

ORTHODOX CHRISTIANITY AND MODERN SCIENCE

SCIENCE AND ORTHODOX CHRISTIANITY

Orthodox Christianity and Modern Science

Tensions, Ambiguities, Potential

Edited by

VASILIOS N. MAKRIDES – GAYLE E. WOLOSCHAK

BREPOLS

© 2019, Brepols Publishers n.v., Turnhout, Belgium.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior permission of the publisher.

D/2019/0095/252

ISBN 978-2-503-57616-9

eISBN 978-2-503-57617-6

DOI 10.1484/M.SOC-EB.5.113654

Printed on acid-free paper.

Contents

Notes on Contributors	9
Preface	19
Relating Orthodox Christianity with Modern Science: An Introduction Vasilios N. Makrides and Gayle E. Woloschak	21

Part I

The Orthodox Christian Tradition and Modern Science:
An Uneasy Relationship?

Modern Science and Orthodox Theology: An Uneasy yet Profound Relationship Metropolitan Nikolaos of Mesogaia and Lavreotiki, Greece	37
The Ambiguous Relationship between Orthodoxy and Science as Part of the Pending Discussion between Orthodoxy and Modernity: From the Polemic against the Enlightenment to the Debate over Homosexuality Pantelis Kalaitzidis	47
Orthodox Tradition and Science: Modernity as a Mediator Vasileios Thermos	67

Part II

The Greek Patristic Heritage:
Its Potential for the Orthodoxy-Science Dialogue

The Patristic Idea of Cosmic Liturgy as the Basis of the Relationship between Orthodox Theology and Science Sergey S. Horujy	83
Philosophical Foundations of Mediation/Dialogue between (Orthodox) Theology and Science Alexei Nesteruk	97

Maximus the Confessor and the Contribution of Orthodoxy to the Dialogue on Science and Religion William R. Shea	123
Using the Concept of Energy to Encounter Orthodox Theology with Physics: An Analogical Comparative Theological Approach (ACTA) Stoyan Tanev	127
Science, Theology, and the Mind Christopher C. Knight	147
God, the Great Writer and Great Computer Whizz: Comment on Christopher C. Knight's Paper Athanasios N. Papathanasiou	161
 Part III Orthodox Christianity and Science: Local Settings and Specific Concerns in the Past and at Present <hr/>	
Science–Religion Interface: Agreements and Tensions of Orthodox Christian Pastoral Concern in the Biomedical Sciences Gayle E. Woloschak	169
The Science-Theology Dialogue through the Inter-Orthodox Bioethics Committee Archbishop Makarios of Australia	181
Orthodoxy and Science in Bulgaria (Twentieth – Twenty First Century) Nina Dimitrova	191
A Theology of the World: Dumitru Stăniloae, the Traditional Worldview, and Contemporary Cosmology Doru Costache	205
Evolution and Orthodox Theology in Russia: An Uneasy Way to the Dialogue Dimitry Kiryanov	223
The Orthodox Tradition and a Personal View on the Universe 'from Within': A Russian Orthodox Perspective Kirill Kopeikin	237

Theology in the Mirror: The <i>Dictionary of Technology</i> as Revival of Orthodox Culture in Serbia/Yugoslavia and Re-ideation of Technology Aleksandar Petrović and Aleksandra P. Stevanović	247
Orthodox Christian Physicians and Scholars in the Ottoman Court Ekmeleddin İhsanoğlu	261
Orthodox Christian Physicians and Scholars in the Ottoman Court: A Commentary John Hedley Brooke	273

The Ambiguous Relationship between Orthodoxy and Science as Part of the Pending Discussion between Orthodoxy and Modernity

From the Polemic against the Enlightenment to the Debate over Homosexuality

Introductory Remarks

The dominant Orthodox discourse regarding the relationship of Orthodoxy to science claims that the former was never opposed to the latter, and that Orthodoxy was always open to scientific research and progress. Partly based on the theology of the late Fr John Romanides and Prof. Nikos Matsoukas, both of the University of Thessaloniki, such an optimistic approach to the issue under discussion maintains that the centrality and the radical character of the distinction between uncreated and created order promoted by patristic theology leave the field of created reality open to scientific research and experiments, thereby saving Orthodox theology from following the oppressive path of Inquisition and Western Christendom. A careful reading, however, of the encounter between Orthodoxy and science in the time of the Enlightenment, as well as the attitude adopted by many Orthodox to a wide range of crucial issues, such as the use of the historical-critical method in biblical and theological sciences, bioethical questions, the evolution theory or questions of gender and sexuality, calls for a reappraisal and a more critical and balanced evaluation of the relationship between Orthodoxy and science and for an honest discussion of the problems that this relationship involves. The present chapter seeks to engage in such a study from the hermeneutical angle of the still pending dialogue between Orthodoxy and modernity, focusing in particular on the encounter between Orthodoxy and science in the time of the Enlightenment, and on questions of gender and sexuality in today's context.

As is well known, the Orthodox world, mainly for historical reasons has not participated organically in the phenomenon of modernity. It has not lived through

* The ideas expressed in this chapter are the sole responsibility of the author.

Pantelis Kalaitzidis Volos Academy for Theological Studies, Volos, Greece

Orthodox Christianity and Modern Science: Tensions, Ambiguities, Potential, ed. by Vasilios N. MAKRIDES and Gayle E. WOLOSCHAK, SOC, 1 (Turnhout, 2019), pp. 47–66.

© BREPOL'S PUBLISHERS

10.1484/M.SOC-EB.5.116856

the Renaissance, the Reformation and the Counter-Reformation, the Religious Wars, the French Revolution and the Industrial Revolution, the emergence of the modern subject and of individuality, the modern human rights, and the religiously neutral nation-state. The fundamental achievements of modernity, which have been described as the autonomy of the subject, the affirmation of rational thought, and the wide use of the historico-critical method, seem to have remained essentially alien to Orthodoxy as a whole. Orthodox Christianity continues to have serious unresolved problems with modernity, a fact that to many people also explains the serious difficulties it has in communicating with today's modern and postmodern world. It is therefore commonly concluded that modernity has been nothing more than an outside influence on the Orthodox East, which has come into contact with modernity and its fundamental achievements only on odd occasions and in a superficial way.¹

Beyond these points, which are chiefly historical in nature, many often refer to those fundamental characteristics of modernity, which suggest a radical incompatibility with Orthodoxy. In other words, over the last three centuries a culture has taken shape in Europe (arising out of the Renaissance and the Enlightenment) with the following, among other, features:²

- 1 I follow here the analysis offered in Pantelis Kalaitzidis, *Ορθοδοξία και Νεωτερικότητα. Προλεγόμενα* [Orthodoxy and Modernity: Prolegomena], Volos Academy for Theological Studies (Athens: Indiktos, 2007); cf. Pantelis Kalaitzidis, 'Orthodox Christianity and Islam: from Modernity to Globalization, from Fundamentalism to Multiculturalism and to the Ethics of Peace', in *Just Peace: Orthodox Perspectives*, ed. by Semegnish Asfaw, Alexios Chehadeh, and Marian Gh. Simion (Geneva: WCC Publications, 2012), pp. 201–21, especially pp. 204–05; Pantelis Kalaitzidis, 'Orthodoxie und Moderne', *Transit: Europäische Revue*, 47 (2015), 76–89; Pantelis Kalaitzidis, 'Orthodoxie et modernité: une relation en suspens?', *Travaux et Jours. Revue interdisciplinaire de l'Université Saint-Joseph de Beyrouth*, 91 (Automne 2017), 27–46, especially pp. 27–29. Cf. also Vasilios N. Makrides, 'Orthodoxes Christentum und Moderne: Inkompatibilität oder langfristige Anpassung?', *Una Sancta*, 66 (2011), 15–30; Vasilios N. Makrides, 'Orthodox Christianity, Modernity and Postmodernity: Overview, Analysis and Assessment', *Religion State and Society*, 40 (2012), 248–85. For the broader topic of the imperative for a theological dialogue of Orthodoxy with Modernity, cf. Pantelis Kalaitzidis and Nikos Ntontos (eds), *Ορθοδοξία και Νεωτερικότητα* [Orthodox Christianity and Modernity], Volos Academy for Theological Studies (Athens: Indiktos, 2007); Assaad Elias Kattan and Fadi Georgi (eds), *Thinking Modernity: Towards a Reconfiguration of the Relationship Between Orthodox Theology and Modern Culture* (Balamand, Lebanon/Münster: St John of Damascus Institute of Theology, University of Balamand/Center for Religious Studies, University of Münster, 2010); Assaad Elias Kattan, 'La théologie orthodoxe interpellée par l'herméneutique moderne', *Contacts*, 234 (2011), 180–96; Georges Nahas, 'Théologie orthodoxe et modernité', *Contacts*, 234 (2011), 152–67. For the encounter of Orthodoxy with modernity in the Russian context, see Andreas E. Buss, *The Russian-Orthodox Tradition and Modernity* (Leiden/Boston, MA: Brill, 2003); Kristina Stoeckl, *Community after Totalitarianism: The Russian Orthodox Intellectual Tradition and the Philosophical Discourse of Political Modernity* (Frankfurt am Main: Peter Lang, 2008). Especially with regard to the issues of gender and sexuality in the Russian context, cf. Konstantin Mikhailov, 'The Church and LGBTQ Issues: The Insurmountable Challenge of Modernity', in *'For I am Wonderfully Made': Texts on Eastern Orthodoxy and LGBT Inclusion*, ed. by Misha Cherniak, Olga Gerassimenko, and Michael Brinkschröder (Amsterdam: The European Forum of Lesbian, Gay, Bisexual and Transgender Christian Groups, 2016), pp. 188–205.
- 2 For the fundamental characteristics of modernity, see, *inter alia*, Stuart Hall and Bram Gieben, *Formation of Modernity* (Cambridge: Polity Press, 1993); D'Alembert, *Preliminary Discourse to the Encyclopaedia of Diderot*, trans. by Richard M. Schwab (Chicago: University of Chicago Press, 1995);

- The gradual overturning of the prevailing natural and social order, which – with the aid of the Church's official discourse – had been taken for granted and considered sacred, unchangeable and inviolable, and the resultant liberation of the individual capacities of the human being and the natural forces of the world.
- The dominance of rational thought and the scientific critical paradigm, the disenchantment of nature and the demythologizing in the hermeneutics of sacred texts, whose results were the banishment of the sacred and the desacralization of the world.
- The replacement of metaphysical thought about the first causes and the ultimate questions by anthropological, social and moral concerns.
- The affirmation of the sensible and natural world, of corporeality and of our bodily nature, which sometimes went so far as to diffuse naturalism or even materialism and unavoidably led to 'an ontological revaluation of the material world'.
- The beginnings of women's liberation and a recognition of their value as persons, the equality between men and women, the affirmation of sexual love, and a spiritual and not merely biological understanding of sexuality and sexual relations.
- The idolization of technology, utilitarianism and the human domination of nature.
- The transition from a traditional agrarian society and economy to an industrial society and a market economy involving accumulation of capital, investment and growth.
- The universal declaration of the rights of the individual and the citizen, and the related move towards a more humane law.
- The introduction of a distinction between the public and the private sphere.
- The autonomy of the human being and the concomitant liberation from reference to metaphysics and religious ordinances, to the extent that humans no longer feel in need of God since they have themselves become masters of their own fate and creators both of works of art and of their own 'biography'.
- The secularization of society and the state, the gradual decline (to the point of disappearance) of Christian values and of the Church's influence in the public sphere, while religion (and religious expression in every form) is relegated to the private realm.
- The rejection of the theistic/theocratic and hierarchical model in constructing social reality, the decline of the religious understanding of the world characteristic of traditional societies, and the transition to an anthropocentric worldview, to democratic governance and to a society of citizens with strong elements of individual (rather than communal) self-determination.



Ernst Cassirer, *La philosophie des Lumières*, trans. by Pierre Quillet (Paris: Fayard, 1951). Cf. also Kalaitzidis, *Ορθοδοξία και Νεωτερικότητα. Προλεγόμενα*, pp. 43–44.

The encounter between Orthodoxy and science, which took place in the Greek-speaking world at the time of the Enlightenment, was neither the first nor the unique meeting of this type. If we look, for example, at the attitude of the Cappadocian Fathers of the fourth century (namely St Basil of Caesarea [the Great], but also St Gregory of Nyssa³) towards the scientific knowledge of their time, we will find both a creative use and a bold reception of scientific and philosophical theories in their account of the creation of the world, and even an articulation and positive apprehension of an 'evolution theory' in a rudimentary form.

Another early example of a positive encounter of Orthodox theology with the scientific mind is provided in the ninth century by the attempt of St Photius (a well-educated man and illustrious scholar, who was elected and ordained Bishop of Constantinople and enthroned as Ecumenical Patriarch directly from the order of lay people), at a scientific explanation of earthquakes. In fact, St Photius, who in many regards represents the spirit of Eastern Orthodoxy in its confrontation with the Latin West, attempted to overcome the religious-mythological explanation by trying to give a scientific account of the earthquakes, a terrible natural phenomenon quite frequent in Constantinople and the wider Eastern Mediterranean. Unlike the widespread idea propagated by ecclesiastical and more broadly by religious milieus, according to which earthquakes are a divine punishment due to the multitude of the sins of Christians, Photius maintains that the earthquakes are not related to any divine punishment, but to the plenitude and abundance of water, which causes turbulences in the bowels of the earth.⁴ What matters for our discussion is not the correctness of his particular scientific views on the natural phenomenon of the earthquakes, but the reasoning and the scientific explanatory process itself; in other words, the legitimacy, which was the result of the attempt of a great theologian and Patriarch of the prestigious throne of Constantinople, and therefore a high symbolic figure of Eastern Orthodoxy, to proceed to a scientific – and not a religious or theological – explanation of natural phenomena. Unfortunately, Photius's attempt to explain the natural phenomena through the lens of the science of his time was not followed by the majority of his successors in the context of Eastern Orthodoxy. Consequently, Photius's method did not experience a great legacy in the Christian East.

Thus, while the Cappadocians (fourth century), Maximus the Confessor (sixth-seventh centuries), John of Damascus (seventh-eighth centuries), Photius (ninth century), and generally speaking the great Fathers of the Eastern Church considered it their duty to possess the scientific knowledge of their time and to dialogue with the then various scientific, philosophical and intellectual trends, apparently this was no longer the case during the following centuries.

3 Cf. mainly their works: St Basil, *Homilies on the Hexaemeron*; St Gregory of Nyssa, *On the Hexaemeron* and *On the Making of Man*.

4 Simeon Magister (Pseudo-Symeon), 'Chronographia', in *Theophanes Continuatus, Ioannes Cameniata, Symeon Magister, Georgius Monachus*, ed. by Immanuel Bekker (*Corpus Scriptorum Historiae Byzantinae*, 45) (Bonn: E. Weber, 1838), p. 673 (*Patrologia Graeca*, 109, 736 A).

The Encounter between Orthodoxy and Science in the Context of the Greek Enlightenment

This last remark has been confirmed in particular by the conditions under which the encounter between Orthodoxy and science took place in the time of the Enlightenment, which in the Greek context was mainly initiated by clerics or monks.⁵ Due to space limitations, I will omit the intermediate period of the almost ten centuries between Photius and the beginning of the Greek Enlightenment, by focusing more on the second half of the eighteenth century. During that period, although the exponents of the Enlightenment in the Greek-speaking world were mainly clerics (such as Eugenios Voulgaris, Methodios Anthrakites, Nicephoros Theotokes, Josephus Moisioudax, Stefanos Dougkas, Veniamin Lesvios, Anthimos Gazis, Daniel Philippides, and many others), the encounter between Orthodoxy, modern ideas, and science had finally led to conflict and to a gradual distancing and alienation among them. On the one hand, one could refer to figures such as Eugenios Voulgaris, who appealed to the Fathers of the Church, remaining thereby faithful to the tradition of Hesychasm and the teachings of St Gregory Palamas (fourteenth century) on the uncreated light and at the same time introduced – not without difficulties and persecutions – new philosophical and scientific ideas to Greek schools, run by the Church under Ottoman rule. On the other hand, however, one should refer to the considerable number of clerics, sometimes even at the highest levels of the ecclesiastical hierarchy or in key positions in the Ecumenical Patriarchate of Constantinople, which undermined this encounter between Orthodoxy and science and strongly opposed the teaching of modern physics in Greek schools, supporting thus the geocentric view of the universe and the governing authority of Aristotelian physics to decide on all matters relating to the sensible or created world, while at the same time persecuting or subjecting to humiliations the representatives of the new ideas, who incidentally were often themselves clerics, as well.

The reaction of the official Church against the emerging new ideas and the challenge of the Enlightenment and modernity was not always and everywhere the same. If we take education as an example, where the partial acceptance and legalization of the new ideas were mainly achieved,⁶ we could observe – following Paschalis Kitromilides – that ‘the traditional concern of the Church for education, a concern chiefly understood as a component of its pastoral mission, led repeatedly to initiatives that paved the way to

5 From the abundant literature on this topic, see the recent volume by Paschalis M. Kitromilides (ed.), *Enlightenment and Religion in the Orthodox World*, Oxford University Studies in the Enlightenment (Oxford: Voltaire Foundation, 2016). In the following paragraphs I also profit from the analysis I have previously offered in Pantelis Kalaitzidis, ‘Ορθοδοξία και Διαφωτισμός: Το Ζήτημα της Ανεξιθρησκίας’ [‘Orthodox Christianity and the Enlightenment: The Issue of Religious Tolerance’], in Kalaitzidis and Ntontos (eds), *Ορθοδοξία και Νεωτερικότητα*, pp. 79–165.

6 Cf. Vasilios N. Makrides, ‘Ορθόδοξη Εκκλησία και φορείς του Διαφωτισμού στον ελληνικό χώρο: Ιδιαιτερότητες μιας σχέσης’ [‘The Orthodox Church and Bearers of the Enlightenment in the Greek Area: Aspects of a Particular Relationship’], *Kleronomia*, 29 (1997), 163–201 (pp. 176–77).

the Enlightenment and its representatives.⁷ Subsequently, however, a generally cautious and negative attitude prevailed. It consisted of a conservative redoubling due both to the atheistic, anti-Christian and certainly anti-clerical positions of the European Enlightenment, especially after the French Revolution, and the direction taken by the wide study and reception of Greek antiquity in Western Europe. The 'Frankish world' and the modern ideas coming from Western Europe started to be considered as a source of evil and the cause of all the problems and dangers for Orthodoxy and the (Greek) nation. It was the ultra-conservative cleric Athanasios Parios (1721–1813), who characteristically endorsed and expressed this perspective. In order to cope with the wave of the Enlightenment ideas, he highly recommended, inter alia, the censorship of the books printed abroad, as well as the burning 'of these evil books'.⁸ He himself rejected any contact and relationship with the 'Frankish world', either 'Europe' or the West, which were supposed to end in 'a chaos of loss'. His well-known aphorism had as follows: 'Stay away from Europe! And even from those coming from Europe.'⁹ Parios taught, therefore, 'against the expatriate Greek scientists coming from Europe', since he had been strongly convinced that 'anyone who was travelling to Europe was an atheist without the need of any further examination. Mathematics was a source of atheism, whose primary effect was the abolition of the practice of fasting'.¹⁰ It is also reported that Hierotheos Dendrinos, a hieromonk from Ithaca, who was teaching in Smyrna in Asia Minor and himself strongly opposed Josephus Moisiodax's departure to Italy for further studies, 'was screaming that all those, who study in the Frankish world, are atheists and after their return they lead also other people to atheism'.¹¹ Furthermore, various collective bodies and individual exponents of the new ideas often became themselves a target of the Church criticism and were condemned. This situation resulted in the persecution and frequent removal of the teachers, who espoused the ideas of the Enlightenment, from the positions they held in ecclesiastical schools, or to the enforced public renunciation of their ideas and to the prohibition or in some cases the burning of their books and writings, often

7 Paschalis M. Kitromilides, *Το όραμα της ελευθερίας στην ελληνική κοινωνία. Από την πολιτική σκέψη στην πολιτική πράξη* [*The Vision of Freedom in the Greek Society: From Political Thought to Political Action*] (Athens: Poreia, 1992), pp. 21–22. Cf. Vasileios N. Tatakis (ed.), *Σκούφος-Μηνιάτης-Βούλαρης-Θεοτόκης* [*Skoufos-Miniates-Voulgaris-Theotokes*] (Athens: Aetos Publications, 1953), p. 25, 28.

8 Fr Georgios Metallinos, 'Η Κολλυβαδική άποψη για το Διαφωτισμό. Μία χαρακτηριστική περίπτωση: Αθανάσιος Πάριος' ['The Kollyvades' View on the Enlightenment: A Typical Case: Athanasios Parios'], *Synaxi*, 54 (1995), 21–29 (p. 28). In this article, Fr Metallinos tries to justify and explain with theological and historical arguments the overall negative attitude of Athanasios Parios, as well as his generally conservative attitude on other issues (e.g., a fundamentalist understanding of the Scripture, a reaction against modern science, a fixation to the Aristotelian philosophy, a defence of the political status of the Ottoman Empire).

9 Metallinos, 'Η Κολλυβαδική άποψη', p. 28.

10 Manouil Gedeon, *Η πνευματική κίνησις του Γένους κατά τον ιη' και ιθ' αιώνα* [*The Intellectual Movement of the Greek Orthodox Genos during the Eighteenth and Nineteenth Centuries*], edited by Alkis Aggelou and Philippos Eliou (Athens: Hermes, 1976), p. 105.

11 Josephus Moisiodax, *Απολογία* [*Apology*], ed. by Alkis Aggelou (Athens: Hermes, 1976), p. 153 n. 2; Gedeon, *Η πνευματική κίνησις*, p. 106.

considered as atheistic or blasphemous. Not least, an Orthodox censorship was also established in order to control the content of books published in Greek language (a *mutatis mutandis* Orthodox *index librorum prohibitorum*).

In this regard, Methodios Anthrakites (a cleric and teacher from Zagori, in Epirus) is a very typical example. In November 1723, in the Ecumenical Patriarchate's courtyard, Anthrakites' textbooks (on logic, physics, mathematics, Euclidean geometry) were publicly burned. After his condemnation, deposition, and prohibition of any teaching duties imposed by the Synod of the Patriarchate ('the first, perhaps, suspending intervention of the Church in the content of the teaching of scholars at that time', according to Alkis Aggelou¹²), Anthrakites was forced to submit a confession of faith while being subject to unbelievable humiliations in order to revoke his sentence. In the end, the only thing of which he was certainly accused, was the rejection of the relevance of the Aristotelian philosophy to the understanding of nature and the secular sciences in general, while the blasphemy against the Holy Scriptures and the authority of the Church Fathers in theology, as well as his supposed anti-Palamite attitude, were not confirmed.¹³ The distinguished scholar of patristic studies and editor of the works of St Gregory Palamas, the late Professor Panagiotis Chrestou, even maintains that Anthrakites was a 'devotee of Orthodox hesychasm in its moderate form', while 'the common theological opinion of that time places Anthrakites exactly with the hesychasts'. Furthermore, the two preserved chapters of his *Metaphysics* are included in a collection of neptic and hesychastic texts.¹⁴ In the case of Anthrakites' persecution, however, as in many other subsequent cases of trials and prosecutions, which almost always took place in the name of the defence of Orthodoxy and the ancestral faith, the selfish personal motives and the weakmindedness of the persecutors, as well as the desperate effort of his rivals, triggered by the interests of the guilds in the city of

- 12 Alkis Aggelou, 'Η δίκη του Μεθόδιου Ανθρακίτη (όπως την αφηγείται ο ίδιος)' ['Methodios Anthrakites' trial (as narrated by himself)'], in Alkis Aggelou, *Των Φώτων. Όψεις του Νεοελληνικού Διαφωτισμού* [Of the Lights: Aspects of the Modern Greek Enlightenment] (Athens: Hermes, 1988) p. 23. Among the profane historians, there is a rigorous critique of the way in which academic theologians (such as Panagiotis Chrestou, *Μεθόδιος Ανθρακίτης. Βίος-δράσεις-ανέκδοτα έργα* [Methodios Anthrakites: Life, Activity and Unpublished Works], Ioannina, 1953, offprint from *Hepeirotiki Hestia*) approach and interpret (with the purpose of playing down and sometimes of covering up) the details regarding Anthrakites' prosecution and condemnation. Cf. Aggelou, 'Η δίκη', pp. 23–24 n. 1; Konstantinos Th. Dimaras, 'Μεθόδιος Ανθρακίτης' ['Methodios Anthrakites'], in Konstantinos Th. Dimaras, *Σύμμικτα Α' . Από την παιδεία στην λογοτεχνία* [Miscellanea. Vol. 1. From Education to Literature], edited by Alexis Polites (Athens: Spoudastirio Neou Ellenismou, 2000), pp. 68–70.
- 13 Gerhard Podskalsky, *Griechische Theologie in der Zeit der Türkenherrschaft (1453–1821). Die Orthodoxie im Spannungsfeld der nachreformatorischen Konfessionen des Westens* (München: C. H. Beck, 1988), pp. 312–17; Aggelou, 'Η δίκη', pp. 33–37; Nikos Psimmenos, *Η ελληνική φιλοσοφία από το 1453 ως το 1821* [Greek Philosophy from 1453 to 1821], vol. II. *Η επικράτηση της νεωτερικής φιλοσοφίας. Μετακορυδαλλική περίοδος* [The Prevalence of Modern Philosophy: The Post-Corydalleian Period] (Athens: Gnosi, 1989), pp. 16 ff.; The details concerning the trial, the condemnation, the deposition and finally the reinstatement of Anthrakites following his public profession of faith and renunciation of his alleged errors, see Psimmenos, *Η ελληνική φιλοσοφία*, vol. II, pp. 421–55.
- 14 Panagiotis Chrestou, 'Ήσυχαστικά αναζητήσεις εις τα Ιωάννινα περί το 1700' ['Hesychast Quests in Ioannina around 1700'], *Kleronomia*, 1 (1969), 337–54 (pp. 350, 349).

Constantinople, to defend the validity and the impact of the established Aristotelian philosophy over the emerging dominance of modern scientific ideas, seems to have played a crucial role. Anthrakites himself, however, in a letter to the Greek Orthodox authorities of Ioannina, having described the content of the conflict, the trial and the sentence, referred to the terms and conditions under which he was finally 'relieved':

So, I am in a hurry to confess bad things [his own writings, P.K.], because, while they were ready to stone me, they finally decided to burn them. I shouted at the Synod that I do not accept any philosophical school, nor do I consider any of them as the accurate one; and for the love of God to listen to me and let me confess in front of them the confession of my faith, and to do whatever they wanted to my textbooks, rip or burn them, I do not care. Once they accepted to read my confession in front of the members of the Synod and affirmed it as secure and healthy according to the Church, I finally kissed the hands of the Patriarchs, received their blessings and departed. This was the decision of the Synod. Whatever then followed by the Synod, is worthy of tears. Consider if they were driven by the zeal of faith and by the Holy Spirit when they gathered the books of logical and physical sciences and those of Euclides [geometry, P.K.] and other mathematics, and they kindled fire in the courtyard of the church, and they threw them into fire on Sunday, and many people outside like boatmen, shoemakers, and tailors, they reacted as if they were confronted with the heresy of Arius or the Pneumatomachoi [combators against the Holy Spirit, followers of Macedonius, P.K.]; books which are studied by the entire world and having nothing to do with faith [...] Subsequently, I was given a confession to sign, where I had to argue that I was motivated to write by satanic synergy, deliberate malice and insanity, and for this reason I should have to condemn them as impious and full of blasphemy and avoid using them or similar works as teaching material. In general, I was asked to avoid teaching any philosophical or Christian topic or mathematics, either publicly or privately, or receiving the confession of any Christian, and if I would ever do this, I would be under the judgment of eternal condemnation.¹⁵

Beyond, however, the painful impression the case of Anthrakites mentioned above might give, we should further point to the emergence, already since 1723, of riot events and of a new population group, the so-called 'indignant believers' ('boatmen, shoemakers, tailors' – according to Anthrakites). These faithful, well prepared and mobilized by the Church leaders, not only took part in the events and decided the destiny of Anthrakites' writings by throwing them into fire, but in line with the witness of Anthrakites' persecutor, the hieromonk Hierotheos Ivirites, Anthrakites was forced to hide because he feared 'the wrath of the pious hierarchs and lay people'.¹⁶ Along the same lines, in 1761–63, according to Josephus Moisiodax, Eugenios Voulgaris was also confronted with the mobilization of the various professional guilds of Constantinople against introducing modern Enlightenment ideas and teaching them

15 Cf. Psimmenos, *Η ελληνική φιλοσοφία*, vol. II, pp. 448–49.

16 Aggelou, 'Η δίκη', p. 31.

in schools.¹⁷ Paradoxically, almost the same situation was repeated at the beginning of the next century (1810) on the occasion of the dispute over the Philological High School (Gymnasium) in Smyrna, which, due to its progressive orientation, caused the suspicion and the hostility of the leadership of the local Church and of the conservative circles of the city. Here again the ‘shoemakers’, the ‘grocers’, the ‘gardeners’ and the ‘furriers’ took active part in the discussion about the future and ultimately forced the temporal closure of the High School.¹⁸ Once more in Smyrna, almost nine years later (1819), the riot events of the guilds and the ‘ordinary people’ supported by the local Church, if not mobilized by it, led to the definitive closure of the Philological High School, which was considered in the meantime a bastion of Enlightenment ideas. We are thus confronted here with an educational and broader ideological and socio-political conflict between the followers of the Enlightenment, namely the ‘philosophers’ and traders, on the one hand, and its opponents, the ‘anti-philosophers’, the popular masses, the guilds, and the local Church headed by Metropolitan Anthimos, on the other.¹⁹ A century later, in the free Greek state, another important – but not the last – instance of such a dispute between the official Church and the bearers of modernist educational ideas were the riots of the ‘indignant believers’, motivated and encouraged by the Bishop Germanos of Demetrias during the so-called ‘atheist incidents’ (Αθεϊκά) in Volos, which led in March 1911 to the closure of the Middle School of Girls, directed by Alexander Delmouzos.²⁰

We should, however, contrast the unfortunate handling of the Anthrakites’ case²¹ and other obscurantist reactions with the more enlightened decisions and open-minded gestures of the then leadership of the Church, which led to an adoption of modern and reformist ideas. This was the case with the Patriarch Cyril V and the Holy Synod of the Ecumenical Patriarchate, which assigned the direction of the Athonite Academy to Eugenios Voulgaris (1753), the most progressive – and impressive – philosophical, theological and ecclesiastical figure of his era.²² This decision was interpreted as

17 Moisioudax, *Απολογία*, p. 80; cf. Gedeon, *Η πνευματική κίνησις*, pp. 101–03.

18 Paschalis M. Kitromilides, ‘Ιδεολογικές συνέπειες της κοινωνικής διαμάχης στη Σμύρνη (1809–1810)’ [‘Ideological Implications of the Social Conflict in Smyrna (1809–1810)’], *Deltio Kentrou Mikrasiatikon Spoudon*, 3 (1982), 9–39 (pp. 30–32).

19 Cf. Philippos Eliou, *Κοινωνικοί αγώνες και Διαφωτισμός. Η περίπτωση της Σμύρνης (1819)* [Social Struggles and the Enlightenment: The Case of Smyrna (1819)] (Athens: Hetaireia Meletes Neou Hellenismou – Mnemon, 1986), pp. 7–10, 20–21, 34–36, 38–52, where one can find detailed references to the sources.

20 For the so-called ‘atheist incidents’ in Volos, see, among others, Charalambos Charitos, *Το Παρθεναγωγείο του Βόλου* [The Girl’s School in Volos], vols 1–II (Athens: Historical Archives of the Greek Youth, General Secretariat of Youth, 1989).

21 For more recent bibliography on Anthrakites, see Vasiliki Mpompou-Stamati, ‘Ο Μεθόδιος Ανθρακίτης και τα “Τετράδια”’ [‘Methodios Anthrakites and the “Textbooks”’], *Hellenika*, 45 (1995), 111–27; Konstantinos Th. Petsios, *Μεθόδιος Ανθρακίτης. Εισαγωγή στη σκέψη και το έργο του* [Methodios Anthrakites: An Introduction to his Thought and Work] (Ioannina 2006).

22 From the most recent bibliography on Voulgaris, see Chariton Karanasios (ed.), *Ευγένιος Βούλγαρης. Ο homo universalis του Νέου Ελληνισμού. 300 χρόνια από τη γέννησή του* [Eugenios Voulgaris: The homo universalis of Modern Hellenism. 300 Years since his Birth], (Athens: Kentron Erevnis tou Mesaionikou kai Neou Ellenismou Akademias Athenon / Holy Monastery of Vatopedi, 2018).

a gesture in support of the reform and modern tendencies, to the extent that the patriarchal decision regarding his nomination and appointment expressly authorized him to make ‘changes and reforms’ in the Academy’s curriculum.²³ Moreover, it should not be forgotten, as Paschalis Kitromilides put it, that

the starting point of the general movement of spiritual recovery that eventually culminated in the diverse expressions of the Enlightenment was due to the educational initiatives by the Phanariote rulers and the Church. This must be emphasized because there is often a tendency to stress the view that the Church was entirely negative to the Enlightenment. This was certainly the final outcome of an ideological opposition adopted by the Church during the various political circumstances.²⁴

The final conflict and ideological confrontation, however, between the Church and the emerging new social bodies that appeared during the Enlightenment (which tried to untie to some degree the control of education from the Church’s authority), must not obscure the various stages of the historical development of this relationship. They also should not negate the overall importance of the work (in the field of education and elsewhere), which had been done until then by the Church, despite the mistakes or deficiencies of some of its representatives.²⁵

Having described the origins of the various riot events motivated by the leadership of the Church in the first decades of the eighteenth century against the danger of the Enlightenment ideas, similar events will be repeated, less than a century later, in 1803. At that time, the Athonite monk, Veniamin Lesvios was condemned by the Patriarchal Synod, because he followed and taught the Copernican worldview. It is indeed indicative of the confusion between theological and ecclesiastical criteria prevailing during that period that the major persecutor of Veniamin because of his support of heliocentrism was the aforementioned Athanasios Parios. Such a scientific worldview was considered by Parios and the ultra-conservative Orthodox incompatible with the Orthodox doctrine and as a source of atheism and heresy!²⁶ At this point, it is noteworthy to quote in length the insightful and acute observations and key questions posed by Vasilios N. Makrides in relation to the well-known insistence of Parios on the fidelity to the Orthodox tradition:

Athanasios Parios, who [...] is currently regarded as the chief exponent of Orthodox spirituality and the patristic tradition during the eighteenth century, was an open opponent of the West and harshly criticized the Copernican worldview and the new scientific developments, contributing to the persecution of many of their supporters

23 Paschalis M. Kitromilides, ‘Athos and the Enlightenment’, in *Mount Athos and Byzantine Monasticism*, ed. by Anthony Bryer and Mary Cunningham (Aldershot, Hampshire: Ashgate, 1996), pp. 257–72 (pp. 258–59, 269). Cf. Archimandrite Eirinaios Delidimos, ‘Εἰσαγωγή’ [‘Introduction’], in Eugenios Voulgaris, *Θεολογικὸν ἢ Ἱερὰ Θεολογία* [*Theologicon or Sacred Theology*] (Thessaloniki: Rigopoulos, 1987), pp. 8–13.

24 Kitromilides, *Τὸ ὄραμα*, pp. 21–22.

25 Cf. Makrides, ‘Ορθόδοξη Εκκλησία’, p. 159. Cf. Tatakis (ed.), *Σκούφος*, p. 28.

26 See Vasilios N. Makrides, *Die religiöse Kritik am kopernikanischen Weltbild in Griechenland zwischen 1794 und 1821. Aspekte griechisch-orthodoxer Apologetik angesichts naturwissenschaftlicher Fortschritte* (Frankfurt am Main: Peter Lang, 1995), especially pp. 147–85.

and exponents in Greece. If, therefore, Parios had been so faithful to the genuine Orthodox patristic tradition and heritage, why then did he not follow the alleged 'liberal' attitude of the Church Fathers in his relationship to science? Why did he not adopt the distinction between the 'created' and 'uncreated' order and why did he not accept the Copernican worldview as a scientific discovery that basically pertained to the 'created' reality? Or, finally, why did he not succeed in addressing the Western influences on his own thinking, to the extent that he was boldly concerned with the preservation of Orthodoxy inviolate from any Western danger?²⁷

The difficult encounter between Orthodoxy and the Enlightenment, part of the wider yet pending dialogue between Orthodoxy and modernity, was a crucial and decisive factor, which shaped to a great extent the problematic relationship of Orthodoxy with modern science. Orthodox theology is facing today new challenges and crucial questions, which pertain again to its relationship with modern science and the current scientific *acquis*. If Orthodox theology has thus the ambition of addressing the new difficult challenges coming from the natural, but also from the human sciences, it must first, with courage and sobriety, go beyond its purely academic and historical work in criticizing the Western influences upon Orthodoxy. Second, it should exercise self-critique for the unfortunate handlings, as well as the fearful and ultra-conservative reactions that have marked the stance of the ecclesiastical hierarchy and theology towards Enlightenment and other modern ideas in the Greek-speaking and the wider Orthodox world.

The Debate on Homosexuality: Relevant Scientific Data and the Challenge of their Reception by the Orthodox

If the encounter of the Orthodox tradition with natural sciences and modern physics was at the centre of eighteenth-century debates, it seems that issues related to gender and sexuality (especially to homosexuality), and by implication the reception of the scientific data or findings on these issues by the Orthodox, are among those which lie at the centre of the current concerns. In fact, to stay only on the controversial issue of homosexuality, I will not say something new if I remind of the absolutely negative way in which homosexuality is usually viewed by the Orthodox.²⁸ With the exception

-
- 27 Vasilios N. Makrides, 'Ορθόδοξη Εκκλησία και Διαφωτισμός στην Ελλάδα: Θρησκευτικές ιδεολογικοποιήσεις μιας αντιπαράθεσης' ['The Orthodox Church and the Enlightenment in Greece: Religious Ideologizations of a Controversy'], *Histor*, 12 (2001), 157–88 (p. 171).
- 28 Following the links below, all accessed in September 2018, one can find statements, press releases, interviews, and other related material on the issue of homosexuality and its radical rejection by the primates or bishops of the Russian Orthodox Church, and the Orthodox Church of Greece: <<https://orthodoxyindialogue.com/2018/04/18/if-your-church-accepts-homosexuality-its-time-to-look-for-a-new-one-by-metropolitan-hilarion-alfeyev-of-vologolamsk/>> <<http://time.com/4797521/russia-orthodox-gay-marriage-nazi-germany/>> <<https://mospat.ru/en/documents/social-concepts/xii/>> <<https://www.newsit.gr/ellada/mitropolitis-peiraios-serafeim-omofylofilia-einai-prosvoli-tou-anthropinou-somatos/2454203/>>

of some moderate approaches, homosexual orientation and homosexual relations are categorically rejected and condemned, or even demonized by Orthodox clerics, monks, and lay theologians, while homosexuality is understood in terms of a 'passion', of a perversion against nature and natural law, as anomaly and insanity, a passion like avarice, greed, lickerishness, anger, blame, and so on. In most cases, the Orthodox refuse to accept the reality of homosexual orientation and think of homosexuality in terms of personal choice initiated by a 'passion'. As noted by Metropolitan Kallistos Ware, 'until recent times, Orthodox thinkers did not make use of the concept of sexual orientation, as this is understood in contemporary psychology. More precisely, they assumed that there is only one orientation, and that is heterosexual. They considered that persons of homosexual inclination were such because of personal choice and were therefore willfully wicked'.²⁹ In some extreme cases, like in the discourse and the recent public statements by some Greek bishops,³⁰ homosexuality is characterized as the most repulsing and hideous sin, which is associated with paedophilia and bestiality!³¹ Therefore, homosexuals are called to fight against their 'passion' and to overcome it through repentance and spiritual struggle including fasting, prayer, and

<<https://www.impantokratoros.gr/F53D963D.el.aspx/>>
 <<https://www.altsantiri.gr/parapolitika/o-pireos-serafim-se-mathima-gia-tin-psychologiki-astathia-omofylofilia/>>
 <<http://www.tanea.gr/2017/01/24/greece/mitropolitis-serafeim-anwmali-seksoyaliki-symperifora-i-omofylofilia/>>
 <<http://www.alfavita.gr/arhron/koinonia/paralirima-serafeim-gia-omofylofiloys-einai-egklimaties-kai-ehoy-n-psyhologika/>>
 <<https://www.newsbeast.gr/greece/arthro/2059248/paralirima-amvrosiou-gia-tous-omofilofilous-den-ine-fisiologiki-anthropi-ine-apovrasmata/>>
 <<http://www.iefimerida.gr/news/239971/apisteyto-paralirima-amvrosioy-kata-ton-omofylofilon-opoy-toys-synantate-ftyste-toys/>>
 <<https://lubn.tv/stream/134531/>>
 <<http://newpost.gr/ellada/503374/ambrosios-apobrasmata-ths-koinwnias-oi-omofylofiloi-mhn-toys-plhsiazete/>>
 <<https://tinyurl.com/ycac3fmh/>>
 <<http://www.thetoc.gr/koinwnia/article/anthimos-allo-oi-omofulofiloi-tis-ekklisias/>>
 <<http://www.alfavita.gr/arhron/anthimos-gia-omofylofiloys-oyte-ta-zoa-den-ehoy-n-tetoies-diatheseis/>>
 <<http://www.thetoc.gr/new-life/lgbt/article/skulia-xarakterizei-o-mitropolitis-anthimos-tous-gkei/>>
 <<http://www.iefimerida.gr/news/242045/ieronimos-i-omofylofilia-einai-ektropi-apo-tin-zoi-vinteo/>>.

29 Kallistos Ware, Metropolitan of Diokleia, 'Foreword', *The Wheel*, 13–14 (Spring-Summer 2018), 6–10 (p. 8).

30 Cf. the links mentioned above.

31 See, for example, <<http://www.documentonews.gr/article/gia-ton-mhtropolit-h-peiraiws-h-omofylofilia-einai-san-thn-kthnobasia-video/>>
 <<http://www.topontiki.gr/article/206117/mitropolit-peiraia-sygkrine-toys-omofylofiloys-me-toys-ktinovates-video/>>
 <<http://www.koutipandoras.gr/article/prokalei-o-mitropolit-peiraio-exisonontas-omofylofilia-paidofilia-kai-ktinovasia/>>
 <https://www.huffingtonpost.gr/2017/02/05/koinwnia_n_14629550.html/> [All websites accessed September 2018].

genuflections, or to be helped in order to return to a 'normal' sexual life by conversion therapies. If conversion therapy fails, then the homosexual is called to follow a life of celibacy and permanent sexual abstinence. In the words of Fr Vasileios Thermos, 'homosexuals are called to lead a celibate life, whether or not they feel a vocation for this'.³² At best, when homosexual orientation is not treated as abomination,³³ as a deadly sin leading to the eternal condemnation of hell,³⁴ homosexuals enjoy a specific pastoral care and are approached by some open-minded and compassionate clerics with understanding, friendly feelings, and Christian love.³⁵ However, their sexuality and their way of life is not theologically justified and ecclesially accepted, even if in many of these cases with a friendly and compassionate pastoral care. This explains why, if homosexuals are not stigmatized and if in the meantime they have not broken their ties with the Church, in most cases they are not accepted in the Eucharist, while their integration in the parish life is also not secured.

Certainly, this Orthodox rejection and condemnation of homosexuality has nothing specifically 'Orthodox', since it repeats the radical rejection of homosexuality adopted in the past by many Protestant Churches, and which is practiced up to now by the Roman Catholic Church. It also has much to do with a static and decontextualized interpretation of the well-known biblical evidence,³⁶ as well as that of the patristic and canonical tradition.³⁷ In addition, this Orthodox condemnation of homosexuality has little to do with any kind of critical engagement with the

-
- 32 Fr Vasileios Thermos, 'The Orthodox Church, Sexual Orientation, and Gender Identity: From Embarrassment to Calling', *The Wheel*, 13–14 (Spring-Summer 2018), 83–90 (p. 86). Cf. Ware, 'Foreword', p. 9.
- 33 Referring to Leviticus 18. 22, and the Greek term 'βδέλυγμα'.
- 34 Cf. I Corinthians 6. 9–10; cf. also Jude 7.
- 35 Cf. for instance Fr Vasileios Thermos, *Ελξη και Πάθος: Μια διεπιστημονική προσέγγιση της ομοφυλοφιλίας* [Attraction and Passion: An Interdisciplinary Approach of Homosexuality] (Athens: En plo, 2016), pp. 469–512 (with rich bibliography); Thermos, 'The Orthodox Church', pp. 89–90; Fr Vasileios Chavatzas, 'Στο πλάι ενός αγώνα ... : Σκέψεις για την ποιμαντική αντιμετώπιση του ομοφυλόφιλου' ['At the Side of a Fight ... : Reflections on the Pastoral Treatment of the Homosexual'], in *Χριστιανική ζωή και σεξουαλικές σχέσεις* [Christian Life and Sexual Relations], ed. by Vasilis Argyriadis and Christos Markopoulos (Athens: En plo, 2015), pp. 201–05; Marc-Antoine de Beauregard, *Regard chrétien sur l'homosexualité* (Paris: Editions de l'Oeuvre, 2013), pp. 103–13. A whole section of the volume edited by Cherniack, Gerassimenko, and Brinkschröder, *For I am Wonderfully Made*, pp. 231–95, is dedicated to 'New Pastoral Approaches'. Cf. also John Breck and Lyn Breck, *Stages on Life's Way: Orthodox Thinking on Bioethics* (Crestwood, NY: St Vladimir's Seminary Press, 2005); Thomas Hopko, *Christian Faith and Same-Sex Attraction: Eastern Orthodox Reflections* (Ben Lomond, CA: Conciliar Press, 2006), pp. 111–22.
- 36 See Genesis 18. 20–19, 29; Leviticus 18. 22, 20. 13; Romans 1. 18–32; I Corinthians 6. 9–11; I Timothy 1. 9–10; Jude 7.
- 37 See, for example, *Didache*, 2: 2; Polycarpus of Smyrna, *Seconde Letter to Philippians*, 5: 3; Justin the Philosopher and Martyr, *First Apologetic*, 27; Clement of Alexandria, *The Pedagogue*, 6: 10; Tertullian, *On Prudity*, 4; Cyprian of Carthage, *Letters*, 1: 9; Novatian, *Jewish Foods*, 3; Eusebius of Caesarea, *Evangelical Preparation*, 4: 10; *Apostolic Constitutions*, 6: 11; Basil of Caesarea, *Letters*, 217: 62; John Chrysostom, *Homily on the Epistle to Titus*, 5: 4 and *Homilies on the Epistle to the Romans*, 4: 1 and 4: 2; Augustine, *Confessions*, III, 8: 15. See also the canons 7 and 62 of St Basil of Caesarea (The Great), and the canon 4 of St Gregory of Nyssa.

works of the Church Fathers, and the discernment and the difference between the theological contribution of the Fathers and the influence of their cultural and social milieu they carry in their writings. As a consequence, it envelops all of their work with a mythological a-historic haze³⁸ and fails to make the distinction between the cultural and the proper theological elements in sacred texts, namely between the Spirit-based, and culture-based influences or changes.³⁹

The classical understanding of homosexuality under the angle of ‘passion’, which presupposes implicitly or explicitly the rejection or the conscious ignorance of the scientific data and the uncritical adoption of many stereotypes represent by far the majority opinion among the Orthodox and the Orthodox tradition on the issue of homosexuality. As noticed by Fr Vasileios Thermos:

Since the Greco-Roman period, the dominant public opinion about homosexuality has been that it is a choice. People firmly believed that all were born heterosexual, and that some, in their perverse disposition for acquiring new pleasures, decided to deviate into homosexual practices. Homosexuality was considered a behaviour, not an identity as is the case today. Thus, it was thought of as a product of free volition, and consequently was judged by Christians to be the worst of all passions – a real rebellion against God. The biblical texts that are often cited in connection with homosexuality share this preconception, and thereby constitute weak arguments in the contemporary theological discussion.

The authors of the New Testament, as well as the fathers, are no exception. They share a very strict attitude against homosexual behaviour, because they view it as epitomizing all the vices. This makes sense if homosexuality is thought of as the result of conscious rebellion against God’s will. It is in this light that the first chapter of the Letter to the Romans has to be read. Saint Paul has in mind someone who arrogantly rebels and becomes self-determining and even deliberately opposes God. Obviously, very few contemporary homosexuals would identify themselves by those descriptions.

Discussion about passions stems out of this ancient yet resilient idea. Such views naturally lead to the conviction that homosexuality is a passion, among the worst. However, there is the clear patristic concord that the worst passion is narcissism (*philautia*, pride, vainglory). Furthermore, empirical evidence shows that all the passions are intertwined, mutually feeding and being fed by one another. Thus, while a person with same-sex attraction may of course have various passions, they are not necessarily connected with homosexuality. There is no passion that

38 Thermos, *Ἐλξη καὶ Πάθος*, p. 17.

39 For the cultural conditioning of many of these biblical and patristic passages, cf. Thermos, *Ἐλξη καὶ Πάθος*, pp. 357–402. For the overcoming of the cultural conditioning of the ecclesial event in favour of the Spirit-based changes, i.e., the changes founded and legitimated from an eschatological perspective and the coming Kingdom of God, cf. Pantelis Kalaitzidis, ‘The Eschatological Understanding of Tradition in Contemporary Orthodox Theology and its Relevance for Today’s Issues’, in *The Shaping of Tradition: Context and Normativity*, ed. by Colby Dickinson (Leuven/Paris/Walpole, MA: Peeters, 2013), pp. 297–312.

is specifically linked to homosexuality, while sexual perversions (psychiatrically known as paraphilias) are certainly accompanied by many.⁴⁰

By expressing and formulating the above-mentioned ideas on homosexuality, many Orthodox are just repeating the well-known triumphalist rhetoric regarding the relationship between science and Orthodoxy, a rhetoric claiming that there is no problem or conflict between science and Orthodoxy. They thus refuse to open up the hermeneutical horizon of the latter by taking into account the theories and views, and even the present-day discoveries of many sciences and disciplines, such as biology, medicine, psychiatry, psychology, philosophy, sociology, or cultural studies, on the issue of homosexuality. By doing so, Orthodox clerics, thinkers, and theologians are just repeating or following the pre-modern uncritical way of approaching the sacred texts by accepting as divinely given and inspired everything included in the Scriptures or in patristic writings. All this happens despite the obvious influences of the cultural milieu or the inaccurate scientific information of that pre-modern period upon the sacred texts; for example, the geocentric system; the tripartite division of the universe in heaven, earth, and the underworld; the chronology associated with the Bible, i.e., the idea that the world has been created about five thousand years before Christ, and so on. It is thus time for the Orthodox to admit that there are many scientific errors in the Bible and that the Bible is not divinely-inspired thanks to these errors, which bear the mark of the cultural milieu of a remote time. But it is divinely-inspired despite those errors, since Divine Revelation concerns the eternal truths about God, the world, and humankind, not the cultural perceptions and understandings of each era. In addition to being divinely-inspired, the Bible (and the Fathers, who in their great majority were not divinely-inspired, but interpreted the Bible) is also a human work. The Orthodox tradition at its best (and in any case, before the Enlightenment) was in permanent dialogue with the new scientific data of its time. It had no problem to review and to correct, having been informed by science and other disciplines such as philosophy, wrong ideas and perceptions related to the created world, insofar as they did not affect the basic doctrinal truths (the Trinitarian and Christological dogmas).

With regard to our discussion, it would not be an exaggeration to argue that the rejection of today's scientific data and findings on homosexuality is analogous to the conflict, in which the Orthodox Church was in opposition to the Enlightenment and the new scientific ideas (as we have seen in the previous section). The church leadership had refused at that time to accept the new scientific *acquis* and the ideas of modernity, while staying attached to the Aristotelian philosophy, to which it had granted the authority of the knowledge of the natural or created world. Today, we have the impression that insisting on an understanding of homosexuality from the angle of a 'passion' that one can overcome and get rid of through the spiritual struggle, is like fighting once again science and scientific findings regarding homosexuality. In the words again of Fr Thermos, 'the language around homosexuality as a voluntary

40 Thermos, 'The Orthodox Church', pp. 83–84.

or demonic condition to be hated no longer applies, because it is undermined by contemporary scientific knowledge. The Orthodox Church has already dealt with other situations in which issues were considered to be theological before modernity, but in modernity this judgment has proved to be erroneous'.⁴¹

Regarding our discussion, beyond specific scientific theories and hypotheses, there is today among scholars, scientists, and medical practitioners a certain common ground, a common understanding, that cannot be ignored if we pretend to be in dialogue with science. In fact, between the middle of the nineteenth and the middle of the twentieth century homosexuality was considered a mental disease, whereas until the 1950s the word 'homosexuality' was clearly linked with sin, illness and crime.⁴² In 1973 homosexuality was removed from the official U.S. list of mental disorders,⁴³ and as early as 1975 the American Psychological Society asked psychologists to lead the removal of the stigma of mental illness, which had long been associated with homosexuals. During the 1980s, policies about homosexuality matured, and the gay community was given the status of a recognized minority.⁴⁴ Finally, in 1992, homosexuality was removed from the international classification of diseases (ICD-10) of the World Health Organization.⁴⁵

There is no unanimity among scientists and scholars regarding the explanation and the reasons of homosexuality, although an increasing consensus seems to exist regarding the importance and involvement of a biological factor in homosexual orientation. Thus, on the one hand, there is the view emphasizing genetic and hormonal reasons, therefore maintaining that homosexuality is not a choice, and that gay or lesbians are not responsible for their homosexual orientation⁴⁶, which cannot be changed by any kind of 'conversion treatment' or 're-orientation therapy'.⁴⁷ On the other hand, there is also a view in favour of a more complex explanation of the phenomenon of homosexuality by supporting the idea that, in addition to genetic and hormonal causes, we should take into account socio-cultural factors and the influence of the familial context. The latter view (supported now by a decreasing number of scholars and medical practitioners) hence maintains that there is space for a change in sexual orientation through the so-called 'conversion treatment' or 're-orientation therapy'. I am neither a doctor nor a biologist or a psychologist, and I do not consider myself the appropriate person to decide about this ongoing scientific and academic discussion. However, if I correctly understood what qualified academics and scientists are saying, then I have to notice that both of the described

41 Thermos, 'The Orthodox Church', pp. 84–85.

42 Thermos, *Ἐλξη καὶ Πάθος*, pp. 38–39.

43 Thermos, *Ἐλξη καὶ Πάθος*, p. 43.

44 Thermos, *Ἐλξη καὶ Πάθος*, pp. 41, 45.

45 Thermos, *Ἐλξη καὶ Πάθος*, p. 44.

46 Ware ('Foreword', p. 9.) boldly noticed from his perspective: 'But homosexual men and women are not personally guilty of their orientation, because this is not something they have chosen.'

47 While considering homosexuality as condition related not exclusively to biological factors and praising a more complex explanation of it, Fr Thermos ('The Orthodox Church', pp. 86–87) has to admit from his side that 'conversion therapies' seem quite ineffective.

perspectives do not allow us to consider homosexuality under the angle of the 'passion'. This means that homosexual orientation cannot be changed through the lens of spiritual life and the ascetic practices or the struggle against passions; and that the Orthodox Church has to proceed to painful revisions in its understanding of homosexuality,⁴⁸ exactly as it did some centuries ago due to the challenges posed by Copernicus, Galilei and Newton on the issue of the geocentric and heliocentric system – a scientific discovery in clear contradiction with the biblical texts and the scientific universe implied by the Bible.

I cannot repeat here the very rich and interesting discussion, which goes on between scientists and academics of the two tendencies regarding the causes of homosexuality mentioned above. Fr Thermos did this in an exemplary way in his scientifically well-documented and theologically informed recent monumental study.⁴⁹ After reviewing the scientific discussion, Fr Thermos concludes that homosexuality is neither a 'passion' nor a sexual perversion,⁵⁰ but rather a unique condition that does not belong to any known category, either of spiritual life or psychiatric taxonomy.⁵¹ However, this statement does not prevent it, according to Fr Thermos, from being a problem theologically, as he explains at the end of his study. The Greek priest and psychiatrist in his final say does not justify or legitimate theologically homosexuality, since the latter contradicts God's plan, suggesting thus for Christian homosexuals a life of abstinence and to bear their cross and burden.⁵² Homosexuality is therefore for Fr Thermos a complex phenomenon, both for genetic and hormonal reasons, but also due to socio-cultural factors, the influence of the familial context, and certain circumstances, which favour (or do not favour) the coming out of the homosexual orientation, and the active gay or lesbian gender identity.

48 Such a timid, yet significant example of a revision on the issue of homosexuality seems to be the Pastoral Letter, issued in December 2017, by the Conference of the Orthodox Bishops in Germany. It was addressed to the Orthodox youth of the country and attempted to cope with the sensitive issues of love, sexuality, and marriage. The importance and novelty of this Letter, issued in German, English and different other languages (Greek, Arabic, Russian, Romanian, and Bulgarian) spoken by the Orthodox people living in Germany, resides in the fact that it is the first official Orthodox document, which does not condemn homosexuality, approaching it in a mere pastoral way, whereas it seems to be open to responsible pre-marital sexual relations. See the English version of the text: 'A Letter from the Bishops of the Orthodox Church in Germany to Young People concerning Love – Sexuality – Marriage', posted at the website of the Orthodox Bishops' Conference in Germany: <<http://www.obkd.de/Texte/Brief%20OBKD%20an%20die%20Jugend-en.pdf/>> [accessed 3 March 2018].

49 Thermos, *Ελξη και Πάθος*. In addition to this discussion, Fr Thermos offers in his book an excellent panorama (pp. 425–67) of the recent approaches to and interpretations on homosexuality by Orthodox priests, lay theologians, psychologists, and medical practitioners.

50 Fr Thermos first questioned the explanation of homosexuality as a 'passion' and as a perversion in his article 'Ομοφυλοφιλία: Ένα "ασύμμετρο" πρόβλημα' ['Homosexuality: An "Asymmetric" Problem'], in *Χριστιανική ζωή και σεξουαλικές σχέσεις* [*Christian Life and Sexual Relations*], ed. by Vasilis Argyriadis and Christos Markopoulos (Athens: En plo, 2015), pp. 149–79.

51 Thermos, 'The Orthodox Church', p. 84.

52 Thermos, *Ελξη και Πάθος*, pp. 605–31, especially pp. 635–50. Cf. Thermos, 'The Orthodox Church', pp. 88–89.

Without being a specialist, and of course without daring to compare my very elementary knowledge of the topic with that of Fr Thermos and other specialists, I would say that I am more and more convinced, on the basis of my limited readings, by the arguments suggesting an explanation of homosexuality *via* genetic and hormonal reasons. Due to space constraints, I will limit myself only to one such study, i.e., the work by Dr Jacques Balthazart, Professor of Behavioural Neuroendocrinology, and Director Emeritus of the Research Group in Behavioral Neurobiology at the GIGA Neurosciences of the University of Liège in Belgium. His now classic study, titled *The Biology of Homosexuality*, was first published in French, and then in English translation.⁵³ The basic argument of that book can be summarized by the following points:

- It seems well established that the sexual and social experiences of early childhood and adolescence have little or no effect on the development of homosexuality. Theories of homosexuality derived from psychoanalysis, behaviourism, or social constructivism, attributing a major role to early sexual experiences or relationships with parents, did not find any support in controlled scientific studies and are in fact at odds with many facts of observation.⁵⁴
- Human (and animal) homosexuality is the result of an interaction between hormonal and genetic embryonic factors with perhaps a minor contribution of post-natal social and sexual experiences [...] It is thus clear that none of the biological factors identified to date is able by itself to explain homosexuality. Three potential explanations are therefore possible. Either there are different types of homosexuality – some have a genetic origin, others a hormonal origin, still others result from the older brothers effect or from biological factors not yet identified – or the effects of different biological factors that have been identified interact with each other in a variable manner in each individual; and it is only when several of these predisposing factors are combined that homosexual orientation is observed, or finally, all the biological factors that I have described only produce a predisposition to become homosexual, and these predispositions can only develop in a specific set of psychosocial contexts that are not yet identified. But if this post-natal context is actually an important permissive factor, it is surprising that a quantitative study has been unable so far to identify aspects of the environment that are limiting.⁵⁵
- It is clear that biological factors acting during prenatal life play a significant role in determining sexual orientation and that homosexuality is not, for most people, a choice of life. This orientation is often or always a reality that imposes itself on the individual during his or her teens or life as a young adult. The recognition of a nonconventional sexual orientation is very often the occasion of significant psychological suffering. It is important to remember that the suicide rate is three times higher during adolescence among homosexuals as compared to the general

53 Jacques Balthazart, *The Biology of Homosexuality* (New York: Oxford University Press, 2012).

54 Balthazart, *The Biology of Homosexuality*, p. 157.

55 Balthazart, *The Biology of Homosexuality*, pp. 158–59.

population. By contrast, the heterosexual orientation develops spontaneously, often while the individual does not truly realize it. It is not a matter of choice here. One does not choose to be homosexual any more than one chooses to be heterosexual. We can choose to accept this orientation, to act accordingly, and to reveal it or not to society, but the orientation itself is not in any way a deliberate choice [...] There are probably sex perverts among homosexuals, just as there are among heterosexuals, but homosexuality itself is not a perversion. A large proportion of homosexuals are born with that sexual orientation, which is revealed to them in a very progressive way during development and is often accepted at the price of a significant psychological distress. It is for most of them not a choice [...] Homosexuality is due neither to a perversity nor to inadequate parents. It is a biological variation of a complex behavioral trait whose control is obviously multifactorial.⁵⁶

I am not in position to judge if Balthazart (and other scientists who share the same view) is right in his argument. But if he is, then the Church, as well as the overall Orthodox approach to the issue of homosexuality, has to proceed to radical and painful revisions. If it does not, it will be trapped once again in a defensive attitude and apologetics like those adopted by the Roman Catholic Church in the Middle Ages, or it will repeat the same mistakes perpetrated by the Orthodox in the second half of the eighteenth century, at the time of the encounter of Orthodoxy with the Enlightenment – a problematic encounter sketched in the first part of the present chapter.

My intention in the second part of this chapter was not to discuss from a theological or Orthodox point of view the difficult and controversial issue of homosexuality. Undoubtedly, it is a timely discussion that should take place. But this is not the proper place for it.⁵⁷ That is why I left out of my presentation the discussion about the ecclesial and theological rejection of homosexuality, the burning issue of gay marriages and civil unions, as well as the practice of ecclesial *oikonomia* and pastoral care. I skipped also a detailed discussion of the crucial theological question (which in many regards is also a theodicy question) of the non-responsibility of the homosexual for his/her homosexuality, for which Orthodox priests and theologians cannot offer

⁵⁶ Balthazart, *The Biology of Homosexuality*, p. 159.

⁵⁷ In addition to the works by Fr Vasileios Thermos, Fr Marc-Antoine Costa de Beauregard, and Fr Thomas Hopko mentioned above, the discussion on homosexuality and Orthodoxy is greatly enriched by some further recent publications: a) *'For I am Wonderfully Made': Texts on Eastern Orthodoxy and LGBT Inclusion*, ed. by Misha Cherniak, Olga Gerassimenko, and Michael Brinkschröder (Amsterdam: The European Forum of Lesbian, Gay, Bisexual and Transgender Christian Groups, 2016), with contributions by Bryce E. Rich, Natallia Vasilevich, Mark Stokoe, Misha Cherniak, Anastasios Kallis, Fr Robert Arida, Maria Guyn McDowell, Fr Jim Mulcahy, and others; and b) the issue 13–14 (Spring/Summer 2018) of the journal *The Wheel*, dedicated to the topic: 'Being Human: Embodiment and Anthropology, Sex, Marriage, and Theosis', with articles by Metropolitan Kallistos Ware, Fr Andrew Louth, Fr John Behr, Katherine Kelaidis, Beth Dunlop, Brandon Gallaher, Giacomo Sanfilippo, Christos Yannaras, Fr Vasileios Thermos, Aristotle Papanikolaou, Bradley Nassif, Marjorie Corbman, Steven Payne, Gregory Tucker, Fr John Jillions, and Fr Alexis Vinogradov.

any other response except sexual abstinence – a quasi compulsory monastic life, but without a monastic vocation! –, and a life of pain, with a cross to bear, by way of participating in Christ's cross. What drew my attention and concerned me here in the framework of a discussion on the relationship between science and Orthodoxy, was only the extent to which the Orthodox reflection on and overall attitude against homosexuality is aware of the current relevant academic and scholarly discussion, and if it takes into account the new scientific data and findings.

With regard to this precise question, I am afraid that instead of a constructive and well-informed attitude, Orthodoxy is characterized today by a kind of moral panic, which in the case of the Orthodox Church of Greece, and more widely of Greek Orthodoxy, becomes particularly evident thanks to the public interventions and vociferous statements of bishops or monks. Some other territorial Orthodox Churches, like the Russian Orthodox Church, seem to be happy to use the issue of homosexuality for political reasons and to be instrumentalized for the sake of state policy by subscribing to a political agenda, which opposes the so-called decadent, corrupted, and effeminate secular West and supports the 'traditional' or 'family' values, and the hyper-masculinity and virility of the traditional Christian East. Similar positions can be observed in the Romanian, Georgian and other Orthodox Churches. Obviously, this is not the way to meet the requirements and the expectations of the dialogue between Orthodoxy and science, and by extension of the encounter between Orthodox Christianity and modernity/postmodernity.