eastern Christianity religions in South-eastern Europe and Eastern Mediterranean

The Project NARSES, headed by Efthymios Nikolaidis of the National Hellenic Research Foundation and carried out by a team of historians, philologists, byzantinologists and paleologists within HPDST, is now approaching its third and final year. Its goal has been the examination of the multiplicity of relations between science and religion from the 4th c. AD to the 20th c. in the geographical areas of south-eastern Europe and eastern Mediterranean. It has strived to address a lacuna in the historiography of science and religion, by focusing on Eastern Christianity and its presence in South-eastern Europe. Sociopolitical spaces such as the Byzantine Empire and the modern Greek State have been conspicuously absent in the scholarship regarding science and religion. Thus, NARSES aims to facilitate research on the subject, through the creation of an online, open-access database, which will include all relevant primary textual sources, indexed and summarized. The results of NARSES’ research have been very encouraging, to the point that the team behind the project has decided to expand its scope even further, by including sources in Greek up to 1974.



Mural depicting the alleged Second Appearance of the Holy Cross in Athens in 1925, shortly after the calendar reform

NARSES has had, since its inception, a commitment to pursue the biggest possible diffusion of its results across the academia and the general public. Its public portal (<http://narses.hpdst.gr/>) is being constantly enriched with primary sources, preliminary analysis and notifications of relevant events. Moreover, the NARSES team has successfully established collaboration with notable academic centers in Europe and abroad, examples being the Observatoire de Paris, CAPHES and the Max Planck Institute for the History of Science. It has also hosted talks and seminars by notable scholars, Professor Ronald Numbers being one such example. Finally, it has organized international colloquiums in the 6th International Conference of the European Society for the History of Science in Lisbon and in the Royal Academy of Belgium in Brussels.

In the future, project NARSES will organize an international conference in Athens, to fully present and discuss its findings. The conference has already attracted the attention of notable theologians, historians and philologists from Europe and beyond. However, the NARSES team has decided to retain its original plan for a small number of talks and presentations, with the emphasis to be given on discussion and critical analysis.

As of 2015, the project is in its final stages of database indexing and cataloguing. It is expected that by the early summer of the same year, the database will be fully operational and useable. The research fields follow a specific but flexible periodization, from 4th to 7th c., from 8th to 12th c., from 13th c. to 15th c., from 15th c. to 1833, from 1833 to 1945 and from 1945 to 1974. This division is meant to act as an indicative and heuristic framework, following major turning points in the history of religion and the history of science. The database already contains information on hundreds of articles, treatises and books. It also hosts small biographies of relevant authors.

However, NARSES is not the end of the journey, but rather the first step. The very encouraging results of the project point to a research field ready to be expanded further, in both local and international level. Thus, the HPDST team is already planning for its next step in that direction. The dialogue between science and religion has whole new dimensions yet to be explored temporally and spatially. Project NARSES is only a small indication of the fruitfulness of the field.

Kostas Tampakis
National Hellenic Research Foundation

2ND NARSES WORKSHOP

Syros, Greece, 2-4 July 2014



The 1st Mosaics Stars (detail), Mausoleum of Galla Placidia, Ravenna, Italy, 5th c.

The second NARSES workshop took place in Syros between the 2nd and the 4th of July 2014. It was organised by the Institute of Historical Research of the National Hellenic Research Foundation in the frame of the Seminars of Hermoupolis. Its goal was to provide a critical description (based on relevant topics and supporting texts and writers) of the research work already accomplished. The workshop also aimed at encouraging a constructive dialogue between the members of the NARSES research team and the invited scholars and researchers.

During the initial session, coordinated by Efthymios Nicolaidis (IHR/NHRF), Ronald Numbers (University of Wisconsin-Madison) spoke about “Popular Science and Religion: From Devils to Dinosaurs” and Michael Shank (University of Wisconsin-Madison) about “Astrology and Politics in the Background to the Galileo Affair”.

The second session was opened by E. Nicolaidis who presented an overview of the NARSES project and its results until that moment. On the one hand, he underlined the importance of the textual material selected for the database prepared in order to be a valuable tool for modern research and education. On the other hand, he traced the new perspectives for future research that could emerge in the interface of historical investigation and contemporary discussions in the field of Science and Religion. Thereafter, Kostas Skordoulis (University of Athens) dealt with “Science, Religion and the Holy Family” of Marx and Engels. In the next presentation, titled “Should one renounce to know the Sky? An essential problem of the classical era”, Vincent Jullien (University of Nantes) focused on the

crucial metamorphoses of the image of the Sky from Antiquity to the Scientific Revolution and the changing worldviews related to them. The session came to a closure with Marie Dupond (EHESS, Paris) who tackled the issue of “The relation between science and religion within the Encyclopaedia and, especially, within d’Alembert’s ‘Preliminary discourse’ and the entries written by Claude Yvon (1714-1791) encyclopaedist and theologian”.

In the last session, coordinated by K. Skordoulis, the emphasis was placed on byzantine writers and primary texts incorporated in the database of the NARSES project. The first contribution, offered by Nikos Livanos (IHR/NHRF), was titled “‘Astromaniacs shall pay for their impiety!’ Astrology and astrologists in Byzantine hagiographical literature”. Gianna Katsiampoura (IHR/NHRF) focused on “The relationship between science and faith in the Byzantine Canon Law” including in the frame of Byzantine Science Alchemy as well. Finally, Eudoxie Delli (IHR/NHRF) dealt with the subject of “Maximus the Confessor and Michael Psellos on ‘natural contemplation’”. Two guidelines on the relation between religion and science in the byzantine thought: convergences and divergencies”.

The workshop concluded with a round table. The vivid discussion between the participants reflected distinct aspects of relevant topics on Science and Religion and also permitted to relate the central thematic areas of NARSES to larger issues of the History and the Philosophy of Science.

Eudoxie Delli
National Hellenic Research Foundation

INTERNATIONAL SYMPOSIUM ON COSMOGONY, COSMOLOGY, HEXAEMERON

An international symposium on the *Hexaemera*, namely, on the interpretations and commentaries of the Genesis (1:1-26) concerning the creation of the world in six days was held in the Royal Academy of Belgium in Brussels on the 18th and 19th of September 2014. The exegetical genre of *Hexaemeron*, shaping the Judeo-Christian representation of the Universe, Man and God, abounded in theological and philosophical treatises written by major authors as Philo of Alexandria, Origen of Alexandria, Basil of Caesarea, Gregory of Nyssa, Augustine of Hippo, Ambrose, Venerable Bede, Athanasius of Sinai, Henry of Langenstein and others. The *Hexaemeron* became also a conceptual vehicle

for the synthesis between biblical cosmology and pagan scientific knowledge defining the framework in which natural philosophy, cosmology and anthropology were to be elaborated in the following centuries. Furthermore, inscribed in the practise of Myth (within its anthropological meaning), the literary genre of *Hexaemeron* dealt through its “catalogical” structures and narrations (concerning cosmology, cosmogony and cosmobiology) with a form of intelligibility proper to complexity.



The symposium’s purpose was to relocate the genre of *Hexaemera* within philosophy by highlighting the conditions of its formation and the modalities of its reception in medieval traditions (Western and Eastern). It also aimed at outlining its various thematic areas showing their impact on the construction of posterior scientific paradigms (as the continuity of the creation, the creation of the Matter, the origins of the Light, the combination of the Elements, etc.).

The symposium was organized by the ULB (Université Libre de Bruxelles) and the FNRS (Fonds National de la Recherche Scientifique) under the direction of Prof. Baudouin Decharneux. Three research teams joined for its realization: the CIERL (Centre Interdisciplinaire d’étude des religions et de la laïcité), the OIKOUMENE (Centre d’études méditerranéennes) and the NARSES Project (Nature and Religion in South Eastern European Space//Fondation Nationale Neohellénique de la Recherche Scientifique).

The opening session was inaugurated by Lambros Couloubaritsis (ULB-ARB) who focused on the “Genesis and Structure of the genre of *Hexaameron*”. The next presentation offered by Michèle Bronze (FNRS-ULB) dealt with the “Eighth day, eighth hour, year 80: a gnostic re-interpretation of an egyptian word play”. Thereafter, Baudouin Decharneux (FNRS-ULB-ARB) turned to the “*De opificio* of Philo of Alexandria”. In the following contributions, Arnaud Delhove (FNRS-ULB) analysed the “Creature of the sixth day. Man in the Candelabrum of the Sanctuary of Bar Hebraeus (II, 3,6)” and José M. Zamora (Autonomous University of Madrid) spoke about “Dependency and generation. The interpretation of Plato (Tim. 28a 4-6) in the Platonic current”. The last paper presented by Lauréline Dartiguepeyrou (University of Neuchâtel) focused on “How to reconcile the temporalities of the Eternity and of the Creation? A study in al-Fârâbî”.

Ammad Amminian (ULB-Omar Khayyam) and Christian Brouwer (ULB) opened the second session. The first focused on “Creation and Koranic anthropology” and the second dealt with “Robert Grosseteste and the foundations of the world”. The session was closed by Fabien Nobilio (ULB) who analysed the question if “The commentaries on *Hexaameron*, could be conceived as precursors of modern creationism”. In the last session, Efthymios Nicolaidis (Dir. NARSES/NHRF) spoke about the “Philosophy of Nature in the *Hexaameron* of John Philopon” and Eudoxie Delli (NARSES/NHRF) focused on the “Survival and the transformations of the *Hexaamera* in authors of the Middle Byzantine Period: the relevant poems of George of Pisidia and Michael Psellos”.

The symposium’s conferences and the animated discussions which followed each session, covering a wide range of related topics and writers from different philosophical and religious traditions (Neoplatonic, Gnostic, Judaic, Latin, Byzantine, Syriac and Arabic), offered a very rich and profound analysis of the genre of *Hexaamera*.

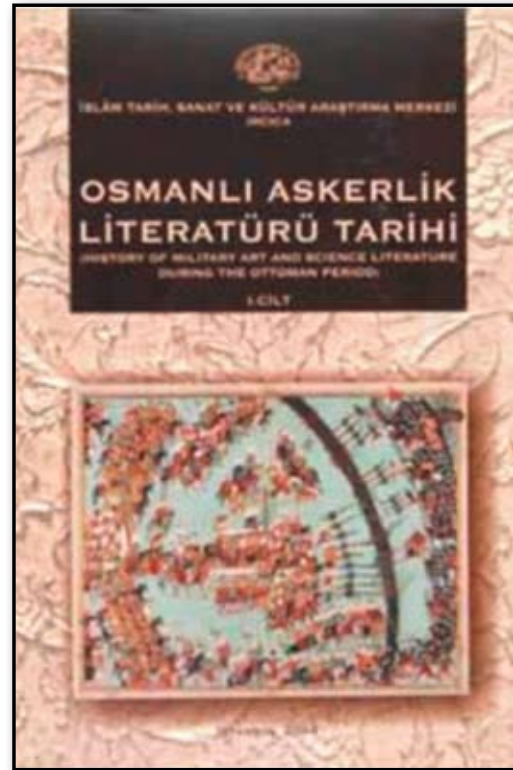
Eudoxie Delli
National Hellenic Research Foundation

OTTOMAN SCIENTIFIC LEGACY

The Twenty Volumes Project Comes to the End

The last two volumes of the twenty volumes project on History of Ottoman Scientific Literature will be published next year. Started in

1985 by Ekmeleddin İhsanoğlu, the 18 volumes published until today comprise of 17 volumes on astronomy, mathematics, medicine, natural and applied sciences, etc. whilst the 18th volume includes cumulative indices of these volumes. The last two volumes of this series will be published under the title “The Ottoman Scientific Legacy”, and it will include an analysis of the findings of the 18 volumes as well as research projects concluded during the last three decades from the beginning of the project.

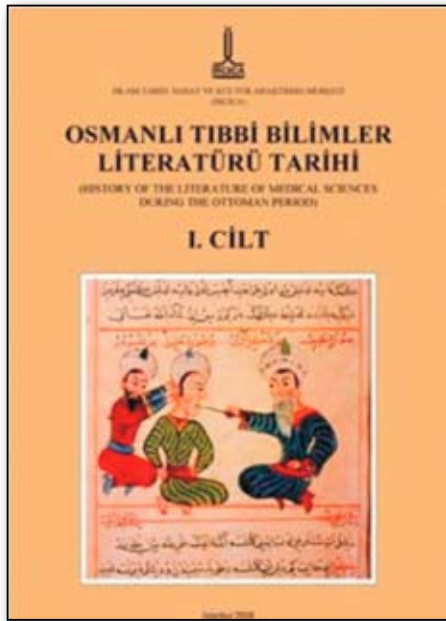


5th volume: History of the Literature of Military Art and Science during the Ottoman Period

The project was worldwide welcomed and applauded. In 1998, after the publication of the first two volumes on astronomy, Nature magazine pointed out that the book “shows that, far from disappearing, science was very much alive in the Ottoman Empire right up to the eighteenth century, when it shifted towards learning and assimilating European sciences through translations and adaptations”. The review qualified the book as follows: “The result is a monumental achievement. It not only provides us with a true picture of the extent of Ottoman scientific activity, but also turns the standard view on its head... It is truly, prodigious work that will be celebrated by historians of science from around everywhere”.

Evaluations of authoritative historians of sci-

ence from all over the world have highlighted the importance of the series focusing on its contribution to the study of the history of science in general and the history of Ottoman Science in particular.



15th volume: History of the Literature of Medical Sciences during the Ottoman Period

David King: “present for the first time the sources available for the study of Ottoman astronomy and mathematics... The standard of the organization and presentation of the materials is of the same high caliber as these earlier reference works... The volumes under review... will eventually lead to a number of serious studies that will help put Ottoman science in clearer perspective... Very useful key”.

Abdulhamid Sabra: “These books as impressive, high quality publications, underlining that the comprehensive information compiled for the first time in these books will help historians advance in a field not sufficiently researched”.

William Shea: “The history of Ottoman science has been neglected because we have lacked an inventory of Ottoman scientific literature. This will now be remedied by an important bibliographical project... All scholars working in this area will want to become acquainted and to master this invaluable source... [The volumes on mathematics] will prove a splendid voyage of discovery”.

Jamil Ragep: “The book was an important step forward in research on history of science in Islam”.



18th volume: General Index of the History of Ottoman Scientific Literature

Boris Rosenfeld: “Extremely useful for historians of science”.

B. Norik: “There can be no doubt that this publication is a notable contribution to creating a multi-faceted history of Muslim scholarly thought”.

Emilia Calvo, Mercé Comes and Ruser Puig: “This enormous work is an excellent series of reference books which identify the source to be explored in an assessment of the Ottoman contribution to almost five centuries of history of science”.

Thomas Goodrich: “An excellent book which provides indexes and lists of works that will meet the appreciation of researchers”.

Mücteba İlgürel: “Those who prepared the series have put their extensive experience into bringing to light valuable works that were forgotten on library shelves”.

Prof. Dr. Ekmeleddin İhsanoğlu
IRCICA Research Centre for Islamic History,
Art and Culture

CLAVIS AUREA OF TECHNOLOGY

The Dictionary of Technology – 33 years later

The Institute for Philosophy and Social Theory, University of Belgrade, on 13 and 14 November 2014 held a scientific conference titled “*The Dictionary of Technology – 33 years later*”. The conference was dedicated to the

examination of the historical context and the theoretical content of *The Dictionary of Technology*, which was published in June 1981 in Belgrade (*Horizons*) as an authentic postmodern reading of philosophy of technology. It contains 161 terms, by which existential experience and humanistic heritage of the Age of Technology are critically examined, as well as projections of the future development of technological civilization. The issue of technology is associated with language, because technology is seen as a specific language that suppresses all others. Each term in *The Dictionary* consists of five levels – etymology, meanings, interpretations, synonyms and examples from the history of science and culture. Synonyms allow the circular reading of *The Dictionary* so that its structure resists to the linear cognitive schemes.



Cover of the Dictionary of Technology

The Dictionary is a meta-discursive text because, besides concepts, it contains symbols, metaphors, allegories, new words. Terms such as analysis, history, evolution, certainty... consider the scientific method, as an attempt to overcome its limitations; and terms such as technology, mathematics, mind, machine, progress... consider the ideological and social background of technological development; whilst the terms Balkans, Leviathan, virtue, mirror... convey the geopolitical and ethical dimension of the problem; terms such as Descartes, Darwin, Encyclopedia, Relativity... point to the realm of the history of science.

In addition to this basic theoretical blueprint,

The Dictionary displays a number of unusual characteristics. The first is that it was written in “Aesopian language” that cannot be understood, unless one apprehends the key concepts and their relationships. Then, the authors are not signed in open source and to this date their identity remains a mystery. The unique significance of *The Dictionary* lies in the fact that it is the only theoretical treatise in the modern European culture, which is totally handwritten and illuminated according to pre-modern manuscripts. In this way it practically performed a critique of technology by pointing out the creative power of the Hand that cannot be essentially replaced by technological devices.



Page of the Dictionary of Technology

Such a critical reading of historical assumptions of the technological development concerned vigorously the Serbian political elite of the time, which, at the beginning of 1982, reacted strongly to *The Dictionary* by officially releasing *The Analyze of the Ideological Orientation of the Dictionary of Technology* quickly prohibiting the Dictionary's circulation. *The Dictionary*, due to this scientific meeting, after 33 years appears in public thus sharing the fate of so many of the key works of the history of science and culture. New concepts, different language and a different world views, as the intensity of their political prescription, the fate of the text and its authors, social and civilizational technological shift over the past decades represented a fruitful starting point for thinking of the actuality of *The Dictionary* 33 years after its publication.

Its appearance was one of the first critical steps related to technology and its posthuman outcomes. While the cloud of nano and transgenic organisms thickens, while living species, cultures and languages disappear, it is obvious that *The Dictionary of Technology* was a kind of early warning, a prophetic alarm and the golden key (*clavis aurea*). A variety of relevant texts and audiovisual documents, as well as *The Dictionary* itself can be found at: <http://rechnik-tehnologije.wordpress.com>

*Aleksandar Petrovic
University of Belgrade*

PROCEEDINGS OF THE 5TH IESHS CONFERENCE

*Scientific Cosmopolitanism and Local
Cultures: Religions, Ideologies, Societies,
Proceedings of the 5th International
Conference of the European Society for
the History of Science, National Hellenic
Research Foundation/Institute of Historical
Research, Athens 2014*

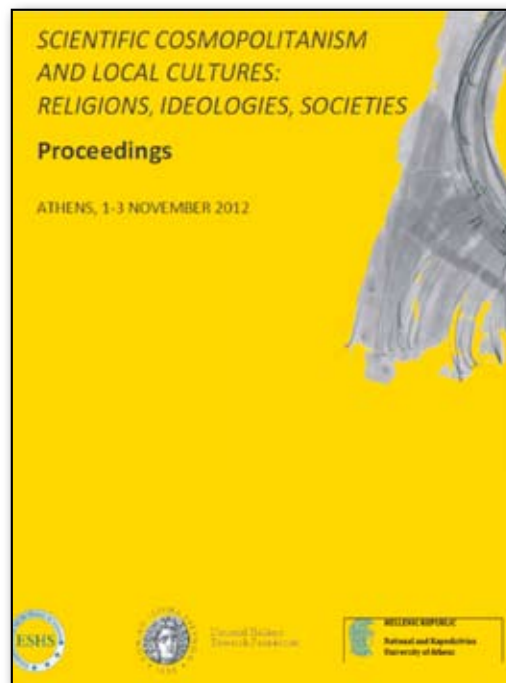
The Proceedings of the 5th International Conference of the European Society for the History of Science, which was organized by the National Hellenic Research Foundation and the National and Kapodistrian University of Athens and took place in Athens, 1-3 November 2012, were edited by Gianna Katsiampoura and published in April 2014 by the National Hellenic Research Foundation/Institute of Historical Research.

The theme of the book, as shown by the title, is *Scientific Cosmopolitanism and Local Cultures: Religions, Ideologies, Societies*. Therefore, the papers included discuss topics associated with this theme from an interdisciplinary point of view.

The first paper, following the “Introduction” by Efthymios Nicolaides and Constantine Skordoulis, is titled “The Reception of Darwin in Greece” and is based on the plenary lecture delivered by Costas Krimbas from the Academy of Athens. After the plenary lecture, the Proceedings are divided into two parts. The first part includes the papers of the 23 Symposia which took place during the Conference. The second part contains 26 papers which were individually presented during the respective presentations of the Scientific Sessions. A poster is in accord to this section.

In total, in the 711 pages of this book, one may find 91 papers which are studying and explaining the concepts of scientific cosmo-

politanism, its relation with local cultures, the mobility of scientists and scientific ideas and related issues.



The Proceedings are available at: <http://5eshs.hpdst.gr/sites/5eshs.hpdst.gr/files/5eshs-proceedings.pdf>

*Gianna Katsiampoura
National Hellenic Research Foundation*

REPORT ON THE 1ST INTERNATIONAL CONFERENCE “SCIENCE & LITERATURE”

Athens, 9-11 July 2014

It is a special feeling to be there at the birth of something new. This was the feeling I got from the recent 1st International Conference “Science & Literature” that was held in Athens in July 2014, under the auspices of the Commission on Science & Literature of DHST/ IUHPST.

The field of Science and Literature has been around for some time. There are established journals and societies on the subject, which bring excellent scholarship to bear on a diverse range of themes. But the conference in Athens was the first put together by the newly founded Commission on Science & Literature, which was inaugurated in Manchester in 2013. That, in less than a year, a truly international conference was up and running is a testament of the vibrancy of the field.

The Conference itself was attended by more than 60 delegates from all over the world. Tellingly, there were delegates not only from Europe and the US, but also from Africa and Asia. The range of subjects was equally diverse and interesting. Jules Verne, dinosaurs, urban planning and utopias were to be found in the various sessions of the three day conference. So were Emily Dickinson, Charles Pierce, automata and puppets. And these are but a few of the themes the conference touched upon.



Iggy McGovern in his plenary lecture

But there are more to a conference than its papers, as any scholar can attest. A conference is also defined by the conversations on the corridors, by the discussions over lunch, even by the venue it is held. As far as location goes, Athens in July can be a bit harsh, even inside the National Hellenic Research Center's air conditioned rooms. But discussions and conversation were everywhere, with younger and more senior colleagues exchanging views and helpful opinions over coffee, ice cream and, in some cases, Cretan style wedding pilaf with meat.

The second day of the conference was also the day that the first organizing meeting of the Commission was held. Ideas on how such a body could be organized and run were put forward and decisions were taken. However, this topic merits a report of its own, so I will leave it temporarily aside. For now, suffice is to say, that all present delegates were eager to see the conference become an institution of its own, and pushed for the Commission spreading its wings in more ways than one.

In conclusion, the conference in Athens was a very promising start. The papers presented were interesting and provoking, the participants

eager and engaging and the atmosphere one of genuine interest and intellectual exchange. It has been an honor to have had a small part in its organization and I think I speak for many of the delegates when I say that I await eagerly for the next one to be announced.

*Kostas Tampakis
National Hellenic Research Foundation*

THE RECEPTION OF ERNST HAECKEL'S IDEAS IN GREECE

*K. Kyriakou, Natural Sciences in Education:
The Reception of Ernst Haeckel's Ideas, PhD
Thesis, University of Athens, 2014*



Ernst Haeckel (1834 – 1919)

The object of the thesis is the study of the reactions and the controversies that emerged on the grounds of the publication of Haeckel's theories and views among certain groups of intellectuals, as well as the effects that they had in the Greek public from the 1870s to the 1930s. Furthermore, this thesis explores how Haeckel's ideas on evolution appeared in all three levels of education from the 19th century until the late 20th century.

The findings of this study can be summarized as follows:

The background of the controversies between the opponents and the supporters of Haeckel's theories in Greece was philosophical materialism. Haeckel's views were treated as materialistic. However, the term "materialism" was given various and, to a great extent, diverging meanings.

The main opponents of Haeckel's views were theologians, while the main supporters were professors as well as graduates of the Medical School of the University of Athens. The arguments used by both sides were basically a repro-

duction of the arguments of European scientists and other intellectuals of the same period.



*I. Skaltsounis (1824 - 1905)
The main opponent of Haeckel's ideas in Greece*

The controversy on Haeckel's ideas was about the demarcation of the boundaries between science and religion and was not an expression of a conflict between politically progressive and conservative scholars. The conflict, essentially, took place between conservative theologians and conservative members of the scientific community.

In the late 19th and early 20th centuries, Haeckel's ideas became of interest to the students of the University of Athens and influenced many of them. The professors that were seemingly most influenced were R. Nicolaidis and Sp. Miliarakis.



Sp. Miliarakis (1852 - 1919) and R. Nicolaidis (1856 - 1928), Professors of the University of Athens influenced by Haeckel's ideas

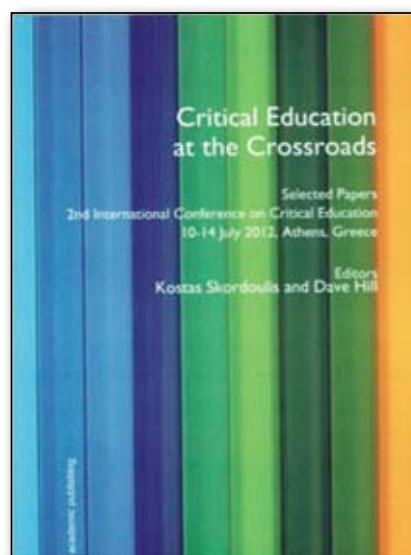
In the second half of the 20th century, the biogenetic law formulated by Haeckel was cited by several authors of Greek secondary education textbooks as an indication and not as proof of the theory of evolution, but with a number of

reservations for its validity. From the late 1990s and onwards, references of the biogenetic law in secondary education school textbooks ceased to exist.

*Kyriakos Kyriakou
Faculty of Primary Education
National and Kapodistrian University of Athens*

SCIENCE AT THE CROSSROADS

Kostas Skordoulis and Dave Hill (eds), Critical Education at the Crossroad: Selected Papers from the 2nd International Conference on Critical Education, 10-14 July 2012, Athens Nissos Academic Publishing, Athens 2014



This book contains selected papers presented at the 2nd International Conference on Critical Education, which took place in Athens between the 10th and the 14th of July 2012.

The main aim of the conference was to discuss the present status as well as the future challenges of the Critical Education movement.

The first paper is an Introduction by the editors Kostas Skordoulis (from National and Kapodistrian University of Athens) and Dave Hill (from Anglia Ruskin University, UK), which presents the main themes of this volume. In particular, the 21 selected papers discuss a variety of topics related with the Critical Education movement, such as classical marxist literature on education, education in revolutionary times, the neoliberal attack on education and the response of the radical teachers' movement, and the radical social movements and education.

In conclusion, the discussion, as presented

in this volume, is very significant for the future of Critical Education, as well as for the research directions of revolutionary education theory.

Gianna Katsiampoura
National Hellenic Research Foundation

WORKSHOP ON MAVROKORDATOS

Berlin, 14-15 December 2014
Between the old and the new organon:
The library of the Mavrokordati and the Book
of Nature



Between 14-15 December 2014 a very interesting workshop took place in Berlin.

The workshop under the title "Between the old and the new organon: The library of the Mavrokordati and the Book of Nature" was organized in the framework of the project "Transfer und Überlagerung. Wissenskonfigurationen in der Zeit der griechischen *homines novi* im Osmanischen Reich (1641-1730)". The project is part of a relevant research which is carried out by the Chair for Modern Greek Studies of the Free University of Berlin.

The main organizer was Professor Dr. Miltos Pechlivanos supported by an excellent team of post-doctoral and doctoral researchers like Kostas Sarris and Nicolas Pissis.

During the workshop several aspects of the scientific milieu during the transition from the 17th to the 18th century in the Greek cultural world were presented. The participants had the chance to comment on and discuss the papers given by Greek and foreign historians of science

in a very fruitful way.

The full programme of the workshop was as follows:

Miltos Pechlivanos (FU Berlin), Introduction

Chair: Miltos Pechlivanos (FU Berlin)

Kostas Gavroglu (University of Athens), Mapping natural knowledge in early modern Europe: Is 'transfer of knowledge' a relevant historiographical category?

Vasilios N. Makrides (University of Erfurt), Aristotelianism and the Orthodox Church (17th–18th c.): Traditionalist Structures and Attempts at a Scientific Renewal

Chair: Kostas Sarris (FU Berlin)

Nikos Agiotis (Berlin-Brandenburg Academy of Sciences and Humanities), «Ταῦτα μὲν οὖν οἱ νεώτεροι κυκῶσι διὰ τὴν καινοτομίας λύσσαν»; authentic aristoteliantradition and its rivals in the philosophical work of Theophilus Corydalleas

Manolis Patiniotis (University of Athens), Aristotle in Constantinople: Philosophy and politics in the early 17th century Ottoman Empire

Chair: Ovidiu Olar (NicolaeIorga History Institute, Bucharest)

Maria Mavroudi (University of California, Berkeley), The Phanariots as Speakers and Readers of Arabic

Harun Küçük (University of Pennsylvania), How Far Can the Senses Go? Empiricism in the Turkish Vernacular

Chair: Nikolas Pissis (FU Berlin)

Kostas Sarris (FU Berlin), "Experientia hoc edocuit" / «ετούτο το εφανέρωσε η δοκιμή»: transferring empiricism, translating natural philosophy by Meletios of Athens

Pantelis Golitsis (Aristotle University of Thessaloniki), Λογική ελλάσων και μείζων περιπατητική και νεωτερική: What is 'peripatetic' and what is 'modern' in Vikentios Damodos' minor and major logic?

George Vlahakis (Hellenic Open University, Institute for Historical Research/NHRF), Re-appraisal of the debate between newtonian and (neo)aristotelian thought in early 18th century Greek manuscripts of natural philosophy

Miltos Pechlivanos (FU Berlin), Closing Remarks – Discussion

George Vlahakis
Hellenic Open University &
National Hellenic Research Foundation

CONFERENCE ON ANCIENT SCIENCE

Paris, 1-4 December 2014

*Shaping the sciences of the ancient world
– Text criticism, Critical editions and
Translations of ancient and medieval scholarly
texts (18th-20th centuries)*

A very important conference took place in Paris in 2013 under the title “Shaping the sciences of the ancient world – Text criticism, Critical editions and Translations of ancient and medieval scholarly texts (18th-20th centuries)”.

In the aftermath of this conference, a workshop was held from 1-4 December 2014 organized by Agathe Keller and the SAW Group, especially the members of SPHERE. The main aim of this workshop was the discussion of a book to be published discussing specific themes of the role critical editions play in the history of science.

The workshop was very successful and the presentations were really interesting and in depth. We would like to mention particularly the hospitality of the organizers and also that nobody will easily forget the lively discussions carried out in a cozy environment with a glass of French wine, during the dinners in traditional Parisian restaurants generously offered by the organizers.

The programme of the Workshop was the following:

Zhu Yiwen & Zheng Cheng, On the First Printed Edition of Mathematical Book in Nine Chapters (1842)

Jerrold Cooper (Johns Hopkins University), Editing the Sumerians: How and Why?

Micheline Decorps-Foulquier (Université de Clermont-Ferrand, Sphère), The Critical Edition of Mathematical Texts of Greek Antiquity: questions of method

Alessandro Graheli (University of Vienna), The Editio Princeps of the Nyāyabhāṣya

Agathe Keller (Sphère, CNRS & University Paris Diderot, SAW Project), What do you do with commentaries, what do you do with structure?

H. T. Colebrooke, Sudhākara Dvivedi and the mathematical chapter of the Brahma-sphuṭa-siddhānta

Piotr Michalowski (University of Michigan), Aleatoric Textuality: On the Tracks of a Very Ancient Philology

Mathieu Ossendrijver (Humboldt University), Babylonian Astronomy: editing and interpreting an ancient science

Karin Preisendanz (University of Vienna), Editing a Foundational Work on Classical Indian Medicine: The Printed Editions of the Carakasamhitā in context

Christine Proust (Sphère, CNRS & University Paris Diderot, SAW Project), Representing numbers and quantities in editions of mathematical cuneiform texts

Han Qi (Institute for the History of Natural Sciences), Rethinking the Ancient Mathematical Text: Ming-Qing Scholars' Critical Reflections on The Gnomon of Zhou [Dynasty]

George Vlahakis (Hellenic Open University-Institute for Historical Studies/National Hellenic Research Foundation), Greeks on Hellenes. Ancient Greek scientific texts critically edited in 18th-19th century Greece



*George Vlahakis
Hellenic Open University &
National Hellenic Research Foundation*

INTERNATIONAL SYMPOSIUM ON SINO-FRENCH GEODESIC SURVEY OF THE QING EMPIRE IN THE 18TH CENTURY

Sanya, China, 14-18 November 2014

*Commemorating the 300th Anniversary of the
Stone Inscription “Hai Pan Nan Tian”*

The geodesic survey of the Qing empire which started in the Kangxi reign period (1662-1722) was an unprecedented geographical achievement not only in Chinese history, but also in world history. The project and its continuation

in the Yongzheng and Qianlong reign periods (1723-1735, 1735-1795), provided basic data for the mapping of the Qing empire. Using western methods, employing Jesuit missionaries (most of them came from France), the project was also a major event in scientific collaboration between China and France and in scientific exchange between China and the West. During the survey from 1707 to 1717, 641 locations were used as control points for triangulation. In the Tianya Haijiao Natural Scenery Park in Sanya, Hainan Province, there still stand a stone with inscriptions “hai pan nan tian (where the sea marks the southern territories”) made by officials sent by Emperor Kangxi in 1714. This is probably the only existent control point to date.

On the occasion of the 300th anniversary of the stone inscriptions that marked the geodesic survey of the Kangxi period, scholars from China, France and other countries were invited to participate in this international symposium to study the geodesic survey in 18th century China, the scientific exchange and collaboration between China and West, and the scientific and cultural significance of the geodesic survey.



*The inauguration of the geodesical monument
in Sanya*

Organization

Sponsors:

Chinese Society for the History of Science and Technology
Institute for the History of Natural Science,
Chinese Academy of Sciences
National Astronomical Observatories, Chinese
Academy of Sciences
Municipal Government of Sanya City

Scientific Organizing Committee:

Dun Liu (Chair, China)
Gang Zhao (China), Yunli Shi (China), Dalong

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(France), Efthymios Nicolaidis (Greece), Laura
Hostetler (USA), Michela Malpangotto (France),
Xiaochun Sun (China)

Local Organizing Committee:

Xiaochun Sun (co-chair), Zhenling Xu (co-
chair)
Yong Li, Yanchun Liang, Liang Li, Geng Li,
Aijun Song

*Efthymios Nicolaidis
National Hellenic Research Foundation*

FESTIVAL DELLA SCIENZA

Genova, 24 October – 2 November 2014



The Science Festival in Genova is one of the most important annual science festivals organised in Europe. It takes place all over Genova in various historical buildings of the town. HPDST participated in 2014 Festival in collaboration with the Observatory of Paris (SYRTE-Systèmes de référence Terre Espace) and the Région de l'île de France in an exhibition on time. The exhibition was organised in the Palazzo della Borsa and presented time measurement from the Antikythera Mechanism to the GPS. A conference on the measure of time in Byzantium (Efthymios Nicolaidis) was organised at the same venue.

*Efthymios Nicolaidis
National Hellenic Research Foundation*

ALMAGEST 5.1



In May 2014, the issue 1 of volume 5 of Almagest, the International Journal for the History of Scientific Ideas, edited by the Network of History of Science of Southeastern Europe, was published. This was an issue of varia.

Contents:

Noël Golvers, “Ferdinand Verbiest’s 1668 observation of an unidentified celestial phenomenon in Peking, its lost Chinese description and some parallel observations, especially in Korea”

Stany Mazurkiewicz, “Dialectical thinking of nature according to Hegel, Engels and Schelling”

Dominique Meeùs, “Friedrich Engels and the unveiling of the historical dimension of the physical world: science and dialectics”

Eirini Viltanioti, “Plato on Iron Reduction Technique (Ti. 60 d 2 – 5)”

Vangelis Koutalis, “Making discoveries for a better life vs. bringing fruits to the national treasury: Davy, Babbage, Brewster and the (ongoing) struggle for the soul of science”

*Danai Avgeri
National Hellenic Research Foundation*

ALMAGEST 5.2



In November 2014, the issue 2 of volume 5 of Almagest, the International Journal for the History of Scientific Ideas, edited by the Network of History of Science of Southeastern Europe, was published. It includes a thematic section on “Scientific cosmopolitanism”, consisting of papers initially presented at a symposium on the same topic organized by Suzanne Débarbat, Eberhard Knobloch and George N. Vlahakis in the framework of the 5th Conference of the European Society for the History of Science, held in Athens in 2012. The contributions contained in this thematic session are the following: a) a paper by Suzanne Débarbat and Simone Dumont, on the career in Paris of the German scientist Johann Karl Buckhardt (1773-1825), b) a paper by Rita Meyer-Spasche on the cosmopolitanism of Oscar Buneman (1913-1993), c) a paper by Charlotte Wahl on the role of expatriates

in the dissemination of Leibniz’s differential calculus, d) a paper by Peeter Mürsepp addressing the regional characteristics of cosmopolitanism, and its connection with the Enlightenment, by focusing on two educators, Sven Dimberg and Georges-Frédéric Parrot, affiliated at different times and in different ways with the University of Tartu (Dorpat), and e) a paper by Maria Terdimou on the history of mathematics teaching at the University of Athens during the 19th century. Apart from the thematic session, the issue 5.2 also includes an article by Carlos M. Madrid Casado, examining how science is depicted in the paintings of the Museo del Prado, and three book-reviews (J.-L. Fournet & A. Tihon, *Conformément aux observations d’Hipparque: le papyrus Fouad inv. 267A*; M. Blay, *Dieu, la nature et l’homme. L’originalité de l’Occident*; M. Martelli, *The Four Books of Pseudo-Democritus*).

*Vangelis Koutalis
National Hellenic Research Foundation*



Ευρωπαϊκή Ένωση
Ευρωπαϊκό Κοινωνικό Ταμείο



ΥΠΟΥΡΓΕΙΟ ΠΑΙΔΕΙΑΣ, ΔΙΑ ΒΙΟΥ ΜΑΘΗΣΗΣ ΚΑΙ ΘΡΗΣΚΕΥΜΑΤΩΝ
ΕΙΔΙΚΗ ΥΠΗΡΕΣΙΑ ΔΙΑΧΕΙΡΙΣΗΣ



ΕΥΡΩΠΑΪΚΟ ΚΟΙΝΩΝΙΚΟ ΤΑΜΕΙΟ



Με τη συγχρηματοδότηση της Ελλάδας και της Ευρωπαϊκής Ένωσης