ГОДИШНИК НА УНИВЕРСИТЕТА ПО АРХИТЕКТУРА, СТРОИТЕЛСТВО И ГЕОДЕЗИЯ СОФИЯ

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THE EMERGANCE OF ARCHITECTURAL EDUCATION IN BULGARIA (1943 – 1946). INVESTIGATING INTERNAL AND EXTERNAL INFLUENCES

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Keywords: *history of architectural education, Bulgarian history, German polytechnic model, German Technische Hochschulen, first educators, academic disciplines*

ABSTRACT

This study examines the establishment of architectural education in Bulgaria during the period 1943 – 1946. It systematically analyzes the institutional, historical, conceptual, and personal contexts that shaped the early development of this educational field, with a focus on distinguishing between internal and external influences. Architectural education in Bulgaria began at the Higher Technical School in Sofia during the challenging circumstances of World War II and the immediate post-war years. The program was developed following the German polytechnic model, adapted to local conditions and constrained by the realities of the time and place. This model was implemented by the first generation of architecture educators (1943 – 1946), most of whom had received their education in German Technische Hochschulen (polytechnics) during the Weimar Republic era (1918 – 1933). The study demonstrates that, in its formative years, Bulgarian architectural education was both adequate and, in certain aspects, progressive for its time-though it did not pursue avant-garde or conceptually radical approaches. The conclusion emphasizes the need for further in-depth research into the subsequent stages of architectural education in Bulgaria.

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1. Introduction

In 2023, Bulgaria marked the 80th anniversary of the establishment of the "Architecture" program. With nearly a century of history, Bulgarian architectural education now requires scholarly efforts to examine and preserve its legacy. The present paper focuses on the initial phase of architectural education at the Higher Technical School in Sofia (present-day UACEG) between 1943 and 1946. This period encompasses the beginning of the program in 1943 and concludes with the division of the Department of Building Science and Design into two new departments: Residential Buildings and Public Buildings [1]. This division represented the first major structural reorganization in Bulgarian architectural education and signaled its transition into a new stage of development. The text offers a systematic analysis of the institutional, historical, conceptual, and personal contexts that shaped the architectural education system in the period. It emphasizes the identification of the internal and external influences that contributed to its formation.

2. Institutional Context: Technical Faculty or Higher Technical School

To understand the context in which Bulgarian architectural education emerged, it is necessary to examine the institutional environment that shaped its initial development. Bulgaria's tradition of higher education was established without particular concern for its underlying philosophical values [2]. The Higher School in Sofia (renamed Sofia University in 1904) was founded in 1888 primarily for practical purposes – to train administrative and teaching staff, as well as to foster and strengthen national identity [2]. In other words, its initial justification was grounded in nationalist and pragmatic considerations rather than theoretical ones [2]. It was only in the context of the university crisis (of 1907) that arguments in favor of the university's autonomy and the pursuit of pure science began to emerge within Bulgarian intellectual and academic circles [2]. This defense, and the subsequent re-legitimation of the university, occurred primarily through the citation of texts by Humboldt, Schelling, and Schleiermacher, and the appropriation of their ideas, rather than through deep reflection on the philosophical foundations of these ideas themselves [2]. In other words, this was a process of cultural mimicry, whereby the existing Humboldtian model was adapted and applied to the Bulgarian context in a practical manner, rather than being critically or philosophically reconsidered [2].

Bulgarian architectural education is closely intertwined with the broader effort to establish the Higher Technical School in Bulgaria. Similar to Sofia University, the creation of the Higher Technical School was both a practical and patriotic project. Like the University, the new institution was also expected to adopt and apply already established educational models within the Bulgarian context. However, the path to the formal establishment of the Higher Technical School was long and complex, accompanied by extensive debates over the most appropriate institutional form – whether it should be an independent school or a technical faculty within Sofia University. These two options would place technical education, including architectural education, within fundamentally different institutional environments.

At the end of the 19th century, the Georgiev brothers bequeathed 6 million gold leva for the creation of the Higher Technical School, but in 1904, the funds were redirected to Sofia University by Minister Ivan Shishmanov. The primary advocate for the introduction of higher technical education in Bulgaria during this period was the Bulgarian Engineering and Architectural Society (BEAS) [3]. The minister's decision was met with resistance from

BEAS, which advocated for the establishment of a technical faculty at Sofia University as a temporary compromise. Despite achieving this goal in 1907, the faculty was dissolved in the same year following the university crisis [3]. During the 1930s, the question of higher technical education resurfaced. In 1936, BEAS proposed the establishment of four technical departments within Sofia University [4], and in 1939, the idea of creating a technical faculty at the University was once again raised [4].

The public legitimation of technical education required little argumentation, as it was framed as training in applied sciences. However, after 1939 the Union of Bulgarian Engineers and Architects (previously BEAS) anticipated the need for a different type of legitimation – the defense of the idea of establishing an independent technical school rather than attaching a technical faculty to Sofia University. To this end, the concept for the new institution was elevated beyond that of a simple school: "...the Higher Technical School will not only be a center for pure technical science, but also a center for technical studies and research focused on local conditions and needs, serving to coordinate and shape technical thought in the country" [5], "...not a faculty, but a temple should be erected for technology in Bulgaria" [6]. Similar to the process of legitimizing Sofia University during the 1907 crisis, Eng. Y. Danchov (leading figure in the Union) also cited Western sources – in this case, the work of Prof. Riedler, the first rector of the Berlin Polytechnic. To demonstrate the natural independence of the Higher Technical School, Danchov emphasized: "The spirit of technical education is too foreign to the university for the latter to cope with technical training" [3]. The special committee tasked with drafting legislation for the School referred to examples such as those in Graz, Berlin, Vienna, and Hanover, where the institutions functioned as independent technical schools [7], rather than as technical faculties, as noted by Eng. Danchov in reference to certain cases in Belgium, Italy, the United States, and other countries [3].

Figure 1. Opening of the Higher Technical School, Sofia, 04.10.1942.
Source: UACEG Visual Archive

In 1941, the Union submitted a new draft law, formally proposing the establishment of the Higher Technical School as an independent institution. The law was passed, promulgated, and implemented that same year. The adopted institutional model closely followed the German polytechnic model, which was "strictly hierarchical and based on separate departments, each led by a senior professor who determined the scientific direction and his assistants" [8]. Once again, this represents the practical application and adaptation of an existing institutional model to the Bulgarian context, rather than any conceptual rethinking of it. The preference of the founders of Bulgarian technical education for the German polytechnic model was not accidental. Data from 1935 [9] on individuals engaged in technical practice in Bulgaria between 1898 and 1935 provides insight into the foreign institutions where they had studied (see Tab. 1). Approximately 47 % of Bulgarian engineers and architects had graduated from institutions in Germany. When graduates from related Higher Technical Schools in Czechoslovakia and Austria are included, the proportion exceeds 71 %:

Table 1. Registered Technical Practitioners in Bulgaria (1898 – 1935) and Their Institutions of Graduation [9]

Country	Civil Engineers	Architects	Electrical engineer	Mechanical engineer	Chemical engineers	Mining engineer	Agricultural engineer	Hydromelioration	Others	Total
Germany	255	263	150	193	74	34	15	9	14	**1007**
Czechoslovakia	95	46	59	49	41	6	38	26	15	**375**
Austria	47	44	19	27	29	24	15	25	9	**239**
Belgium	117	19	19	24	-	8	-	-	4	**191**
France	2	29	95	14	16	1	-	-	2	**159**
Russia	17	1	4	13	1	12	3	-	42	**93**
Switzerland	62	-	-	2	2	1	-	-	2	**69**
Italy	21	17	9	7	1	-	-	-	11	**66**
Poland	6	3	7	5	2	1	-	-	1	**23**
Others	18	7	12	6	2	2	-	1	4	**52**
Total	**639**	**428**	**374**	**340**	**168**	**89**	**71**	**61**	**104**	**2274**

The Higher Technical School officially began operations in 1942, during the height of World War II. Beyond the Union's advocacy, the actual founding of the school was driven by several broader factors. First, the Higher Technical School can be understood as a patriotic project: until 1941, Bulgaria remained the only independent European country without its own technical school [10]. It was also a pragmatic project: the war accelerated the demand for rapid modernization [11], and Bulgaria faced an urgent need to train more engineers and architects [11]. The war also restricted opportunities for studying abroad, and many young people chose to remain in Bulgaria [12]. At the same time, Bulgaria had developed sufficient human capital to staff the new institution with domestic faculty [13]. Additionally, in 1939, Eng. N. Sarafov [12] estimated that Bulgaria was spending over 20 million leva annually in foreign currency to

finance the education of its engineering and architecture students abroad. Following Bulgaria's entry into the war in 1941, the country's economy began to deteriorate. Bulgaria became economically isolated from the Allied countries while simultaneously engaging in disproportionate exports. This resulted in severe shortages, the emergence of a black market, and widespread speculation. Between 1941 and 1942, prices rose sharply, and the cost of living increased dramatically. In this context, foreign currency became an increasingly scarce and valuable resource [13].

3. A Brief History of the Architecture Section at the Higher Technical School (1943 – 1946)

The origins of architectural education in Bulgaria can be traced back to those early years of the Higher Technical School. Established in 1942, the school initially comprised two faculties: the Faculty of Civil Engineering and Architecture, and the Faculty of Mechanical Engineering. The Section of Architecture was part of the Faculty of Civil Engineering and Architecture. To support its academic development, four key departments were created: the Department of Building Construction, the Department of Building Science and Design, the Department of History and Style, and the Department of Urban Planning [14].

In 1942, the first professors serving as department heads in the Section were appointed. Arch. Hrabar Popov was assigned to lead the Department of Building Construction, while Arch. Stancho Belkovski became head of the Department of Building Science and Design. The first competitive entrance examination for prospective architecture students was held in August 1943. The exam assessed candidates' drawing skills as well as their proficiency in the Bulgarian language. A total of 29 candidates were admitted to the architecture program, ranked based on their examination performance. Alongside the 25 male and 4 female students admitted through the competitive process, additional students were enrolled through special provisions. These included 11 children of architects and engineers, 2 students from Macedonia, and 2 transfers from engineering programs. As a result, at the beginning of the academic year, the architecture program had a total of 44 students – 33 men and 11 women [15].

Figure 2. First Building of the Higher Technical School, Sofia.
Source: UACEG Visual Archive

For the needs of the Higher Technical School, the government allocated the unfinished northern wing (located on Dragan Tsankov Boulevard) of the secondary technical school, which was subsequently completed and expanded. Additional teaching facilities were also secured, including laboratory spaces at Sofia University on Moskovska Street and at the Faculty of Agronomy on Dragan Tsankov Boulevard [15].

The architecture program officially began on October 5, 1943. The curriculum was continuously revised and refined, with Professor Hrabar Popov serving as the key academic figure during that first year. However, the political and economic situation in Bulgaria quickly deteriorated, significantly affecting the school and its students. Arch. Metodi Pisarski, among the first students, later recalled [15]:

"…The times were difficult – wartime, marked by shortages and hardships. There was a severe lack of food and coal. To this day, we remember how we carried coal in baskets or on children's sleds to heat our cold student rooms. The air raids of December 1943, and especially those in January 1944, were a brutal reality that shaped the early days of our professional lives. The destruction and loss of life were immense. Fear, cold, and darkness paralyzed life in Sofia. The rapid evacuation of the city's population also affected the Higher Technical School, which was temporarily relocated to the town of Lovech. We, the first class of architecture students, were dispersed to our hometowns, or to stay with relatives and friends in villages across the country. Thus, the symbolic declaration of war on distant America soon became terrifyingly real with the repeated overflights of large formations of American 'flying fortresses'. The ground shook under their bombs. Many buildings in Sofia were reduced to rubble and flames."

On the night of September 8 – 9, 1944, the military coup organized by the opposition political coalition, the Fatherland Front, took place across the country. Just three days earlier, the Soviet Union had declared war on Bulgaria, with Soviet troops entering Bulgarian territory. These events coincided with the new student entrance examinations held in Lovech. Following the political shift, the Higher Technical School gradually began its return to Sofia, with classes resuming on December 4, 1944 [16].

By increasing the number of weekly class hours, reducing vacation periods, and extending the academic year, it became possible not only to cover the full curriculum for the 1944/45 academic year but also to compensate for the missed material from the interrupted 1943/44 academic year [16]. Meanwhile, some architecture students were mobilized and participated in the final phase of World War II, serving in military operations in Yugoslavia and Hungary [15]. In December 1944, a government decree was issued granting all mobilized youth the right to enroll at universities of their choice, with their previous semesters automatically recognized, regardless of whether they had attended lectures or practical exercises [16].

At the same time, 232 architecture students were transferred from abroad, primarily from German, Austrian, and Czechoslovakian technical universities, to continue their studies in Bulgaria. Teaching took place under extremely challenging material conditions. There were no dedicated lecture halls or student working spaces. Lectures were delivered in Hall No. 6 of the Higher Technical School, the auditorium of the Faculty of Agronomy (located nearby), and in various public venues such as the Slaveykov Cinema, the Odeon Theater, the Kultura Cinema, and the attic floor of the BEAS building. The severe shortage of drafting tables meant that students often had to wait for feedback from their instructors and complete their project work at home before the next review session [15].

On April 10, 1945, the first Rector of the Higher Technical School, Prof. Arch. Stancho Belkovski, was elected. At the start of the 1945/46 academic year, the Higher Technical School

was restructured and renamed the State Polytechnic. Admissions for the 1945/46 academic year were normalized. Frontline soldiers, former partisans, political prisoners from the previous regime, and children of disabled individuals were granted preferential admission [16]. Despite these efforts, securing adequate teaching facilities remained a pressing issue. The State Polytechnic gained access to the BEAS building and two floors of the Secondary Technical School, though this space proved again insufficient. There were no dedicated student working spaces, no laboratories, and in some cases, one office was shared by one or two departments, housing five or more instructors [16].

The appointment of permanent faculty gradually normalized and Prof. Stancho Belkovski played a central role in the section's development. The following full-time professors and department heads were appointed for the Architecture Section: Prof. Arch. Todor Zlatev (Department of Vernacular and Agricultural Architecture), Prof. Arch. Lyuben Tonev (Department of Urban Planning), and Prof. Boris Kolev (Department of Drawing). The hiring of key lecturers, assistants, and part-time instructors also continued. Notable appointments included Arch. Ivan Danchov for Industrial Buildings, Arch. P. Markovski for Industrial-Agricultural Buildings, and Arch. P. Zagorski for Interior Architecture. Arch. Hashnov for Stylistics, while Sava Bobchev took responsibility for History of Architecture [15].

Lectures in the various disciplines were conducted under extremely difficult conditions, primarily due to the large influx of students in the first graduating class. Simultaneously, the parallel training of the next incoming class placed additional pressure on the academic schedule, making it difficult to coordinate lectures across different semesters. This resulted in an exceptionally complex and improvised academic structure – combining students from the first year (who had missed the entire second semester due to wartime bombing), students from the following year, and students transferred from foreign institutions, whose prior education often did not align fully with the Bulgarian curriculum [15]. Most of the faculty lacked formal pedagogical experience, and the young architectural program faced numerous difficulties as it sought to establish itself [15]. Meanwhile, the gradual construction of the so-called "Architectural Wing" on Paskal Paskalev Boulevard (now Hristo Smirnenski Boulevard) began [16]. During this period, the Department of Building Science and Design was reorganized into two new departments: Residential Buildings and Public Buildings [1]. This restructuring marked the transition into the next phase in the development of architectural education in Bulgaria.

4. The Conceptual Question in Bulgarian Architectural Education

The establishment of architectural education within the framework of an independent Higher Technical School, based on the German polytechnic model, largely predetermined its initial structure. Even from the brief historical overview provided, the challenging conditions under which this young institution operated are evident. It can reasonably be assumed that, during the earliest years of the program, there was little time for conceptual debates. Instead, the focus remained on what was feasible under the circumstances.

The situation, however, was somewhat different before the escalation of political processes in Bulgaria. In 1942, during the preparation of the first curricula for the emerging Architecture Program, Arch. B. Shangov [17] explicitly noted the existence of two distinct educational models (the artistic and the technical) and reflected on their potential application in Bulgaria. He observed:

"In Europe, although it would be difficult to generalize, two tendencies can be identified. The Latin countries favor artistic education, which focuses more extensively on the study of design as an art form. In contrast, the Germanic countries prioritize technical

education. Both approaches, however, benefit from excellent conditions for post-graduate development, including access to extensive literature, the opportunity for practical study of numerous architectural monuments, established technical expertise, and deep-rooted traditions…"

Shangov outlined the concept of "comprehensive education", where all sciences and arts related to architecture would be thoroughly covered, with a particular emphasis on design.

It is important to recognize that thinking in terms of fixed educational models inevitably obscures the complex contextual adaptations made within each institution where these models were practically applied and developed. Such contextual adjustments necessarily introduced variations and even contradictions. Nevertheless, if we wish to broadly outline the evolution of architectural education during this period, we can indeed identify the two fundamental models Shangov mentioned.

The artistic model conceives of architecture as a fine art, while the polytechnic model frames architecture as a technical science. Both models address the aesthetic and technical parameters of buildings, but they do so through fundamentally different approaches. The artistic model is closer to the realm of sculpture and the visual arts. Although technical disciplines are not absent, the primary focus of the artistic model lies in studio work, intensive design exercises, and rigorous competition-based training and juries [18]. In contrast, the polytechnic model aligns much more closely with the field of engineering. Students undergo comprehensive training in the natural sciences, including subjects such as physics, mathematics, and technical drawing, which are supplemented by courses in drawing, aesthetics, ethics, law, and other related fields. The polytechnic model places particular emphasis on the structural essence of architecture, while the design and aesthetic aspects of buildings are largely left to the individual interpretation of the artist [19]. During that period, the École des Beaux-Arts in Paris was regarded as the epitome of the artistic model, while the German Technische Hochschulen (Higher Technical Schools) embodied the polytechnic model. In practice, during the first half of the 20th century, both models evolved simultaneously in both educational contexts, with each institution applying them in ways that reflected its own specific conditions and traditions.

Ultimately, architectural education in Bulgaria emerged within the framework of the Higher Technical School, rather than the National Academy of Arts, which predetermined the adoption of a more technical model.

5. In Search of External Influences: The First Teachers of Architecture in Bulgaria

The application of the German polytechnic model in the context of Bulgarian architectural education occurred for an important reason – the predominance of graduates from German Technische Hochschulen. The following section highlights the most significant representatives of the first generation of teachers (1943 – 1946), along with the year they completed their architectural education, and the institution they attended:

Full Professors: Arch. H. Popov (TH Berlin, 1923), Arch. St. Belkovski (TH Berlin, 1920), Arch. T. Zlatev (TH Munich, 1910), Arch. L. Tonev (Sorbonne University – Paris, Urban Planning Program, 1929).

Leading Disciplines: Arch. P. Markovski (TH Berlin, 1925), Arch. P. Zagorski (TH Berlin, 1925), Arch. V. Khashnov (Paris, institute unknown, date unknown), Arch. S. Bobchev (TH Berlin, 1920), Arch. I. Danchov (TH Berlin, 1922).

Assistants and Part-Time Tutors: Arch. Shangov (Paris, institute unknown, date unknown), Arch. V. Lazarov (TH Vienna, 1935), Arch. Beyazov (TH Berlin, 1929), Arch. A. Popov (TH Braunschweig, 1928), Arch. Sh. Shterev (TH Munich, 1933), Arch. I. Popov (TH Brno, 1936), Arch. D. Sugarev (Paris, institute unknown, 1929), Arch. A. Damyanov (TH Berlin, 1931), Arch. B. Stoyanov (TH Darmstadt, 1934), Arch. K. Hadjiivanov (École polytechnique Paris, 1940), Arch. B. Nenkov (TH Dresden, 1941), Arch. G. Natov (TH Berlin, 1944), Arch. B. Yolov (TH Brno, 1942), Arch. H. Anastasov (TH Berlin, 1932), Arch. D. Georgiev (TH Munich, 1928), Arch. A. Delibashev (TH Munich 1928), Arch. P. Tashev (Belgrade University, 1941), Arch. A. Stoichkov (TH Prague, 1936), Arch. I. Kostakiev (TH Brno, 1931).

The dominance of the German polytechnic model in shaping this generation of lecturers is evident. For most of them, their understanding of how architectural education should be structured and practiced was closely tied to this model. Many of the first assistants and part-time tutors would later advance to the rank of professor. These factors are particularly important to highlight, given that part of this generation would play a leading role in the development of Bulgarian architectural education until the late 1970s – early 80s [20].

Naturally, this raises the question: What does it mean to be influenced by the German polytechnic model, particularly in the field of architectural education? The answer is complex and multifaceted. The German polytechnic model was never a monolithic entity. It manifested differently across institutions and evolved over distinct periods of development. To deepen the analysis, special attention should be paid to the years of the Weimar Republic (1918 – 1933), with a particular focus on the Technische Hochschule Berlin. This emphasis emerges organically from an analysis of the dates and institutions at which the first generation of teachers completed their education. However, this is by no means a straightforward task. The period in question was exceptionally turbulent for Germany's political, economic, cultural, and architectural development. Moreover, targeted research on German Technische Hochschulen during the 1920s remains limited [21]. The available biographical data on the first generation of Bulgarian architectural educators is also scarce, making it difficult to conduct a focused and in-depth analysis of the specific educational and architectural influences they absorbed in Germany. Nevertheless, five key processes can be identified, which most likely left a significant mark on the first generation of Bulgarian architectural educators who studied in Germany:

First Professors of Architecture (1943 – 1946) at the Higher Technical School, Sofia. Source: UACEG Visual Archive

Figure 3. Prof. Arch. Stancho Belkovski

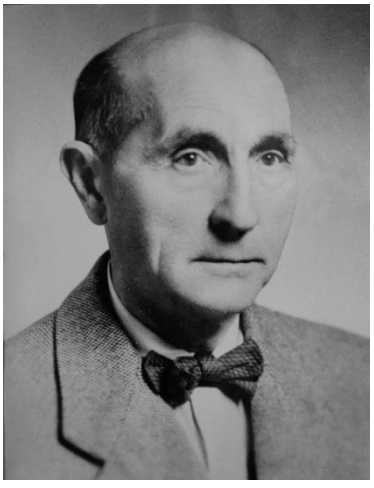

Figure 4. Prof. Arch. Todor Zlatev

Figure 5. Prof. Arch. Hrabar Popov

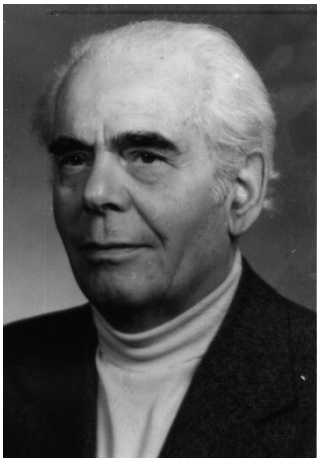

Figure 6. Prof. Arch. Lyuben Tonev

Turbulent Political and Economic Context: Germany descended into political and economic turmoil following World War I. In 1918, the Kaiser abdicated, and the Weimar Republic was proclaimed. Internal conflicts wracked the country – the communist Spartacist uprising (1919) was violently suppressed, while right-wing extremists staged the Kapp Putsch (1920). The Treaty of Versailles (1919) imposed heavy reparations, further fueling public discontent. The economic situation deteriorated rapidly, culminating in severe hyperinflation in 1923. The Franco-Belgian occupation of the Ruhr region that same year deepened the crisis, though the introduction of a new currency, the Rentenmark, eventually helped stabilize the economy. Between 1923 and 1928, Germany experienced a period of relative stability. The Dawes Plan (1924), combined with increased foreign investment, facilitated industrial recovery. At the same time, Gustav Stresemann's diplomatic efforts improved Germany's international standing, particularly through the Locarno Treaties (1925) and Germany's admission to the League of Nations (1926). However, despite economic improvements, unemployment persisted, and political tensions continued to simmer. The Wall Street Crash of 1929 triggered a profound economic depression, which struck Germany with particular severity. By 1932, unemployment exceeded six million, while Chancellor Heinrich Brüning's austerity policies only exacerbated the crisis. Political instability intensified, creating fertile ground for the rise of radical parties, especially the National Socialists. In January 1933, President Hindenburg appointed Adolf Hitler as Chancellor, marking the end of the Weimar Republic and the beginning of the Nazi regime.

Link with the first educators: During this turbulent period, large Bulgarian student communities existed in several German cities. Their student years abroad were marked by hardship – poverty, inflation, political upheavals, and unstable social conditions. Many Bulgarian students faced severe difficulties, including a lack of adequate academic preparation prior to their studies. A significant proportion never completed their degrees, while others emerged as particularly distinguished members of their academic environments [22].

The Rise of Modernist Movements and Architectural Debates: This period also saw the emergence of modernist architectural movements, although these movements were far from unified. Ideas advocating for modern architectural expression – as a reaction against Historicism and Art Nouveau – began to emerge in Germany at the turn of the 20th century. These ideas would eventually merge in the founding of the German Werkbund, an organization

dedicated to elevating both the artistic and functional quality of architecture, crafts, and industrial design [23]. However, the modernist movements themselves were never homogeneous. Instead, they encompassed a wide range of personalities, styles, and ideologies that frequently intersected and influenced one another [24]. As the political and economic crises of the Weimar period deepened, divisions within modernism became more pronounced. The central modernist debate revolved around two opposing camps: radical modernists associated with the Neue Sachlichkeit (New Objectivity) movement, and more conservative reformers. The former – led by prominent figures such as Walter Gropius and Ludwig Mies van der Rohe – championed rationalism, the use of industrial materials, and functionalist design principles [24]. By contrast, architects such as Paul Bonatz, Paul Schmitthenner, and Heinrich Tessenow advocated for a more gradual modernization rooted in local traditions, materials, and architectural forms [24]. These ideological differences became increasingly pronounced as the Weimar Republic's economic and political crises worsened. In response to the radical modernists, more conservative architects formed the "Der Block" movement in 1928 to counter the influence of modernist groups such as "Der Ring" (founded in 1926) and CIAM (founded in 1928) [24]. With the rise of National Socialism in the early 1930s, traditionalist approaches gained official support, while avant-garde modernism was increasingly marginalized [24].

Link with the first educators: The architectural culture of the era was thus shaped by a clash between competing visions of modernity, a cultural environment that profoundly shaped the Bulgarian architectural students who studied in Germany during this period. An entirely separate analysis would be required to trace how these influences manifested in the architectural work they later produced in Bulgaria. But it is evident in previous research [25].

Architectural Education in German Polytechnics as Dominant Model: In practice, both polytechnic and artistic approaches coexisted in Germany. Eight Technische Hochschulen were offering architectural education during this era: Berlin (1799), Braunschweig (1835), Darmstadt (1826), Dresden (1828), Hanover (1831), Karlsruhe (1825), Munich (1827). Stuttgart (1829) [26]. In addition to polytechnics, architectural education was also offered at various types of state art academies. These could be classified into three categories [27]:

1. Art academies with faculties of architecture: Düsseldorf (1773) and Berlin (1689).
2. Art academies offering architectural classes: Kassel (1777), Breslau (1791), and Dresden (1764).
3. Art academies without regular architectural classes: Weimar (1860), Karlsruhe (1854), Munich (1808), Stuttgart (1761), and Königsberg (1790).

In cities where prestigious Technische Hochschulen existed, art academies tended to occupy a secondary position [27]. Several factors contributed to this: art academies did not provide sufficient technical training; their graduates were generally excluded from public sector employment and could only practice as private architects; and, crucially, the academies traditionally did not administer final examinations or issue formal diplomas. Consequently, their graduates were not legally entitled to use the professional title of "architect" [27]. For example, in the summer semester of 1930, only 29 architecture students were enrolled at the Dresden Academy of Arts, compared to 228 students at the Technische Hochschule Dresden in 1929 [27].

Link with the first educators: For prospective Bulgarian architecture students, the choice was therefore clear from the outset – Technische Hochschulen offered far greater professional security.

The Rise of Modernism Led to Significant Reforms in Architectural Education: The gradual shift away from Historicism and Art Nouveau created conditions for rethinking how architecture should be taught. A more functional and practice-oriented approach to education began to emerge. Throughout the period, discussions of educational reform took place in nearly every architectural institution. However, what reform entailed, what its primary focus should be, and how it should be implemented varied greatly from one institution to another. Some art academies sought to strengthen their position in competition with the state polytechnics [27]. Walter Gropius became the emblematic figure of this reformist movement, promoting the idea that education should take place in multidisciplinary studios where buildings were conceived as total works of art, integrating contributions from all artistic and technical disciplines. According to Gropius, architecture – as the "mother of all arts" – should hold a central position within the curricula of art academies [27]. These ideas materialized in the founding of the Bauhaus, a radical new educational project that emerged from the merger of the Weimar Academy of Fine Arts and the Weimar Academy of Applied Arts [28]. Following Gropius' example, the art academies in Düsseldorf, Karlsruhe, and Berlin also merged with their respective local academies of applied arts [27]. The Bauhaus bold attempts to break with educational traditions had significant repercussions. As early as 1921, internal conflicts between progressive and conservative faculty members led to a split and the founding of the State Academy of Arts in Weimar [27]. Meanwhile, the established Technische Hochschulen retained their dominant position in architectural education [24]. These institutions were critical of the Bauhaus unorthodox methods and simultaneously pursued their own, often more moderate, processes of modernization. The Technische Hochschule Stuttgart became a stronghold of resistance to avant-garde modernism. Professors such as Paul Bonatz and Paul Schmitthenner advocated for a more contextually grounded, regionally inspired form of modernism [26]. However, Bonatz, unlike Schmitthenner, encouraged his students to experiment with the full range of modernist architectural expression [24]. At the Technische Hochschule Braunschweig, under the leadership of Carl Mühlenford, emphasis was placed on urban planning, functional typologies, and strong links with the construction industry – directly rejecting the Bauhaus ethos [21]. The Technische Hochschule Munich, under the leadership of German Bestelmeyer, maintained a conservative approach to architectural education. Following Bestelmeyer's retirement from the Technische Hochschule Berlin in 1922, the appointments of Hans Poelzig in 1923 and Heinrich Tessenow in 1926 fostered an environment of ideological architectural competition. On one side Hans Poelzig, close to Neue Sachlichkeit (New Objectivity) movement, on the other Heinrich Tessenow, sought to intertwine modernity with local architectural traditions [24].

Link with the first educators: What becomes clear from this period is that German polytechnics continued to dominate architectural education. Although they introduced certain modernizing reforms, they remained institutionally and pedagogically conservative compared to the Bauhaus. Architecturally and structurally, the polytechnics preserved their traditions: strict curricula, a focus on technical mastery, clear departmental hierarchies, and limited interdisciplinary interaction. Ultimately, each institution – whether Technische Hochschulen or art academy – developed its own interpretation of educational reform, largely shaped by the influence of its most prominent faculty members [27]. Figures such as Bonatz, Schmitthenner, Mühlenford, Bestelmeyer, Poelzig, and Tessenow became highly influential, not only shaping the institutions where they taught, but also cultivating the students' architectural ideas [24]. For example, decades after completing their studies, figures such as Arch. Dimitar Tsolov and Arch. I. Ivanchev will remember the mentorship of their teacher German Bestelmeyer [22].

The Cultural Influence of the Bauhaus During This Period was Considerable: The Bauhaus Manifesto of 1919 set the tone for future educational reforms in design and architecture. The school became a cultural and intellectual epicenter for progressive ideas in architecture, design, and education. Major public events, including the 1923 Bauhaus Exhibition in Weimar and the 1929/1930 traveling exhibition, helped amplify its influence. In 1930, the Bauhaus participated in the German section of the Exposition de la Société des Artistes Décorateurs in Paris, while the Bauhaus Zeitschrift Magazine was published between 1926 and 1931, further cementing its intellectual reach [28]. Bauhaus-affiliated architects and designers were also responsible for several landmark projects of the era, including the Haus am Horn (1923), Das Neue Frankfurt housing project (1925 – 1930), the Bauhaus Building in Dessau (1926), and the Weissenhof Estate in Stuttgart (1927), among many others. Influential architectural magazines such as Das neue Frankfurt and Das neue Berlin regularly reported on the architects' achievements, further enhancing their reputation [24].

Link with the first educators: the Bauhaus formally ceased to exist in 1933, and it is worth noting that the school only officially taught architecture from 1927 onward. Among the Bulgarian students of the period, only Mara Uchkunova attended the Bauhaus, and she studied textiles rather than architecture [25]. Assessing the Bauhaus direct influence on Bulgarian architectural education is challenging. While the Bauhaus undoubtedly enjoyed high cultural prestige during the Weimar Republic and its influence extended far beyond the school's borders, the claim that Bulgarian architectural education was directly modeled on the Bauhaus system is difficult to substantiate. The first generations of Bulgarian architecture professors were primarily educated within the classical German polytechnic model, which emphasized rigid curricula, hierarchical departmental structures, and a lack of interdisciplinary creative environments. It was this more conservative model – not the experimental ethos of the Bauhaus – that left the strongest imprint on the foundations of architectural education in Bulgaria.

6. In Search of External Influences: A Comparative Analysis Between Academic Disciplines in Architecture at HTS Sofia and TH Berlin

Table 2. A Comparative Analysis Between Academic Disciplines in Architecture at HTS Sofia and TH Berlin

Legend: match **L – lecture**
only at HTS Sofia **P – practice**
only at TH Berlin **S – semester**

List of disciplines for the first graduating class of students in "Architecture" at the HTS Sofia 1943 – 1947 [15]			List of disciplines in "Architecture" for the academic year 1943 – 1944 at the TH Berlin [29]		
Course Title	**L/P**	**S**	**Course Title**	**L/P**	**S**
Descriptive Geometry	L+P	I, IV	Descriptive Geometry	L+P	I
Mathematics	L+P	I, III, IV	Mathematics	L+P	I, II, III, IV
Building Construction I, II, III	L+P	I, III, IV, V, VI, VII	Building Construction	L	V, VI, VII
Construction Materials	L	I	Construction Materials	L	I, II, III, IV
History of Art	L	I	History of Art	L	-

List of disciplines for the first graduating class of students in “Architecture” at the HTS Sofia 1943 – 1947 [15]			List of disciplines in “Architecture” for the academic year 1943 – 1944 at the TH Berlin [29]		
Course Title	**L/P**	**S**	**Course Title**	**L/P**	**S**
Modeling	P	I, III	Sculpture I & II	P	III, IV, V-VII
French Language	L	I, III, IV, V	Foreign Language	-	-
Drawing	P	I, III, IV, V, VI	Drawing I, II & III	P	I, II, III, IV, V, VI, VII
Statics I, II, III	L+P	I, III, IV, V	Statics I-III	L+P	I, II, III
Heating and Ventilation	L	III, IV	Heating and Ventilation	L	III, IV
Construction documentation	L+P	III, IV	Economics II	L	V-VII
Building Surveying	P	III, IV	Building Surveying I+II	P	III, IV, V, VI
Stylistics	L+P	III, IV, V	Stylistics	L+P	I, II, III
Materials Science	L	IV	-	-	-
Geodesy	L+P	IV	Geodesy	L+P	I-IV
Agricultural Buildings	L+P	V	-	-	-
Composition and Color Theory	L	V	Color in Architecture	L	V-VII
Lighting Installations	L	V	Lighting I & II	L+P	V
Building Knowing (Design)	L+P	V, VI	Building Design	L+P	III, IV
Parks and Gardens	L+P	V, VII	-	-	-
History of Architecture	L	V, VI, VII	History of Architecture	L	I, II, III, IV, V, VI, VII
Vernacular Architecture	L+P	VI	-	-	-
Statics of Iron and Wood Structures	L+P	VI	Statics IV+V	L+P	IV, V, VI, VII
Industrial Buildings	L+P	VI	Industrial Buildings	L	V-VII
Agricultural-Industrial Buildings	L+P	VI, VII	-	-	-
Urban Planning	L+P	VI, VII	Urban Planning	L+P	V, VI, VII
Building Design	L+P	VI, VII, VIII	High-Rise Building Design	L+P	V, VI, VII
Water Installations	L+P	VII, VIII	Building Installations I+II	L+P	I-IV
Construction Hygiene	L+P	VIII	-	-	-
Interior Architecture	L	VIII	-	-	-
Construction Law	L	VIII	Construction Law	L	I-IV
Statics of Reinforced Concrete	L+P	V	Statics IV+V	L+P	IV, V, VI, VII
Economic Sciences	L	VII	Economics I	L	V-VII

List of disciplines for the first graduating class of students in “Architecture” at the HTS Sofia 1943 – 1947 [15]			List of disciplines in “Architecture” for the academic year 1943 – 1944 at the TH Berlin [29]		
Course Title	**L/P**	**S**	**Course Title**	**L/P**	**S**
-			Construction Execution	L	I-IV
-			Technology and Crafts	L+P	I, II
-			Crafts	L	I-IV
-			Photogrammetry	L	I
-			Perspective	L+P	I, II
-			Artistic Perspective	P	V+VII
-			Chinese Urban Planning	L	I-VII
-			German Architecture	L	I-VII
-			Monument Preservation	L	I-VII
-			Economics in Urban Planning	L	VI, VII
-			Regional Planning Seminar	P	VII

Another process that needs special attention is the architectural education in Germany, which took place alongside the establishment of the “Architecture” program at Sofia's Higher Technical School in 1943. As is well-known, the first educators used examples relevant to their time [16]. The presented analysis (see Tab. 2) compares the courses studied in Sofia from 1943 to 1947 with the catalog of disciplines at the Technische Hochschule Berlin [29] for the academic year 1943 – 1944. It is important to note that, due to wartime conditions, there are certain discrepancies in both lists. For instance, the second semester at Sofia’s HTS was canceled because the city was evacuated following heavy bombing. Additionally, TH Berlin’s curriculum for the period shows seven semesters, one fewer than the traditional eight in previous decades [30]. Several key observations emerge from the analysis:

- **A significant overlap of academic disciplines is noted between the two institutions.** The implementation of a polytechnic model for architectural education at HTS Sofia is confirmed. However, the overlap is not entirely complete across the two institutions and the exact content of the parallel courses remains unclear. It is likely that, as some sources briefly suggest [15], the first educators drew upon examples from various polytechnic schools. Future research should explore the specializations pursued by Bulgarian lecturers abroad [15]. It remains uncertain whether faculty from the Architecture Section participated in these programs or which institutions they were involved with. The first curriculum was essentially developed in action [15], and likely reflects a blend of influences, compromises, and adjustments.

- **During this period, the unity of design-related disciplines and departments is evident.** The functional-typological approach to teaching and structuring architectural education in Sofia had not yet been fully established, and it is similar to TH Berlin department structure. At that time, HTS Sofia had one main design department, Building Science and Design, led by Prof. Arch. S. Belkovski. This department was responsible for almost all design-related courses, such as “Building

Knowing", "Building Design", "Industrial Buildings", and "Agricultural-Industrial Buildings".

- **Nevertheless, the introduction of typological design disciplines is observable at HTS Sofia.** It is not yet possible to definitively determine whether these influences originated from other German polytechnics attended by the early tutors (for example, TH Braunschweig, where, since the 1920s, education has emphasized typologies [21]), or whether they reflect the initial stages of Soviet influences in the curriculum [31].

- **The disciplines offered at HTS Sofia reflect an advanced phase of modernization in architectural education.** The course list is striking for its limited emphasis on subjects like "History of Architecture" and "Stylistics", in favor of more technical and contemporary courses such as "Building Construction". This shift signals a departure from the dominance of historical styles in architectural education. Simultaneously, there remains a certain respect for the local historical context, as evidenced by the inclusion of courses such as "Vernacular Architecture" and "Agricultural Buildings" [14].

7. Conclusion

In conclusion, it can be stated that architectural education at the Higher Technical School in Sofia during the period 1943 – 1946 appears to have been both adequate and, to some extent, progressive for its time. While it was by no means avant-garde or reflective of the Bauhaus approach, it demonstrated a thoughtful local adaptation of the more established and traditional polytechnic model. The establishment of the architecture program during these years was a turbulent and challenging endeavor. The difficulties encountered were varied, including a lack of sufficient space, resources, pedagogical experience, and an overabundance of students. Nevertheless, the establishment of the "Architecture" program within the independent Higher Technical School, along with the involvement of prominent management personnel, particularly Prof. Arch. S. Belkovski, provided a solid foundation for future development. While the education of the time did not exhibit significant conceptual depth, it mirrored the practical, applied approach of the Higher Technical School itself, utilizing established models adapted to local conditions and taking into account context constraints. The limited availability of detailed biographical records on the first generation of architecture educators presents a significant challenge to fully understanding this formative period. Future research should therefore concentrate on the subsequent phase in the development of Bulgarian architectural education, with particular emphasis on the Soviet influences and the resulting changes.

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НАЧАЛОТО НА АРХИТЕКТУРНОТО ОБРАЗОВАНИЕ В БЪЛГАРИЯ (1943 – 1946). В ТЪРСЕНЕ НА ВЪТРЕШНИ И ВЪНШНИ ВЛИЯНИЯ

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Ключови думи: *история на архитектурното образование, българска история, немски политехники модел, немски висши технически училища, първи преподаватели, академични дисциплини*

РЕЗЮМЕ

Текстът изследва началото на архитектурното образование в България между 1943 – 1946 г. Той последователно разглежда институционалния, историческия, идейния и персоналния контекст, оказали формообразуващо влияние за началото на това образование, като подчертава кои от тези влияния са вътрешни и кои – външни за България. Архитектурното образование започва своя път във Висшето техническо училище в София в тежките военни и следвоенни години на Втората световна война. Подобно на самото Висше техническо училище, специалност „Архитектура“ се реализира практично, използвайки вече установения модел на немските политехники, приложен с местни особености и съобразявайки се с всички ограничения на времето и средата. Този процес е воден от първите преподаватели по архитектура (1943 – 1946), мнозинството от които са завършили своето образование в немските висши технически училища (Technische Hochschulen) по време на Ваймарската република (1918 – 1933 г.). Като резултат изследването доказва, че в първите си години българското архитектурно образование е адекватно и дори в известна степен напредничаво за времето си, макар в никакъв случай да не е авангардно или концептуално осмислено. Подчертава се нуждата от дълбочинни изследвания на следващия период в развитието на образованието.

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