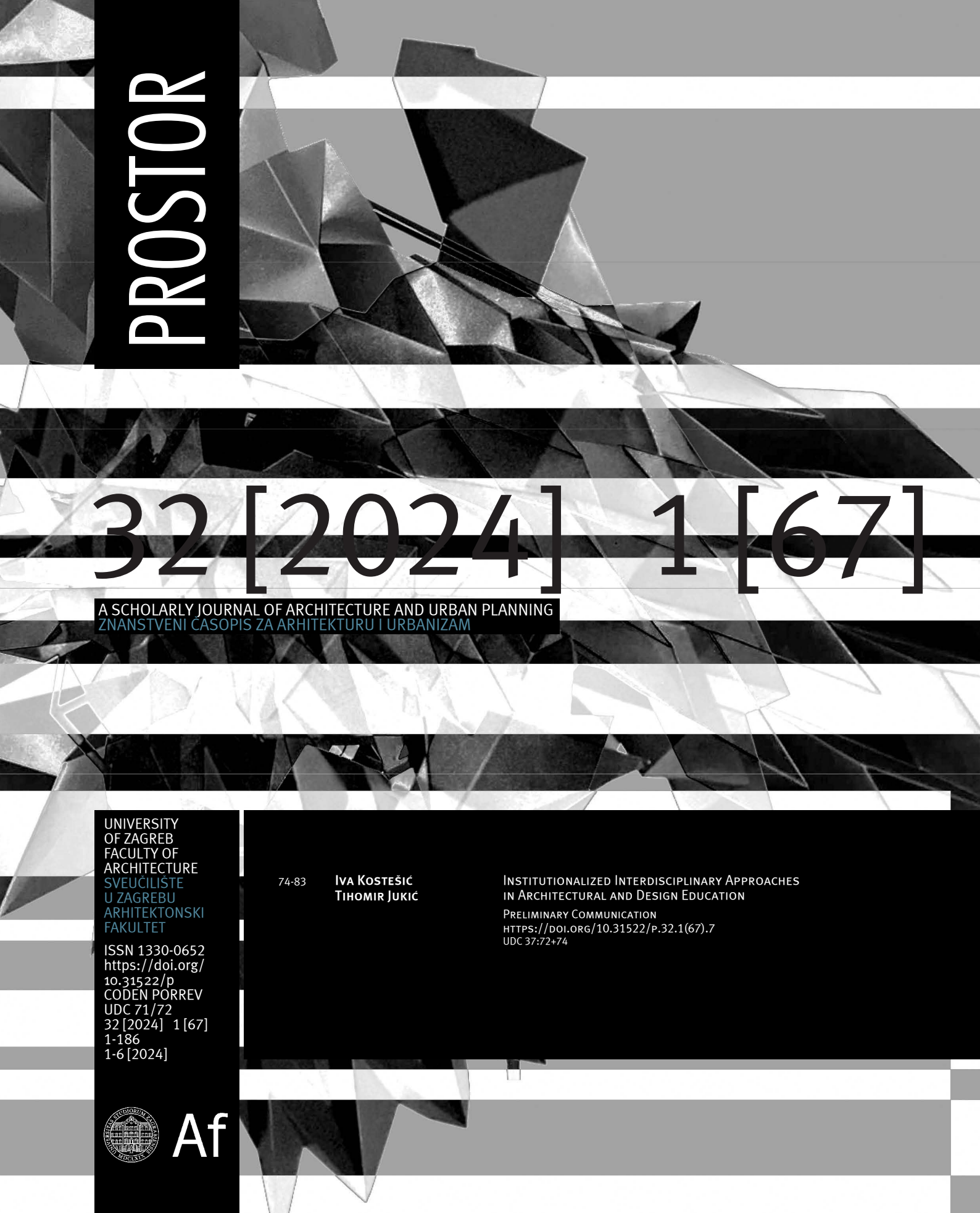

PROSTOR

32 [2024] 1 [67]

A SCHOLARLY JOURNAL OF ARCHITECTURE AND URBAN PLANNING
ZNANSTVENI ČASOPIS ZA ARHITEKTURU I URBANIZAM

UNIVERSITY OF ZAGREB FACULTY OF ARCHITECTURE
SVEUČILIŠTE U ZAGREBU ARHITEKTONSKI FAKULTET

ISSN 1330-0652
https://doi.org/10.31522/p
CODEN PORREV
UDC 71/72
32 [2024] 1 [67]
1-186
1-6 [2024]

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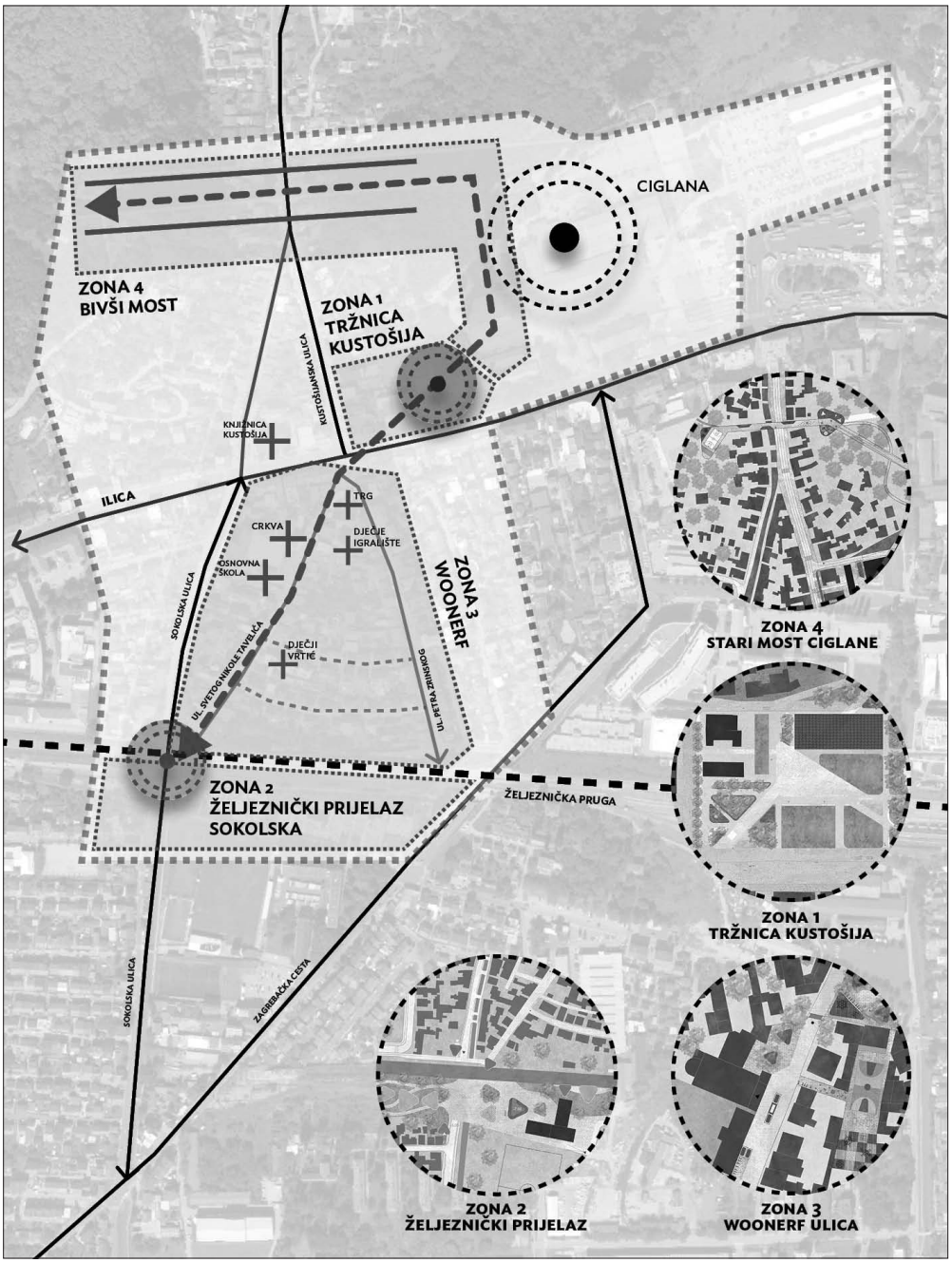

Fig. 1 An example of interdisciplinary education in regular courses for students at the University of Zagreb Faculty of Architecture and the Faculty of Humanities and Social Sciences, Department of Sociology. All three levels of urban planning were used (planning, architecture, and design), along with the citizens' participation, and deployed during the semester.

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Preliminary Communication
https://doi.org/10.31522/p.32.1(67).7
UDC 37:72+74
Technical Sciences / Architecture and Urban Planning
2.01.02. – Urban and Physical Planning
2.01.04. – History and Theory of Architecture and Preservation of the Built Heritage
Article Received / Accepted: 13. 3. 2024. / 10. 6. 2024.

Institutionalized Interdisciplinary Approaches in Architectural and Design Education

Bauhaus
Delft approach
interdisciplinarity
Ulm model
University of Zagreb Faculty of Architecture

This paper investigates the multifaceted realm of interdisciplinarity in architectural education, examining historical and contemporary perspectives from institutions such as the Bauhaus, the Ulm School of Design, TU Delft, and the University of Zagreb Faculty of Architecture. Acknowledging the challenges posed by complex urban issues, the study underscores the imperative for interdisciplinary approaches in addressing economic, social, and ecological crises. By tracing the evolution of the concept, the paper distinguishes between disciplinary and interdisciplinary approaches, exploring key definitions of the concept. The paper concludes by highlighting ongoing efforts in educational institutions, reflected in various courses, workshops, and summer schools. Despite the limitations inherent in examining a handful of examples, the findings offer valuable guidance for educational institutions aspiring to embrace or enhance interdisciplinary approaches in architectural education. The insights draw attention to the importance of holistic, collaborative models in preparing future architects to navigate the complexities of our urban environments.

INTRODUCTION[1]

Interdisciplinarity as an approach is often used when it comes to dealing with complex problems in the urban environment, those that cannot be resolved from the position and methods of one discipline. In the contemporary context of economic, social, and ecologic crises and distress, interdisciplinarity is seen as a means to give a response to these problems.

Doubts about the sustainability of a system that strictly separates artistic and scientific fields in general, or visual communication design and industrial design, architecture and urban design specifically, were expressed already in the middle of the 20th century through the activities of the Ulm school, and again in the late 1990s. Victor Margolin points us to this problem by stating that, "under the influence of technology, management strategies, social forces and new intellectual currents", the division that defines different forms of practice as graphic design, industrial design, architecture or urban planning seems inadequate, even ineffective (Margolin, 2012: 459-460).

If we accept that any urban environment is a complex space within which the unification of diverse processes, structures and functions that transcend academic and disciplinary boundaries occurs, then the approach to research, planning and design should necessarily be interdisciplinary. Even more so if we strive for environments and living spaces that are sustainable from social, economic and environmental point of view (Verloo and Bertolini, 2020).

THE CONCEPT OF INTERDISCIPLINARITY

In order to try to clarify the issue of the concept of interdisciplinarity, one often first starts from the concept of disciplinary, in order to distinguish between these two terms as precisely as possible. Scientific disciplines are formalized by their institutionalization, i.e. the establishment of scientific associations and educational institutions. This formalization is often a consequence of the development of individual disciplines, the need for distinction between individual disciplines and a precise description of their field and method of action. A discipline is defined as "a scientific field that investigates a specific field and possesses accumulated knowledge that is organized and expressed through theories, concepts and assumptions using specific terminology and technical language" (Menken and Keestra, 2016: 27). After individual disciplines have become institutionalized and thus achieved their own legitimacy and independence through the process of divergence, i.e. the establishment of mutual differences (in theoretical approaches, methodology or the field of research), there is a need for convergence and the search for similarities, places of overlap and common interests, i.e. interdisciplinarity in order to address complex problems in a real environment (Fig. 2).

Interdisciplinarity is most often defined as a means of solving problems and answering questions that cannot be satisfactorily addressed by applying one-sided methods or approaches (Klein, 1990: 96). Huutoniemi et al. (2010) state that interdisciplinarity can best be understood as "a set of different ways of bridging and confronting prevailing disciplinary approaches" (Huutoniemi, et al., 2010: 80), while Bruce et al. (2004) and Menken and Keestra (2016) see integration as key to interdisciplinarity. Thus, Bruce et al. (2004) state that interdisciplinary research, as opposed to multidisciplinary, approaches the problem from different disciplinary perspectives, whereby "the contributions of these disciplines are integrated in order to achieve a holistic or systemic outcome" (Bruce, et al., 2004: 459). Menken and Keestra (2016) conclude that interdisciplinary research is a type of research in which relevant concepts, theories and/or methodologies from other disciplines are integrated (Menken and Keestra, 2016). Often, the term is used in a much broader sense, as defined by Huutoniemi (2010), and implies "a type of

integrative research activities that combine more than one discipline, area or set of knowledge" (Huutoniemi, 2010: 309).

On the other hand, a **multidisciplinary** approach, in relation to an interdisciplinary approach, basically assumes the inclusion of more than one discipline, means their comparison, and such an approach is described as additive, not integrative (Klein, 1990: 56; Menken and Keestra, 2016: 32).

Transdisciplinarity occurs when scientists collaborate with non-academic stakeholders and denotes knowledge from outside academia that is integrated with academia (Menken and Keestra, 2016). Klein describes such an approach as a non-disciplinary, a-disciplinary, meta-disciplinary, supra-disciplinary, omni-disciplinary approach that "denotes the connection of all aspects of reality, going beyond the dynamics of dialectical synthesis to encompass the total dynamism of reality as a whole" (Klein, 1990: 66).

Among the mentioned types of "multidisciplinary" approaches, when it comes to design disciplines that are inherently "multidisciplinary", the most common term which is associated is multidisciplinarity, interdisciplinarity or transdisciplinarity, depending on the degree of integration of individual disciplines. Recent literature even mentions the term "alterplinary", coined from the terms "alternative" and "discipline", which is most often associated with design. The term is used in attempts to describe the contemporary state of design practice where the boundaries of traditional design disciplines are regularly crossed (Rodgers and Bremner, 2019: 176).

As Petrişor (2013) states, planning and architecture are essentially multidisciplinary, interdisciplinary, and transdisciplinary because they deal with the human habitat, which is seen as a complex system and such a system can only be managed with a holistic approach (Petrişor, 2013: 44, 48). A similar position is taken by other authors, for example Hussain and Said (2015), and Lyle (1999).

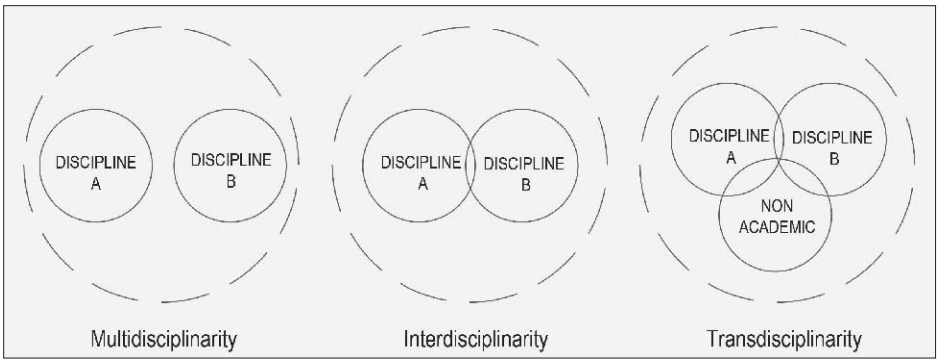

Fig. 2 Diagrams showing the difference between multidisciplinary, interdisciplinarity and transdisciplinary

Historic Attempts in Interdisciplinary Design Education

Although some forms of partial interdisciplinary education preceded it (as part of the "Art and Craft Movement"), historically speaking, the most important examples of interdisciplinary approach in the education of designers, even after their closing, are the Bauhaus school and the Ulm School of Design, which tried to realize an interdisciplinary curriculum through the synthesis of art, craft and later industry, that is, the synthesis of science and art (Lindinger, 1991; Spitz, 2002; Oswald, 2013; Boradkar, 2017). At these educational institutions, education was unconventional insofar as it did not follow the strict specialization that was carried out at academies and polytechnics (Fig. 3).

The Bauhaus Interdisciplinary Experience

The Bauhaus School[2] was formed in 1919 by the integration of the Academy of Fine Arts and van de Velde's School of Arts and Crafts[3] (Bayer, Gropius and Gropius, 1938: 18; Whitford, 2012). Although the school was closed relatively soon after its establishment, what was achieved during its fifteen years of operation makes it one of the most important institutions for education in design and architecture. The Bauhaus operated from 1919 to 1933

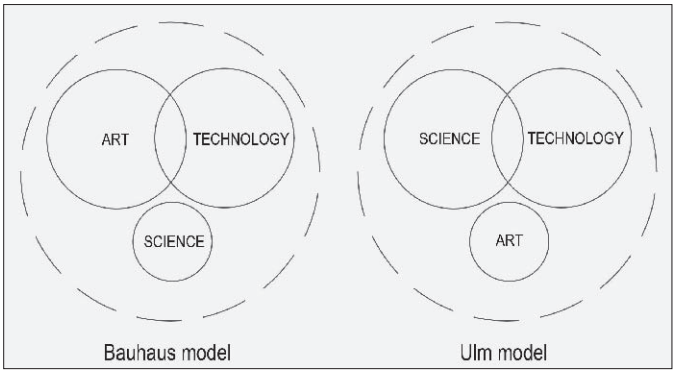

Fig. 3 Bauhaus and Ulm model of interdisciplinary education

1 The paper was written based on detailed research carried out as part of preparations for the doctoral dissertation "Interdisciplinary Design Models in Urban Planning, Architecture and Product Design for Organized Housing Programs" under the supervision of Prof. Ph.D. Tihomir Jukic at the Doctoral Study in Architecture and Urbanism at the University of Zagreb Faculty of Architecture in Zagreb.

2 Originally: *Staatliches Bauhaus Weimar*, after moving to Dessau: Bauhaus Dessau, *Hochschule für Gestaltung*.

3 The foundation contract was signed on April 1, 1919, between Walter Gropius and the local authorities. With this contract, Gropius became the director of the Weimar Academy, and on April 12, he united the Academy with the School of Arts and Crafts.

in three locations[4] and under three directors[5] (Naylor, 1985; Wingler, 1978; Bačić, 2018) who directed the school's program from the synthesis of art to the "unity of art and technology" (Naylor, 1985: 127; Findeli, 2001: 6). The materialization of this unity, as well as the synthesis of art under the primacy of architecture, is precisely the Gropius building in Dessau.

The cultural, political, and social climate of interwar Germany was, in part, quite unfavourable regarding the formation of the school itself. Namely, Germany was an extremely divided society, as witnessed and interpreted by Alexander Dorner (Dorner, 1938: 11-12), and this division manifested itself through two currents of thought, which we can conceptually label here as "traditional" and "avant-garde". The traditional circle included all those who did not understand that the world, as it existed before the First World War, simply does not exist anymore – in the first place, these are the supporters of the old art academies. On the other hand, there were groups and individuals who tried to find a new way of living and creating, contrary to the traditional one in which there was a clear distinction between "high" and applied art. Gropius will thus describe the "academy" as a "tool of the spirit of the past" that isolated the artist from the community by separating him from the world of production – industry and crafts (Gropius, 1938: 23). The Bauhaus tried to provide a new educational framework that dealt with a different way and method of learning in arts and crafts, and later design and architecture.

In the first phase, the aspiration of Walter Gropius, the founder and first director of the school was to abolish the hierarchy in art, through the synthesis of craftsmen and artists, which is explicitly clear from the goals of the Bauhaus set in the school's manifesto and program published in 1919 (Gropius, 2012). Later, Gropius described the Bauhaus idea as "work on integration and coordination, encompassing, not exclusivity", because, as he states, "the art of building is contingent upon the co-ordinated teamwork of a band of active collaborators whose co-operation symbolizes the co-operative organism of what we call society" (Gropius, 1955: 7).

If we return to the manifesto, the concept of creating a "great structure", a "unified work of art", has its roots in the medieval idea of *Gesamtkunstwerk*, which is most vividly represented by the Gothic cathedral. Therefore, it is not surprising that it was the "cathedral of socialism", published alongside the Bauhaus manifesto and program, that served as a metaphor for the unification of craft and art under the primacy of architecture. This early phase of the Bauhaus, which calls for the unification of art, is not *de facto* the first example of such an effort in Germany. The "fusion model" of high and applied art was also sought to be accomplished at the Debschitz school (1902-1914), where the basic idea was that there was no specialization, and students were encouraged to participate in all activities[6] (Naylor, 1985: 20). The school was unique in that it did not follow the educational norm of dividing the curriculum into specific courses but offered interdisciplinary education through a preliminary course by combining all disciplines, focusing on three interconnected areas: design, model making and representation techniques (Ziegert, 1986: 34-35).

The model of connecting art and design that was established at the Debschitz school influenced schools throughout Germany, the most famous of which is the Bauhaus. This model is most obviously manifested precisely in the formation of the Bauhaus, but also through the method of education that includes a preliminary course *(Vorlehre/ Vorkurs),* a workshop type of teaching and two mentors – a master of craft (*Lehrmeister* or *Werkmeister*) and an artist, master of form (*Formmeister;* Lerner, 2005: 215). Thus, an effort was made to unite the theoretical concepts of the academies *(Formlehre)* with the practical knowledge that was learned at the arts and crafts schools (*Werklehre;* Bayer, Gropius and Gropius, 1938: 24-25).

Education at the Bauhaus was divided into three stages: 1. preliminary course (six months / one year), 2. workshop teaching – craftsmanship and instruction in theory (three years) and 3. architecture, with the culmination point in the creation of a new correlation of all processes of creation (Gropius, 1938: 30). The preliminary course was created by the Swiss painter Johannes Itten and offered simultaneous teaching in practice and theory (Bayer, Gropius and Gropius, 1938; Dearstyne, 1986; Lerner, 2005). After the preliminary course, all those who satisfied its outcomes enrolled in the workshop according to their own affinities and creative potential. In the first phase of the school's operation, the workshop classes were organized so that the lessons were taught by two mentors – a master of craft and a master of form. Considering the division in education at the time, the synthesis of art and craft, according to Gropius, could not be realized without these two components, which will be redundant after the first generation of students completes their education and then return to the Bauhaus in the role

4 Weimar, 1919-1925; Dessau, 1925-1932; Berlin, 1932-1933.

5 Walter Gropius, 1919-1928; Hannes Meyer, 1928-1930; Ludwig Mies van der Rohe, 1930-1933.

6 Students participated in areas of activity of the school and creative disciplines that included carpentry, metal, textile and ceramic workshops, as well as sculpture, painting and drawing.

of teachers. With such coordinated teaching conducted by two mentors, a new generation of artists would be educated as masters of form and craft at the same time (Gropius, 1938: 26-27; Whitford, 2012: 156-157). The Department of Architecture was only established in 1927 after the school moved to Dessau in 1925. According to Gropius's texts, the study of architecture could only be accessed by those students who had completed a three-year schooling in workshop classes, and it represented a certain point of culmination of schooling at the Bauhaus (Gropius, 1938: 29). With Hannes Meyer as appointed head of the Department, the research conducted there focused more on scientific, objective and systematic examination of various phenomena (e.g. sociological and biological) that influence design, and therefore students had to conduct research on urban typologies within projects and take into account numerous external factors such as pedestrian movement, traffic, services, the relationship between the house and the road, noise problems, insulation and the like, and took courses in urban planning (Naylor, 1985; Whitford, 2012).

The "Ulm Model"

Another historic example of interdisciplinary education in the field of urban planning, architecture and design is the School of Design (*Hochschule für Gestaltung*, hereinafter: HfG) in the German city of Ulm, located south of Stuttgart. The HfG (1953-1968) is known as the spiritual successor of the Bauhaus and as one of the most influential design schools of the post-war period. It was within the HfG that a design methodology based on scientific objectivity and interdisciplinarity was developed, and would form the basis of the so-called "Ulm model" (Lindinger, 1991). The basic idea of the Ulm school was to create an institutional model that would enable the humanization of everyday life, especially in the domain of "design viewed as a discipline that can advance the process of civilization" (Meurer, 1993, cited in Vukić, 2003: 71). The school's first dean, Bauhaus educated, Swiss architect and designer, Max Bill sought to connect different levels of design and planning for the human environment through education in: 1. architecture and urban planning (built environment), 2. industrial design (material environment) and 3. visual communications (symbolic environment) (Vukić and Kristofić, 2013). As the school matured and developed, there were significant attempts to establish a stronger connection between design, science and technology that will be indispensable for formulating the Ulm model. The role of the designer was no longer understood as an artist whose mission lies in self-expression, but his goal was to shape the environment, in an effort he shares with experts of various profiles – scientists, technicians, research departments, and even sales representatives. This goal and work are described as more responsible insofar as the activities do not focus on individual objects of material culture, but on shaping the environment in a socially responsible way (Lindinger, 1991). The curriculum thus included not only design courses, but also various courses in natural, technical, and social sciences.

The study at the HfG lasted four years. In the first year, all students attended the preliminary course which was taught by teachers from all departments until 1961 (Takayasu, 2017). The purpose of the course was to prepare students for teamwork through joint work in different disciplines (HfG Ulm, 1958). After the first year together, students choose to specialize in one of four departments: Product Design, Visual Communications, Industrialized Construction, and Information Department. In addition to the departments, HfG also established institutes for development and research that cooperated with industry and worked on projects for various clients (Lindinger, 1991).

Among numerous teachers and lecturers who worked at the Ulm school, Gui Bonsiepe, Tomás Maldonado, Otl Aicher and Claude Schnaidt were most accountable for the establishment of the methodology and science of design. In the last issue of Ulm magazine Bonsiepe predicts design science as a branch of future environmental science, emphasising that a designer cannot be a mere consumer of science, but must act in order to produce and accumulate design knowledge. Bonsiepe is critical of the previous application of other sciences in design and advocates a special branch of knowledge inherent to design as an independent discipline (Bonsiepe, 1968).

Contemporary Examples of Interdisciplinary Design Education

There are various examples in contemporary design education that advocate and conduct interdisciplinarity as a research and educational approach, so a global analysis is at this point and for the purpose of this paper inadequate. The paper will focus on two examples – Delft University of Technology (Tu Delft) and University of Zagreb Faculty of Architecture, so as to try and give a more detailed insight into specific contemporary educational praxis (Kostešić, 2024).

TU Delft – the Delft Approach to Urbanism

The Delft approach to urbanism stems from a broad definition of urbanism, which considers it inherently interdisciplinary. It addresses realistic sociocultural, ecological, and technological challenges that directly or indirectly influence urban spaces from the standpoint of spatial planning and design. Interdisciplinarity is achieved by combining three disciplines: 1. spatial planning, 2. urban design and 3. landscape architecture; whereby knowledge from individual disciplines is synthesized into a coherent whole at different scales. Such an approach to the study of urbanism, as implemented at the Department of Urbanism at the Faculty of Architecture and the Built Environment at the TU Delft, is linked to the specificity of Dutch geography and, consequently, the urbanist tradition. The idea of integrating different disciplines and standards at TU Delft appeared as early as at the beginning of the 20th century, emphasizing the importance of urbanism and spatial planning as an integral part of architectural education. The foundations for the establishment of the Department of Urbanism in the 1990s were laid after the Second World War. At TU Delft, urban space is viewed as a phenomenon occurring across various scales, interconnecting buildings, cities, and landscapes. Consequently, the approach to urban space involves the collaboration of diverse disciplines such as urban planning, urban design, landscape architecture, civil engineering, and landscape ecology (Nijhuis, Stolk, and Hoekstra, 2017: 96-98).

Interdisciplinary education and approach to urbanism is taught in two graduate studies offered within urbanism education: 1. Urbanism, 2. Landscape architecture. These programs are based on five principles:

P1. urban space as an object of multi-scale interdisciplinary research;
P2. acquiring theoretical understanding and applying theoretical knowledge;
P3. coping with unpredictability;
P4. multi-scale design with the help of visual thinking;
P5. exploring the relationship between design and research (Nijhuis, Stolk and Hoekstra, 2017: 99-100).

These principles are put into practice through teaching methods that combine passive and active learning approaches. Moreover, research and design classes concentrate on projects that address real problems and challenges of contemporary society. These efforts are reinforced by supplementary courses covering theory, methodology, and technology.

In the first year of teaching, the curriculum is divided into four parts. The initial three quarters emphasize thematic research and design conducted within studio teaching, expanded by complementary courses that implement all principles. Specifically, Principle 2 extends studio teachings to theory, methodology, and technology-related courses. Principles 1, 3,

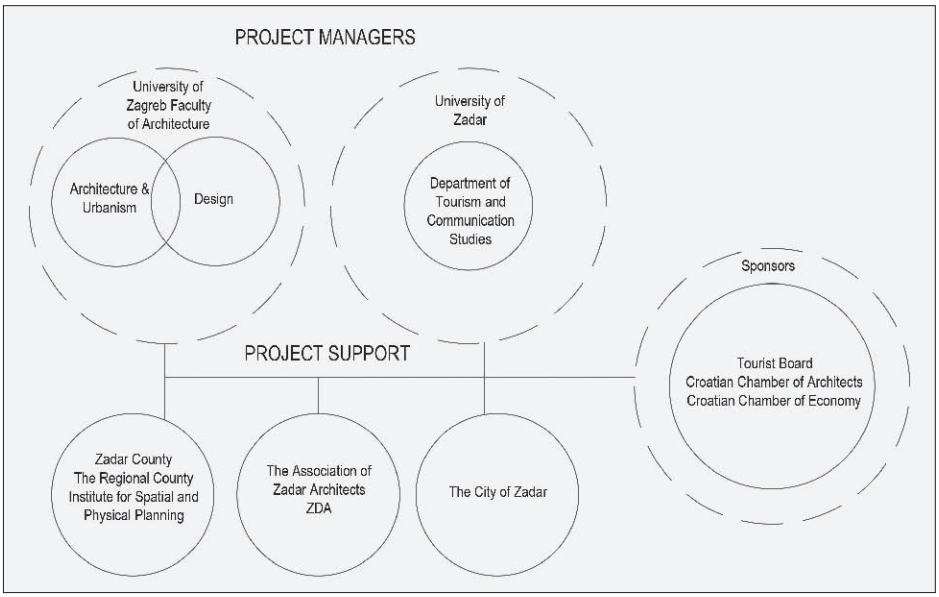

FIG. 4 „PUBLIC SPACES OF THE CITY OF ZADAR – TRADITION AND CONTEMPORARY NEEDS" – SCHEME OF COOPERATION

and 4 are realized through studio classes focused on projects covering diverse topics, scales, and theoretical approaches. Principle 2 and 5 are implemented through two mentors who ensure and guide the interaction between complementary courses and studio classes (Nijhuis, Stolk and Hoekstra, 2017: 101).

UNIVERSITY OF ZAGREB FACULTY OF ARCHITECTURE

The University of Zagreb Faculty of Architecture has its roots in the Architecture Department of the Polytechnic founded in 1919, which grew into the University of Zagreb Faculty of Engineering in 1926. After the Second World War, the Faculty was divided into four independent faculties, and in 1962, the Faculty of Architecture was separated from the Faculty of Architecture, Civil Engineering and Geodesy (AGG) as an independent scientific and teaching higher education institution (*** 2015).

As early as at the time of the establishment of the Faculty of Engineering, the study of architecture was interdisciplinary – on the basis of technical sciences, but with an insistence on the "artistic spirit and aesthetic feeling", and the practice of permeating the technical and artistic fields continued with the establishment of AGG. Two years following the founding of the Faculty of Architecture, majors were implemented, with the initial two years of study being common to all students. By the third year, students had the option to select either architectural design or construction as their major. In the subsequent fourth year, students majoring in architectural design could opt between architecture or urban planning. Since 1979, an "integrated" approach to studying architecture and urbanism has been adopted, eliminating the need for majors. This integrated approach has continued from undergraduate to graduate levels following the introduction of the Bologna reform (Arhitektonski fakultet, 2022).

Following the guidelines and conclusions drawn from the seminar on industrial design education, hosted by the International Council of Societies of Industrial Design[7] (ICSID) in Bruges in 1964, the Faculty of Architecture established an interfaculty and interdisciplinary School of Design in 1989 (Vukić, 2008: 291). The conclusions of the seminar related to the specific topic of the relationship of industrial design studies to other faculties determined its crucial connection with technical schools, as opposed to art academies (*** 2012). Based on this conception the School of Design was established through the collaboration of eight institutions from different scientific and artistic areas.[8] While presently functioning as a department within the Faculty of Architecture under the domain of the arts, the School of Design maintains a significant emphasis on interdisciplinarity, particularly evident in its methodological and scientific approach to design, which integrates technical sciences, humanities, and social sciences (Kostešić and Vukić, 2020: 150).

An interdisciplinary approach to education and research at the Faculty of Architecture is also implemented through courses (elective and regular; Fig. 1), workshops and summer schools, especially at graduate and doctoral studies. Recent examples of interdisciplinary collaboration include workshops held as part of the "Transformation of the City" course from 2014 to 2018, as well as the interdisciplinary project "Public Spaces". This project involved collaboration between the Department of Urban Planning, Spatial Planning, and Landscape Architecture of the Faculty of Architecture and the Department of Sociology at the University of Zagreb Faculty of Humanities and Social Sciences. The aim was to revive the practice of cooperation between technical, social sciences, and humanities to foster the creation of humane and high-quality environments (Vukić, Jukić, and Čaldarović, 2019). At the Faculty of Architecture, urban planning is conceived in a manner akin to the approach at TU Delft, emphasizing its interdisciplinary nature, blending elements of architecture, spatial planning, urban design, landscape architecture, and design. This approach places significant importance on social sciences, particularly sociolo-

7 Today the World Design Organization.

8 Academy of Fine Arts, Faculty of Architecture, Faculty of Economics, Faculty of Mechanical Engineering and Naval Architecture, the Faculty of Humanities and Social Sciences, Faculty of Forestry, Faculty of Technology, and the Higher School of Graphics.

gy, as a fundamental element for creating purposeful and meaningful environments.

In addition to the regular courses offered in the university's graduate study in architecture and urbanism, an interdisciplinary approach to research, planning and design is also implemented into elective courses (e.g. "Transition of public space") and summer schools. Notably, the architectural and urban planning summer school in Zadar, held annually since 2016, serves as a prime example of interdisciplinary collaboration. The first summer school focused on an "Encounter with the garden city", exploring the relationship between the urban centre and its rural hinterland, the Ravni Kotari region. Subsequent editions explored the potential of public space through the topic "Public spaces of the City of Zadar – tradition and contemporary needs" (Fig. 4), while the summer school in 2018, "Zadar – the city and islands", focused on the dynamics between the city and its surrounding islands. The summer school was organized in cooperation with the Association of Zadar Architects, University of Zadar and University of Zagreb with the aim of organizing existing and planning new content that would encourage the economic, ecological and social sustainability of island areas. The strength of the summer school lies both in the interdisciplinary and transdisciplinary approach, actively involving the local community in all stages. Students from different fields of social, humanistic, and technical sciences and the arts reflected on topics aimed at contributing to local community development (Jukić, 2017, 2019; *** 2018a; *** 2018b; Jukić and Perkov, 2023; Fig. 5). Over the years, interdisciplinary teaching has gradually been introduced in some other courses of the Faculty of Architecture, especially in studio-based instruction and elective courses of the Undergraduate and Graduate Studies.

At the university's post-graduate doctoral scientific study in Architecture and Urbanism, cooperation between different disciplines continues to be nurtured and encouraged, especially through research and the method of an intensive seminar. These seminars feature participation from educators with diverse academic background within Croatian universities, as well as from foreign institutions. It is important to mention that interdisciplinary education is gradually being introduced to other faculties in Croatia in the field of architecture, urban planning, and civil engineering, specifically at the University of Split Faculty of Civil Engineering, Architecture and Geodesy and Josip Juraj Strossmayer University of Osijek Faculty of Civil Engineering and Architecture.

Conclusion

The paper explores diverse perspectives on interdisciplinarity in architectural education, drawing insights from institutions such as the Bauhaus, HfG, and TU Delft, as well as the University of Zagreb Faculty of Architecture. The Bauhaus is highlighted for its multifaceted approach, incorporating a preliminary course, workshop teaching, and a general synthesis of art, all centred around the primacy of architecture. HfG, on the other hand, achieves interdisciplinarity through the formation of the notion of design science and the Ulm model, aiming to integrate various fields of science and art into environmental science for the improvement of the human environment. TU Delft sees interdisciplinarity as intrinsic to urbanism, particularly realized in parallel planning and design within spatial planning, urban design, and landscape architecture. Meanwhile, the University of Zagreb Faculty of Architecture has a rich history rooted in the Architecture Department of the Polytechnic, evolving into an independent institution in 1962. Over the years, the faculty has embraced an interdisciplinary approach to architectural education, emphasizing the fusion of technical, artistic, and humanistic elements. The establishment of the School of Design (1989) in accordance with international design education guidelines further exemplifies this commitment to interdisciplinarity. Ongoing efforts are evident in various elective courses, workshops, and summer schools, fostering collaboration not only within the Faculty of Architecture but also across different scientific and artistic domains. Although limited to a handful of examples, the insights drawn from these institutions can serve as valuable guidance for other educational institutions aspiring to adopt or enhance both interdisciplinary and transdisciplinary approaches in architectural education.

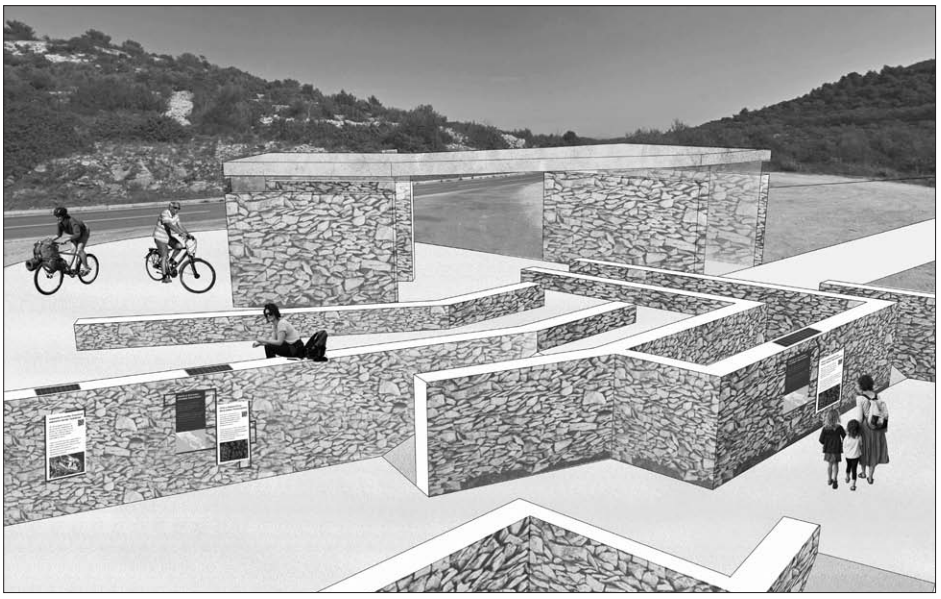

Fig. 5 Interdisciplinary project „Telašćica Nature Park Info Point". Students: Karla Kocijan (University of Zagreb Faculty of Architecture School of Desing), Mateja Rogulj (University of Zagreb Faculty of Architecture), Lana Kyra Athis Mišurac (University of Zadar, Department of History and Department of Sociology).

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Illustration sources

Fig. 1 Courtesy of Danijela Koški, Mia Šolaja, Iva Žužul, 2022/2023
Fig. 2 Authors, 2024
Fig. 3 Authors 2024, adapted from: Findeli, 2001
Fig. 4 Authors, 2024
Fig. 5 Jukić, 2019

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