

*Dionisis Baltzis*

Greece

## **INTER-BALKANIC CONNECTIONS: INTERNATIONAL COOPERATION AMONG MATHEMATICIANS AND EDUCATION REFORM IN GREECE DURING THE 1930S**

**Summary:** This study explores the interplay between Greek secondary mathematics education reform and international mathematical collaboration in the 1930s, focusing on the 1934 Inter-Balkan Conference of Mathematicians in Athens. It examines the role of the Hellenic Mathematical Society (HMS) in shaping education, highlighting internal conflicts, particularly between university professors and secondary school teachers. These tensions led to the formation of the Association of Secondary Education Mathematics Teachers (ASEMT), which organized the landmark conference. The event, shaped by political, scientific, and educational aims, coincided with the Balkan Pact and emphasized regional cooperation. Despite initial HMS resistance, the conference gained international recognition. The study also addresses textbook authorship and publishing, showing how commercial competition and state control influenced education. The findings reveal broader implications of political and scientific developments for educational reform in Greece and the Balkans.

**Keywords:** history of mathematics education, Hellenic Mathematical Society (HMS), Association of Secondary Education Mathematics Teachers (ASEMT), Inter-Balkan Conference of Mathematicians

### **Introduction**

This article investigates the reciprocal influences between advancements in Greek secondary mathematics education and international cooperation among mathematicians. Starting from a division in the Greek mathematical community during the early 1930s, I trace the progression that contributed to the organization of the Inter-Balkan Conference of Mathematicians in September 1934.

I aim to provide an interpretative framework for the rationale behind subsequent developments in the landscape of Greek secondary mathematics education, placing textbook writing and publishing at the center of the analysis. It will be argued that the internal dynamics of the Greek mathematical community and its textbook policies were shaped not only by domestic educational priorities but also by international collaboration and political considerations during the interwar period.

The history of modern Greek mathematics, as well as its Balkan counterparts, has not been extensively documented; therefore, I will try to provide some contextual information that will improve our grasp of these developments.

A key methodological tool for this research was the study of the bulletins published by the two mathematical societies that clashed during the period in question, as well as other (both official and unofficial) publications of the time. These bulletins primarily featured scientific articles, but during periods of heightened conflict, numerous articles and commentaries were published that explicitly took sides in the controversy. It is worth noting that these texts were anonymous, meaning that the editorial boards bore responsibility for their content.

## HMS and the formation of the Greek mathematical community

The formation of the Greek mathematical community was undoubtedly marked by the founding of the Hellenic Mathematical Society (HMS)<sup>1</sup>. It was in March 1918 that professors and teachers of mathematics joined together to form the first mathematical society of modern Greece. It is evident that the founding of HMS was an initiative undertaken by the professors of mathematics at the University of Athens, who almost exclusively comprised the first Board. The HMS had a very diverse composition, which included graduates of mathematics, secondary education teachers, educational consultants, as well as professors in higher schools and universities<sup>2</sup>.

The first elected president of HMS was Nikolaos Hatzidakis (1872–1942), while Georgios Remoundos (1878–1928) and Panagiotis Zervos (1878–1952) were elected vice-presidents. All three were the only full professors of mathematics at the University of Athens. Nilos Sakellariou (1882–1955) was an adjunct professor<sup>3</sup> and was elected general secretary of the HMS<sup>4</sup>.

<sup>1</sup> C. Phili, *The university of Athens: A cradle for the development of the mathematical community in Greece*, “Archives internationales d’histoire des sciences” 2016, vol. 66, no. 177, p. 319–344.

<sup>2</sup> HMS, *Ekthesis ton pepragmenon tis Ellinikis Mathimatikis Etaireias*, “Bulletin of the HMS” 1918, vol. 1, no. 1, p. 8–12.

<sup>3</sup> According to the regulations of the National University of Athens, the teaching staff is classified into regular professors (permanent position), adjunct professors (fixed-term, seven-year appointment), and lecturers authorized to teach independently at the university level without holding a professorial chair). Law 3823/1911, “Government’s Gazette” 1912, no. 19A (20.01.1912).

<sup>4</sup> HMS, *Dioikitiko Symvoulío tis Ellinikis Mathimatikis Etaireias*, “Bulletin of the HMS” 1918, vol. 1, no. 1, p. 3.

The purpose of founding HMS had early on been delineated: (1) ‘the modernization of secondary mathematics education’ which was closely linked to the division of upper secondary education and the creation of schools that would emphasize the exact sciences, (2) ‘the promotion and dissemination of Mathematics’, and (3) the establishment of common ground of communication and action for all Greek mathematicians, all of which were linked to the publication of a periodical and the organization of lectures<sup>5</sup>.

Indeed, until 1931, HMS intervened in matters of mathematics education by acting as a pressure group towards the Ministry of Education with regard to the division of upper secondary education. The schools that HMS advocated for were first founded in 1924 and gradually developed into a network, operating ever more regularly. Indeed, starting from 1929, when the Education Act of the Eleftherios Venizelos government was introduced, the ‘practical lycei’ typically assumed the status of an alternative to the ‘gymnasia’<sup>6</sup>. After succeeding in materializing this goal, HMS shifted its interest towards curricula, textbooks, and more direct communication with the student population. It was with regard to these endeavors that a rift appeared within the Greek mathematical community<sup>7</sup>.

### The rift within the Greek mathematical community

At the end of 1932, the Association of Secondary Education Mathematics Teachers (ASEMT) was founded<sup>8</sup>, operating within the HMS until 1936. Its expressed purpose<sup>9</sup> was to address the issues of teaching methodology and mathematics education curricula<sup>10</sup>.

The founding of the Association was based on the observation that the HMS did not prioritize secondary education<sup>11</sup>. However, this perspective overlooked significant efforts by the HMS, such as the publication of the “Appendix of the Bulletin” and systematic interventions to the Ministry of Education, as well as the press.

<sup>5</sup> N. Hatzidakis, *Prologos*, “Bulletin of HMS” 1919, vol. 1, no. 1, p. 1.

<sup>6</sup> D. Baltzis, *Recover, repurpose, reform: The Hellenic Mathematical Society and the Modern Mathematics reform in Greece*, [in:] *History and Epistemology in Mathematics Education: Trends, practices, future developments*, ed. by E. Barbin et al., Springer Verlag, 2024 (accepted, to be published).

<sup>7</sup> Ibidem.

<sup>8</sup> On 15.12.1932, a circular was issued, signed by three members of the HMS, who were secondary education teachers, announcing the establishment of the ASEMT. HMS, *Egkyklios pros ta meli tis EME (17.01.1933)*, “Bulletin of the HMS” 1932, vol. 13, no. 2, p. 39–43.

<sup>9</sup> ASEMT, *Oi skopoi tou Deltiou*, “Bulletin of the ASEMT” 1933, no. 1, p. 1–2.

<sup>10</sup> For a brief examination of the Association’s purposes and focal points of action, see A. Poulos, *I idrysi tou Syndesmou mathimatikon Mesis Paideias to 1933*, presentation at the 39th Mathematics Education Conference, Hellenic Mathematical Society, Ancient Olympia, Greece 2024.

<sup>11</sup> ASEMT, *Oi skopoi tou Deltiou*, p. 1–2.

The establishment of the Association was influenced by factors related to the diverse and at times incompatible interests of the HMS members. A notable contradiction was related to the fact that while the majority of its members were secondary education teachers, the Board was dominated by university professors<sup>12</sup>.

The crisis that erupted within the HMS at the beginning of 1933<sup>13</sup> eventually subsided, and the HMS remained united. The presidency of Nilos Sakellariou, which began in 1929, lasted until his death in 1955. The Association ceased its public activities in 1936<sup>14</sup>. This development is largely attributed to the political instability of the mid-1936, which culminated in the establishment of the Metaxas dictatorship in August of that year. During 1935–1936, the Greek Secondary School Teachers' Union (GSSTU [OAME]) followed a similar course<sup>15</sup>.

### The initiative to organize a Conference

The establishment of the Association was primarily driven by secondary school teachers who were members of the HMS. Their goal was to take action in defense of key issues affecting their field, such as the allocation of teaching hours in gymnasia, the upgrading of practical secondary schools, and various union concerns<sup>16</sup>. This movement was also met by a group of university professors who sought independence from the influence of the then-President of the HMS, Nilos Sakellariou.

The meeting between these two parallel movements, based on the hegemony of the university professors, is reflected in the ambitious decision to convene

<sup>12</sup> ASEMT, *I eklogi tou airetou symvoulou*, "Bulletin of the ASEMT" 1933, no. 1, p. 40–42; HMS, *Egkyklios pros ta meli tis EME (17.01.1933)*, p. 39–43.

<sup>13</sup> Barbastathis reports that a divergence of opinion within the HMS was observed since early 1932. Indeed, at the beginning of 1932, following the publication of a new syllabus that reduced mathematics teaching by 25% (from 24 to 18), an article by N. Hatzidakis was published in the "Bulletin of the Greek Secondary school Teachers' Union" which directly criticizes the leadership of the HMS, accusing it of inaction and suggesting that the Society's delayed action was pretentious. It is noted that Hatzidakis' article was followed by an article by Barbastathis, which, however, did not criticize the HMS but instead outlined the quantitative characteristics of the reduction and the qualitative characteristics of its results. N. Hatzidakis, *To neon programma ton gymnasion kai i ek toutou zimia ton Mathimatikon*, "Bulletin of the GSSTU" 1932, no. 67, p. 217–218; C. Barbastathis, *Ta Mathimatika kai to neon programma*, "Bulletin of the GSSTU" 1932, no. 67, p. 218–220; HMS, *Praktika dyo synedrion Genikon Synelefsion ton melon tis EME*, "Bulletin of the HMS" 1933, vol. 14, no. 2, p. 3–16.

<sup>14</sup> It was a conscious choice to avoid presenting the Association as an exclusively scientific association, thus circumventing the prohibitions, but to maintain its full scientific and professional character. This choice is justified in an article in the Bulletin of the ASEMT, which criticizes the HMS leadership for choosing the former option. ASEMT, *Pros synehisin tou ergou mas*, "Bulletin of the ASEMT" 1936, no. 6, p. 1–4.

<sup>15</sup> More information can be found in: GSSTU, *I dialysis ton dimosioupallilikon organoseon*, "Bulletin of the GSSTU" 1936, no. 9a, p. 279–281.

<sup>16</sup> ASEMT, *Oi skopoi tou Deltiou*, p. 1–2.

a mathematical conference. In fact, starting from the very first issue of its Bulletin, the Association announced plans to organize a conference focused on issues relevant to secondary school teachers, such as the teaching of mathematics, the structure of secondary education, and various union concerns<sup>17</sup>. Over time, though, the focus shifted towards scientific research and only secondarily toward professional issues. Additionally, professors from Balkan universities were invited to participate<sup>18</sup>.

It is reasonable to assume that the organization of a conference on such a large scale was unlikely to have been driven by secondary school teachers alone; it is more probable that university professors took charge of the organizational aspects from the outset<sup>19</sup>. This is suggested by several factors: the selection of the University as the venue (for a full seven days), collaboration with professors from other Balkan universities, and the successful engagement with government officials (as discussed below). Additionally, university professors assumed key responsibilities: Hatzidakis served as chairman of the executive committee and Zervos as chairman of the organizing committee<sup>20</sup>.

### The international political importance of the Conference

The organization of the conference and its gradual expansion into an Inter-Balkan event coincided with the developments surrounding the Balkan Pact, which was signed in Athens in February 1934 by Greece, Turkey, Romania, and Yugoslavia. This development occurred in a very unstable international political environment<sup>21</sup>.

<sup>17</sup> The reversal of the order of the topics to be covered at the conference is of semiotic (and substantive) interest: while it was initially ‘Section A – Didactic [...], Section B – Professional [...], Section C – Scientific [...]’, the order was later reversed to ‘scientific, didactic, professional part’. ASEMT, *To A’ en Athinai Synedrion ton kathigiton ton Mathimatikon*, “Bulletin of the ASEMT” 1933, no. 2, p. 45; ASEMT, *Prosklisis tis Organotikis Epitropis tou Synedriou*, “Bulletin of the ASEMT” 1934, no. 3, p. 41–42.

<sup>18</sup> ASEMT, *To A’ en Athinai Synedrion ton kathigiton ton Mathimatikon*, p. 45–46; ASEMT, *To A’ Mathimatikon synedrion*, “Bulletin of the ASEMT” 1934, no. 3, p. 1–3; GSSTU, *To A’ Mathimatikon Synedrion*, “Bulletin of the GSSTU” 1934, no. 88, p. 279; GSSTU, *To Mathimatikon Synedrion*, “Bulletin of the GSSTU” 1934, no. 90, p. 437.

<sup>19</sup> *Actes du Congrès Interbalkanique de Mathématiciens*, ed. by P. Zervos, N. Hatzidakis, Imprimerie nationale, Athènes 1935 (in English, French, and German). Another example of the decisive presence of N. Hatzidakis, which raises broader questions about his role with respect to the Association is the fact that he is mentioned as the organizer of the Inter-Balkan Mathematics Conference in 1934. M. Stefanidis, *I istoria tis Scholis Physikon kai Mathimatikon Epistimon tou Panepistimiou Athinon*, vol. 2, National Printing House, Athens 1948, p. 87.

<sup>20</sup> *Actes du Congrès Interbalkanique de Mathématiciens*, ed. by P. Zervos, N. Hatzidakis.

<sup>21</sup> M. Türkeş, *The Balkan Pact and its immediate implications for the Balkan states, 1930–34*, “Middle Eastern Studies” 1994, vol. 30, no. 1, p. 123–144.

Indeed, references to this connection can be found in the texts of the Association's Bulletin, as well as in speeches delivered at the conference. For example, it was stated that the timing of the conference was justified, first, by Greece's history, where mathematics was elevated to a Science in ancient times, and second, by 'the general psychological situation, due to the recent political agreements between the Balkan countries and the friendly spirit that prevails in the scientific circles of these countries'<sup>22</sup>.

Accordingly, a circular from the Minister of Education, Makropoulos, states that the purpose of the conference, in addition to the promotion of mathematics, is also 'the development of the spirit of cooperation between the peoples of the Balkan countries'<sup>23</sup>.

Additionally, during the concluding session of the conference, N. Hatzidakis celebrated the conference's success, urging the delegates to 'announce to their peoples the now unmistakable message that Balkan humanity will no longer repeat the cruelties of a Balkan war'. In addition, according to the proceedings: 'Mr. Hatzidakis declared the conclusion of the Congress and distributed branches of the holy olive to the delegates'<sup>24</sup>, based on the symbolic use of the olive branch as a gesture of peace.

### The stance of the HMS towards the Conference

The HMS leadership opposed the conference, with President N. Sakellariou publicly rejecting the initiative and predicting its failure. Their objections included: (a) inadequate preparation and experience, (b) high costs, (c) minority views and questionable practices of the organizers, (d) potential harm to scientific progress and national interests, (e) more urgent issues facing the mathematical community, and (f) unclear objectives and themes, rendering foreign participation unjustified<sup>25</sup>.

Instead, the Society advocated for more significant activities, such as pushing for the filling of vacant positions in schools with unappointed mathematics teachers. They also promoted the idea of organizing a national conference<sup>26</sup> as a more

<sup>22</sup> ASEMΤ, *To A' Mathimatikon synedrion*, p. 1–3.

<sup>23</sup> Ministry of Education, *Egkyklios (30.05.1934)*, "Bulletin of the ASEMΤ" 1934, no. 4, p. 8.

<sup>24</sup> *Actes du Congrès Interbalkanique de Mathématiciens*, ed. by P. Zervos, N. Hatzidakis, p. 293–294; ASEMΤ, *Teliki synedriasis*, "Bulletin of the ASEMΤ" 1935, no. 5, p. 34.

<sup>25</sup> ASEMΤ, *Ai antidraseis tou k. N. Sakellariou kata tou synedriou*, "Bulletin of the ASEMΤ" 1934, no. 3, p. 37–40; ASEMΤ, *To synedrion*, "Bulletin of the ASEMΤ" 1934, no. 4, p. 1–6; HMS, *Ypomnima ston Ypourgo Paideias peri tou Mathimatikou Synedriou (27.04.1934)*, "Bulletin of the HMS" 1934, vol. 15, no. 2, p. 3–6; HMS, *Diaforoi eidiseis*, "Bulletin of the HMS" 1934, vol. 15, no. 1, p. 82–83; HMS, *Anakoinosi epitropis episkefthisis ton k. Ypourgon tis Paideias*, "Bulletin of the HMS" 1934, vol. 15, no. 2, p. 7.

<sup>26</sup> In fact, a circular was issued seeking the opinions of members regarding this possibility. Subsequently, the HMS submitted a memorandum to the Prime Minister and the Minister of Educa-

valuable endeavor. In fact, the contrast between a national and an Inter-Balkan conference emerged as a cover for the wider difference in orientations<sup>27</sup>.

The stance of the HMS regarding the 1934 conference is particularly intriguing, as it appears to have been influenced by non-scientific factors. One would expect a scientific association like the HMS to enthusiastically participate in and fully support such an important event. However, the fact that the conference organizers were primarily the leading members of the Association, along with some professors from the University of Athens, seems to have shaped the Society's stance.

The HMS leadership group initially perceived the establishment of the Association as a divisive and objectionable move, driven by individuals who had failed to be elected to its Board. This sentiment was further fueled by the involvement of authors of mathematics textbooks and university professors like N. Hatzidakis, who had clashed with N. Sakellariou in previous years<sup>28</sup>.

Moreover, the HMS leadership group, after formally articulating their opposition to the conference in January and again in April 1934, engaged in activities aimed at 'sabotaging' the conference<sup>29</sup>. They sought to disrupt the organizers'

---

tion, outlining the Society's multifaceted educational activities and requesting funding of 100,000 drachmas for the Panhellenic Mathematical Congress. Upon receiving the memorandum, the Minister of Education approved the convening of the Congress but withheld further commitments, stating that he needed to consult with his superior. However, he later announced that he was 'currently unable to allocate the necessary funds for the Congress, as no relevant appropriation exists'. Following this, the Board of the Hellenic Mathematical Society decided to postpone the conference to a more suitable time. As is known, the first Panhellenic Mathematical Conference was eventually organized by the Hellenic Mathematical Society in 1960 in Heraklion, Crete. HMS, *Egkyklios EME peri sygkliseos Panell. Math. Synedriou (05.12.1936)*, "Bulletin of the HMS" 1936, vol. 17, no. 2–3, p. 169–170; HMS, *Diaforoi eidiseis*, "Bulletin of the HMS" 1938, vol. 18, no. 1–2–3, p. 216; HMS, *Ypomnima tis EME pros ton k. Proedron tis Kyverniseos kai ton k. Ypourgon tis Paideias (19.06.1937)*, "Bulletin of the HMS" 1938, vol. 18, no. 1–2–3, p. 199–200.

<sup>27</sup> HMS, *Ypomnima ston Ypourgo Paideias peri tou Mathimatikou Synedriou (27.04.1934)*, p. 4. See also HMS, *Diaforoi eidiseis*, 1934, p. 82–83.

<sup>28</sup> Conflicts arose over the allocation of positions in the School of Physics and Mathematics at the University of Athens (University of Athens Historical Archive [UoA Archive], Proceedings of the Meetings of the Faculty of Physics and Mathematics of the University of Athens, 12.06.1926, 16.10.1926), within the administration of the HMS, and regarding issues of scientific validity (heavily influenced by personal judgments). HMS, *Ekthesis ton pepragmenon ypo tou D. Symvouliou tis Ellinikis Mathimatikis Etaireias kata to etos 1929*, "Bulletin of the HMS" 1930, vol. 11, no. 1–2, p. 3–7; N. Hatzidakis, *Kritiki tis ergasias tou k. Neilou Sakellariou: "Peri idiotitos tinos kentrikon tinon kiniseon"*, brochure, Athens 1930; N. Sakellariou, *Apantisis eis tin kritikin tou k. Hatzidakis N. tis ergasias tou k. Neilou Sakellariou «Peri idiotitos tinos kentrikon tinon kiniseon»*, brochure, Athens 1930; N. Sakellariou, *Teleia kai pavla*, brochure, Athens 1931.

<sup>29</sup> HMS, *Ypomnima ston Ypourgo Paideias peri tou Mathimatikou Synedriou (27.04.1934)*, p. 3–6; HMS, *Ekthesis ton pepragmenon ypo tou D. Symvouliou tis Ellinikis Mathimatikis Etaireias kata to 1933*, "Bulletin of the HMS" 1934, vol. 15, no. 1, p. 3–6.

contacts with political leaders and the international scientific community. According to the Association, they also fed information to the press, characterizing the event as ‘an excessively costly comedy of the Balkan conference of mathematicians’<sup>30</sup>.



Fig. 1. ‘The excessively costly... comedy of the Balkan conference of mathematicians’. Source: “Neos Kosmos” 21.06.1934, p. 5.

Meanwhile, the Association responded to the Society’s objections, urging it to reconsider, participate in, and support the conference. Its criticism, assertive and personal, targeted Sakellariou directly. A Bulletin article accused him of: (a) fraudulent bureaucratic practices within the HMS, (b) attempting to sabotage the conference, (c) lacking faith in Greek scientists, (d) personal egoism<sup>31</sup>, and (e) indirectly engaging in anti-national actions<sup>32</sup>.

### Involvement of political officials in the Congress

It is assumed that Hatzidakis and Zervos undertook to contact professors from the Balkan countries, as well as certain Greek political officials, in order to secure the success of the conference. Notably, the Prime Minister accepted the honorary presidency of the conference and officially opened its proceedings, while the Minister of Education also attended and delivered a speech. Additionally, Alexandros Papanastasiou, a politician and president of the Balkan Pact, placed it under its auspices<sup>33</sup>.

<sup>30</sup> I. Ziogas, *I polydapanos... komodia tou valkanikou synedriou ton mathimatikon*, “Neos kosmos” 21.06.1934, p. 5; ASEMT, *To synedrion*, 1934, p. 1–6.

<sup>31</sup> One article directly mentions the HMS president in its title. See ASEMT, *Ai antidraseis tou k. N. Sakellariou kata tou synedriou*, p. 37–40.

<sup>32</sup> ASEMT, *To synedrion*, 1934, p. 1–6; ASEMT, *Aparaitites exigiseis*, “Bulletin of the ASEMT” 1934, no. 3, p. 31–32; ASEMT, *Ai egkyklioι kai ta ek touton symperasmata*, “Bulletin of the ASEMT” 1934, no. 4, p. 43–44.

<sup>33</sup> ASEMT, *Teleftees plirofories gia to synedrion*, “Bulletin of the ASEMT” 1934, no. 3, p. 37; ASEMT, *To synedrion*, 1934, p. 1–6; ASEMT, *To synedrion*, “Bulletin of the ASEMT” 1935, no. 5, p. 3–5; I. Makropoulos, *O logos tou k. Makropoulou*, “Bulletin of the ASEMT” 1935, no. 5, p. 9–11;

The support of leading political officials was a decisive factor in the success of the Congress. This support not only limited the ability of the HMS and its president to react but also ensured substantial material backing. This funding was necessary for the successful multi-day event, the expenses that were incurred by the foreign professors, and the excursion on the last day of the conference<sup>34</sup>.

In addition, it is noteworthy that the conference proceedings were published at the expense of the Greek state at the National Printing House in a luxury hard-cover volume of large size (approx. A4). This publication contributed to the dissemination of the conference to an international audience (most of the papers are written in French), but also endowed the conference with an aura of formality and luxury<sup>35</sup>.

Faced with this situation, the HMS found itself in a difficult position and argued that the conference ‘will neither promote science nor serve the broader interests of Greece, nor can it be aligned with its foreign policy, as its proponents claim’<sup>36</sup>.

The conference was regarded as scientifically valid by the international mathematical community. The excellent organization, primarily managed by professors Zervos and Hatzidakis, along with the substantial support provided by the Greek government, contributed significantly to the conference’s success. These two professors facilitated the participation of numerous professors from other Balkan countries, as well as highly esteemed figures from the broader European mathematical community.

The submission of papers by Ernest Vessiot, a professor at the Sorbonne and Director of the *École normale supérieure* in Paris, Richard von Mises, who had assumed a full professorship at the University of Istanbul, Turkey, and Constantin Carathéodory<sup>37</sup>, who was a professor at the University of Munich at that time, lent the conference considerable scientific prestige.

---

P. Tsaldaris, *Epistoli ston proedro tis Organotikis Epitropis tou Synedriou*, P. Zervo, “Bulletin of the ASEM” 1934, no. 3, p. 43; P. Tsaldaris, *I prosfonisis tou k. prothypourgou*, “Bulletin of the ASEM” 1935, no. 5, p. 8–9.

<sup>34</sup> *Actes du Congrès Interbalkanique de Mathématiciens*, ed. by P. Zervos, N. Hatzidakis.

<sup>35</sup> *Ibidem*.

<sup>36</sup> HMS, *Ypomnima ston Ypourgo Paideias peri tou Mathimatikou Synedriou (27.04.1934)*, p. 6.

<sup>37</sup> C. Carathéodory’s participation and his assumption of the position of honorary president of the conference bear considerable significance, given the national and international prestige that he held. For example, Carathéodory participated in the five-member committee that awarded the first Fields medal in 1936. Carathéodory did not attend the conference in person, because he resided in Munich, but sent his speech, which was announced by N. Hatzidakis. M. Georgiadou, *Constantin Carathéodory: Mathematics and politics in turbulent times*, Springer Verlag, Heidelberg 2013, p. 297.

## On the issue of school textbooks

It is now time to attempt an explanation regarding certain subsequent developments in the landscape of secondary mathematics education, particularly the textbooks and their authors.

As was mentioned before, Hatzidakis, who was the first president of the HMS from its founding in 1918 until 1926, was the most senior professor of mathematics at the University of Athens, followed by Zervos and Sakellariou<sup>38</sup>.

Hatzidakis had previously clashed with Sakellariou over the activities of the HMS and the operation of the Department of Mathematics at the University of Athens<sup>39</sup>. N. Hatzidakis belonged to a family with a rich tradition in higher mathematics. His father, Ioannis Hatzidakis (1844–1921), played a vital role in the revival of higher mathematics in modern Greece, beginning with his appointment as a full professor at the University of Athens in 1884<sup>40</sup>.

Until 1920, I. Hatzidakis's textbooks (published by Kollaros) dominated school mathematics education. After his death, the teacher Christos Barbastathis updated them, while publishing rights stayed with Kollaros. Meanwhile, Nilos Sakellariou entered the market with Sideris-published textbooks featuring more exercises, challenging the traditional format of extensive theory and few problems. Still, Hatzidakis's works held a firm place in Greek education, as all professors had studied from them. Exercises, though valued, remained secondary. The 1930 publication of the "Appendix of the Bulletin of the HMS" took place in this context<sup>41</sup>.

In his 1987 study, Schubring<sup>42</sup> explores the commercial strategies of mathematical textbook authors and identifies two main aspects. The first one concerns the direct competition among authors. Schubring observes that direct competition between textbook authors is more prevalent in centralized states (such as Greece during the period under review) than in decentralized states (e.g., Germany and Italy in the 19th c.). This kind of rivalry is evident in Sakellariou's accusations against textbook authors and their alleged activities related to the Association<sup>43</sup>.

<sup>38</sup> G. Oreopoulos, *EME 1918–1988: Ta prota evdominta chronia*, Hellenic Mathematical Society, Athens 1988.

<sup>39</sup> See footnote 28.

<sup>40</sup> C. Phili, *The university of Athens*; N. Sakellariou, *Ta Mathimatika eis tin Ellada apo tou 1830 mehri tou 1930*, "Bulletin of the HMS" 1935, vol. 16, no. 1, p. 60–75.

<sup>41</sup> C. Phili, *Oi theseis tou K. Karatheodori gia ti didaskalia ton Mathimatikon sti mesi ekpαιdefsi kai to egcheiridio Geometrias tou I. N. Hatzidaki*, [in:] *School textbooks in the Greek State*, ed. by A. Mastrapas, Educational Policy Institute, Athens 2023, p. 328–336; D. Baltzis, *Recover, repurpose, reform: The Hellenic Mathematical Society and the Modern Mathematics reform in Greece* (accepted, to be published).

<sup>42</sup> G. Schubring, *On the Methodology of Analyzing Historical Textbooks: Lacroix as Textbook Author*, "For the Learning of Mathematics" 1987, vol. 7, no. 3, p. 41–51

<sup>43</sup> HMS, *Praktika dyo synedriou Genikon Synelefsseon ton melon tis EME*, p. 3–16.

The second aspect concerns the relations among authors, publishers and the state. Schubring highlights the tendency of authors and publishers to compete for a larger share of the textbook market, aiming for a monopoly.

The second aspect becomes particularly relevant when connected to textbook publication rights and the attempts by the Metaxas dictatorship to exert more direct control over school knowledge. This control was formalized through the establishment of the OSTP (Organization of School Textbook Publishing) in 1937<sup>44</sup>, which aimed to regulate and centralize the production and distribution of school textbooks<sup>45</sup>. OSTP was the first such organization in Greece. Before its founding, the state organized public competitions for textbook authorship based on the published curricula and approved those textbooks that met the criteria. However, no official explanations were provided regarding why certain textbooks were approved for use in schools<sup>46</sup>.

The interplay between these commercial strategies and political maneuvers reflects the broader struggle over educational content and authority during this period.

The creation of a state-controlled textbook system and the resulting publishing monopoly had major consequences for publishers. Kollaros, known for Hatzidakis's textbooks, had focused heavily on educational materials – 151 of its 247 new editions (61%) between 1930 and 1937 were textbooks, study aids, or maps. This share dropped sharply in 1938<sup>47</sup>.

The advent of the OSTP was particularly detrimental to publishers like Kollaros. The establishment of a state monopoly on textbooks meant that private publishers lost a significant portion of their income, impacting their business operations and market influence.

At this point, an interpretation is necessary regarding the choice of C. Barbastathis as the author of all school mathematics textbooks<sup>48</sup>. C. Barbastathis was a member of both the HMS and the Association, the president of the pre-dictatorial Teachers' Union, a mathematics teacher at the experimental school of the University of Athens, and therefore had wide connections. His endeavors were such that the dictatorial regime entrusted him with the mathematics textbooks, most probably because his active participation in defending the professional interests of secondary school mathematics teachers would smooth the change brought about by the establishment of the OSTP.

<sup>44</sup> Law 952/1937, "Government's Gazette" 1937, no. 469 (19.11.1937).

<sup>45</sup> O.E. Anastasakis, *Authoritarianism in 20th Century Greece: Ideology and Education under the Dictatorships of 1936 and 1967*, PhD thesis, London School of Economics and Political Science, London 1992, p. 141–142.

<sup>46</sup> L. Ventoura, *I nomothesia peri didaktikon vivlion: Mia estia sygkrouseon ekpaideftikou dimotikismou kai antimetarrythmiston (1907–1937)*, "Mnimon" 1992, vol. 14, p. 91–114.

<sup>47</sup> A. Karakatsouli, *Sti chora ton vivlion: I ekdotiki istoria tou Vivliopoleiou tis Estias, 1885–2010*, Athens: The Colleagues' Publications, Athens 2011.

<sup>48</sup> D. Baltzis, *Hellenic Mathematical Society's interventions in mathematics education: A historical analysis*, Master's thesis (in Greek), University of Western Macedonia, Thessaloniki 2021.

The picture becomes clearer when considering someone like N. Sakellariou – a politically conservative university professor and HMS president – who might have seemed a fitting choice. However, the regime likely wished to avoid reviving the rivalries of the 1930s. Choosing Barbastathis instead affirmed his dominant role in secondary education and supported the regime’s effort to stabilize the monopoly regulation process for textbooks.

Barbastathis’ style closely followed that of I. Hatzidakis, with theory at the center and exercises secondary. Sakellariou’s textbooks, by contrast, gave exercises a more central role, reflecting influences from Dewey and Kerschensteiner, as he sought to challenge Hatzidakis’s near-monopoly on the textbook market.

### Subsequent developments

Three years after the conference in Athens, the 2nd Inter-Balkan Conference was held in Bucharest, Romania, as was announced at the end of the Athens conference by N. Hatzidakis<sup>49</sup>. Indeed, the subsequent conference took place in 1937. Its proceedings were published in the “Bulletin mathématique de la Société Roumaine des Sciences” (vol. 40, no. 1–2, 1938).

The numbering indicates that the 1934 conference in Athens was recognized as valid by the international mathematical community<sup>50</sup>. The Bucharest conference featured many Greek mathematicians, among them N. Sakellariou as well. It is particularly interesting that it was Sakellariou himself, as President of the HMS, who undertook to present the proceedings at the Second Inter-Balkan Conference to the HMS<sup>51</sup>.

<sup>49</sup> *Actes du Congrès Interbalkanique de Mathématiciens*, ed. by P. Zervos, N. Hatzidakis, p. 294; ASEM, *Teliki synedriasis*, p. 33–39.

<sup>50</sup> It is noteworthy that after the success of the Inter-Balkan Conference of Athens, an international journal was published. Titled “Revue Mathématique de l’Union Interbalkanique”, it was published by the National Printing House in Athens, Greece, and edited by R. De Mises (Istanbul), M. Petrovich (Beograd), K. Popoff (Sofia), G. Tzitzeica (Bucharest), and P. Zervos (Athens). However short-lived, it was a clear indicator of the collaborative climate of that period.

The journal was research-focused and comprised two volumes: vol. 1, no. 1 (1936) – vol. 1, no. 3 (1937); vol. 2, no. 1 (1938) – vol. 2, no. 4 (1939). It is difficult to come across, and even though it was published in Athens, Greece, it was impossible to locate it in the national or the university libraries. For the purposes of my research, it was located at the Bibliothèque of the Henri Poincaré Institute (IHP) in Paris, France.

Its publication was terminated following the outbreak of the Second World War. Shortly before this, one of the editors, G. Tzitzeica, had died (February 1939). In conclusion, the publication of the journal bears significant importance as far as the international cooperation of mathematicians is concerned, in particular during turbulent times.

<sup>51</sup> Along the same lines, it was Sakellariou who first presented his report of the Bucharest Conference to the Faculty of the School of Physics and Mathematics (UoA Archive, Proceedings of the Meetings of the Faculty of Physics and Mathematics of the University of Athens, 08.10.1937), while Zervos and Hatzidakis presented their own reports at the next session. (UoA Archive, Pro-

In his report, he praises the participants' efficiency and cooperation, envisioning lasting collaboration among Balkan mathematicians beyond academia. This marks a clear shift from his earlier critique of the 1934 conference, likely influenced by the success of the later one. Although Belgrade was set to host the 3rd Inter-Balkan Mathematical Conference in 1939<sup>52</sup>, it was likely canceled due to World War II. The tradition resumed with the third conference held in 1966 in Bucharest.

## Conclusion

I aimed to describe the state of the Greek mathematical community in the 1930s and the impact of its internal divisions. Although this division initially seemed to paralyze the community, the rivalry between the factions ultimately fueled the ambitious initiative to organize an Inter-Balkan conference. The success of this conference was a setback for the leadership of the Hellenic Mathematical Society (HMS), who had predicted its failure. Despite the fact that the Association, which was the primary organizer of the conference, was later disbanded by the dictatorship, the division within the community left deep scars and continued to influence developments in subsequent years, even as relations between the different factions gradually improved. I argued that the dictatorial regime considered the outcome of this internal rivalry when implementing reforms related to textbook writing and publishing to ensure a smooth transition.

## Bibliography

### Sources (in Greek)

- Actes du Congrès Interbalkanique de Mathématiciens*, ed. by P. Zervos, N. Hatzidakis, Imprimerie nationale, Athènes 1935 (in English, French, and German).
- ASEMT, *Ai antidraseis tou k. N. Sakellariou kata tou synedriou* [Mr. N. Sakellariou's reactions against the conference], "Bulletin of the ASEMT" 1934, no. 3, p. 37–40.
- ASEMT, *Ai egkyklioi kai ta ek touton symperasmata* [The circulars and their conclusions], "Bulletin of the ASEMT" 1934, no. 4, p. 43–44.
- ASEMT, *Aparaitites exigiseis* [Necessary explanations], "Bulletin of the ASEMT" 1934, no. 3, p. 31–32.
- ASEMT, *I eklogi tou airetou symvoulou* [The election in the Educational Council], "Bulletin of the ASEMT" 1933, no. 1, p. 40–42.
- ASEMT, *Oi skopoi tou Deltiou* [The purposes of the Bulletin], "Bulletin of the ASEMT" 1933, no. 1, p. 1–2.

---

ceedings of the Meetings of the Faculty of Physics and Mathematics of the University of Athens, 29.10.1937). N. Sakellariou, *To B' Diavalkanikon Synedrion ton Mathimatikon*, "Bulletin of the HMS" 1938, vol. 18, no. 1–2–3, p. 208–216.

<sup>52</sup> The Belgrade conference is advertised on the last page of the "Revue Mathématique de l'Union Interbalkanique", vol. 2, no. 4.

- ASEMT, *Pros synehisin tou ergou mas* [Towards continuing our work], “Bulletin of the ASEMT” 1936, no. 6, p. 1–4.
- ASEMT, *Prosklisis tis Organotikis Epitropis tou Synedriou* [Invitation of the Organizational Committee of the conference], “Bulletin of the ASEMT” 1934, no. 3, p. 41–42.
- ASEMT, *Teleftees plirofories gia to synedrion* [Last information concerning the conference], “Bulletin of the ASEMT” 1934, no. 3, p. 37.
- ASEMT, *Teliki synedriasis* [Final session (of the conference)], “Bulletin of the ASEMT” 1935, no. 5, p. 33–39.
- ASEMT, *To A' en Athinai Synedrion ton kathigiton ton Mathimatikon* [The First conference of mathematics teachers in Athens], “Bulletin of the ASEMT” 1933, no. 2, p. 45–46.
- ASEMT, *To A' Mathimatikon synedrion* [The First mathematics conference], “Bulletin of the ASEMT” 1934, no. 3, p. 1–3.
- ASEMT, *To synedrion* [The conference], “Bulletin of the ASEMT” 1934, no. 4, p. 1–6.
- ASEMT, *To synedrion* [The conference], “Bulletin of the ASEMT” 1935, no. 5, p. 3–5.
- Barbastathis Christos, *Ta Mathimatika kai to neon programma* [Mathematics and the new syllabus], “Bulletin of the GSSTU” 1932, no. 67, p. 218–220.
- GSSTU, *I dialysis ton dimosioupallilikon organoseon* [The disbanding of the civil servants’ organizations], “Bulletin of the GSSTU” 1936, no. 9a, p. 279–281.
- GSSTU, *To A' Mathimatikon Synedrion* [The First Mathematical Conference], “Bulletin of the GSSTU” 1934, no. 88, p. 279.
- GSSTU, *To Mathimatikon Synedrion* [The Mathematical Conference], “Bulletin of the GSSTU” 1934, no. 90, p. 437.
- Hatzidakis Nikolaos, *Kritiki tis ergasias tou k. Neilou Sakellariou: “Peri idiotitos tinon kentrikon tinon kiniseon”* [Criticism of Mr. Nilos Sakellariou’s work “On the properties of certain central movements”], brochure, Athens 1930.
- Hatzidakis Nikolaos, *Prologos* [Preface], “Bulletin of the HMS” 1919, vol. 1, no. 1, p. 1.
- Hatzidakis Nikolaos, *To neon programma ton gymnasion kai i ek toutou zimia ton Mathimatikon* [The new secondary-school syllabus and the resulting loss in Mathematics], “Bulletin of the GSSTU” 1932, no. 67, p. 217–218.
- HMS, *Anakoinosi epitropis episkefithisis ton k. Ypourgon tis Paideias* [Announcement of a committee that visited the Minister of Education], “Bulletin of the HMS” 1934, vol. 15, no. 2, p. 7.
- HMS, *Diaforoi eidiseis* [Miscellaneous news], “Bulletin of the HMS” 1934, vol. 15, no. 1, p. 82–83.
- HMS, *Diaforoi eidiseis* [Miscellaneous news], “Bulletin of the HMS” 1938, vol. 18, no. 1–2–3, p. 216.
- HMS, *Dioikitiko Symvoulío tis Ellinikis Mathimatikis Etaireias* [Board of the Hellenic Mathematical Society], “Bulletin of the HMS” 1918, vol. 1, no. 1, p. 3.
- HMS, *Egkyklios EME peri sygliseos Panell. Math. Synedriou (05.12.1936)* [Circular of the Hellenic Mathematical Society regarding the convening of the Panhellenic Mathematical Conference (05.12.1936)], “Bulletin of the HMS” 1936, vol. 17, no. 2–3, p. 169–170.
- HMS, *Egkyklios pros ta meli tis EME (17.01.1933)* [Circular towards the members of the HMS (17.01.1933)], “Bulletin of the HMS” 1932, vol. 13, no. 2, p. 39–43.

- HMS, *Ekthesis ton pepragmenon tis Ellinikis Mathimatikis Etaireias* [Annual report of the Hellenic Mathematical Society], “Bulletin of the HMS” 1918, vol. 1, no. 1, p. 8–12.
- HMS, *Ekthesis ton pepragmenon ypo tou D. Symvouliou tis Ellinikis Mathimatikis Etaireias kata to etos 1929* [Annual report of the Hellenic Mathematical Society during 1929], “Bulletin of the HMS” 1930, vol. 11, no. 1–2, p. 3–7.
- HMS, *Ekthesis ton pepragmenon ypo tou D. Symvouliou tis Ellinikis Mathimatikis Etaireias kata to 1933* [Annual report of the Hellenic Mathematical Society during 1933], “Bulletin of the HMS” 1934, vol. 15, no. 1, p. 3–6.
- HMS, *Praktika dyo synedrion Genikon Synelefeon ton melon tis EME* [Proceedings of two General Assembly sessions of the members of the HMS], “Bulletin of the HMS” 1933, vol. 14, no. 2, p. 3–16.
- HMS, *Ypomnima ston Ypourgo Paideias peri tou Mathimatikou Synedriou (27.04.1934)* [Memorandum to the Minister of Education regarding the Mathematics Conference (27.04.1934)], “Bulletin of the HMS” 1934, vol. 15, no. 2, p. 3–6.
- HMS, *Ypomnima tis EME pros ton k. Proedron tis Kyverniseos kai ton k. Ypourgon tis Paideias (19.06.1937)* [Memorandum of the HMS to the Prime Minister and the Minister of Education (19.06.1937)], “Bulletin of the HMS” 1938, vol. 18, no. 1–2–3, p. 199–200.
- Law 3823/1911, “Government’s Gazette” 1912, no. 19A (20.01.1912).
- Law 952/1937, “Government’s Gazette” 1937, no. 469 (19.11.1937).
- Makropoulos Ioannis, *O logos tou k. Makropoulou* [Mr. Makropoulos’ address], “Bulletin of the ASEMT” 1935, no. 5, p. 9–11.
- Ministry of Education, *Egkyklios (30.05.1934)* [Circular (30.05.1934)], “Bulletin of the ASEMT” 1934, no. 4, p. 8.
- Sakellariou Nilos, *Apantisis eis tin kritikin tou k. Hatzidakis N. tis ergasias tou k. Neilou Sakellariou «Peri idiotitos tinos kentrikon tinon kiniseon»* [Response to Mr. N. Hatzidakis’ criticism of Mr. Nilos Sakellariou’s work “On the properties of certain central movements”], brochure, Athens 1930.
- Sakellariou Nilos, *Ta Mathimatika eis tin Ellada apo tou 1830 mehri tou 1930* [Mathematics in Greece from 1830 until 1930], “Bulletin of the HMS” 1935, vol. 16, no. 1, p. 60–75.
- Sakellariou Nilos, *Teleia kai pavla* [Full stop], brochure, Athens 1931.
- Sakellariou Nilos, *To B’ Diavalkanikon Synedrion ton Mathimatikon* [The 2nd Inter-Balkan Conference of Mathematicians], “Bulletin of the HMS” 1938, vol. 18, no. 1–2–3, p. 208–216.
- Tsaldaris Panagis, *Epistoli ston proedro tis Organotikis Epitropis tou Synedriou, P. Zervo* [Letter to the chairman of the Organizing Committee of the Conference, P. Zervos], “Bulletin of the ASEMT” 1934, no. 3, p. 43.
- Tsaldaris Panagis, *I prosfonisis tou k. prothypourgou* [The Prime Minister’s address], “Bulletin of the ASEMT” 1935, no. 5, p. 8–9.
- University of Athens Historical Archive [UoA Archive], Proceedings of the Meetings of the Faculty of Physics and Mathematics of the University of Athens, meetings of 12.06.1926, 16.10.1926, 08.10.1937, 29.10.1937.
- Ziogas Ioannis, *I polydapanos... komodia tou valkanikou synedriou ton mathimatikon* [The excessively costly... comedy of the Balkanic conference of mathematicians], “Neos Kosmos” 21.06.1934, p. 5.

### Literature

- Anastasakis Othon Evangelos, *Authoritarianism in 20th Century Greece: Ideology and Education under the Dictatorships of 1936 and 1967*, PhD thesis, London School of Economics and Political Science, London 1992, p. 141–142.
- Baltzis Dionisis, *Hellenic Mathematical Society's interventions in mathematics education: A historical analysis*, Master's thesis (in Greek), University of Western Macedonia, Thessaloniki 2021.
- Baltzis Dionisis, *Recover, repurpose, reform: The Hellenic Mathematical Society and the Modern Mathematics reform in Greece*, [in:] *History and Epistemology in Mathematics Education: Trends, practices, future developments*, ed. by E. Barbin et al., Springer Verlag, 2024 (accepted, to be published).
- Christine Phili, *Oi theseis tou K. Karatheodori gia ti didaskalia ton Mathimatikon sti mesi ekpaidefsi kai to egcheiridio Geometrias tou I. N. Hatzidaki* [C. Carathéodory's opinions on the teaching of Mathematics in Secondary Education and the Geometry textbook of I. Hatzidakis], [in:] *School textbooks in the Greek State*, ed. by A. Mastrapas, Educational Policy Institute, Athens 2023, p. 328–336.
- Christine Phili, *The university of Athens: A cradle for the development of the mathematical community in Greece*, "Archives internationales d'histoire des sciences" 2016, vol. 66, no. 177, p. 319–344, DOI 10.1484/J.ARIHS.5.115061.
- Georgiadou Maria, *Constantin Carathéodory: Mathematics and politics in turbulent times*, Springer Verlag, Heidelberg, 2013, p. 297, DOI 10.1007/978-3-642-18562-5.
- Karakatsouli Anna, *Sti chora ton vivlion: I ekdotiki istoria tou Vivliopoleiou tis Estias, 1885–2010* [In the land of books: The publishing history of the Estia Bookstore, 1885–2010], Athens: The Colleagues' Publications, Athens 2011.
- Oreopoulos Georgios, *EME 1918–1988: Ta prota evdominta chronia* [HMS 1918–1988: The first seventy years], Hellenic Mathematical Society, Athens 1988.
- Poulos Andreas, *Idrysi tou Syndesmou mathimatikon Mesis Paideias to 1933* [The establishment of the Association of Secondary Education Mathematics Teachers in 1933], presentation at the 39th Mathematics Education Conference, Hellenic Mathematical Society, Ancient Olympia, Greece 2024.
- Schubring Gert, *On the Methodology of Analyzing Historical Textbooks: Lacroix as Textbook Author*, "For the Learning of Mathematics" 1987 vol. 7, no. 3, p. 41–51.
- Stefanidis Michael, *I istoria tis Scholis Physikou kai Mathimatikon Epistimon tou Panepistimiou Athinon* [The History of the School of Physics and Mathematics of the University of Athens], *Centenary 1837–1937*, vol. 2, National Printing House, Athens 1948, p. 87.
- Türkeş Mustafa, *The Balkan Pact and its immediate implications for the Balkan states, 1930–34*, "Middle Eastern Studies" 1994, vol. 30, no. 1, p. 123–144.
- Ventoura Lina, *I nomothesia peri didaktikon vivlion: Mia estia sygkrouseon ekpaideftikou dimotikismou kai antimetarrythmiston (1907–1937)* [The legislation on school textbooks: A site of conflict between educational demoticism and counter-reformists (1907–1937)], "Mnimon" 1992, vol. 14, p. 91–114.

**Dionisis Baltzis** is a mathematics teacher based in Athens, Greece, and works as an independent researcher specializing in the history of mathematics and mathematics education. His research focuses on the institutional aspects of mathematics and its intersections with society and politics.

e-mail: [baltzisdio@gmail.com](mailto:baltzisdio@gmail.com)