

Urban Design 1960–2020. Evolution of the curriculum. Case of Faculty of Architecture, Wrocław University of Science and Technology

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Abstract: This article presents the results of research on the evolution of the curriculum of urban design at the Faculty of Architecture of Wrocław University of Science and Technology (Poland). Urban Design is one of the many courses that future engineers in the program of Architecture and Urban Design participate in. Urban Design is an important subject, it deals with land development and the organization of public space. Several dozen study programs, project topics and form of classes were analyzed. The teaching of Urban Design was juxtaposed with changes taking place in post-war cities, trends and planning documents. The research results allow us to see the current state of urban design education and in what direction it is evolving.

Keywords: urban design, spatial planning, curriculum

Introduction

“Urban Design” is a concept that functions in the design and university jargon, as well as in general public. The term was popularized in the 20th century, but was the subject of design theory much earlier [1]. Decades ago, it got its own definition and began to function as a separate design activity, independent of architecture, planning or civil engineering. With each decade, the importance of urban design grew. This was associated with an increase in the awareness of residents, the development of transport and services. In the initial period, when urban design was developing as a separate field, it was narrowly defined as dealing only with appearance [2]. In the following years, the scope of the projects expanded to include new topics important to residents, related to health, transport and revitalization.

The leading problem presented in the article are the results of the research covering the analysis of the Urban Design curriculum at the Faculty of Architecture of Wrocław University of Science and Technology (Poland) in the years 1960–2020. The evolution of teaching urban design has been presented in a broader context, concerning both the form of education and changes taking place in the cities of the 20th century, such as the reconstruction of post-war damage, the construction of large housing estates and the change of the economic system in 1989. Urban design is a dynamic field of science that responds to the needs of residents in various spatial conditions and time. The builders of post-war Poland, designers of enormous residential complexes saw other design problems, than the contemporary designers see now.

Methods

The subject of detailed research, presented in this article, is the analysis of the curriculum in the program of Architecture and Urban Design. Courses in the field of Urban Design and Spatial Planning were analyzed. Several dozen curricula and subject cards were cataloged and analyzed according to which future architects were taught in the years 1960–2020 at the Faculty of Architecture of Wrocław University of Science and Technology. The research problem set by the author was the observation of changes taking place in teaching urban design over the course of 60 years. The main aim of the article is to present the evolution of the urban design curriculum at the Faculty of Architecture of Wrocław University of Science and Technology in the years 1960–2020. The subjects of the projects, the number of hours and the form of classes were analyzed. Due to the historical background, two additional goals were introduced: confronting the curriculum with urban design practice after World War II and confronting the curriculum with national planning regulations (closely related to urban design).

Origin of the concept of urban design

The concept of Urban Design appeared in world literature only in the 1960s, as a response to the problems of post-war cities. Europe at that time needed specialists who had a vision of a city of the future and were consistently implementing it.

In the following decades, the importance of urban design grew. Many scientists are debating the new concept. They have different views [3], both flattering and critical. Mike Bidduch [4] draws attention to the multidimensionality of urban design, which draws from many areas. On the other hand, Stephen Marshall [4] points to unclear scientific bases. According to many scientists, urban design, despite its growing popularity, is still a contentious issue in the context of a simple and clear definition [5]. However, researchers agree that urban design developed in the second half of the 20th century. Some see the beginnings of urban planning as early as the 1960s, others – 20 years later. Michael Gunder [6] notes that at the end of the 1970s, urban design completely separated from spatial planning, embracing the themes of city life and aesthetics. The growing importance of urban design and the challenges it faces were also the subject of research by Ali Madanipour [2], who adds that the 1980s were particularly important for urban design, when it completely separated from the margin of architecture and spatial planning, creating its own current.

In the 1960s, a series of conferences were held at Harvard University [7]. Participants hoped to bridge the gap between architecture involved in building design and spatial planning that focused on socio-economic issues. At the same time, several North American cities began to create projects that some decades later were called “first generation urban plans” [7]. Urban design filled the gap between planning and architecture, thus, it has become a bridge between two domains [1].

Currently, it is more and more appreciated that urban design deals with the organization of urban space and the processes of shaping cities [2]. In the 1990s [1], urban design significantly expanded the scope of activities. Designers [7] showed greater concern for the protection of the environment, designing a more sustainable and transport-oriented urban form and promoting pedestrians for a healthier lifestyle. The topic of health in connection with urban planning is also gaining importance [8]. It is becoming known that the appearance of districts and the perception of the housing environment influences the well-being of the inhabitants [9], [10]. This mainly applies to older people who do not go to work and spend more time around the house. At the same time, the perception of the space in which they stay affects their mental health.

Urban design in Poland

In Poland, as in other European countries, the role of urban design has increased with each post-war decade. It was influenced by the process of rebuilding the country, which contributed to the creation of an urban planner. It was a figure that was truly needed by both society and the authorities [11]. The 20th century, the destruction of subsequent wars and the growing expectations of the inhabitants influenced the creation of urban design, which became a separate field of creative activity and scientific research. A few years after the war, in 1947, the

Main Spatial Planning Office was established, which presented the National Plan Study. Planning and designing new cities was initially entirely in the hands of the government [1], [12]. The most important issue was the reconstruction of the post-war economy and the agricultural system [13].

Large housing programs played a special role in the development of urban design [11]. In the years 1950–1970, the share of urban residents increased from 39% to 52% of the total population [12]. The development of technology and the possibility to use prefabricated elements contributed to the expansion of housing estates. Thus, huge, low-quality housing estates were built at a relatively fast pace. Hundreds of urban and architectural competitions were announced, dozens of new housing estates were implemented. Each project included a communication system, a basic service system, a parking system, etc. However, the designed urban concept was not always fully implemented.

The change of the economic system in 1989 resulted in the reorganization of many areas, including spatial planning. In 1994 two important legal acts came into force: the Regulation of the Minister of Spatial Economy and Construction of December 14, 1994 on Technical Conditions to be Met by Buildings and Their Location, and the Act of July 7, 1994 on Spatial Development. Another important step was the creation of Masterplans, which defined the purpose of an area and after 2004 – Poland’s accession to the EU, which resulted in subsidies for many programs and projects, including urban planning.

Evolution of the curriculum

The Faculty of Architecture of Wrocław University of Science and Technology is located in Wrocław, south-western Poland, in central Europe. It is one of the oldest faculties of architecture in Poland, which started its activity in 1949. For 80 years, the Faculty of Architecture educates future urban and architectural designers. They will learn the principles of design, construction, drawing, history, etc. The subject of the research carried out as part of this work was the analysis of the Urban Design and Spatial Planning curriculum in the program of Architecture and Urban Design after 1960. The starting point was a comprehensive analysis of the number of teaching hours carried out by students during their 5-year education. As can be seen from the graph (Fig. 1), the number of hours was systematically decreasing over the assumed period of time. The exception is the current program, which assumes several percent more hours compared to the last 20 years. Additional hours were devoted to the practical form of classes, including projects.

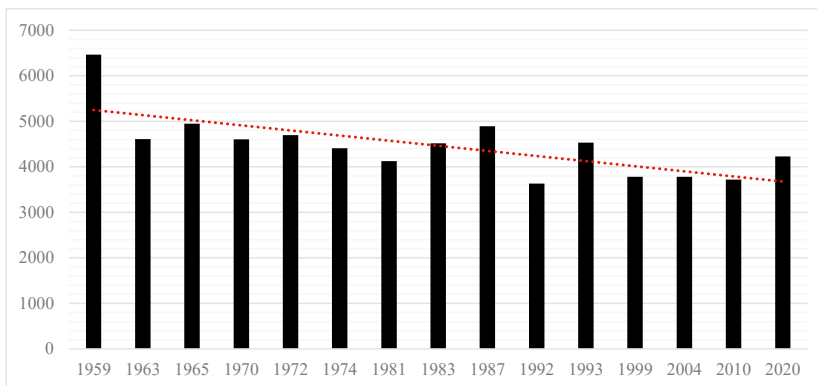


Fig. 1. Number of teaching hours carried out by students during their 5-year education

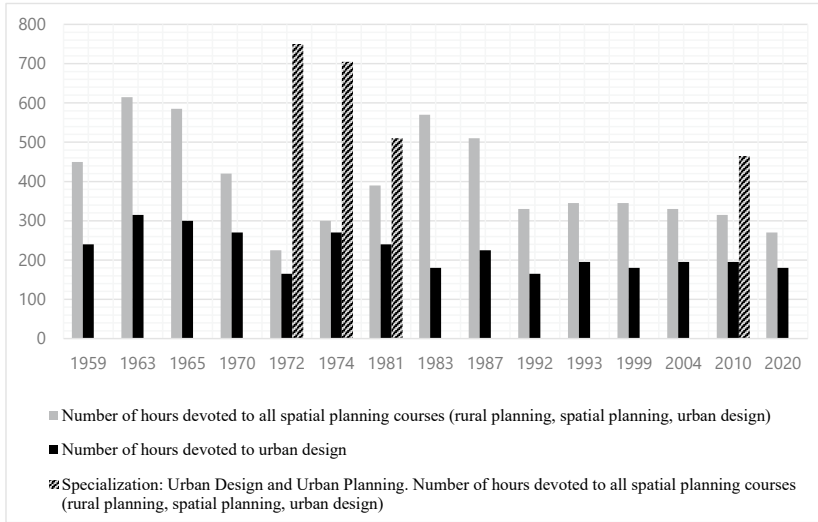


Fig. 2. Comparison of the number of hours devoted to Urban Design vs. the number of hours devoted to all spatial planning courses (rural planning, spatial planning, urban design)

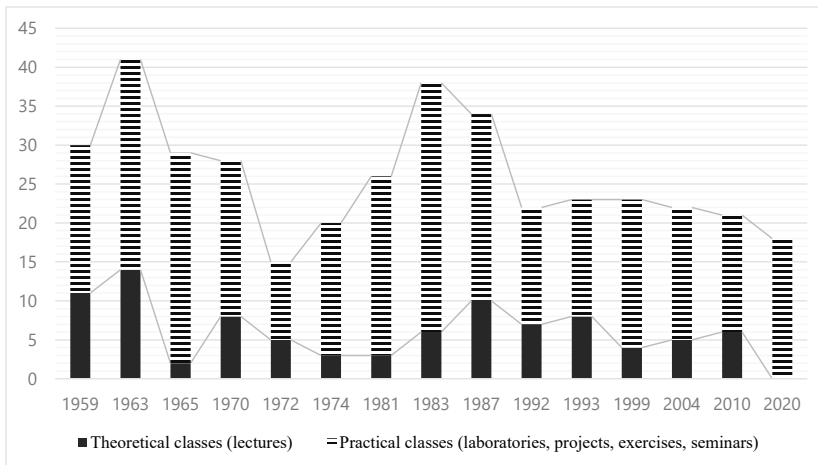


Fig. 3. The proportion between theoretical classes (lectures) hours and practical classes (laboratories, projects, exercises, seminars) hours for Urban Design

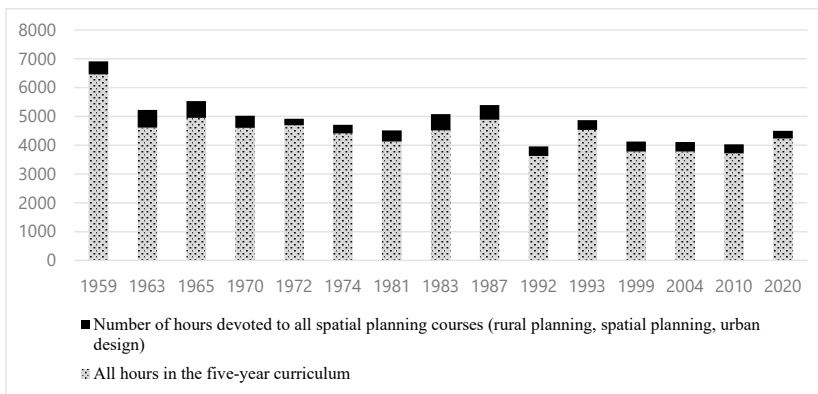


Fig. 4. The proportion between the hours of entire curriculum vs. the hours of spatial planning courses (rural planning, spatial planning, urban design)

■ Place of Urban Design in the curriculum

Urban Design and Spatial Planning are present in all cataloged curricula (Fig. 4). Together with Preservation, History of Architecture, Construction and the leading subject – Architectural Design they form the core of the curriculum. The names of Urban Design related courses were changing throughout the years. They were: *Urban Design (I, II, III)*, *City Planning*, *General Plan*, *Urban Programming*, *Small Housing Complex*, etc. The topics of the projects included shaping the urban environment including road system,

location of services and development of single plots. During classes students worked at different scales, from 1:5 000 to 1:500, focusing on the space between buildings. In the late 1950s and early 1960s, Urban Design did not function as a separate course. The subject of urban design as the organization of space between buildings, was included in larger projects carried out by students, such as: “Designing Cities and Housing Estates”.

- Number of hours devoted to urban design

From the cataloged curricula and course cards, hours allocated to Urban Design and Spatial Planning were separated. The graph above (Fig. 2) shows the comparison of the number of hours devoted to all courses covering spatial planning (Spatial Planning, Rural Planning, Urban Design) vs. Urban Design courses alone. As can be seen, the number of hours was changing dynamically. For 30 years, the number of hours devoted to Urban Design has remained at a similar level. Hours devoted to Urban Design accounted for a total of 55% of all hours devoted to courses related to the shaping of space.

- Specialty: Urban Design

The study programs from 1972 to 1981 gave students the opportunity to choose one of several specialties: Architecture and Industrial Forms, Urban Design and Spatial Planning, Conservation of Urban and Architecture Monuments. The graph (Fig. 2) compares the hours devoted to spatial subjects: Urban Design vs. Spatial / Rural Planning and Urban Design for the specialties: Architecture and Industrial Forms as well as Urban Design and Spatial Planning. There is a visible decrease in hours for the architectural specialty, while an increase for the urban specialty. The 1970s were a time of strong urbanization in Poland when huge housing estates were built. Settlement design specialists were needed in the cities. The Urban Design specialization for Architecture was re-launched after 2010. It operated at the Faculty of Architecture for several years.

- Stabilization of the number of hours

At the beginning of the 1990s, a new program of study was opened at the Faculty of Architecture of Wrocław University of Science and Technology: Spatial Planning, which indirectly translated into the curriculum of the Architecture program. The number of hours devoted to courses dealing with shaping space has decreased. An important observation is the stable number of hours devoted to Urban Design for the last 30 years. On the other hand, the number of hours allocated to Spatial Planning and Rural Planning is systematically decreasing.

- Theoretical vs. practical courses

The study analyzed various forms of classes teaching urban planning. Theoretical classes (lectures) were separated and compared with practical classes: projects, exercises, laboratories and seminars. The number of practical hours always made up the majority. A significant decrease in the number of lectures is visible twice. First time in the 1960s (1965 curriculum), where the students conducted only two hours of lectures per week during the fifth year of studies. Second decrease in the number of lectures can be observed in 2020. The study program does not include lectures on Urban Design or Spatial Planning.

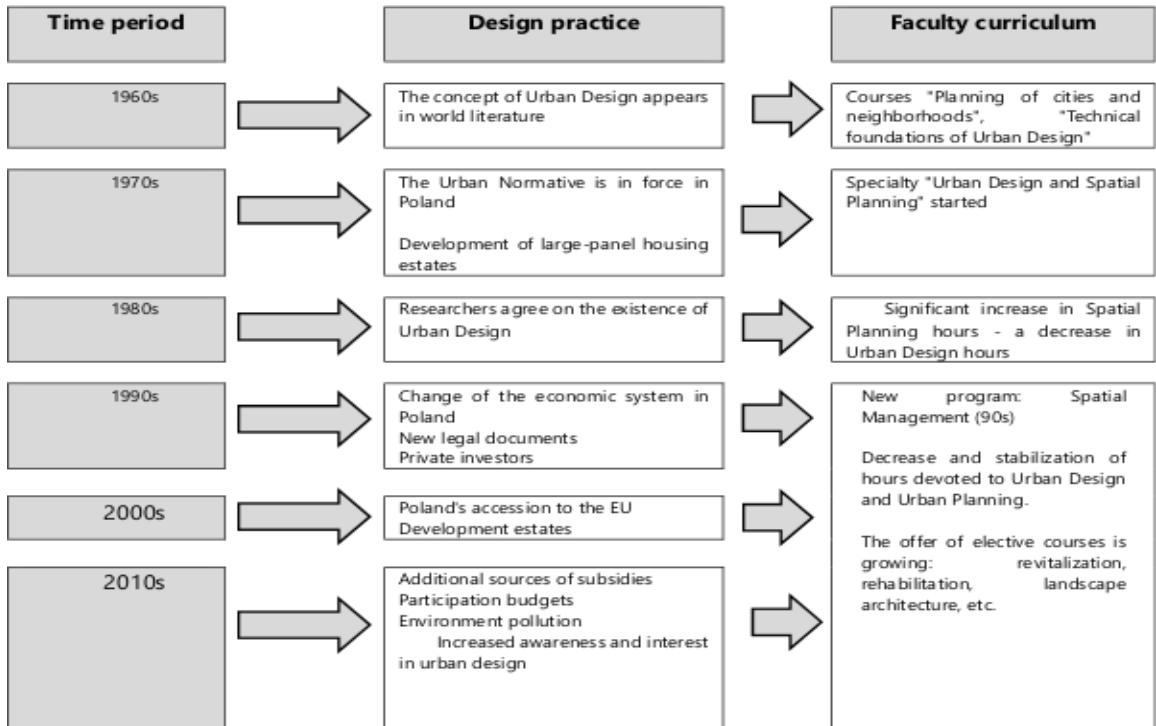
- The fragmentation of Urban Design

Since the beginning of the 1990s, the number of obligatory Urban Design hours has remained stable. It should be noted, however, that with the increasing importance of urban planning, the number of courses that use the foundations of urban design increases. These are specialist courses. Students have a wide range of elective courses like: revitalization, designing sports grounds, water zones, etc.

Discussion

The research results suggest that Urban Design and Spatial Planning have been present in the curriculum since the beginning of the 1960s. The study program responded directly to the urban planning practice and new legal

acts (e.g. by implementing courses leading to the preparation of General Plans, Masterplans) or indirectly – enriching the study offer with problems of modern cities or by educating specialist: architects – urban planners in the period of rapid urban development in Poland. Currently, the number of obligatory hours devoted to Urban Design is relatively small, amounting to only 180 hours during the entire education period. However, students can broaden their knowledge by attending elective courses where they deal with revitalization, regeneration, development of sports grounds, social participation or communication problems.



Urban design filled the gap between architecture and spatial planning. For several decades, it has been present in design practice, law and in the curriculum. Due to the growing awareness of the inhabitants, their needs and spatial conflicts, its importance increases. Social projects and participation budgets appear and the importance of social participation is growing. Society needs knowledge and tools to transform the urban structure. An answer to the needs of residents is urban design created also by architects.

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Słowa kluczowe: urbanistyka, planowanie przestrzenne, program nauczania
