Modernizing through Medicine: 
Knowledge Transfer, State-Building, and the Role of Athens University during the 19th Century

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Introduction

The 19th century was marked, perhaps more than any other period of time, by the rapid development of modern scientific knowledge in almost all disciplines in Europe. Science and technology even became part of the foreign policy agenda of the leading Western countries, which used them to categorize themselves as superior and civilized in contrast to those who could not perform so well or innovatively in science. Paramount scientific and technological achievements became an important ingredient in national intellectual self-perception and also in influence abroad. This influence could only be exerted by countries which fulfilled the criteria of “civilization” and undoubtedly these countries were located in Western Europe. At the same time, this very period was also marked by the formation of nation-states in Europe. All Balkan states – among them Greece – were formed after the collapse of the Ottoman Empire and they developed a sense of belonging to the European body politic. With these states entering into a new era, they were eager to become modern. They understood modernity as synonymous with being European, Western, in other words “civilized”. This primarily meant being industrialised, economically independent, and politically strong. The quest for modernity by the Balkan states also meant breaking the links with their “barbarian”, as they called it, Ottoman past. The central European countries, primarily Germany and France, all had the characteristics of being civilized and, therefore, they became a model for the peripheral states, which were eager to develop close relations with them.

However, for the rest of Europe the Balkans continued to be regarded as a backward, primitive, uncultured, and uncivilised agrarian land, in some views even as a lawless, violent, and savage territory that linked the Danube Monarchy with the Ottoman Empire (Todorova 1997: 63). The region was also labeled as “The Orient”, clearly signaling that it did not belong to Western civilisation. Despite the acknowledgement that this ‘uncivilized’ region was seen as “Europe’s Folk Museum” (Volksmuseum) and therefore worthy of being preserved, this label carried no positive connotation (Thierfelder 1940: 7; Todorova 1997: 63). Moreover, it offered the most fertile soil for exerting influence and control so that ‘civilizing’ – or even, ‘Europeanizing’ – the Balkans became a priority for the European Powers in their foreign policy agenda. The involvement of “civilized” Europe in Balkan affairs was accelerated by the war of independence that the peoples and elites in the region gradually declared on Ottoman Rule. Germany and France, in particular, saw the “peripheral eagerness” to become an acknowledged part of civilized Europe as an opportunity to strengthen their own positions in south-eastern Europe.

Within this framework the newly established Greek state developed close relations from the very start with Germany which gave the new state its first king.
Therefore, Germany had a real advantage over other European countries in their struggle to develop policies and strategies in Greece that would help make it a powerful player in the region and would secure it “a place in the sun”.1 On the other hand, Greek elites had already oriented themselves toward the West and the merits of the Enlightenment. Greek merchants and the Phanariots, who supplied significant funds for the so-called Greek War for Independence as well as an ideological framework (Karas 2004a: 13), were inspired by the ideals of the Enlightenment and the French Revolution, creating the movement of the Modern Greek Enlightenment. These elites were very much involved with science. Even though linguistics, humanities, mathematics, and physics were the disciplines in which they were primarily interested, medicine was the science that the Greek academics in training used to study at European universities. They also translated a number of medical-philosophical books into Greek and even published their own studies and their doctoral theses (Karamperopoulos 2003: 570–576; 1996). This intellectual current, also referred to as the Modern Greek Renaissance (Karas 2004a: 19; 2004b: 119–127), not only ideologically justified the Greek cause of independence, it also created the scholarly fabric upon which the modern Greek state would slowly weave its existence. Greek science also followed this path of Western modernity; moreover, it became the vehicle that led the new state into the modern era.

In this paper I will discuss how knowledge and scientific transfers— in this case medicine— provided the conditions of modernity, i.e. all those elements that contribute to political progress with the participation of the people in decision-making, economic growth, cultural creation, and social stability. This description is by no means a definition of modernity, which is a dynamic and complex phenomenon and is subject to many different interpretations. Nevertheless, this description provides the general framework of a dominant perception of modernization that was shaped in ‘the long 19th century’ Europe. I will not delve into issues regarding the transfer and adoption of particular styles of scientific thought, for example, in pathology or virology, nor into particular styles of scientific practice, like surgery. Rather, I will try to highlight and discuss two of the notions that are closely related to modernity: culture—a notion that is different but not separate from civilization (unterscheiden, nicht trennen, Schröeder 2005: 21), and nationalism with regard to the transferring of medical knowledge. These notions will be examined in relation to the establishment in Greece of medical scientific institutions and the training of professionals, which were both among the main priorities of the modern state.

The different connotations of the notions “culture” (Kultur) and “civilization” (Zivilisation) acquired in the French, English, and German tradition during the 18th and 19th centuries represented the different ways the individual national conscious-

1  This phrase was first offered by the German Ministry of Foreign Affairs, Bernhard von Bülow, in his declaration on German Weltpolitik in the German parliament debate on 6 December 1897, in: Verhandlungen des Reichstags, IX. Legislaturperiode, 5. Session, 1897/98, vol. 1, p. 60 (Mommsen 2007: 194).
nesses of these nations were formed.\textsuperscript{2} “Civilization” did not mean the same thing for the French, the British, and the Germans. For the first two, the term could also refer to political or economic, religious or technical, moral or social facts. For the Germans, though, there was a distinctive line between the political, economic, and social facts on the one side, and the intellectual, artistic, and religious occurrences on the other, the latter being identified as constitutive elements of “culture”. For the Germans “civilization” represented secondary values that referred to the surface of human existence and the external side of the human being, i.e. human achievements and behavior. In contrast to this perception, “culture” included all those intellectual, artistic, and religious merits to which Germans associated themselves (Elias 2000: 5–10).

This distinction, however, cannot be detected among the Greek elites or the Phanariots, who played a crucial role in the establishment of the modern Greek state. For them “πολιτισμός” encompassed qualities of both “culture” and “civilization” and it rather resembled the French or the British notion of culture. It became the primary constitutive element of modern Greek national identity, which encompassed Hellenic antiquity and Orthodoxy as well as Western modernity. Nationalism, on the other hand, which emerged in the late eighteenth and early nineteenth centuries, i.e. during the Modern Greek Enlightenment, had all the characteristics of romanticism, which defined at least the first years of the new state (Koliopoulos/Veremis 2003: 3–4; Kitromilides 1990: 23–25).

I. The making of the Greek state and its medical community

Greece was established as a modern state in 1832 in the course of the collapse of the Ottoman Empire, becoming at that point a kingdom. Its first monarch was the second son of the philhellenic King Ludwig I of Bavaria, Otto v. Wittelsbach, having been chosen by the Great Powers of that time, namely England, France and Russia. The new state, whose initial territory was less than a half of its present-day borders and which had been left in ruins after the long and brutal fight for independence, had to be built up almost from scratch. Consequently, the new kingdom needed a number of governing rules and institutions in order to start functioning as a state. These rules were eventually implemented by the Bavarians, marking the period from 1832–1863. The quick ratification of those rules was very important for the functioning of the state and also for its control. Greece was offering to the Bavarians “a virgin soil to span [a] web of rules and regulations all over her” – as a German official stated it – so that “we could later sow the seeds of control” (Ruisinger 1997: 112, footnote 156).

German culture represented for the Greek elites, at an institutional as well as scientific level, Western modernity and, therefore, it became dominant in the process of establishing their new state. This was also the case for medicine. Even though the country from 1832 until the creation of its first university in Athens in 1837 did not have an established community of professional physicians, there were a significant

\textsuperscript{2} The process of this development was studied by the sociologist Norbert Elias in his influential work Über den Prozeß der Zivilisation: Soziogenetische und psychogenetische Untersuchungen first published in 1939. Here I use the English edition.
number of traditional healers. There were also a number of recognized Greek medical practitioners in the Diaspora who played a decisive role in the country's transition to modernity. During the 19th century, Paris, Vienna, Berlin, Bucharest, Budapest, and Munich were some of the European cities where Greeks went to study medicine and were initiated not only into science and its achievements but also into a new way of thinking, into the European Enlightenment. Many Greeks made a career in European countries and others returned to their homeland or headed to the heart of the Ottoman Empire, Istanbul, where there was a large Greek community. They developed close relation with the Orthodox Patriarchate, contributed to the creation and organization of the administrative organs of the Greek Diaspora in the Ottoman Empire, and eventually became carriers of a national ideology (Troboukis 2000: 73–82).

When Greece was declared an independent state, those scientists used their established prestige abroad to gain power and a strong voice in establishing a modern European state. One of the declared priorities of the newly founded kingdom was to tackle diseases and chronic illnesses as well as malnutrition, and to improve the health of the decimated and exhausted nation.

At that time, the Greek population relied on healers and non-formally trained medical practitioners to cure their maladies or treat their battle wounds. The emerging Greek medical community primarily consisted of academic professionals from the Greek Diaspora and physicians and medical experts from other countries, i.e. Britain, France, Italy, and of course, Germany. There were doctors who had practiced their profession since the rebellion of the Greeks against the Ottomans, medical practitioners who had permission from the government, philhellenic doctors who did not leave Greece after the end of the war for independence, Greeks who were living abroad, mainly in Europe but also in what were still Ottoman territories and who slowly started returning to their homeland, and of course the Bavarian advisors and private doctors of the young king Otto. All of them were the protagonists who shaped the medical science in Greece, dictated the criteria of medical professionalization, set the directives for science policy in medicine, and ultimately established the Medical Faculty at University of Athens. This inhomogeneous group of medical practitioners was organized according to the Bavarian model and was going to play a central role in the formation of the new health system of Greece. Accordingly, during Otto’s reign the first systematic efforts for the organization of the country’s public health and hygiene were put forward. In 1833 the first hygienic service of Greece, the “Department of Hygiene”, was founded and it was one of the six departments of the Ministry of the Interior. At the same time a “Medical Committee” (Ιατροσυνδέσμου) was created. This was the highest state authority for all hygienic and health issues and was in charge of standardization, professionalization, and control of the future academic medicine of Greece. It was officially founded in 1834 and headed by the Bavarian personal physician of Otto’s court, Karl-August Wibmer (1803–1885), and it was also subject to the Ministry of the Interior. Its role was more so a consultative

3 The located archival material on the functioning and the undertaking of the ‘Medical Committee’ refers to the period 1900–1949. Unfortunately, as of the writing of this paper, material on the previous years was nowhere to be found.
one and it had significant influence at least until 1923, when it was renamed as the High Council of Hygiene. The Medical Committee consisted of four doctors, two pharmacists, and 1 to 2 veterinary doctors. Among its tasks were the creation of exams and assessing the qualifications of doctors, surgeons, dentists, veterinary doctors, pharmacists, and midwives. The Committee was also responsible for giving its expertise in forensic cases and consulting the government in serious medical matters. This institution encompassed and created the major actors of Greece’s public health system for the years to come. Most of the names appear in key policy- and decision-making positions, almost until the end of the century, professionalizing but also controlling medicine and neighboring disciplines.

For this reason, the Medical Committee was involved in the creation of the first two scientific societies in Greece, the “Natural History Society of Athens” and the “Medical Society of Athens”, both founded in 1835. The first one included not only physicians but also scientists from other disciplines, i.e. botanists, zoologists, and pharmacologists. It should be noted that before the arrival of King Otto and his bevy of specialists and scientists, there were only ten to twelve doctors practicing medicine in the territory that later became the Greek state, and they purchased drugs from only four pharmacists abroad: two Greeks, one Italian, and one German (Turczynski 2003: 222). The Natural History Society aimed to expand the basic knowledge in the natural sciences, rare animals and plants, thereby creating a kind of agricultural ministry (Turczynski 2003: 223). The initiative for this Society came from the Bavarian doctor and botanist Nikolaus Karl Fraas (1810–1875) and he was instructed to organize it in line with European standards, better said, German standards. Its founding members were the court’s head pharmacist Xaver-Hans Landerer (1809–1885), the Greek doctors Dimitrios Mavrokordatos and Ioannis Vouros, the military doctor Heinrich Treiber (1796–1882), the doctors Karl-August Wibmer (1803–1885), Joseph von Roesser and Georg Rothlauf, the military doctor and ornithologist, Anton Lindermayer (1806–1868) and the pharmacist Joseph Sartorius (Ruisinger 1997: 79–80). Members of this Society were encouraged to become “members of the Medical Committee, medical officers of prefectures, military doctors, natural scientists, national estate bursars and high ranking forestry civil servants”. Two years later there were 44 ordinary members and the corresponding members were 33 (Ruisinger 1997: 80). These numbers show that the Natural History Society was one of the institutions that served as a pillar in shaping and legitimizing the scientific community in Greece, and medical scientists had a key role in this process.

The organization of physicians and specialists into societies was part of a professionalization process of medical experts and scientists of related disciplines, and this had to be done along a modernizing path, as seen in the West and particularly in Germany. Within this framework another society was founded in the same year, in

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4 Royal Decree: “On the Creation of the Medical Committee”. In: Official Gazette of the Greek Government (FEK) Nr. 24, 12/24 July 1834.
5 Ibid. Since 1862, the responsibility for the doctors’ exams was with the Medical Faculty of the University of Athens.
1835, the “Medical Society of Athens”. The initiative came again from Bavarian doctors and this society included doctors and pharmacists as well as members of the Natural History Society of Athens. The founding members were again Fraas, Landerer, Mavrokorodatos, Wibmer, Roser, Rothlauf, and Sartorius, but also included some new persons, most of them Greeks: Nikolaos Kostis, Ioannis Klados, Ioannis Acheloidis, Friedrich Zehler, Friedrich Dotzauer, the pharmacists Nicolaos Zavitzi- anos and August Mahn. In 1837, the Medical Society counted ordinary and corresponding members from Asia Minor, the Balkans, central Europe, and Italy, and in 1851 it could boast the membership of 17 well-known American doctors (Ruisinger 1997: 83). It was the longest-lived scientific society in modern Greece and most of its members were strongly engaged in the establishment of the Medical Faculty of University of Athens (Memorabilia catalogue 1987: 97). These scientific societies not only shaped the medical profession of the country in accord with German standards, and not only legitimized and set the framework of an institutionalised medical science, they also provided a channel for the communication and exchange of ideas with scientists in similar societies in Europe, creating in this way networks for transferring medical knowledge in Greece. The launching of a considerable number of medical journals by members of the Society contributed to this communication, but also strengthened the professional status of the Greek doctors. Those journals were “The Medical Journal of Greece” (Ιατρική Εφημερίς της Ελλάδος), “Asklepios” (Ασκληπιος), “Health” (Υγεία), and “Medical Bee” (Ιατρική Μέλισσα). The journal “Asklepios” was the official organ of the Society.

Having set, more or less, the initial framework for the institutionalization and legitimation of the existing medical practitioners through these scientific societies, the Greeks had to secure the future of this community. Moreover, they had to tackle the shortage of well-educated and well-trained doctors, which the new state urgently needed. Almost simultaneously with the three institutions discussed before, a royal decree was issued in May 1835 regarding the establishment of a “Theoretical and Practical School for Surgery, Pharmacy and Obstetrics”.


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later, the School closed, giving way to the University of Athens that was founded that same year (1837).

II. “The wisdom between East and West”: The creation of University of Athens

Four years after the establishment of the modern Greek state, the creation of a university may have sounded more than ambitious, if not unrealistic. And indeed it was. Greece lacked not only the proper administration and infrastructure, but also adequate, well-educated scientists who could staff the new university. Moreover, there were not even enough students with adequate secondary education, because an organized and well-structured secondary education system did not yet exist.⁸ In 1830 there were 71 primary schools in the territory that later came to belong to the Greek state, with 6000 pupils, which made up only 8% of the whole population of that age group; there were just 37 secondary schools, which had only 2709 students in total (Maniat 2001: 21; cf. Mpouzakis 1996: 36). This was a very limited pool of future students for the University of Athens seven years later. The graduates of the country’s three preparatory schools in Athens, Nafplion and Syros, who comprised the first group of students, were not sufficient for a university institution to function properly. The shortage was even greater in the medical sector. Suffice it to say that when the first students were called to register on 26 April 1837, only six registered at the Medical Faculty and these persons came from of the country’s border regions. In summer semester, the number increased significantly to thirty-two⁹ and remained almost the same¹⁰ for the next four years (Kouzis 1939: 6, 7). This increase was due to a new regulation issued by the government after a request submitted by the Medical Faculty. This regulation gave permission to pupils who did not have a degree of secondary education (Απολυτήριον) to nevertheless become medical students. The only requirement was to pass exams proving that they were proficient in the Greek language and basic mathematics. If that requirement could be fulfilled, they could attend medical courses for two years.¹¹

The establishment of a university, despite the generous donations from rich patriots of the Greek Diaspora, lacked adequate funds for its full and smooth operation. Nevertheless, the Greek vision of creating a university that would free their spirit

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⁸ Prof. Dr. Miltiades Venizelos (1867): Λόγος εκφωνητικός τη ΙΣΤ’ Οκτωβρίου 1866 ημέρα της επομένης εγκαθάρδυσης των νέων Αρχών του Εθνικού Πανεπιστημίου υπό τον τακτικού καθηγητή της Μαιευτικής και διευθυντού τον Μαυρετίνου Μιλτιάδου Βενιζέλου παραδόντος την Πρωτευτεία το διαδόχο αυτού κυρίου Αλέξανδρου Ρ. Ρεγγαρή, τακτικού καθηγητή της Αρχαιολογίας (Rector Speech 1866: 11).

⁹ Kouzis mentions there were only four (Kouzis 1939: 6).

¹⁰ Prof. Dr. K.G.A. Rallis (1869): Λόγος εκφωνητικός την 9 Νοεμβρίου 1841 υπό τον πρώην Πρωτάνος Κ.Γ.Α. Ράλλη, παραδόντος εις τον διαδόχο του την διευθύνσιν του Οθωνείου Πανεπιστημείου (Rector Speech 1868–69: 2).

¹¹ The number of students in 1839 was 38.

from the backwardness of “Ottoman slavery”, thereby strengthening their national identity, was in full swing. Therefore, the new university was to be structured on European models, but it should also reflect the country’s ancient heritage by reviving Plato’s Academy, as one of its first rectors stated. The creation of a higher education institution brought to the fore nationalist aspirations that were legitimized on the grounds of four hundred years of Ottoman rule. At the same time, they were eager to become part of enlightened Europe and the best vehicle to succeed in both was education. Tradition and renewal co-existed “as a dialectic entity” (Karas 2004b: 125–126).

The University of Athens, originally named the Ottonian University of Athens (1837–1862), was founded on the lines of German universities and more precisely the Ludwig-Maximilians-University in Munich. Christian August Brandis, professor of philosophy at University of Bonn, was appointed by Otto’s court as an advisor to the young king with regard to organizing the country’s higher education. As an expert on Ancient Hellenic philosophy (and Aristotle in particular), Brandis gave to the new university a classical and scholastic orientation, which was also in accord with the Bavarian romanticism that sought to revive the ancient Hellenic civilization and the ancient ideal (Maniati 2001: 22). One of the ambitions in establishing a university in the young state was that of carrying the torch of knowledge and civilization, spreading them to the neighboring region. This ambition was cultivated during the Modern Greek Enlightenment, when the scholars of that period were initiated into European scientific and philosophical thought and reintroduced to the ancient Hellenic spirit. They claimed that European thought was not alien to the ancient Hellenic spirit and that the French Enlightenment had been nurtured – as they declared – from that ancient tradition. An awareness of this newly discovered shared connection needed to be widely disseminated, thereby further strengthening not only the Greek national identity but also legitimizing the state in its orientation toward the West. This belief was mirrored in the speeches of all four Deans of the Faculties during the inauguration of the Ottonian University of Athens. Its first rector, Prof. Dr. Miltiades Venizelos (1885):

13  Prof. Dr. Miltiades Venizelos (1885): Πρυτανεία (Δευτέρα) Μιλτιάδου Βενιζέλου, τακτικού καθηγητού της Μαιευτικής και διευθυντού του Μαιευτηρίου. Τεσσαρακοστή Πρυτανεία 1883–1884 (Rector Speech 1883–84: 14).
14  The emergence of nationalist aspirations was justified by the Ottoman yoke is a topic that is well researched and is directly linked with the current of the so-called Greek Enlightenment. See the selected bibliography: Dragoumis (1927); Paparrigopoulos (1962); Moskof (1972); Seidl (1981); Iliou (1989); Kitromilides (1994); Politis (2003).
15  In 1862, when Otto was forced to leave Greece, the institution was named the “National University” and in 1932 the “National and Kapodistrian University of Athens”.
16  Kimourtzis challenges this argument but not very convincingly (Kimourtzis, 2003: 129–150). According to Ruisinger the model was the University of Göttingen, founded in 1737, which throughout the 18th century was in the top rank of German universities and by 1812, it had become an internationally acknowledged modern university. However, this claim does not seem to be supported by the records (Ruisinger 1997: 111).
17  I name just a few representative works on this discourse: Rosen (1998); Wolff (2001); Israel (2005); Beaton and Ricks (2009). See also Apostolopoulos and Fragiskos (1998) which selects all works published between 1945–1995 on Greek Enlightenment.
Konstantinos Schinas, argued that given the University’s position between East and West, the institution “was destined to receive the seeds of wisdom and having grown them well for itself, it should transfer them to the neighboring East, fresh and fruitful”. Greece could regain the lost prestige through the university, offering to the region what no other Balkan neighbour could give, namely higher education. The image that the university was the prism though which the lights of the West would pass and then would be diffused to the East was not exclusively Greek. Georg Ludwig Maurer, the person in charge of the educational policy in Greece, argued in 1835 for creating a university in Greece that “would relight the long faded torch in its ancient cradle” (Lappas 2004: 44; Maniat 2001: 27).

Arguing along the same line and with the same words, the first doctor who became rector of the Ottonian University, Nikolaos Kostis, in his ceremonial speech at the beginning of his rectorship in 1841, said that the university would disseminate scientific light throughout Greece and beyond, becoming a cultural metropolis that would illuminate “the darkness that was covering the neighboring countries”. He proposed further that the university would be the bond not only with the Greek Diaspora but also with the whole scientific world. The Greek Diaspora played a crucial role in the realization of this project by financing the whole effort from the very beginning and for the next many years. Kostis stressed particularly the significance of education for the nation saying that with education [παιδεία] the Greeks would bring the friends of their country back, the friends of civilization and science, who were all over the world. In other words, this meant that the university would be the main ticket for Greece’s accession to the community of the civilized nations and this honor should be translated by the Greeks into a proper operating of the institution. Having a higher educational institution, namely a university”, the young Greek academia believed that it was joining the civilized nations of the European family, fulfilling at the same time its mission, that is to say, to civilize the Orient (Koliopoulos/Veremis 2003: 228).

One of the first four faculties at the University was the Faculty of Medicine. The medical professionals in Greece played a decisive role on the creation of the country’s first university. The Greek professors could declare boastingly that theirs was}

18 Prof. Dr. Konstantinos Schinas (1837): «Λογιθδιον εκφωνηθεν εις την ημερα της εγκαθιστησεως του Πανεπιστημου οθωνου», in: Λογις εκφωνητεσ απο του Πρυτάνεως και των τεσσαρων Σχολαρχων, Αθήνα (Rector Speech 1837: 3-4).

19 Both quote Maurer’s work translated in Greek (1976: 421, 531).

20 Prof. Dr. Nikolaos Kostis (1842): Λογις εκφωνητεσ απο του Πρυτανεως Κ. Ν. Κωστη διαδεχομενου την δευτεραν του Οθωνος Πανεπιστημου (Rector Speech 1842: 3).

21 Even today there are funds coming from the Greek Diaspora, either in the form of grants or in the form of financing research and publishing at the University of Athens and other Greek universities.

22 Prof. Dr. Nikolaos Kostis (1842): Λογις εκφωνητεσ απο του Πρυτανεως Κ. Ν. Κωστη διαδεχομενου την δευτεραν του Οθωνος Πανεπιστημου (Rector Speech 1842: 4).

23 The establishment of an Academy of Science was also planned and it was eventually created in 1926.

24 The other three were Theology, Law, and Philosophy. Royal Decree: "On the Establishment of Otto University" (FEK) Nr. 16, 24 April 1837.
the first university not only in the Balkans, (a region that had shared the same fortune with the Greeks under Ottoman rule), but also that it was the first university in the Orient, and the only one for many years. This seemed to bring into realization the vision of the Greek elites to become “once again” the cradle of modern civilization at least in the region, which the Greeks characterized as “barbarian”. As current historians suggest retrospectively, it was because Greeks “have purified themselves” from barbaric rule “in a bath of blood and tears” that they believed they had secured a place among the civilized nations of Europe and therefore they felt “destined to civilize the East” (KOLIOPOULOS/VEREMIS 2003: 228). What contributed to that conviction was the fact that the majority of the university’s professors were either Greeks, educated in Germany and other European countries, or were German scientists (KOZIS 1939: 8–68). This was particularly evident at the medicine faculty where five of the eight professors were educated in Germany (RUISINGER 1997: 115). The first scientists who staffed the medical faculty were Dimitrios Mavrokordatos, who was appointed to teach anatomy and physiology, Anastasios Levkias to teach history of medicine and later general pathology and therapy, Ioannis Vouros to teach specific pathology, medical and clinical therapy, Nikolaos Kostis obstetrics and medical material, and Erik Treiber surgery. The staff was completed by Ioannis Olympios, Alexandros Pallis, Nikolaos Livadieus, I. Ipitis, Xaver Landerer, Karl Nicolas Fraas, and Ioannis Georgiadis. Anastasios Levkias was appointed Dean of the Faculty (KOZIS 1939: 5–6).

By 1862, fourteen out of twenty-three professors at the University of Athens had studied at German universities. Three were graduates of the Greek institution, but went to Germany and France for advanced studies. After 1862 the number of the German-educated professors was reduced since the preference was to appoint graduates from the University of Athens (RUISINGER 1997: 115). It was recognized that very few Greeks could afford to study abroad and this number was never sufficient to staff the faculty with well-educated and trained scientists, let alone to offer their services to the population. This was a serious reason to start thinking of establishing a polyclinic according to the model of the German city Halle (RUISINGER 1997: 123). This initiative was not only intended to train students, but also to offer its services to the population. The Greek doctors, however, opposed the plan as they thought it was more urgent to improve the existing Public Hospital (Αστυπληκτή) in 1856. This Polyclinic was also equipped with its own pharmacy and it was designed to be a fully functioning clinic where the students could be trained and ordinary people could get free treatment, even private visits to their

25 Prof. Dr. Miltiades Venizelos (1885): Πρωτανεία (Δευτέρα) Μιλτιάδου Βενιζέλου, τακτικού καθηγητή της Μαιευτικής και διευθυντού του Μαιευτηρίου. Τον Ιούνιο της Πρωτανεία 1883-1884. Λόγος κατά την παραλαβή της Πρωτανείας (Rector Speech 1883–1884: 9, 30).

homes in the event that they were not able to go to the clinic. This undertaking was revolutionary at that time and it put a distinctive mark not only on the health treatment for the Greek population, but also on the establishment of social services. The Polyclinic was vital for the student’s practical experience and it was affiliated with the Faculty of Medicine. However, it seems that this was not enough for the Greek scientists, who wanted the university to have its own hospital, a demand that remained unfulfilled until the beginning of 1930s. Professor Konstantinos Melissinos in his ceremonial speech given at the beginning of his rectorship in 1930, argued that “for the sake of the Medical Faculty and therefore of medical science in our country, for the sake of the philanthropy itself, which could only be offered at a university hospital, and finally for the sake of providing experienced doctors to our society, who could not afford being trained at foreign universities, the state should build, next to the existing laboratories, a university hospital complex”.

An additional argument was that Greece would be uncompetitive with Western universities if it continued to lack medical laboratories, which should be operated under the auspices of a university hospital. Another argument was that working outside of such medical institution, the professors of the faculty were gradually losing their prestige, being forced to follow orders from the directors of the existing hospitals, particularly the Municipal Hospital (Δημοτικό Νοσοκομείο), who did not necessarily belong to the faculty’s academic personnel. The Faculty of Medicine at the University of Athens was also responsible for the education and training of pharmacists until 1838, at which point a chair of pharmacology was created (Ruisinger 1997: 125). Five years later, a “Pharmacy School” was founded, which remained, however, under the control of the medical faculty, since the teaching was in the hands of its professors. In 1856 the school acquired its own chair and began operating independently. Theodoros Afentoulis, a graduate and doctoral student of the University of Athens, as well as at the University in Munich, was the first to occupy the chair. From 1837 until the removal of Otto from his throne in 1862, the

27 Ibid. See also: Prof. Dr. Miltiades Venizelos (1885): Πρωτοανέα (Δευτέρα) Μελισσινός, τακτικού καθηγητού της Μαθηματικής και διευθυντού του Μαθηματικού. Νεωτερική Περίπτωση Πρωτανέας 1885–1884. Λόγος κατά την παραλαβή της Πρωτανέας (Rector Speech 1883–1884: 38).
28 Prof. Dr. Konstantinos Melissinos (1931): Λόγος περί της από Επιστημονικής και διδακτικής άποψεως κατασκευής του Πανεπιστημίου της σήμερον και των αναγκών μέσων δι’ όν το καταστάσεως της επιστημονικής και διδακτικής κατασκευής των Πανεπιστημίων την 7 Δεκεμβρίου εν τη εκδοχή του Πανεπιστημίου την εποχή της αναγκής κατασκευής της Επιστημονικής κατασκευής Πρωτανέας κατά το Πανεπιστημιακού Ετος 1920–1931 (Rector Speech 1930–1931: 10).
29 Ibid., p. 11.
30 The corresponding Royal Decree is not published. The exact date of its creation on 4/16 May 1843 is mentioned in the Royal Decree: “On the Regulation of the Pharmacy School Students” (FEK) Nr. 74, 14 November 1856. See also: Ruisinger 1997: 126; Maniati 2001: 183.
The number of graduates from the Faculty of Medicine amounted to 352 students (Memorabilia 1987: 97). The first student who graduated with excellence and was awarded the first doctorate in 1843 was Anastasios Goudas.

It seems that the Faculty of Medicine monopolized everything that was related to the education and practice of the medical profession and neighboring disciplines, i.e. doctors, pharmacists, midwives. Moreover, it was always more or less the same persons who were involved in institutions making policy and controlling the medical profession and this was even more evident during the first sixty years after the establishment of the Greek State. Nevertheless, this centralization seems to have been unavoidable. The main reason was that Greece had to overcome two major barriers: space and time, meaning that its limited territory and the urgency of dealing with all kind of problems required that big and quick steps be made, for which only a small number of people was qualified (Turczynski 2003: 224). In other words, this elite had the power to help shape the modern statecraft. In this effort medical scientists had a decisive role, using that power primarily to establish their professional group and later to exert direct and indirect influence upon the state and more importantly on the society. In Foucault’s terms, they achieved a straddling of the gap between “government” and “government of the self” or personal conduct (Foucault 1977: 205–217; Ibid.: 2009: chapter 13). Bavarian, or bettered said, German, medical science influenced Greece greatly and dominated all educational programs, scientific activities and overall the functioning of the Faculty of Medicine during the whole 19th century. The majority of the faculty professors not only had German education and training but also followed the German curriculum (Turczynski 2003: 230). The legacy of this policy survived almost unaffected until the beginning of the 20th century, when Eleftherios Venizelos became Prime Minister of Greece in 1910. He was inclined toward French and English culture, and Greece became more attracted to the French and English policies and practices, something with which many Greek medical scientists were already familiar.

III. Modern science between nationalism and civilization

At this point, I would like to re-address some questions that were only suggested in my account. What did it really mean at that time to become a modern state? What kind of modernity were Greeks seeking in the 19th century? How did the Greek nationalism that emerged with the creation of the national state in 1832 affect the adoption of the German model? My intention is merely to provoke some critical thinking along the lines I suggested at the beginning of my paper (i.e., culture and nationalism), than to provide more complete answers.

As I mentioned before, the main argument of the Greek scientists was that they wanted to be recognized as part of a civilized state and, therefore, part of modern Europe. In other words, they wanted to make a break with the past, i.e., the relatively
recent past under the Ottoman rule. Having nothing left after the long and bitter fight for independence, the Greeks turned to their past, yet with a nod to modernity. In many cases they perceived modernity as a mixture of tradition and Europeanization. And this, they believed, was also something which their new king and the Germans brought with them. Education was one of the major pillars of Greece’s modernizing program and medical science was the first discipline that was given priority. The main reason was that it was immediately associated with the welfare of the society and, hence, with the country’s desperately needed labour forces. The priority of establishing the medical faculty was also linked with medicine’s power to impose norms on society. As Foucault puts it:

“[…] Medical power is at the heart of the society of normalization. Its effects can be seen everywhere: in the family, in schools, in factories, in courts of law, on the subject of sexuality, education, work, crime. Medicine has taken on a general social function: it infiltrates law, it plugs into it, it makes it work. A sort of juridico-medical complex is presently constituted, which is the major form of power. […] Medicine can very well work as a mechanism of social control, but it also has other ways of functioning, of technical and scientific character” (Foucault 1996: 197).

One of the founders of the medical faculty and one of the first Rectors of the university, Ioannis Olympios, supported an organized and systematic education as part of the rebirth of the Greek nation, echoing the rhetoric of the Modern Greek Enlightenment. Olympios, who was educated in Heidelberg and Berlin, understood civilization solely with relation to Greece’s ancient past and less with the West. Olympios was not alone in perceiving civilization in that way. This perception was dominant in the consciousness of the first and second generation of medical professors, as one can see studying the Rector speeches of nearly all of the twenty Rectors of the Faculty of Medicine from 1841 until 1920. The professor of obstetrics and pharmacology and Rector in 1853, Nikolaos Kostis, underlined that “when the Greek man was liberated from the barbarian rule, he realised that the Greek State in its narrow borders […] was impossible to disseminate the positive energy of the Greek race otherwise than with education and the lights of science”.

Nationalism was now coming into play and we can watch how it was entangled with modernity. Greek nationalism was constantly nourished relying on both the tradition from antiquity, but also from Orthodoxy (Kitromilides 1990: 24). Nationalism was a “significant power as an organizing and mobilizing force” (Schwartz 1993: 224). This force was vital to the establishment of medical science in Greece, moreover, to give medicine the credit to play a central role in the institutionalization of knowledge, namely the foundation of Greece’s first university. The notion itself was used with positive connotations by all scientists who had key positions in the

33 Prof. Dr. Ioannis Olympios (1855): Προσλαλία του καθηγητού χειρουργικής Ιωάννου Ολυμπίου, αναδεχομένου την Πρυτανείαν (Rector Speech 1855: 21–32).
34 Prof. Dr. Nikolaos Kostis (1853): Λόγος του καθηγητού Νικολάου Κωστή. Εκφωνηθείς μια την 20 Σεπτεμβρίου 1853, καθ’ ην ανέλαβε την Πρυτανείαν (Rector Speech 1853: 39).
shaping not only of medical policy but – to some extent – of social policy as well, recognizing nationalism as an essential part of Greek identity. Professor of Forensics (Ιατρονομική) and Rector in 1860, Alexios Pallis, emphasized that there was nothing more appropriate to do on the occasion of celebrating the appointment of a new Rector than to remember the wisdom of ancient Greeks. “We, first of all”, he argued further, “ought to trace it [the wisdom] in ancient writings and to demonstrate its greatness and glory, because only with its help are we able to re-inflame its birthplace and nurture the noble feeling of nationalism, the noblest of all, because the reflection of its glory (αλής) has saved us”.

Pallis went even further, attributing the newest scientific findings, even in psychiatry, to ancient Greeks. Perhaps the strongest demonstration of nationalism was given by professor of Physiology and Rector in 1870, Konstantinos Vousakis, when he defended the pureness of the Greek race (φυλή) in his ceremonial speech. Vousakis’ reaction was triggered by the published theories of the prominent Austrian Orientalist Jacob Philipp Fallmerayer, who had challenged the Hellenic origins of the current Greeks. In his book “Geschichte der Halbinsel Morea während des Mittelalters” published in 1830, Fallmerayer argued that modern Greeks lost their purity during the latest centuries as they were mixed with other races, like the Slavs. In his fiery speech, Vousakis drew arguments from history, anthropology, and physiology to defend the continuity of the Greek race and its superiority, challenging the views of the Austrian scientist. Fallmerayer’s views caused fierce reaction from various scholars of the newly established Greek state and triggered a search for continuity within Greek historiography, in an attempt to prove the existence of links between modern Greeks and the ancient Greek civilization. Vousakis contributed to this effort adding a medical perspective to the issue.

The Greek doctors at the academia voiced a strong ideological line which held that the university should also contribute to a political yet primarily a national goal. The transfer of knowledge was changing its origins even before it was well established. Turning from a recipient of knowledge from the West, particularly Germany, Greece became the transmitter of Western light mixed with ancient spirit. This ideology served as a theoretical basis for what a few years later would evolve into the so-called “Great Idea” (Μεγάλη Ιδέα). This self-initiated role was not seen positively by the Europeans, who on the one hand saw their role in the East as being “stolen”, on the other hand felt they were losing control over Greece’s Europeanization, as

35 Prof. Dr. Alexios Pallis (1860): Λόγος εκφωνηθείς υπό τον καθηγητού Α. Πάλλη, αναδεχομένου την Πρυτανείαν (Rector Speech 1860: 28).
36 Prof. Dr. Konstantinos Vousakis (1870): Λόγος του νέου πρυτάνεως χιψίου Κωνσταντινού Βουσάκη εκφωνηθείς κατά την τελετή της εγκαθίδρυσεις των νέων ακαδημαϊκών αρχών (Rector Speech 1870: 54–59).
37 It should be noted that neither Pallis nor Vousakis had studied in Germany; Pallis was educated in Italy and Vousakis in Athens and Paris.
38 See also: Prof. Dr. Miltiades Venizelos (1867): Λόγος εκφωνηθείς τη ΙΣΤ’ Οκτωβρίου 1866 ήμερα της επισήμου εγκαθίδρυσες των νέων Αρχών του Εθνικού Πανεπιστημίου υπό τον παπίσεως καθηγητού της Μακαιρικής και διευθυντού της Μακαιρικής Μελέτων Βενιζέλου παραδοντός την Πρυτανείαν το διαδόχο αυτού χιψίου Αλεξάνδρου Ρ. Βεγκατζή τακτικού καθηγητή της Αρχαιολογίας (Rector Speech 1865–1866: 31, 38).
Greece was creating its own Europe (Koliopoulos/Veremis 2003: 263–264). Therefore, the university (and with it the powerful medical community) were reflecting the civilized West, and the expertise they had acquired in the West justified the assertion that their nation indeed belonged to the West. On the other hand, the university had another mission, i.e., to unify all Greeks living abroad and strengthen the bonds between them and the Greek state. This romantic – idealistic trend that revealed the treasures of tradition went hand in hand with another trend that also dominated the 19th century Europe: positivism and rationalism which both derived from the achievements of the natural sciences (Maniati 2001: 53). Nevertheless, Greece in 1837 was still a very poor country, with a very limited productive economy (if it was that at all).

Therefore, the ideological and scientific organization of the university was in line with a romanticism that glorified the past. About thirty years later, this picture started to change and medical scientists were the first not only to contribute to, but also to avail themselves of this revision. The rhetoric had changed, even from those who argued for theoretical education based on classical letters. Kostis and Venizelos, who both served as Rectors for a second time in 1853 and 1883 respectively, used a language with more “positivist” elements. Repeating the argument for the enlightening role of the university, Kostis underlined that among the carriers and transmitters of Greek civilization were the doctors who graduated from the University of Athens. Civilization was intertwined with nationalism and by arguing in favour of its merits and benefits for mankind, he brought to the fore the great significance of medical science. For Kostis, the human figure (μορφή) in a civilized society was shaped to perfection. The smooth facial characteristics reflected the kindness and the noble feelings of the person. Morphologically a civilized human being differed from primitive persons who had savage feelings which disfigured the facial features. The Greek race belonged, without any doubt for Kostis, to the first category and a proof for that was the exquisite beauty of the Greek statues. He implied that what differentiated Greece from “its barbarian former rulers” was civilization and he indirectly ranked the Turks with criminals. It should be noted though that in 1853, the tensions between Greece and the Ottoman Empire were running high due to the Crimean War. Kostis argued further, though, that good, plentiful, and regular nutrition, namely eating meat, as well as exercise contributed to physical vigor, which besides the noble facial features created a civilized morphology. With this argument, Kostis tried this time to urge Greeks to eat more meat if they wanted to belong to the civilized nations like England and other European countries, whose peasants were consuming meat every day. In Greece the people, both in countryside as well as in the cities, still

39 Prof. Dr. Nikolaos Kostis (1842): Λόγος εκφωνηθείς νπό του Πρυτάνεως Κ. Ν. Κοστή διαδεχομένων την διεύθυνσιν του Οθωνείου Πανεπιστημίου (Rector Speech 1842: 3);
Prof. Dr. Nikolaos Kostis (1853): Λόγος του καθηγητού Νικολάου Κοστή. Εκφωνηθείς κατά την 20 Σεπτεμβρίου 1853, καθ' ην ανέλαβε την Πρυτανεία (Rector Speech 1853: 48–50).

40 Prof. Dr. Nikolaos Kostis (1853): Λόγος του καθηγητού Νικολάου Κοστή. Εκφωνηθείς κατά την 20 Σεπτεμβρίου 1853, καθ' ην ανέλαβε την Πρυτανεία (Rector Speech 1853: 47–48).
lacked the means to consume meat more often than once a week. Last but not least, Kostis particularly underlined that a civilized society was a healthy society and the advancement in medical science, especially for the sake of the poor through philanthropic institutions, was an unquestionable element of civilization.\footnote{He was president of the “Committee for the Protection of Destitute People” created in 1854 and a member of the Board of Directors of the Chatzikonsta orphanage founded in Athens in 1856 (Korasidou 1995: 60, 135).} Infectious and epidemic diseases like syphilis, plague, icterus, and others had been tackled in civilized nations with the help of medicine. Therefore, these diseases were now present only in barbarian or semi-civilized nations. What shaped a human being, according to Kostis, was civilization and good health.\footnote{Prof. Dr. Nikolaos Kostis (1853): Λόγος του καθηγητού Νικολάου Κοστή. Εκφωνηθήκε κατά την 20 Σεπτεμβρίου 1853, κατ’ ην ανέλαβε την Πρυτανεία (Rector Speech 1853: 48–50).}

In line with the positivist thinking in Europe, Miltiadis Venizelos as Rector of the university, argued that knowledge should be used more practically, as was done in many French universities, which – it should be noted – were not the most attractive model for the Greeks. It is true that “the international university models were interacting with each other” and this interaction was well known to the Greeks who were the protagonists in the process of establishing a university in the new state (Kimourtzis 2003: 129). Nevertheless, the German influence proved greater in Greece for a number of reasons which go beyond the presence of the Bavarian Regency. The English university system, due to its elitist character, did not correspond to the structure of the Greek society and, consequently, it would be an alien attempt. In addition, the Greek university was planned to serve national aspirations, which was not the case in Britain. The French university model, on the other hand, as it was transformed after the French Revolution, seemed attractive to some extent. The new French state set new priorities, focusing on new vocations with a practical character, and organized the training at lower as well as higher levels. At the same time it continued to educate professionals to practice their skills not only in the state’s mechanism but also independently. Despite its efforts to correspond to the needs of the time, the French state did not really replace the old aristocratic university. It tried to adapt it to the new premises making it a rather complex mechanism, difficult to be imitated by the Greeks. It is noteworthy that France itself recognized that it did not follow the German university avant-garde, which became very influential and dominant in Europe as well as in North America during the end of 19th century (Kimourtzis 2003: 135–143).

Miltiadis Venizelos may well have argued for an applied use of sciences, but he still had to defend the theoretical character of his university and, I believe, his own convictions were deeply steeped in the romantic tradition (as was the case for all the first generation of professors). Venizelos defended general scientific knowledge, arguing that this was also the case in England and Germany, which precisely because of their practical character, they valued a broader and general scientific education. The reason was, as Venizelos advocated, that a scientist who had received such an education was a more complete scientist and he could better succeed in his practical mis-
sion. Therefore, a pure practical orientation of the university, he concluded, would only pervert the pure scientific thinking. Despite the still limited productive economy in Greece, which discouraged students to follow the exact sciences, medical studies ensured an immediate exercise of doctor’s profession due to the undeveloped health infrastructure of the state and the severe health problems of the majority of the Greek population.

IV. Conclusion

It appears that a “totalistic conception” of modernity does not seem to be applicable in the Greek case. It does not seem that modernity as a “total state of affairs represents a qualitative break with the traditional of the past – a break which is in essence so radical that it amounts to nothing less than a Cartesian ‘beginning from scratch’” (Schwartz 1993: 213). On the contrary, in 19th century Greece, civilization was merged with nationalism and both were expressions of modernity. It seems that the modern pattern in Greece was closer to the metaphor of the growth of the biological organism (ibid.). Indeed, this metaphor is present in many inaugural speeches of doctors who served as rectors at the University of Athens. Nonetheless, the “tradition-modernity dichotomy to the notion of essential cultural difference” does not seem to be understood as unilinear by the Greeks, which according to Schwartz should not imply innate cultural superiority (ibid.). Greeks indeed demonstrated the superiority of their civilization, i.e., antiquity and Orthodoxy, using science – in our case medicine –, sometimes repeating the romantic rhetoric of the Modern Greek Enlightenment, some others trying to structure a “more scientific” argument. In other words, the way towards modernity in Greece through science was a process that in itself was in accord with the European trend created in 18th and 19th centuries, combining the features of German Romanticism with nationalism as a key idea, and the merits of French Enlightenment which sought a new approach in scientific knowledge and eventually led to the rise of Auguste Comte’s Positivism.

The contact Greek elites had with Europe before the War of Independence and the establishment of the Greek State, not only influenced their perception of modernity; it facilitated the creation of networks, both visible and invisible, which transferred ideologies and scientific knowledge. The dispersed Greeks in European cities and at European universities formed a network with their motherland, but also with their intellectual homelands, which became effective after their return to the newly established Greek State. The strongest network was with Germany (particularly with Bavaria), which offered Greece a constant channel of scientific knowledge and aca-

43 Prof. Dr. Miltiades Venizelos (1885): Προτασεως (Λευτέρο) Μπαλαδόν Βενιζέλου, τακτικού καθηγητή της Μαιευτικής και διευθυντού του Μαιευτηρίου. Τεσσαρακοστή Πέμπτη Προτασεως 1883–1884. Λόγος κατά την παραλαβή της Προτασεως (Rector Speech 1883–1884: 19).

44 For example: Prof. Dr. Konstantinos Vouvakis (1870): Λόγος του νέου πρωτάνεως κυρίου Κονσταντίνου Βουνάκη εκφωνηθες κατά την τελετή της εγκαθιστάνθης των νέων ακαδημαϊκών αρχών (Rector Speech 1870) and Prof. Dr. Ioannis Olympios (1855): Προσλογια του καθηγητών χειρουργικής Ιωάννου Ολυμπίου, αναδεχομένου την Προτασεως (Rector Speech 1853).
emic training. Medicine was the discipline first and most affected by the operation of this network on all levels, i.e., scientific tradition, academic organization, and material support, and this intertwined relationship lasted almost unchanged for more than a century.

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