

CENTENNIAL HISTORY OF THE FACULTY OF ARCHITECTURE

Address by Dr. L. GÁBOR, Dean

Honoured Session, Dear Guests,

Let me, as Dean of the centennial Faculty of Architecture of the Technical University, Budapest, recall the architectural education in Hungary, its past, present, and outline its future, proposed development trends, of course its essentials only, indicating the most important steps, sketching the latest, hardest ideas.

In Hungary, organized architectural education at university level has begun 100 years ago, i.e. in 1871, at the Hungarian Joseph Palatine Technical University, just having been reorganized and granted autonomy.

This would not mean, however, that architectural education began only then, since as early as in the third quarter of the 18th century, architecture has been delivered and architects trained at the College of Szempe near Bratislava.

Namely, this institute called Collegium Oeconomicum, besides of delivering accountance, economy, geodesy, mapping, geometry and mechanics, laid much stress on the subject civilian architecture (including building components and perspective) so that already third-year students planned major buildings.

After the College of Szempe perished in a fire in 1786, this institute has been relocated in Tata where, however, it could not take roots and unfortunately died away. But the need toward architectural education went increasing. Therefore in 1782 the Board of the Buda University of Sciences suggested to launch an engineering course in the frames of that University.

As an answer to repeated demands, Emperor Joseph II edicted the statutes of the Engineering Institute in the same year i.e. September 19th 1782.

Kornél Zelovich, Rector of this University in 1921 to 1923 stated with a just pride in his book entitled "The Hungarian Royal Joseph Technical University and the Higher Engineering Education":

"Hence, from 1782, we educated our engineers at high school, ahead of the world, and 12 years ahead of the French who established the Ecole Polytechnique for engineering education in 1794." Well, this statement is correct

but overdue in respect of architecture since the Institute had though famous teachers and pupils, but neither was an architect, so it did and could not fulfil the hopes for architectural education.

Establishment of this Institute relieved but transiently the problems of engineering education, since in the frames of a university of sciences, its curricula became soon obsolete just as did its instruction method, at the same time there was hardly training of building engineers.

This is why the technical high school became of concern for ever more interested, even it has been put on the agenda of the Bratislava Diet of 1832 to 1836.

The Bill passed in 1836 classified as a "public will" to establish an engineering school.

In 1841, Antal Vállas, professor at the engineering institute, quotes foreign examples for the to-be Hungarian Technical University and develops its curriculum, cost estimate.

After being granted the royal approval in 1844, the new high school was inaugurated in 1846, for the time in rather modest circumstances, improved only in 1850 when the engineering institute, up to then pertaining to the University of Sciences, has been annexed.

Of course, the oppression of the War of Independence caused much harm in this respect too, and József Stoczek, first rector of the University was right to classify the period to then, 1872, as "provisory" since there was no architectural education in merit, it being represented by merely two subjects.

These are the very modest frames of which the architectural education in this country grew out, largely on the bases laid down by János Schnédár, the first professor of architecture.

The time for Joseph Technical School to become Joseph Polytechnicum, that is, a *de facto* university, is September 30th 1856, date of the "supreme resolution".

A change of importance was due to the appointment of József Stoczek, an outstanding wide-ranged specialist as director of the polytechnicum, who, backed by the teachers' board, started a stout struggle for updating the instruction, for finding the necessary means.

As a result, three independent sections have been formed within the technical division: education of civil engineers, mechanical engineers and chemical engineers got separated.

From 1863, special time-tables have been prepared for civil engineering students, involving ever wider fields of, and ever more hours for architecture.

The time-table of 1870/71 announces a special architectural course within the civil engineering section (first time since its establishment).

The position of the Joseph Technical University begins to solidify and the number of students grows to three-fold.

This period is affected by two serious inconvenients — first, there is no institution competent to issue an engineering diploma since the university of sciences has already lost this right, not conferred still to the technical university; second, it is difficult to find an engagement as possibilities don't keep pace with needs.

The new statutes issued by József Eötvös, Minister of Education in 1871, granted the same rights to the Joseph Technical University as to the University of Sciences.

The Technical University moves in its new quarters for the year 1872/73, to occupy in 1882 its permanent quarters on Múzeum körút built by Imre Steindl.

1872 to 1882, there was no special architectural section operating, mainly due to the too low number of students in architecture (8 in all).

Namely, the two decades — from the dissolution of the Engineering Institute to 1871 — in course of which no engineering diploma has been issued, have most affected architectural education. It became established that those aspiring to a serious graduation enrolled at some western university. Unfortunately, this mode of thinking needed decades to be changed, so that students in architecture attained the number of fifty as late as in the mid-eighties.

Adversities of the first period are evident from the curricula, together with the fact that in that period architectural education fell short of the niveau needed to keep at home the more ambitious students.

In spite of the quoted and other difficulties, every year produced some progress in the education, such as:

- reorganization of design subjects (1876/77);
- introduction of the subject "engineering natural sciences" (1877/78);
- introduction of university examinations (1878/79);
- issue of the new organizatory statutes (1882).

This latter was a particularly important step by enforcing to follow the issued curriculum and stopping the ill-interpreted "complete" freedom of teaching. By 1882, the priming subjects, belonging up to then to the universal section, had been transferred to first-year curricula of each special section.

This did not mean a significant alteration of the work of the architectural section but initiated the delimitation of subject domains, of the fields of activity of departments, thus, a purposeful, more differentiated education.

Besides, in this period, some eminent authorities assumed teaching:

The development of the architectural section has become conspicuous, so that Rector János Kriesch in his inaugural address (1885) makes allusion for it to become quite independent in the near future.

This separation, unfortunately, did not come about, and the co-existence with civil engineers became a tradition, though the number of students grew

from 53 in 1885/86 to 168 for 1898/99, worth a perfect organizational independence.

Development, even if slowly, goes ahead. Two new departments have been established (1886/87) making up the number of architectural departments to six. Samu Pecz and Győző Cziegler have been appointed university professors.

Curriculum of this period shows — taking tendency to Neoromanticism prevalent at this faculty into consideration — rather correct and realistic proportions to prevail between different kinds of knowledge pertinent to the profession. This is evident from the fact that, in the third year, 22 of the weekly 42 hours had been devoted to technical knowledge and 6 to design, while in the fourth year, out of the overall 40 hours, 14 were spent to design, 5 to technical knowledge, 16 to history and drawing, and 5 to complementary knowledge.

By the nineties, names of professors encountered already in course of my studies begun more than 40 years ago, emerge. By that time Adolf Czakó, Gyula Sándy, Dezső Hüttl and Károly Nagy join the University as teachers. By then, a new, three-storey architectural pavilion in Múzeum-körút has been erected, much improving conditions and thereby efficiency of work.

The following conclusions can be drawn from the analysis of education in the decade following the 1887 reform:

It was a progress to make the education more professional, and a regression to do this by sacrificing the up-to-then balanced technical and artistic aspects, with its harmful consequences manifest during decades by decisively stressing drawing and moulding abilities needed for the so-called “artistic” design.

This standpoint of the university is conscious or even official, as it is evident from the inaugural address by Alajos Hauszmann, Rector, in 1903, refuting the principle of “modern art for a modern society”, and declaring, with an allusion to the new architectural trends in Hungary: “Secession has no ground in this country, it is born out of perverted phantasy, a chaotic helter-skelter, an insult to good taste”. Thus, lecturing on the old, Neoromantic architecture keeps on to the period of the Hungarian Soviet Republic.

From the stably conventional, tradition-keeping character of the education it follows naturally that nothing but personal changes could bring about some variation — without affecting the mode of viewing or the method.

Nevertheless, standard of the Hungarian architectural education can be stated not to lag behind affin western institutions in this period, and even if it gets stuck at Eclectics because of an overdue stiffness, offers in general sufficient theoretical and practical knowledge for an up-to-date architectural practice. This is also evident from the steeply increasing number of students, exceeding 400 by 1919/20.

The increase of enrolment at any faculty created important problems of placing, some final solution has become imperative.

Already in 1898, Rector Vince Wartha announced the construction of the new building for Joseph Technical University at Lágymányos (its actual site). This building designed by Professors Győző Cziegler, Alajos Hauszmann and Samu Pecz was solemnly inaugurated May 25th 1910.

Obstacles to a major development of architectural education have been removed by the Hungarian Soviet Republic, as one of its essential merits, by introducing reforms of incentive effect even after the early fall of the Soviet Republic.

By their importance, these merit a treatment in particulars.

Based on a tentative elaborated by the professors in architecture, March 1st 1919 Professor István Möller submitted a detailed reform proposal agreed by the University Board and then by the Commissariat of Education.

The proposal had two clauses:

a) establishment of an artistic perfection course,

b) organizatory changes needed by the development, creation of new subjects and new departments.

Item *a)* aimed at solving a long-delayed problem by offering the most talented students the compulsory subjects of design, artistic architecture, design in arts related to architecture and design in arts and crafts, complemented by facultative lectures such as inner space art, questions of modern architecture, open space art, garden architecture, dwelling and furniture etc.

This part of the proposal is questionable, as it reduces the first four years to preliminary studies.

The second part of the proposal related to the establishment of new departments is of much greater importance. This has been recognized by the Commissariat of Education by decreeing six new departments to be established and appointing six professors to head them, as soon as April 15th 1919.

These were:

Department of Town Planning	headed by Manó Lessner
Department of Industrial and Agricultural Architecture	headed by Béla Málnay
Department of Design I	headed by Móricz Pogány
Department of Design II	headed by Rezső Hikisch
Department of Furniture and Inner Decoration	headed by Lajos Kozma
Department of History of Architecture	headed by László Éber,

all being pioneers of modern architecture and arts in Hungary.

The short régime of the Hungarian Soviet Republic could only initiate the right tendencies of development but could not launch them and the pitiful

truth is that in fact, almost 30 years took to fight achievements brought about in a few weeks by the Hungarian Soviet Republic.

In the twenties, architectural education is ruled by stiff, conservative mind, that has not changed much upon the appointment of some new professors (Gyula Wálder, Károly Nagy, Gyula Sváb and László Varga). Though, Iván Kotsis, appointed as university professor in 1928, introduced in fact new subject matters and education methods, so that modern architecture and up-to-date architectural education could penetrate the Faculty of Architecture, but not without encountering serious drag.

I have subjective reminiscences of this period since I was a student from 1928 to 1932, being offered this kind of architectural education.

As I remember, in this period, education was featured partly by an infinity of traditions, rigid formalism and atmosphere, and partly, by overwhelming work (42 to 44 hours a week), too much of obsolete knowledge and backwardness in architecture.

This was in fact the official standpoint, evolved from the conviction of most professors, continuation of the Neoromantic taste as against Secession, only that the former was advocated by Hauszmann, and the latter by Hülltl.

By this time, an important progress in architectural education was brought about by the international congress of architects, organized in 1930 in Budapest, concerned with the problems of education.

As a result, Hülltl declared already in 1931: "... to the cost of subjects on history of architecture, a greater number of hours has been allocated to design exercises ...".

In fact, this step was primordial by breaking with the Eclectic mind, both in principle and in practice.

Unfortunately, thereafter, subject and method of education are settled and no transformation occurs before the end of World War II and the great social transformation.

This pre-war period considered as stationary — outlined for the sake of understanding the further development — was featured by:

- a conservative architectural mind;
- among subject groups, maximum of hours allotted to design;
- much stress laid on building structures;
- accent on structural engineering — though at a somewhat reduced number of lessons; and
- exchange of most of the teaching staff.

By 1945, a radically new section of architectural education has begun, qualitatively different from the previous one, characterized by great many

significant transformations and a variety of organizatory, personal, material as well as subject matter and methodology changes.

Method, degree, character, evolution of this transformation were indissolubly coherent with the social transformation, the resulting new mind, changed possibilities, with the ever increasing and ever more complex new tasks.

Natural and necessary endeavours to replace immense war destructions, damages as rapidly as possible, the important social development, large-scale, quick-pace industrialization, involving the perfect reorganization of the building industry, evidently and fundamentally affected the entire problematic of architecture and construction, changed the situation of the building industry, multiplied its tasks, wholly reorganized it and perfectly altered the demand in specialists, thereby much affected the architectural education — both directly and indirectly.

Of course, also this university had been faced by the problem of what, how, with what a mind, an aim, and who should teach in a changed world, under changed circumstances.

Therefore,

— already in 1948, it was natural to raise the problem of educational reform, and as soon as in 1950, a second reform has been introduced, and

— evidently, ideological, aim and methodological changes of the education involved creation of new institutions, new departments, involvement of new specialists, as required by the execution of changed tasks, cultivation of new fields of knowledge, change of professional mind, development of the number of teachers, replacement of the retired professors.

This has led to the establishment of the

Department of Industrial Architecture (evidently, dependent on the policy of industrialization and industry development),

Department of Building Organization and Mechanization (in logical relation to the establishment of the state-owned building industry and to the rapid, essential change of building technology and methods),

Department of Sanitary Engineering (required by the increasing importance of heating, cooling, ventilating, water and gas supply and canalization within the building industry).

Thereby the necessity arose

— to elaborate the education of the theory and history of architecture according to Marxist viewpoints;

— to update subject matters on structures and skill;

— to elaborate the knowledge of settlement and town planning.

To meet this need, practicing architects join the University.

Nevertheless, the line of growth, development, transformation is neither unbroken nor exempt of contradictions, due partly

— to the radical change of architectural mind and creation method (in fact, the modern architecture tamed to traditional has been displaced first by a radically modern one, then one re-traditionalizing, archaizing and eclectic, finally, by an architecture that is up-to-date as it is actually meant, or even stylish); partly

— to the transformation of circumstances, possibilities, equipment, and thus, of creation and working methods of the building industry (namely, manufacture employing few qualified workers and applying almost no machinery has been replaced by increasingly mechanized and industrialized construction); partly

— to the necessary alteration of the trade policy including that affecting the building industry (ever growing tasks, problems due to uneven development, to labour shortage being decisive for it).

Evidently, architectural training, that is, university education is often and markedly changing.

The initial shifting towards structural subjects has been replaced by two parallel tendencies quite apart, i.e. artistic and executional, to finally return to — proved — knowledge domain proportions after long and arduous debates, frequent program modifications and quite many reforms, for enrolments ranging from 500 to 1700 a year — followed up by the teaching staff with a delay and to a certain degree only — to reach its effective equilibrium condition based on the principle of the so-called uniform architectural-engineering education, equally qualifying for a variety of practices.

This way, far from being simple and straight, can be understood in the knowledge of the process of taking shape of education.

a) University organization problems arose,

— namely, in 1951, faculties of architecture and civil engineering had been detached from the Technical University, Budapest to form the Technical University of Building, completed later by the Faculty of Transport Engineering, and the three did not return but after 16 years (in 1967) to the Technical University, Budapest.

b) Departments have been established and melted, their profile modified, small laboratories created:

— departments of history of architecture, departments of public building design have fused to achieve a uniform mode of viewing, departments of building operations melted to unify the field of knowledge, minor laboratories for building structures, sanitary engineering and structural engineering have been created to achieve up-to-date structural design and research.

c) Composition and number of the teaching staff has significantly changed

— partly upon education coming to the foreground;

— partly upon the important growth of enrolment; and

— partly upon the modification of both the importance and the proportion of the particular fields of knowledge.

d) Multiple, even continuous updating of subject matters, contributing to the creation — as a useful by-product — of Hungarian technical and textbook literature providing international acknowledgement,

— namely, quite a number of books on theory and history or architecture, town planning, construction design, building structures, structural engineering have been published.

e) Elaboration of new methods of education have become imperative because of the increased stress laid on education,

— affording a human, direct mode of lecturing, leading to the distribution of students into study circles, thereafter into small groups.

f) The task of teaching became inseparable from research and scientific work, then from architectural practice,

— namely, realistic teaching, education to life are unthinkable without them.

In the ordinary course of things, the equilibrium state could not, and did not last,

— since the extraordinary speed of development of science and technique, the rapid expansion and obsolescence of knowledge matter, the increasing importance of architecture and construction, the transformation and dynamic progress of building industry, the reorganization of higher education, and — last but not least — worldwide endeavours in the field of university education made seeking of ways and means imperative and pressing.

Thereby in 1968, the necessity arose also at this faculty, — in part, upon the demand of industry represented by the Ministry of Building — to develop a new conception of architectural education, based on the revision of the system of uniform architectural education.

The new tentative conception — complete by May 1968 — starts from the following principles based on a comprehensive analysis of the problem:

a) keeping the essentials of the actual mode of viewing, education has to be differentiated to a certain degree without affecting the unity of education but permitting the student to absorb in a rather restricted field of his profession,

— acquisition of the entire knowledge matter of architecture being almost impossible,

— permitting the subject matter to be reasonably divided and students unloaded to a certain degree.

b) Hence, at the Faculty of Architecture, sectional education in conformity to disposition and talent, according to the main fields of knowledge of the profession has to be introduced, renouncing of the principle and method of teaching everything,

— as it would risk or even inhibit real absorption,

— while omitting it permits to spend part of the so gained time to acquire the capacity of absorption and the particular knowledge matter.

c) Volume of this particular knowledge matter cannot exceed, however, a low percentage (10%) to permit graduates — after a certain practice — to hold in any field of the profession, at the same time to offer them particular knowledge enough to become later specialists of a given domain determined by their activity or disposition.

d) Only so can the target of architectural education be attained, taking in mind the peculiar task of the architect, i.e.

— to create artificial nature, spatial order, human environment for the human society based on a comprehensive mind,

— to be able in his work to value, ponder, co-ordinate and summarize the constant and ever intensifying flow of varied information,

— to provide him with professional knowledge enabling one to find the solution out of the multitude of possibilities that is the best from architectural aspect, the most reasonable from technical aspect and the most feasible from economical aspect.

e) Thereby logical mistakes in the built-up of the subject matter can be eliminated, inherent contradictions avoided, details refined and communication methods improved.

I am convinced the presented outlines of updating the education can still be much ameliorated e.g. by granting the possibility of partly individual curricula, by developing highly efficient communication methods, by introducing arithmized education periods, by means of directly contacting and educating mentors and management, by organizing teamwork in studios.

Thus, we are faced by a clear-cut task to be approached through different ways. To find the optimum, there is much to do and to learn, namely results of tentatives have to be evaluated, their shortcomings avoided, a row of experiments has to be carried out, their observations evaluated, and last but not least, fear from daring new has to be overcome, just as the excessive adherence to traditions.

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