

The Historiography of Science and Religion in Europe

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HIGH SCIENCE AND NATURAL SCIENCES: GREEK THEOLOGIAN AND THE SCIENCE AND RELIGION INTERACTIONS (1832–1910)

by *Kostas Tampakis*

Abstract. What was science for the Orthodox Greek theologian of the nineteenth century? How did it feature in his (theologians were all men at the time) own work? This article is an attempt to describe the science and religion interactions by placing Greek Orthodox theologians of the nineteenth century in the center of the historical narrative, rather than treat them as occasional deuteragonists in the scientists’ historiography. The picture that emerges is far more complicated than one of antagonism, indifference, conflict, or coexistence. Greek theologians saw themselves as scientists and treated theology as a positive, rational science. They developed strategies to delineate their disciplinary borders and safeguard their identity as expert scholars by harnessing their university and academic credentials. For that reason, they had to invoke famous German and other Western theologians, while ensuring that they were seen as true defenders of Orthodox Christianity. The idea of science was an integral part of this achievement.

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In the various histories, micro-histories and grand narratives of the science–religion historiography, the theologians are the quintessential deuteragonists. Like his counterpart in Greek drama, the deuteragonist theologian alternatively supports or opposes the protagonist of the scientific enterprise, but he is allowed the spotlight only when the protagonist has left the stage. Initially, theologians were lumped together with the church in the role of the bugbears in the John W. Draper story of eternal, inescapable conflict. Their role amounted to deducing, for example, “schemes of chronology and cosmogony which had proved to be stumbling-blocks to the advance of real knowledge” (Draper 1875, 183). For the much more sympathetic Pierre Duhem, theologians were the unsung heroes of medieval science, themselves the devotees of an academic discipline as logical and structured as natural philosophy itself (Duhem 1913, 43). In the much more recent monumental work of John Hedley Brooke, it is theologians like William Paley (1743–1805) and Noël-Antoine Pluche (1688–1761) that bring together natural philosophy and theology on what is today known as natural theology in the seventeenth and eighteenth centuries, by utilizing ideas of form, function, and divine intent (Brooke [1991] 2014, 261–69). Finally, Peter Harrison traces how science and religion acquired their present conceptual panoply by discussing not only Blaise Pascal (1623–1662) and Isaac Barrow (1630–1677), but men like the fifteenth-century Spanish theologian Raymond of Sabunde (fl. 1434) and the American Calvinist theologian Leonard Woods (1774–1854) (Harrison 2015, 73, 154).

It is thus apparent that theologians have a long and distinguished presence in science and religion historiography. However, two characteristics shape their sporadic existence as a distinct group of historical actors in the science and religion historiography. First, theologians have always been present, from at least the founding of the first universities of the twelfth century and onward. Second, theologians are portrayed as reacting to science, rather than as thinkers who act on their own initiative. Developments in understanding the natural world force them to consider, ignore, incorporate, or reject ideas, much as deuteragonists help, pass over, or hinder protagonists. When discussing the history of science and religion interplay, rarely if ever do theologians appear as the central historical actors.

This article proposes to renegotiate these historiographical presuppositions, by considering how theologians dealt with the sciences, and the idea of science, on their own terms, if they are taken to be a community of experts with its own disciplinary practices and ideas. Furthermore, what kind of narratives and rhetorical schemes emerge when theologians were themselves a new kind of expert scholar, operating under a disciplinary aegis that was itself novel and in the process of formation? To do so, this article will focus on the group of Greek Orthodox theologians active in nineteenth-century and early twentieth-century Greece. They were themselves a new kind of expert, the first Orthodox theologians of their kind

and era to appear in Europe, and they used their academic credentials and the idea of a national science to establish a cultural and intellectual role for themselves. The idea of science, natural or not, was prominent in this process, and as such, Greek theologians saw the natural sciences more as a wayward sibling of their own discipline rather than as an adversary to be vanquished or an ally to be won. To show the intricate strategies Greek theologians developed, we must first turn to the history of the Greek state itself.

A NEW STATE FOR AN OLD NATION

The Ottoman Empire ruled over several Greek-speaking Orthodox communities in southeastern Europe from the fifteenth to the nineteenth century. Such communities were also to be found in Vienna, Venice, and later in Marseille, Odessa, and in other mercantile cities across Europe. After the 1821 Revolution and with the intervention of the Three Guardian Powers—France, Great Britain, and Russia—a new Greek State was recognized from 1828 onward. Its initial territory was less than half of what it is today, and it did not include Crete, the Dodecanese, or the Ionian Islands (Clogg 2013, 7–46). The relationship of the neophyte new state with the Greek-speaking Orthodox communities outside its borders was contentious, as the Greek national identity was at the time fluid. Eventually, in the first decades after the 1830s, Greek identity coalesced around four main axes. The first was the idea of a direct descent from the glorious classical Greece of Homer, Pericles, and Aristotle. The second was Greek language itself, which was seen as a covenant for Hellenism throughout the ages. Third, and despite the ambivalent role of the Ecumenical Patriarchate in the Greek Revolution of 1821, Hellenism was deemed inseparable from Orthodox Christianity. Finally, to be Greek was to have passed through the crucible of the 1821 Revolution, and to share its ideals of freedom from oppression. From the 1840s onward and at least until the beginning of the twentieth century, this conception of Hellenism added fuel to the so-called Grand Idea, the drive to integrate all Greek-speaking Orthodox populations in Thrace, Macedonia, Epirus, Thessalia, Istanbul, or Smyrna within the Greek state, by force if necessary (Skopetea 1988).

To lead the new state, the under-aged Bavarian prince Otto Friedrich Ludwig von Wittelsbach (1815–1867) was appointed the first King of Greece in 1832. Many Bavarian scholars accompanied the young king in Greece, alongside three vice-regents that were to help him govern until he was legally of age. King Otto was dethroned in 1862 and was succeeded by the Danish prince William of Schleswig-Holstein-Sonderburg-Glücksburg (1845–1913), who reigned as King George the First of the Hellenes for 50 years (Gallant 2015). However, most of the scientific, educational, and military institutions were in fact founded by the Bavarian regency.

Among them was the establishment of a three-tiered national educational scheme heavily influenced by Bavarian institutions. The most exclusive and esteemed educational and scientific institutions were the University of Athens, founded in 1837, and the Polytechnic School of Athens, also founded in 1837 as a Technical School but very quickly reorganized as a school for engineers and architects on the model of the French *Grandes Écoles* (Tampakis 2013, 780–83). It was the University of Athens that was to be the first and most enduring institutional home for Greek Theology.

THE APPEARANCE OF THE GREEK ORTHODOX THEOLOGIAN

It is notoriously difficult to define a discipline or an area of expertise unambiguously. Historians of science, for example, have not managed yet to agree what science has been historically and how its practitioners should be named over the years (Dear 2005). Yet so far, I have treated the term “theologian” as conceptually self-evident. It is not the purpose of this article to propose a complete definition of theologians and theology that would be true for all eras and areas in which Christianity has been active, even more so since it is precisely the idea that the term acquired a specific meaning in nineteenth-century Greece that I would like to explore. And yet, a bit more clarity is necessary. For the purposes of this article, I will take the term “Christian theologian” to mean someone who acted as an authoritative heir to the academic discipline of systematically discussing the Christian faith as a system of belief, as it emerged in Western Europe. As an historical actor, I take the theologian to have been an acknowledged expert, versed in an academic discipline with a history going back at least as far as the founding of the university itself. For that reason, the theologian was intellectually and culturally bound by the norms and practices of his discipline, as much as the lawyer or the medical doctor of his era were with theirs. An important aspect of those norms has been the idea that Christian theology is continuous with the Christian faith, and its role as a discipline has often been that of a servant to the faith, rather than that of a detached observer. This is an imperfect, descriptive definition that confines the theologian temporally in the period from the Early Modern period onward, and one that assumes a role of expertise within scholarly communities that appeared well into the eighteenth century and solidified in the nineteenth century (Turner 1978; Zachhuber 2013, 2–20; Kohlrausch and Trischler 2014, 60–76). It is, however, robust enough for my purposes, and quite similar to definitions of theology and theologians found in even contemporary handbooks of Christian theology (Erickson 2013, 8; McGrath 2019, 101–20).

Who was then an Orthodox Greek theologian? Such a person did not exist before 1837. This year marks the date when the University of Athens, then called the Othonian University in honor of Otto, the young Bavarian king of Greece, operated for the first time. The University’s Bavarian

genealogy entailed that a Theology School would be created, alongside the Schools of Law, Medicine, and Philosophy, the latter also encompassing the natural sciences (Gavroglu et al. 2014, 53–83). The Theology School of Athens is the first Orthodox theology school to appear in Europe and the first to shelter and educate Orthodox theologians under a university aegis. Even though the Imperial Moscow University and the Saint Petersburg Imperial University are almost a century older than the University of Athens, neither of these institutions originally encompassed a theological school, by mutual agreement between the Russian Orthodox Holy Synod and the Russian authorities. Russian universities were founded as strictly secular institutions and all religious education was left at the hands of the church (Kaplan 2007, 38–40). Although the Russian Orthodox Church created a large network of seminaries and theological academies, some of which used Western (“Latinized”) textbooks and methods, these institutions remained firmly under the control of the church and were unaffiliated with the Russian universities until the twentieth century (Meyendorff 1981, 105–07). Thus, it was in Athens in 1837 that the Orthodox theologian as a university-taught, academic expert first appears.

The School of Theology remained a small school, even by the standards of the small University of Athens. In 1837, it had only three professors, one of which, Theoklitos Pharmakides (1784–1860), engaged as he was with transforming the Church of Greece into an autocephalous church as one of the first Secretaries of the Greek Holy Synod, did not teach at all. The Theology School acquired a greater number of Chairs only after the 1860s, and rarely had more than six professors active in the same time until the first decades of the twentieth century. In total, from 1837 to 1905, 18 full professors taught in the Theological School, most for more than 30 years each. Almost half of them were also members of the clergy, while four served at one time as Archbishops of Athens and thus as heads of the Church of Greece. Finally, and with very few exceptions, the professors teaching in the theological faculty had studied in the German lands (in Tübingen, Leipzig, and Erlang) and some few additionally in Moscow and St. Petersburg (Mpalanos 1937, 4–21). Their studies in German theology schools made the Greek theologians well-versed in Protestant theology and very respectful of certain German theologians such as Friedrich Daniel Ernst Schleiermacher (1768–1834) (Podskalsky 1996). As we shall see, their close ties with German Protestantism also made Greek theologians vulnerable to charges of heresy and corruption from Western ideas.

The students in the school were also few in number. Until the turn of the century, an average of 7 to 12 students enrolled in theology each year, for a total of 587 students by 1900 of 25,612 students for the whole university. However, enrollment did not also mean graduation. Only 258 students graduated from the Theology School until 1907, the first appearing in 1856 (Peter Nintsisky from Kiev) and the second in 1862 (Lappas 2004,

306–07, 402–03). A third to a fourth of those students were from outside Greece, either from Crete, Thessaly, Macedonia, or from the greater Balkans and even from Russia (Mpalanos 1937, 28–29). Thus, the status of the Theology School of Athens as a unique center of Orthodox theological studies was quickly recognized within the small community of Orthodox religious scholars. Nevertheless, Greek theologians bemoaned the lack of enthusiasm of Greek youth for studying theology, attributing it, rather correctly, to the many more vocational opportunities that a degree in medicine or law allowed (Apostolides 1852, 7). Their complaints are very similar to the exclamations of another small faculty, that of the natural sciences and mathematics that operated under the School of Philosophy until 1905, and which also complained of its low attendance for much the same reason (Tampakis 2014).

THE SCIENCE OF ORTHODOX THEOLOGY

Greek theologians were thus by default members of a small, elite community, having attended, and even more significantly having taught, in the University of Athens. However, the university itself was a novel institution, whose role in Greek society was under negotiation. It is no surprise that Greek theologians first and foremost strove to define and delineate their own field. Their efforts can be seen in theology textbooks and articles they wrote, in inaugural lectures and provostial addresses they published, or in speeches they gave at important university functions such as the Three Holy Hierarchs feast on January 30 each year. Theirs was an uphill battle to describe why Orthodox theology was necessary, when the Orthodox Church had millennia of experience in discussing Orthodox Tradition, as the combined writings and wisdom not only of the Bible but also of the Church Fathers is called. The Greek theologians' response was a recourse to science. Michael Apostolides, one of the three first theology professors and an Archimandrite of the Greek Church, said in 1840 that "theology is a high science" that needs to be taught to all clergymen. Not only that, but theology benefits when its practitioners study the other sciences of nature, of society, and of the human condition (Apostolides 1840, 6, 10–12).¹ A quarter of a century later, Nikolaos Damalas, who would become the Chair of New Testament Hermeneutics in 1868, wrote in his introduction to Orthodox theology tellingly titled *On the Scientific and Ecclesiastical First Principles of Orthodox Theology* that "Everybody agrees that theology is the science of the Christian religion, and this is the definition that we will take as a starting point in order to develop our ideas" (Damalas 1865, 18). And again in 1892, Prokopios Oikonomides (1837–1902), the future Archbishop of Athens, declares in his inaugural lecture as Professor of the History of Dogmas that "the theological science . . . is a complete and perfect system through which the foundational truths of Christianity are

scientifically researched and are developed from a theoretical and practical point of view” and that “theology, as a positive science, examines the existing first principles of the Christian religion through specific courses” (Oikonomides 1892, 4–5).

Greek theologians were thus very keen to describe Orthodox theology as a science. But what does that term mean? The word used in Greek even today is *επιστήμη*, from the same root that created the term *episteme*. However, *επιστήμη* denotes any academic discipline, such as law, medicine or, today, economics and psychology. Its use and function are much closer to the German *Wissenschaft* than in the English term “science.” The distinction is more than a philological affectation. By claiming the title of *επιστήμονες*, Greek theologians defined themselves as members of the university-educated elite, with all the privileges and norms this entailed. It is thus not a coincidence that Greek theologians went to great lengths to defend the University of Athens and the other academic Faculties and Schools, both in general terms and especially as beneficent to theology itself. Although most of the Greek population saw the university as a source of pride and believed its existence would be foundational for reviving the Greek nation, a smaller group of traditionalists and reactionaries instead saw a corrupting Western influence that could topple religious and national traditions. This is one of the reasons that Apostolides, in his speech for the founding of the university writes,

Within this University, the saving light of holy philosophy will rise again, to destroy the darkness of ignorance, and within it, the devotees of the theory of beings, the ministrants of Themis and the followers of Asclepius will acquire the necessary knowledge, in order to contribute to our society’s prosperity until finally the Highest Lord’s ministrants will be initiated to the eternal and saving truths of Divine economy. (Dimaras 1987, 110–11)

In the same vein, Panagiotis Robotis (1830–1875), the Professor of Dogmatics, Ethics, and Liturgics, says in his 1874 provostial address,

There is everywhere room for philosophy, and for history. Parts of philosophy are (the study of) nature, of law, of religion, of rhetorics, of pathology or of anything else. Without history, none of these could develop . . .

Any bickering on these issues should stop and all sciences should live and work together in harmony and mutual love, as the ingenious inventors of the University have decreed, who did very well in housing all the Muses in the same temple. (Robotis 1875, 9)

The same message of unity and necessary cooperation between academic disciplines will emerge again and again in the writings of Greek theologians until well into the twentieth century. By defending philosophy, law, and medicine, by showing how these sciences—*επιστήμες*—relate to theology and by praising the role of the university, Greek theologians in

fact defended their own academic community, specifically by defining their work as a special type of academic discipline. Of course, a university school without students was problematic and very few students chose theology. Unsurprisingly, Greek theologians spent considerable effort to attract, and in the process define, their target audience. Apostolides in one of his first lectures insists that all priests should be trained in theology before becoming members of the clergy (Apostolides 1840, 1–3). Nikolaos Damalas in an 1872 speech went on to say that

(to achieve a true education for the people) it is necessary that these truths (of religion), which are known only to professional theologians, also get transmitted to the whole of the Orthodox Christendom. This would be come possible only if professional theologians take over the pulpits of all Orthodox churches. (Damalas 1872, 16)

Even 30 years after Damalas and 65 years later than Apostolides, Dimitros Mpalanos (1877–1959), the Chair of Dogmatics and Patristics and future Minister of Education, declared in his inaugural lecture *Is Theology a Science?* that the purpose of the Theology School of Athens “should be to educate clergy that would be capable of developing the moral and religious sentiment of the people” (Mpalanos 1906, 20–21). For the whole of the nineteenth century, the theological school aspired that all members of the clergy would study theology and become professionals and vice versa, theologians would help priests by delivering sermons to the Greek nation.

The idea of theology as a science was of course neither a Greek idea nor confined to Greece. Schleiermacher, even before the foundation of the University of Berlin in 1810, had advocated and campaigned heavily for the inclusion of a scientific theology in the emerging Humboldtian University. The status of theology was negotiated according to what *Wissenschaft* would end up meaning in this new context (Zachhuber 2013, 12–20; Purvis 2016). Greek theologians had nothing but high praise for Schleiermacher, but they were also adamant that their theology was not Protestant in the least. Damalas in his 1865 textbook on Orthodox theology specifically states that his goal is to show that Orthodoxy is as good as, if not better than, Protestantism for theological deliberation. He wrote a lengthy angry retort to the Protestant theologians who considered Orthodoxy an archaic fossil of Christianity (Damalas 1865, 2–4). In much the same way, Anastasios D. Kyriakos (1843–1923), the Chair of Symbolics and Church History and one of the most prolific nineteenth-century Greek theologians, wrote in his article for the 400-year anniversary of the birth of Luther that no one can call himself a scientist of theology if he has not studied German Protestant theology, and that it is Protestant religion that has led to the prosperity and moral fortitude of Protestant nations. However, when Protestantism has tried to encroach on Eastern Christianity, it has failed because Orthodox Christianity has had no need of reformation (Kyriakos 1887a, 155–61). In

1897, Kyriakos will again publish an article on German theology, praising it as the most scientifically advanced in the world and saying that Orthodoxy should not blindly follow it, but learn from it, while staying true to its own traditions (Kyriakos 1897).

The establishment of scientific credentials through the careful negotiation of German theology had some disadvantages. An image of Orthodox Christianity as an ark that protected the essential Hellenism of the Greek nation had been cultivated within Greece from at least the beginning of the nineteenth century by scholars and the clergy alike (Gazi 2011). Greek theologians were among the most enthusiastic promoters of such rhetoric schemata. However, this left them vulnerable to criticism by reactionary and conservative members of the clergy. Theologians specifically and all university professors in general were accused of being tools of godless Westerners, who knowingly or unknowingly corrupt the character of the Greek nation. On May 28, 1838, the University Senate was called in an emergency session. A few days earlier, during some university celebrations, the Archbishop of Athens Neophytos (1762–1861), a veteran of the 1821 Revolution, told the Secretary of the University, who he did not recognize sitting next to him, that he did not like being in this place where atheism and irreverence were taught. The Secretary was greatly offended, but the Senate decided that it was a private remark made in error and did not pursue the matter (Senate of the University of Athens, 1838). The charismatic and controversial theologian and cleric Apostolos Makrakis (1831–1905) wrote in 1888 that what we call University in the nineteenth century is actually a School of Darkness founded by the devil and headed by people who want to spread darkness. He states his own mission was to combat Turkism, Papism, Protestantism, and Masonism, as well as any pseudo-philosophy and pseudo-religion (Makrakis [1888] 1927, 6, 18, 26, 32). Makrakis, initially a rising star within the church hierarchy, had a significant number of followers and admirers but later on become a condemned, but popular, outcast. Some years earlier, when Makrakis was still in the Holy Synod's good grace, Bishop Makarios of Karystia had urged Makrakis to rouse the people of Athens and burn the university to the ground, as a den of atheism and heresy (Mpalanos 1937, 38). Using the academic mantle to secure disciplinary boundaries came with a price for Greek theology.

SCIENCE OF GOD AND SCIENCE OF NATURE AS SIBLINGS

The delineation of the Greek theology as an *επιστήμη*, as a specific type of *Wissenschaft*, automatically made all other sciences—*επιστήμες*—its intellectual siblings, the natural sciences included. However, this approach did not exhaust the ways that Greek theologians discussed the natural sciences. The natural sciences and mathematics professors formed a very small faculty under the aegis of the School of Philosophy, and the Greek

scientists were even rarer than the Greek theologians. During its founding, the University of Athens had five people teaching mathematics and natural sciences. It was only after the 1860s that the number of scientists became larger. The first natural sciences graduate from the University of Athens appeared in 1865 and the second a decade later (Stefanidis 1948, 4–22). At any given time, less than 30 people in the whole of Greece could call themselves scientists (Tampakis 2011). Moreover, the role and function of the Greek scientist changed over the span of the nineteenth century, as did the role of the University itself. In that shifting milieu, Greek theologians negotiated their discipline's relation to the natural sciences on their own terms. The first and most enduring attitude toward the natural sciences was one of brotherly camaraderie. Greek scientists were fellow experts, working under the same institutional aegis and worthy of the respect due to their discipline. The natural sciences were a vital and important part of a university education. As such, theologians and clergy should be familiar with them. Once again, Apostolides sets the tone early on, by saying that theology benefits from its practitioners studying nature, because this augments the powers of the heart and of the mind and reveals God in his works. Secular education and Orthodox faith are natural allies, both striving to find truth. In a convoluting lyrical passage he writes,

Because concentrating the mind, through science, toward the wonderful structure of the created, in their connection and strengths, in their closure and value, to the proper understanding of the infinite size of the universe and the exact exploration of the unchanging regularity of its movements, the quiet contemplation of its unalterable laws, which the whole of nature guards, the observation of the natural causes and the strange phenomena and the various valuable discoveries made by the high mind of Newton and Euler and the other great men, have greatly benefited religion, by arming men against the treachery of the senses, by battling superstition and by revealing the frauds perpetuated by impostors. (Apostolides 1840, 11–12, 14)

His colleague Konstantinos Kontogonis (1812–1878), who single-handedly taught most of the theological courses for many years, agreed in his provostial address in 1854 that all students, including those of theology, should be educated in general courses especially “those that wonderfully develop and sharpen the mind and the morals, such as Mathematics, the Natural Sciences and History” (Kontogonis 1855, 15). Panagiotis Pavlides (1837–1894), the Chair of Church History and Old Testament, declared in his 1872 speech for the Three Holy Hierarchs feast, that science and religion are siblings, spreading from the same root of heavenly wisdom, and that science is the little brother of faith (Pavlides 1872, 13–14). On the same occasion, four years later, Zikos Rossis (1838–1933), Professor of Dogmatics and Ethics, would say that all sciences are siblings, and none should consider itself greater than the others. Even Spiridon Sougras, who

was the first lecturer in Apologetics in 1877, in his polemical 1885 book *Brief Notes on Faith and Science* wrote that

Christian faith inspires the belief that it rests in harmony with science if we then precisely understand the relation between science and faith in its objective sense, then we arrive at the point of philosophical inquiry that we are obliged to recognize the absolute necessity of combining the essence of Christianity with the true and safe results of science. (Sougras 1885)

There are many such statements, spanning the whole of the nineteenth century and the first decades of the twentieth (Kyriakos 1887a, 1887b, 1887c; Sougras 1898; Mpalanos 1905). Fraternal congeniality, even if nominal, was the context through which most of the theologians operated. This can even be seen when the inescapable scandal of teaching Darwinism erupted in Greece in 1880. Ioannis Zochios (1840–1912), Professor of Anatomy and Physiology in the School of Medicine, taught evolution in his anatomical course of the same year. On April 7, 1880, Damalas reported to the Theological School that Zochios had mocked the preacher Latas for his anti-Darwinian sermons and that he had also derided the Church. Damalas asked that the Theology School make an official complaint to the Senate. However, most of the other professors, including Kyriakos, Pavlides, and Rossis, argued that it was necessary to establish the exact facts before moving on to such measures. Pavlides is quoted as saying that discretion is needed, because each professor has the liberty to teach freely any scientific research as long as he does not insult religion. “Astronomy has reached findings that seem to contradict the Old Testament. Should it not be taught?” (Theological School, University of Athens 1880, 104–08). The end result was a mild official appeal to Zochios to refrain from insulting religion, while affirming that Zochios’s freedom of teaching and research should not be curtailed in any way. Zochios himself denied that he had done any such thing as insult religion, and that he had only striven to show how physiological theories were irrelevant to religious beliefs (Mpalanos 1937, 34; Nicolaidis 2011, 182–87). All in all, Greek theologians were quite willing to officially adhere to the academic ethos, even in such inflammatory subjects as Darwinian evolution.

FREEDOM, THEOLOGY, AND SCIENCE

The invocation of freedom in the Zochios affair was not incidental. In fact, a specific notion of freedom presented another mode of interaction of Greek theology with the natural sciences. In the 80 years between 1830 and 1910, Greek theologians had to confront several developments. Some, such as the Language Question of the end of the nineteenth century on the choice between the archaic *Katharevousa* and the vernacular *Demotiki*, only tangentially affected the science and Orthodox Christianity relations

(Mackridge 2009). Others had more direct influence and gave opportunities for Greek theologians to harness the advancing cultural status of the natural sciences.

In 1848, Pope Pius IX made a number of gestures toward the Orthodox Churches, proposing a reconciliation of the schism, in which the Eastern Churches would recognize the Papal Primacy and come back into the Catholic fold. The Orthodox Patriarchs responded with a point-by-point rejection of the papal arguments and with a reaffirmation of the Orthodox Tradition as their guiding dogma (Walker 1938). The same Pope convened the First Vatican Council of 1868, which re-established papal infallibility and primacy, two especially contentious subjects for Orthodox Christianity, as well as rejecting rationalism, liberalism, and materialism (Hasler 1981). The aftermath was felt in Greece. For several decades, there would be overtures of reconciliation and discussions of a possible unification between Greek Orthodoxy and Catholicism, and the fervent denunciation of Catholicism by Orthodox theologians and clergy alike. The conciliatory *Orientalium Dignitas* of Pope Leo XIII in 1894, in which the glory and dignity of the Eastern Churches were recognized, did little to allay the anti-Catholic suspicion. It was thus vital for the Greek Orthodox theologians to discuss how and why Orthodox Christianity and Orthodox nations such as Greece differ from Catholics. In that endeavor, science and freedom would be important allies. Freedom was a cardinal virtue for the Greek nation, which saw their 1821 Revolution against the Ottoman Empire as the birth of the Greek state. Veterans of the Revolution acquired the status of national heroes, and freedom was seen as the duty and birthright of every Greek. Apostolides in 1850, in another speech on the occasion of the Holy Three Hierarchs, was the first to say that religion upheld freedom (Apostolides 1850, 14). Pavlides in 1872 took the next step, when he discussed the limits of science as seen by theology:

Neither should faith abandon science . . . , nor should science say to faith *leave, I don't need you* (italics in the original). But does that mean that science should be a slave to faith? No, but it should walk in step in free communion with her aiming at the glory of God . . . science should not be deceived by its freedom, its paths should not be constrained, but left free so that it can descend into the lowest of depths and ascend to the highest heights; however, [science] should not forget its home, but with respect and love return to it. (Pavlides 1872, 13–14)

Thus, Orthodoxy, freedom, and science have a link, a mutual dependency. If Catholicism is shown to combat freedom, then alongside everything else, it also combats science. If Orthodoxy promotes freedom, it also promotes science. Damalas in his provostial address in 1878 makes the argument clear. In the aftermath of the *Syllabus Errorum* of Pius IX in 1864, Damalas presents the Papal Seat as demanding sovereignty over all of Christianity,

political power, and the full control of education. In contrast, the Orthodox Church accepts a full separation of political and religious power, and leaves education to the state (Damalas 1878, 11–13). Freedom is the defining difference:

Finally, the spirit of each church is made apparent in its relationship with the person; for the Greek [church] even within the religious inquiry, there is absolute freedom in the thoughts and studies of the person, and the freedom of science is recognized as long as they do not leave the boundaries that the finite human reasoning sets, and thus through arbitrary hypotheses seek to disprove foundational truths of the Christian faith; and even in that case, [the Greek Church] does not harass the erroneous science, but only renounces its hypotheses as unchristian. . . . [T]he Latin Church on the contrary demands blind obedience to all the edicts of the Roman Pontificate . . .

All the Christian achievements of modern civilization, the freedom of consciousness, the free practice of any religion . . . the Pope renounces as heretical. (Damalas 1878, 14–15)

After the 1880s, the question of how the Orthodox Church should respond to the entreaties of the Old Catholics, who disagreed with the papal infallibility edict, and with the Roman Catholics was becoming more pressing. Conferences and meetings started to develop an ideal of Christian ecumenism, reaching a peak in the 1890s (Fitzgerald 2004, 70–77). In 1884, George Dervos (1854–1925), the Chair of Patrology and Christian Archaeology, repeated the argument of Damalas in a much more historically oriented treatise (Dervos 1884). It is, however, Kyriakos who completed the argument for the connection between freedom, religion, and science and presented it coherently over a number of years. We have already encountered Kyriakos's treatise on Luther, presented in 1884 but published in 1887 (Kyriakos 1887a). Kyriakos can praise Luther because it allows him to formulate an historical example of what happens when the people escape Catholicism. The Protestant nations are beacons of civilization, and it is their break with Catholicism that makes them so. Fifty years before Robert Merton, Kyriakos directly attributes the triumphs of science to the rise of Protestantism (Kyriakos 1887a, 135–36). Catholicism was a religion made in the Middle Ages and as such the barbarism of the Western nations allowed the Pope to claim authority (Kyriakos 1887a, 138–39). When the Western world left behind its infancy, it discovered Greek education through humanism and as such it was liberated politically and intellectually from the Pope (Kyriakos 1887a, 142). And modern science was the result:

Modern science, with all its great discoveries and its gigantic progress, would have been impossible without Protestantism. Protestantism contributed fully to the emancipation of science. During the Middle Ages, there was no science because science is the free research on things through the human reason, but Papism was afraid of free research and condemned it. It was when schools

and universities got liberated from the oversight and tyranny of the Pope and of Western clergy and when science could breathe at last, that its peak appeared. (Kyriakos 1887a, 157–58)

It is precisely, Kyriakos concludes, because the Orthodox Church, despite its many shortcomings, never espoused the Pope and behaved very differently that no religious revolution is needed, and why Protestantism will never gain traction in Orthodoxy, (Kyriakos 1887a, 160–62). Finally, in 1887, Kyriakos gave a lecture specifically on the topic of the relations between science, freedom, and religion. All three are needed, he says, for any of them to function. Freedom needs science to educate people and religion to give them morals. Science needs freedom to pursue its research and religion, because unethical people will produce false science. Religion needs freedom, because tyranny will use religion and then discard it. Religion also needs science, because it helps religion correct its course (Kyriakos 1887c). The circle is complete. The same arguments Kyriakos would present again in 1905 in his speech for the feast of Three Holy Hierarchs, titled *On the Harmony of Science and Religion*. Once more, freedom is what binds religion and science together, and the mutual interdependence of all three. This is the reason that science and religion *are* in harmony and *have always been* in harmony (emphasis mine) (Kyriakos 1905).

The discussions on freedom, science, and religion highlight how Greek theologians could appropriate science within their own discourse, to further goals internal to their discipline. In battling Catholicism, the natural sciences became an ally, and a way to use the powerful rhetorical schemata associated with freedom and liberty within the Greek state. Greek theologians were not idle observers, waiting to react to the natural sciences' progression, but rather harnessed their cultural and intellectual status to promote their own agenda.

THE SPECTER OF MATERIALISM

The relationship between Greek theologians and the natural sciences was not always, or often, cordial. After the 1870s, the appearance through the German lands of naturalistic materialism, carrying on its wings Darwinism and evolution, elicited a number of outraged, even hostile responses. The central dispute of the era happened between the editors of *Prometheus*, a journal dedicated to the natural sciences that operated under the aegis of several prominent scientists, and *Anaplassis*, the journal of the homonymous para-ecclesiastical organization. From the 1880s and up to the 1890s, various disputes centering on Haeckel, Darwin, evolution, and materialism took place between contributors to the two journals, as well as other newspapers and religious journals such as *Pantainos* (Nicolaidis 2011, 184–87). Greek theologians took part in the debate, but tangentially. However, it is at that period, from the late 1870s onward, that articles written

by theologians that are specifically critical of the natural sciences begin to appear. Once again, the narrative that emerges is not one of simple opposition. Greek theologians have their own goals to pursue.

The first shot is fired by Damalas in his 1872 speech. While arguing for the necessity of robust theological education, he notes an approaching false philosophy, which teaches people that “There is no spiritual world, whatever looks like spirit and mind is an illusion. You cannot learn your origin; your ancestor could be a monkey, or a mouse or some such animal; it does not pay to look into these things. The only real and certain thing is matter and the body and its pleasures. . . . This false wisdom has appeared in all eras, as a moral leprosy” (Damalas 1872, 14–15).

Here, echoes of Darwinism are associated with materialism and immorality, but the connection is not explicitly stated. Materialism is the real enemy. This is the motif that will appear again and again in the writings of Greek theologians. It is interesting to remember here that Damalas was a proponent of the freedom of science, even if a reluctant one by the standards of his peers. In his 1878 speech, Damalas states specifically that truth by revelation cannot contradict human reason. He then goes on to attack pantheism, theism, and atheism, which he considers synonymous with materialism. The association here is more explicit and Damalas spends several pages attacking materialism. “This is why that theory, which all idiots mention without knowing what it is, the evolution and transformation of species of Darwin and his peers, which is false and silly, because these people want to use the similarity of the body to prove the sameness of the origin of man and animal” (Damalas 1878, 25).

The mention of Darwin is not unexpected, nor is his association with materialism and atheism. The focus of the speech however is atheism alongside pantheism and theism. Indeed, atheism will mostly be attacked alongside the supposedly much more harmless pantheism. Why make the association, even if it is theologically valid?

The answer is again to be found in the cultural and intellectual currents of the era, and where poetical competitions were main cultural events. Greece was a country where poets and authors were prominent intellectuals. In fact, even scientists had an active interest in literature and poetry (Tampakis 2015). From the 1880s onward, a new generation of literati was rediscovering romanticism and from there moved to *fin-de-siècle* spiritualism. Pantheism was the underlying philosophy of the movement (Mathaiopoulos 2005; Lamm 2010; Politis 2017). Greek theologians were taking down several birds with one stone. An interesting approach to the problem was that of Panagiotis Robotis in his provostial address on the moral statistics of Alexander von Oettingen. While making the point that statistics led to the recognition of historical and moral laws, he took the time to attack the various “hylozoists and proponents of sensualismus . . . including the pantheists” whom he accuses of denying free will (Robotis 1875, 12).

The scientific materialism of Ludwig Büchner and romantic pantheism are conflated with determinism.

By 1876, attacks on materialism and, by association, on the natural sciences became more explicit and specific. Spiridon Sougras, who would become the first Lecturer in Apologetics, took it upon himself to write a polemic against Darwinism and materialism. Sougras was one of the most reactionary opponents of materialistic science and his book is one of the most aggressive. It set a pattern that many would later follow. Justifying his involvement by saying that the “rushed and superficial results that the proponents of this theory derive and the paeans the ideas of Christianity sing on the genesis of the world, force any scientist, especially a theologian, to get involved with this issue, since they strike at the foundations of our society” (Sougras 1875, 6). Sougras then proceeds to offer 256 pages of anti-Darwinian arguments, such as anthropological evidence, arguments proposed by eminent scientists, and moral and religious considerations, tackling communism and socialism in the bargain. His general conclusion is no less sweeping:

From the above, it has been proven . . . that Darwin’s theory of evolution . . . lacks any scientific merit . . . while from an anthropological, religious, and moral viewpoint, it leads to irreconcilable and atrocious contradictions. The whole texture of the system dissolves like smoke against history, science, and logic. That so many European scientists bend their knee in front of the wise Englishman . . . has probably to be attributed to the materialistic propensity of this century. (Sougras 1875, 254)

Despite the agonistic and curt tone of Sougras, it is worth noting how the natural sciences are treated not only with respect, but as tools to combat Darwinism. Sougras tried to use scientific and anthropological arguments, not only ethical and theological ones. The idea that natural sciences are academic siblings to theology is in force, even when theologians are at their most antagonistic. It bears remembering that Sougras in his 1885 lecture stated that Christianity should embrace true and safe scientific results. In the rest of his lecture, he again tackles materialism and Darwinism and blames its proponents for any conflict between Christianity and science. While equating theology with certainty and science with probability, Sougras saw no problem in coexisting harmoniously, as long as science stayed within its disciplinary confines (Sougras 1885, 36–37).

Kyriakos presents a rhetorically much more nuanced treatment of materialism, while discussing religious indifference. He starts by noting the many advances of the era, but also the weakening of the religious feeling of most people (Kyriakos 1887b, 214–16). He then carefully distinguishes between a small minority who is hostile to Christianity from the more general feeling of religious indifference (Kyriakos 1887b, 217–18). Kyriakos identifies as one of the major sources of religious indifference the fact that

the parables and dogmas of the Bible were seen as being antithetical to the conclusions of the natural sciences. However, only those having taken leave of their senses and reason, such as materialists and pantheists, could believe so, by crediting that such an ordered world could come about by chance (Kyriakos 1887b, 221). Moreover, Christianity has been a force for freedom and morality and only Catholic clergy have been hostile to reason and science. Why should the Orthodox Church be associated with their errors? (Kyriakos 1887b, 222, 226) On the other hand, Orthodox clergy should educate themselves on modern developments, scientific and others, and show that they know what their audiences care about (Kyriakos 1887b, 225). In one speech, Kyriakos manages to weave together all the themes and rhetorical schemata we have so far identified: the familial congeniality between science and religion, the role of freedom, the fight against Catholicism and the condemnation of materialism, atheism, and pantheism using moral and scientific arguments. From 1890 onward to 1910, Greek theologians will discuss the relationship between science and religion using the arguments seen in Kyriakos and Sougras. Theology and science should each stay within their allotted intellectual fields. Pantheism, atheism, and hylozoism are incompatible with Orthodox Christianity. Any conflict between them is the result of false materialistic science claiming the mantle of truth (Papadopoulos 1893; Mpalanos, 1905, 1906; Androutsos 1907, 93, 111–12, 129–30).

CONCLUSION

What was science for the Orthodox Greek theologians of the nineteenth century? How did it feature in their work? This article has been an attempt to take such questions seriously and to describe the science and religion interactions by placing Greek Orthodox theologians in the center of the narrative, rather than treat them as occasional deuteragonists in the scientists' historiography. To achieve that, this article took into consideration all the ways that Greek theologians interacted with the public sphere, with each other, and with the intellectual and cultural field of their era and place: textbooks, journal and newspaper articles, provostial addresses and inaugural lectures, pamphlets and published speeches given at formal and informal occasions. The picture that emerges is far more complicated than one of antagonism, indifference, conflict, or coexistence. Greek theologians saw themselves as scientists and treated theology as a positive, rational science. They developed strategies to delineate their disciplinary borders and safeguard their identity as expert scholars by harnessing their university and academic credentials. For that reason, they had to invoke famous German and other Western theologians, while ensuring that they were seen as true defenders of Orthodox Christianity. The idea of science was an integral part of this achievement. The natural sciences then, ministered by their expert

colleagues in the even smaller natural sciences and mathematics faculty, were theology's academic sibling, and were discussed and treated as such. Depending on their own disciplinary desiderata, the natural sciences were either an ally to be invoked in the fight against Catholic encroachment or a younger brother, to be admonished when it lost its footing and overstepped its boundaries. All those themes were coexisting and threaded into a continuous discourse that ran through the corpus of Orthodox Greek theology. In an historical *topos* where Draper and Andrew Dickson White were not only unknown, but would be considered irrelevant, Orthodox theologians created a complex narrative to navigate the intellectual and cultural currents of their era.

NOTES

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1. All translations from Greek sources have been made by the author. All dates are in the Julian calendar then in effect in Greece.

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