Description and Prescription in the Historical Centre of Rimini (Italy)

From urban research to planning and design

Strengthening cooperation between academia and practice

edited by ILARIA GEDDES and NADIA CHARALAMBOUS

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Preface

Interdisciplinarity and Cross-Sectoral Collaboration in Urban Research, Planning and Design

Ilaria Geddes, Nadia Charalambous[1]

Contemporary cities stand at the crossroads of unprecedented challenges and opportunities. Rapid climate change, environmental degradation, mobility inefficiencies, resource inequities, and rising social inequalities pose complex and urgent problems for urban centres worldwide. Yet, within this complexity lies the potential for innovation, collective action, and sustainable transformation. Urban research, planning, and design are uniquely positioned to address these challenges, offering solutions that mitigate environmental burdens, promote social equity, and enhance the quality of life for urban residents.

The joint KAEBUP – 3rd CyNUM Regional Conference, hosted by the University of Cyprus from 6th to 8th December 2023, acted as an opportunity to bring together academics and practitioners from both the private and public sectors to exchange knowledge and explore ways for strengthening collaboration to tackle urban challenges collectively. This cooperative effort was reflected in the shared organization of the conference mobilizing the international research project Knowledge Alliance for Evidence-Based Urban Practices (KAEBUP) and the local scientific group Cyprus Network of Urban Morphology (CyNUM). The interaction between the two meant that the conference offered a breadth of perspectives, building upon the strong theoretical foundations of urban morphology to explore how scientific evidence can be integrated into education that is relevant for the profession and in successful practices which must deliver sustainable urban environments.

The conference featured twelve keynote speakers, who delivered plenary lectures or acted as discussants in round tables, and whom we deeply thank for their participation: Ed Parham (Space Syntax Limited), Mark David Major (Abu Dhabi University), Oya Atalay Franck (European Association of Architectural Education), Ruth Schagemann (Architects Council of Europe), Giuseppe Strappa (ISUF Italy), Achilleas Kalopedis (ALA Planning Partnership), Howayda Al-Harithy (American University of Beirut), Lora Nicolaou (Frederick University), Marco Maretto (University of Parma), Laurent Antonczak (RMIT Vietnam), Vitor Oliveira (University of Porto), and Wafa Al-Ghatam (University of Bahrain).

The sessions were grouped into seven thematic areas:

1. Theory and concepts of evidence-based design: the history of Evidence-Based Design (EBD) and how it has been adapted to urban design and planning; conceptual models of EBD; issues in the interpretation and the translation of research findings for practice.
2. Emerging research methodologies for application in urban planning and design: recent tools and methods created within academia or practice for application in design and planning processes.

1. Society and Urban Form (SURF) Research Lab, Department of Architecture, University of Cyprus.

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3. The role of urban morphology in evidence-based design and planning: 'traditional' morphological approaches (historico-geographical, process-typology, space syntax) and their role in Evidence-Based Design and Planning (EBDP); evaluations and discussions of their uptake, effectiveness, and success in professional practice.
4. Evidence-based design and planning in the Eastern Mediterranean and the Middle East (EMME) region: the extent of the application of EBDP in different design and planning contexts in the region; progress in engaging industry and public sector agencies in the uptake of EBDP in the region.
5. Case studies of research methods applied in professional practice: examples of specific applications of research methods and tools used in real projects to produce design and planning outputs; successful examples as well as challenging projects to reflect on; case studies from any geographical areas and the EMME region, in particular.
6. The evidence from participation in design: the role of the public, NGOs and civil society in planning and design, creating knowledge from participation for the purposes of sustainable and inclusive planning and design, the value of different types of knowledge (from experience, practice, know-how, etc.) in EBD.
7. In memory of Professor Robert Saliba: The urban form of Beirut: the historic formation and transformation of Beirut; tradition and modernity in the urban form and architecture of Beirut; city-planning for post-war reconstruction, and contemporary urban design in Beirut and the Arab World.

The proceedings of this conference reflect the shared ambition of academics and practitioners to strengthen cooperation to tackle pressing urban issues. Evidence-Based Design and Planning (EBDP) served as the central focus of this collaboration, providing rigorous analytical frameworks that complement traditional intuition-led design processes. By integrating robust data gathering, advanced methodologies, and interdisciplinary perspectives, EBDP equips urban professionals with the tools necessary to evaluate and implement effective, sustainable solutions for the built environment.

This conference emerged from a recognition that, despite the growing need for evidence-based practices, significant challenges persist to the flow of knowledge between academic research and professional practice, and vice versa. While higher education institutions across Europe and beyond are increasingly incorporating EBDP into their curricula, there remain barriers and challenges to its integration into daily professional work. Similarly, while a few pioneering firms have successfully embedded evidence-based methods into their operations, stronger links between academia, businesses, and public agencies are essential to scale these successes.

The themes explored in this conference span the theoretical foundations of EBDP, emerging methodologies, and practical applications across diverse urban contexts, with a particular focus on the Eastern Mediterranean and Middle East (EMME) region, including contributions to these proceedings from Cyprus, Abu Dhabi, Bahrain, Egypt an Iran. From historical urban morphology, the integration of new technologies and urban regeneration strategies, to participatory design processes that amplify the voices of civil society, and critical insights into planning practice, these proceedings illustrate the potential of EBDP to create innovative, inclusive, and sustainable urban environments.

By bringing together academics and practitioners from around the world, the conference fostered a platform for mutual learning and collaboration. It emphasized the value of blending research-driven insights with practical expertise and know-how to address shared challenges such as urban densification, mobility, climate resilience, and heritage preservation. The case studies, conceptual explorations, and methodological advancements presented

here demonstrate how EBDP can bridge the gap between theory and practice, transforming abstract knowledge into actionable strategies.

Together, the papers in this collection, exemplify the dynamic relationship between research and practice in urban planning and design. The contributors address both theoretical frameworks and practical methodologies, advancing evidence-based approaches to urban challenges. The range of topics – from space syntax theory to the historical and morphological study of urban settlements and participatory design – demonstrates the breadth of issues and contexts in which urban planning and design intersect with research. The topics addressed reflect contemporary challenges and advancements in urban theory and practice, with a particular focus on the integration of new technologies, historical context, and urban regeneration strategies, examining the role of urban form and policy in shaping public space, human experiences, and the socio-cultural fabric of cities.

Each paper demonstrates a commitment to evidence-based approaches that rely on rigorous data collection, analysis, and interdisciplinary collaboration: their strong theoretical foundations combined with practical methodologies and sensitive contextualisation underscore the importance of critical thinking and interdisciplinarity in addressing contemporary urban challenges, from sustainability and resilience to social equity and historical preservation.

In sum, the papers in these proceedings contribute to the ongoing dialogue between academia and practice, emphasizing the importance of evidence-based methodologies, interdisciplinary collaboration, and the integration of historical and contextual knowledge in urban planning. The insights and frameworks presented here are valuable for addressing the pressing urban challenges of today and for fostering more sustainable, resilient, and inclusive urban environments in the future.

As editors of these proceedings, we extend our gratitude to the contributors for their diverse perspectives, to the organizing committee and Easy Conferences for their dedication to delivering a successful conference and to the scientific committee for devoting their time to the review process. We hope this volume inspires continued collaboration and innovation, driving forward the pursuit of urban environments that are resilient, equitable, and human-centered.

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Leveraging Cross-Sector Expertise for Transformative Urban Education and Practice

The KAEBUP Project

Nadia Charalambous, Ilaria Geddes[1]

1. The Knowledge Alliance for Evidence-Based Urban Practices (KAEBUP)

The Knowledge Alliance for Evidence-Based Urban Practices (KAEBUP) set out to develop an international educational and training model that enables participants to engage directly with professional environments. Its central aim was to demonstrate how research can serve as the foundation for innovative professional practices, and to explore what businesses in the fields of planning, architecture, and urban design require from academia. Across Europe, forward-looking enterprises are increasingly integrating research outputs into their core practice to address urgent urban challenges such as sustainability, mobility, public health, and social cohesion. These evidence-based approaches are becoming essential tools for designers and public authorities striving to achieve more effective and sustainable urban outcomes.

KAEBUP brought together higher education institutions (HEIs), non-governmental organizations (NGOs), and enterprises from various European cities. All partners shared a strong commitment to evidence-based design and a mutual interest in strengthening the interface between academia and business. This collaboration was instrumental in addressing current societal and educational needs, while also contributing to the development of future-oriented educational systems. The project sought to equip students with the skills required to thrive in professional contexts and to inspire academic staff to innovate in both teaching and research through closer ties with practice.

KAEBUP's objectives were pursued through three interrelated 'pathways to evidence-based urban practice':

1. Innovating learning and teaching by promoting knowledge exchange and transversal skills development through real-life urban projects.
2. Understanding and developing business models that support evidence-based urban practices.
3. Co-creating urban knowledge via multiple modes of collaboration and mutual learning involving students, academic staff, and professionals.

Throughout its implementation, KAEBUP fostered entrepreneurial mindsets among students and academic staff, while enhancing businesses' access to research knowledge and improving communication between the academic and professional spheres. The Alliance produced tangible and transferable results, especially in relation to curricu-

1. Society and Urban Form (SURF) Research Lab, Department of Architecture, University of Cyprus.

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lum innovation and the promotion of transversal skills critical to contemporary urban practice.

KAEBUP's activities addressed its ambitions through a series of interconnected initiatives that combined education, research, entrepreneurship, and dissemination. These included three international training workshops and student internships, which innovated learning and teaching by engaging participants directly with professional practices and real-world urban challenges. A comprehensive literature review, alongside interviews with professionals and two dedicated professional development sessions, mapped the potential of research-informed practice and explored the business models underpinning successful evidence-based urban practices. Three Business Model Workshops fostered entrepreneurial thinking among students and staff in architecture and urban design, culminating in a portfolio of tailored business models. Collaborative Learning Activities through the Research to Practice Platform (R2P) supported blended learning and enabled the co-creation of a critical mass of knowledge through open educational resources.

In addition, the project developed an online, open-access module on "Social Entrepreneurship and Evidence-Based Design for Sustainable Urban Development", which introduced a learning progression that integrated key stages of entrepreneurial thinking with evidence-based approaches to urban issues. Finally, a wide range of dissemination activities – including webinars, round table discussions, capacity-building events, conference presentations, research publications, and the organization of academic and professional conferences – played a vital role in initiating communities of practice and promoting the exchange of knowledge and best practices across diverse sectors and national contexts.

2. Innovating learning and teaching in urban planning and design

At the heart of KAEBUP was the ambition to reimagine and enrich the way urban planning and design are taught and learned. Through the integration of practice-based learning, entrepreneurial thinking, and collaborative pedagogy, the project developed and tested a new pedagogic model that bridges academic knowledge with the realities of professional urban practice.

A New Pedagogic Model

The pedagogic model developed by KAEBUP is grounded in co-creation, interdisciplinarity, and knowledge exchange between academia and practice. It moves beyond traditional classroom-based instruction to promote situated, collaborative learning, where students, educators, and practitioners come together to tackle real-world urban challenges. Central to this model (figure 1) is the belief that students should not only acquire knowledge but actively participate in its production – through research, experimentation, and reflection. This model emphasizes flexibility, responsiveness to context, and an iterative learning process that mirrors the complexity of contemporary urban practice.

Transversal Skills

KAEBUP placed a strong emphasis on transversal skills – those competencies that are transferable across disciplines and professional settings. These include critical thinking, collaboration, communication, adaptability, and problem-solving. By engaging with real-life projects and working in interdisciplinary teams, students were exposed to diverse perspectives and learned to navigate complex social, environmental, and institutional settings. These skills were further reinforced through mentorship by professionals and researchers, who modeled reflective and adaptive approaches to urban challenges.

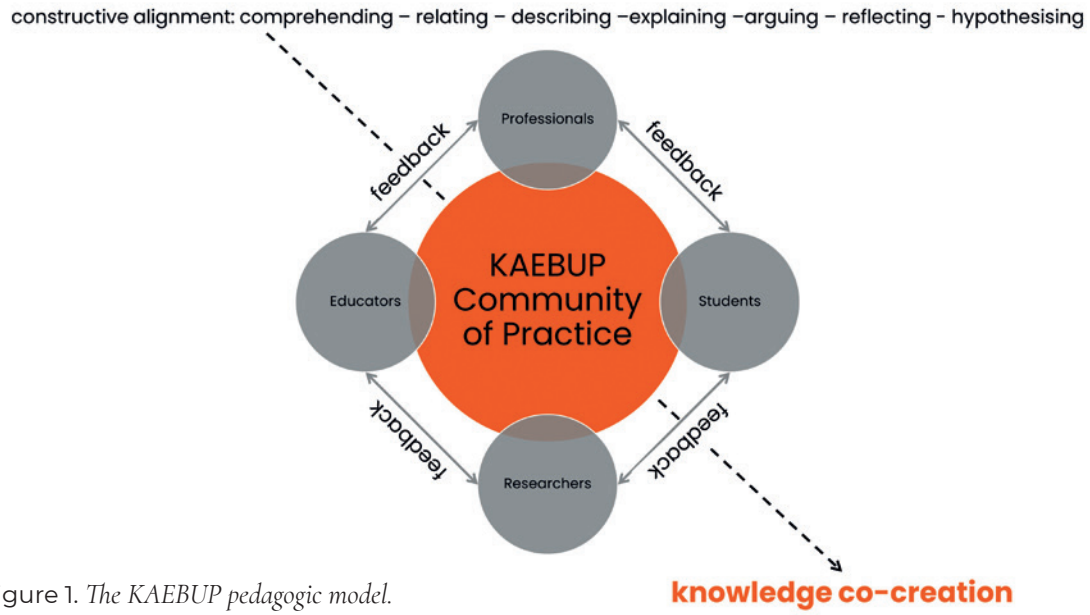

Figure 1. *The KAEBUP pedagogic model.*

Real-Life Urban Projects

One of the key innovations of KAEBUP's approach was the direct engagement of students with real-life urban projects in different cities. These projects served as living laboratories, where students could apply theoretical knowledge to concrete problems, test out research methodologies, and interact with stakeholders. The learning was experiential, hands-on, and deeply contextual. Students worked on issues ranging from urban regeneration and mobility planning to ecological infrastructure and inclusive public spaces. This engagement enhanced their ability to navigate real-world constraints while also encouraging them to propose innovative, research-informed solutions.

Entrepreneurship

KAEBUP also aimed to nurture an entrepreneurial mindset among students and staff. Rather than viewing entrepreneurship solely in commercial terms, the project promoted a broader understanding that includes social innovation, value creation, and proactive engagement with urban challenges. Through the Business Model Workshops, the online module on Social Entrepreneurship and Evidence-Based Design, and direct interaction with practicing professionals, participants were encouraged to envision new roles for themselves – not only as future employees but as initiators of change, founders of practices, or leaders of community-based initiatives. This orientation was designed to empower participants to shape their professional paths and contribute to more sustainable and inclusive urban futures.

3. Business Models for Evidence-Based Urban Practices

3.1. *Market Opportunities for Evidence-Based Urban Practices*

The report on market opportunities for evidence-based urban practices was developed to deepen our understanding of how research is – or could be – adopted in the professional fields of architecture, urban design, and planning. It served not only as a foundation for the subsequent development of business models within KAEBUP, but also as a resource to guide the design of future workshops, learning modules, and strategic collaborations between aca-

demia and practice. At its core, the report explores what drives the uptake of evidence-based design (EBD) in professional settings, and where the barriers, gaps, and possibilities for innovation lie.

Drawing on a combination of literature review, survey data, and in-depth interviews with project partners, the report reveals that the integration of research into design practice depends on two key enablers: skills and strategic orientation. On the one hand, the presence of specific research skills – ranging from data analysis and evaluation to participatory methods and critical reflection – is essential. On the other, the successful adoption of EBD requires a more deliberate and forward-looking business strategy, where research becomes not an add-on but a central driver of value, innovation, and competitiveness.

Despite growing interest, the report highlights several persistent challenges. Many practitioners expressed concern over the additional time, costs, and resources required to engage with research, often noting that clients are hesitant to pay for services perceived as ancillary to design. This signals the need for operational models that can embed research more seamlessly into existing workflows. At the same time, there is a broader issue of knowledge management: much of the expertise within design firms remains tacit, experiential, and siloed within project teams. Without systematic processes for knowledge transfer and codification, it becomes difficult to build on previous learning or scale research-informed practices across an organization.

To address these challenges, the report introduces concepts such as *lean management* and *agile methodologies* as particularly relevant to the design disciplines. Borrowed from manufacturing and software development, these approaches provide tools to streamline operations, reduce waste, and iterate on ideas through structured experimentation. When adapted to design contexts, they can support firms in making research more actionable and sustainable – both economically and organisationally. For instance, lean principles can help clarify value to clients, eliminate inefficiencies, and encourage meaningful knowledge sharing, while agile practices can promote adaptability, team collaboration, and better stakeholder engagement throughout a project lifecycle.

Beyond these methodological insights, the report also surfaces deeper structural considerations. The extent to which a practice adopts EBD often correlates with its size, specialization, client base, and access to external funding. Firms that already operate in complex, multi-stakeholder environments – or that are committed to innovation – are more likely to invest in systematic research. For smaller or less resourced offices, however, the perceived risk and effort remain high. In this context, the role of higher education institutions becomes particularly important: not only to train future practitioners in relevant research methods, but to provide accessible knowledge, tools, and partnerships that help bridge the gap between theory and application.

Among the outputs of the report is a series of *definition cards* – clear, concise explanations of core concepts and practices related to EBD – which can serve as tools for teaching, collaboration, and dissemination. These, along with visual frameworks such as PEST and SWOT analyses, offer firms a way to self-assess their readiness to adopt evidence-based approaches and identify strategic opportunities for innovation.

Ultimately, the report positions evidence-based urban practice as more than a technical enhancement – it is a strategic imperative. In an increasingly complex urban landscape shaped by environmental, social, and economic pressures, the capacity to ground decisions in rigorous, contextualised knowledge is emerging as a key differentiator. For practices willing to engage with research proactively, EBD offers not only new forms of value creation, but a route to resilience, relevance, and long-term impact.

3.2. *Portfolio of Business Models for Evidence-Based Urban Practices*

Alongside the market opportunities report, KAEBUP developed a comprehensive Portfolio of Business Models for Evidence-Based Urban Practices (EBUPs), complemented by a litera-

ture review on research start-ups, entrepreneurial frameworks, and social innovation in the built environment. Together, these resources offer both theoretical grounding and practical guidance for supporting the emergence and sustainability of evidence-based practices across architecture, planning, and urban design. They also provide insights that can inform the reform of higher education curricula, particularly in regard to entrepreneurship, research integration, and industry collaboration.

The portfolio was created through a comparative investigation of architectural and urban design firms and organisations operating across Europe and Cyprus. Despite notable differences in size, mission, and service focus, these EBUPs exhibited significant similarities in the structure of their teams, their relationship with clients, and the role of research within their workflows. Some firms primarily provided consultancy services, others were focused on small- and medium-scale design projects, while a few dealt with more complex, large-scale developments. Additionally, NGOs within the sample adopted a more hybrid approach, engaging in both design practice and research-led public initiatives.

Across the board, these organisations shared a strong emphasis on client satisfaction, high-quality project delivery, and the importance of professional reputation – factors that were seen as critical for securing future work and sustaining business growth. Salaries emerged as the primary operational cost across firms, underscoring the need for effective resource planning in service-based industries.

A major insight from the research was the extent to which research activities vary depending on internal factors, such as a firm's value proposition and project scale, and external conditions, such as regulatory frameworks and access to funding. In smaller firms, research was often informal and closely tied to practical needs such as permit acquisition, site analysis, or material selection. In larger firms and NGOs, however, research was more systematically embedded within their value proposition – sometimes as part of their competitive edge or strategic differentiation.

Several practices highlighted the potential of external funding and academic partnerships in supporting more structured research activities. In some cases, such collaborations allowed for the integration of simulations, post-occupancy evaluations, and participatory methods into ongoing design processes – transforming research from an add-on into an intrinsic element of service delivery. However, the report also noted the persistent challenges faced by firms: limited time, resources, and often a lack of client willingness to pay for research-intensive approaches.

From this comparative analysis, a series of insights were drawn that can inform both sustainable business model development and curriculum innovation in architecture and urban design education. These include the need to: integrate research into the value proposition of a firm, enabling clearer communication of added value to clients; identify diverse revenue streams by reframing architectural services as products (e.g., site assessments, evaluation reports, pre- and post-design analyses); implement knowledge management strategies to make tacit, project-based knowledge more transferable across teams and contexts; teach students a broad spectrum of research methods relevant to design practice, from legal and environmental analysis to simulation tools; promote academic-industry-government collaboration through research projects, empowering students and professionals to contribute to policy change and institutional reform.

Some firms already demonstrated creative approaches to revenue diversification – for example, one practice made use of part of its office space for short-term rentals to supplement income. Others invested in research and development hours, recognizing that such investments would position them more competitively in the long term.

The report also underlined the necessity of framing research not as a burden but as a value-generating process that improves design quality, operational efficiency, and long-term

resilience. By equipping graduates with both entrepreneurial thinking and an understanding of how research adds value to practice, higher education institutions can play a transformative role in shaping a new generation of socially engaged and market-savvy professionals.

Ultimately, this portfolio – alongside its accompanying literature review – serves not only as a practical tool for businesses but as a pedagogical and strategic resource. It supports the scaling, replication, and upskilling of innovative design practices across Europe and contributes to the broader mission of embedding evidence-based approaches in both the professional and educational landscapes.

4. Co-creating Urban Knowledge Through Real-Life Case Studies

One of KAEBUP's most significant contributions lies in its capacity to foster the co-creation of urban knowledge through an integrated model of teaching, learning, and research. At the core of this approach was the active involvement of students, interns, academic staff, and professional practitioners in real-life case studies, forming temporary but highly productive knowledge alliances around pressing urban issues. These activities did not merely simulate professional scenarios – they directly engaged with real urban challenges and professional projects, thus offering a situated, practice-oriented environment for knowledge production.

Across different contexts and project scales, KAEBUP facilitated the exploration of a wide range of research questions, developed collaboratively by learners and professionals. This resulted in a substantial volume of original findings and analytical outcomes, extending from spatial diagnostics to post-occupancy evaluations. Notably, the process led to the creation of a transferable and methodologically grounded tool: the Sustainability Toolkit for the Assessment of Master Plans (STAMP). STAMP is a structured evaluative instrument designed to assess master plan proposals against defined sustainability goals. It is one of KAEBUP's most significant methodological innovations, emerging from the iterative and collaborative engagement between academia and practice.

The diversity and depth of the findings reflect both the richness of the co-creation process, and the complexity of the contexts addressed. In the case of the Ministry of Municipal and Rural Affairs (MoMRA) in Riyadh, for instance, research explored how the building design impacts site accessibility, urban integration, and climate responsiveness at the block level – critical issues in a city facing rapid urbanisation and environmental stress. In the case of the masterplan for Verengaria, the site of former British military barracks in Limassol, Cyprus, the STAMP tool was tested in both academic and professional settings, offering quantitative evidence that allowed consultants to assess the performance of different planning iterations against their sustainability objectives.

In the case of Solar da Avenida, in Porto, Portugal, students conducted a post-occupancy evaluation of a heritage building renovation, analysing its performance in light of local tourism pressures, conservation guidelines, and regulatory frameworks. Their findings not only validated the design team's approach but also demonstrated the potential of research-informed evaluations to support replicable strategies in heritage-sensitive urban contexts.

In the neighborhood of Martinovka in Zagreb, Croatia, collaborative activities revealed a critical gap between planning intentions and the lived experience of the local community. Through community engagement and transdisciplinary research, learners uncovered narratives and spatial practices that had been overlooked in formal planning processes. This case exemplifies the power of co-creation to uncover situated knowledge, enabling planning practices to become more responsive to social realities and everyday needs.

While the quality of outputs varied – unsurprisingly given the diversity in students' levels, institutional settings, and constraints such as time or remote participation – an internal review

process, involving the project's Quality Assurance Committee and feedback from academic and professional mentors, ensured that the most robust and relevant outcomes were identified and included in the portfolio of project research findings. These represent not only meaningful academic exercises but also valuable contributions to practice, particularly in their capacity to generate knowledge that was not previously available to the designers of the case studies.

Importantly, although these activities often took place retrospectively, after the main phases of the design or planning process had been completed, the knowledge produced remains relevant and applicable. Many of the professionals involved continue to work on related projects or within the same geographical contexts, meaning that the tools, insights, and reflections generated through KAEBUP will likely influence future planning and design adaptations. Moreover, the process demonstrated how educational and research collaborations can retroactively strengthen professional practice, offering analytical clarity and validation that may shape subsequent decision-making.

This experience of co-creation also underscores the transferability and adaptability of the research tools and methods developed through KAEBUP. Their application across diverse geographical contexts, project types, and institutional settings revealed their potential not only to enrich education and research but to directly support practitioners in refining design outcomes, aligning with client expectations, and navigating regulatory frameworks. The learning gained through these collaborative engagements illustrates how academia and practice, when meaningfully intertwined, can produce forms of knowledge that are contextual, actionable, and future-oriented.

In sum, KAEBUP's co-creation model did more than provide a framework for experiential learning – it actively produced urban knowledge of professional value. Through real-life case studies, students and researchers became contributors to the urban knowledge ecosystem, supporting a more reflective, informed, and collaborative form of design and planning. This legacy of co-created knowledge not only serves present stakeholders but has established a foundation for ongoing dialogue, tool development, and curriculum innovation within and beyond the lifespan of the project.

5. Concluding Thoughts: Reflections and Future Directions

The KAEBUP project has illustrated the powerful role that European collaboration can play in advancing research-led, practice-oriented, and entrepreneurship-driven models of education in architecture, urban planning, and design. By bringing together higher education institutions, professional practitioners, NGOs, and enterprises from across Europe, the project established a dynamic framework for knowledge exchange, pedagogical innovation, and real-world experimentation that produced tangible results at multiple levels.

At the core of KAEBUP's achievements was its ability to foster the co-creation of urban knowledge through real-life case studies. These collaborative engagements between students, academic staff, and practitioners generated a significant body of research and insight, including the development of new analytical tools such as the STAMP toolkit. The collaborative model proved especially effective in revealing contextual knowledge that had previously been unavailable to the designers or stakeholders of the projects under study, validating the importance of embedding research and education in practice. The results of these activities were not only relevant at the time but are also expected to inform future planning and design work within the same contexts, attesting to their lasting value.

European cooperation was central to the success of the project. The diversity of expertise across the partner institutions enabled the exchange of knowledge that would have been inaccessible within national or disciplinary silos. Institutions specializing in different methods and

pedagogical traditions were able to learn from each other and co-develop new curricular content and approaches. This was evident in the design and implementation of international training workshops, professional development sessions, and the development of blended learning activities. These efforts were instrumental in building a shared educational infrastructure supported by open educational resources, remote collaboration tools, and cross-institutional peer learning.

Moreover, the mobility of students and staff across countries offered direct exposure to new urban contexts, cultures, and design challenges, encouraging reflexivity and global citizenship. Participants developed transversal competencies such as digital and media literacy, intercultural communication, and adaptive problem-solving by working in unfamiliar settings and through interdisciplinary collaboration. The project also enabled institutions to leverage their previous experiences in EU-funded initiatives, while feeding KAEBUP's outputs back into national and European-level research, education, and innovation ecosystems.

Another core contribution of the project was the advancement of entrepreneurial thinking in urban disciplines. By conducting an in-depth exploration of market opportunities for evidence-based urban practices, and developing a portfolio of sustainable business models, KAEBUP helped define how research can be embedded into the operational and strategic dimensions of professional practice. It showed how firms can incorporate research not simply as an auxiliary function but as a value proposition that enhances service quality, client relationships, and long-term competitiveness. This also proved beneficial for academic staff and students, many of whom gained a clearer understanding of how research and entrepreneurship can coexist and reinforce one another in the professional world.

Among the successes of the project was the creation of a robust network of academic and professional actors committed to evidence-based design, the production of high-quality and openly accessible educational tools, and the facilitation of meaningful learning experiences that bridged theory and practice. These outcomes not only fulfilled the goals of the project but also positioned KAEBUP as a model for future knowledge alliances.

Nevertheless, the project also revealed areas for improvement. The diversity in participants' academic levels and access to resources led to a range of output quality, particularly in student-led research activities. While this variability is to some extent inherent in experiential learning environments, it underscores the importance of providing clearer scaffolding, consistent feedback mechanisms, and more structured support, especially in transnational and interdisciplinary settings. In addition, while the partnerships formed were productive and mutually beneficial, ensuring their sustainability beyond the project's lifespan remains a challenge. More robust institutional anchoring and long-term strategies for collaboration would strengthen the durability of these networks.

Looking into the future, the outputs and methods developed by KAEBUP offer fertile ground for further development. The Research to Practice (R2P) platform, the STAMP toolkit, and the online module on social entrepreneurship all have the potential to become permanent educational assets. The integration of these tools and methods into bachelor's and master's programmes could help formalise the innovations piloted during the project. Moreover, the involvement of KAEBUP's findings in new initiatives such as the TWIN2EXPAND project, funded by Horizon Europe, suggests that the project's legacy will continue to evolve and influence research and education in evidence-based urban practice.

Ultimately, KAEBUP has shown that when higher education institutions, professional enterprises, and public organisations work together across borders, they can co-create new knowledge and capabilities that address the complex challenges of urbanisation in a globalised world. The project not only fostered a new generation of urban thinkers and practitioners but also contributed to building a shared European space for innovation in architectural and urban education – one grounded in research, collaboration, and a commitment to social and environmental relevance.

Description and Prescription in the Historical Centre of Rimini (Italy)

Martina Crapolicchio[1]

Abstract: A prescriptive act (such as a rule) cannot exist without a descriptive act (of restitution of form) that constitutes its founding relationship. Urban morphology, within a geographical and historical tradition, focuses on the rigorous and systematic description and explanation of the urban landscape (Oliveira, 2021), while urban codes are primarily in support of an urban vision (Dutton, 2000) from a prescriptive sphere-oriented perspective in the regulatory sphere. The relationship between description and prescription is the subject of a long debate in urban morphology. One of the central questions is how to derive prescriptions for regenerating the urban environment based on descriptions of the existing and its historical development. The debate today tends to focus on the need to make the descriptions provided by urban morphology more objective and scientific, with the expectation that an objective and scientific description should not, in principle, already be normative (Kropf, 2021). The city has long been the subject of studies involving different disciplines, and some works are based on the concept of the science of the city (Batty, 2013; Mehaffy, 2014). It is impossible to determine how cities will or should be built in the future, yet it is possible to outline the contours of urban rules and how their effects have influenced the city's shape. This research places current issues on urban coding in the context of studying the physical city (form) using the historic centre of Rimini (Italy) as a case study. The study offers an analysis of the evolution of the urban form of the historic centre of Rimini and its urban rules, reasoning on a broader discourse concerning the reform of urban codes. Through a morphological analysis based on traditional assumptions, this study uses design as a bridge between the study of urban form and the prefiguration of urban codes in the context of Italy's historical centres. The proposed result is a draft of urban rules that accommodate the flexibility of past and future urban transformations.

Keywords: Urban Form, Urban Codes, Urban Design, Historical Centre, Italy.

1. Rules and Physical Qualities

As argued by Ben-Joseph (2005), designers, planners and those who wish to work on the built environment cannot easily escape the obligation to create and maintain places where rules do not oust physical qualities. This thinking underlies the concept of quality of place and at the same time the flexible performance of urban rules in a formal action perspective. In this sense, codes could be used in a generative way, to specify generic urban elements and relationships, such as the type of building, the way buildings relate to the hierarchies of pathways, and so on, in order to create a number of variations around the formal theme. In a generative code, the codified elements and relationships are controlled,

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but the final overall form is derived from the identification of the emergent form. An *emergent form* or structure possesses constitutive characteristics or overall qualities that are not explicitly specified (nor necessarily provided for) in their mode of creation (e.g. rules of construction, aggregation, location, etc.) (Marshall, 2011). The concept of *emergent urban structure* refers to a configuration or pattern of settlement that develops spontaneously, without rigid planning or predefined design; it is composed on the basis of individual actions, user decisions and spontaneous adaptation processes and may appear to be orderly and well-organised, but is the result of stratification due to human actions and time. Historic centres fall into the category of emergent structures because they have developed over centuries: streets, buildings and public spaces have gradually configured themselves, responding to users' needs and social interactions. Studies on these concepts have been developed mainly by Christopher Alexander (1977; 2008) and Michael Mehaffy (2008; 2020) and declined into theories that build on these assumptions in the studies of Michael Batty (2005; 2018) on generative algorithms and the science of the city, and Bill Hillier (1996) on connection sets of spatial interactions. These approaches support the use of generative codes in place of master plans and can help consolidate a new way of doing cities (Plater-Zyberk, 2008). The theses of Alexander and the other academics, together with the theories on permanence and permutations developed in the Italian morphological sphere by Muratori (1959) and Caniggia (& Maffei, 1979), compose a framework in which urban form could be assumed as the main generator of codes and vice versa. In addition to the concept of *emergent structure*, from these methods it follows that the configuration of elements at one scale contributes to the design of integrated components at the next scale, creating an interlocking urban vision. For example, the combination of buildings and public spaces creates a certain type of street; or the combination of walls, doors and windows creates a façade. In fact, in traditional urban fabrics, based on the importance of the street as a route and matrix of settlements, there is an interconnected relationship between buildings, streets and public spaces (Marshall, 2011). In other words, elements tend to be composed of smaller sub-elements, which in turn contribute to larger elements or a larger whole (Alexander, 1977). The interaction between scales could help solve a problem highlighted by Christopher Alexander (1966) in his essay, *A City is Not a Tree*. This is a criticism of the overly simplistic hierarchical organisation of the urban environment, which does not allow for a rich complexity of overlapping elements, and of the apparent difficulty of urban planners in conceiving and achieving such complex overlapping arrangements on the ground (Alexander, 1966).

On the basis of these theories, the Rimini case study is developed, conducted with the aim of triggering urban regeneration mechanisms within the historic fabric, starting from its formal analysis and arriving at the definition of new guidelines. To achieve this objective, this article is divided into three fundamental parts. In the first section, 'Five forms (description)', the urban form of Rimini's historic centre is analysed, highlighting the main elements that structure the area. This part recognises urban structures enclosed in morphological clusters, i.e. parts of the urban fabric that present the same characteristics in terms of formal aggregation or building type. The second part recognises in each cluster the opportunity to hypothesise, on the basis of the formal analyses, a meta-design intervention, here called a device (from the definitions of 'dispositif' and 'device' by Foucault, Deleuze and Agamben). As a result of this process of analysis, in the third part, this contribution produces a synoptic matrix that proposes an a priori vision of the urban code, outlining a direction for the urban development of the historic centre (a portion of urban territory that in Italy tends to play a testimonial role, sometimes regardless of its real value).

2. Five Forms (description)

In order to accurately describe the consistency of the urban fabric of Rimini, it is essential to be equipped with the tools and techniques required to realise the complexity of the urban landscape. Recognising that the visible appearance of the urban environment is the outcome of processes that differ greatly in their logic and origins, and that these intersect and overwrite each other, leaving traces, albeit minimal, without a solution of continuity, defines the territory as a palimpsest that is gradually reshaped (Corboz, 1983). The sum of these processes represents an urban scenario in which transformations are difficult to reverse and whose sum constitutes the territorial fixed capital, which is the principle and the constraint for regeneration operations.

To set operational aims on consolidated urban fabrics, it is necessary to clearly define a certain number of elements that make up the urban structures of the historic centre. First of all, the presence of the structuring elements, i.e. the components of the urban environment that are almost unchanged and constitute the identity of the historic centre; these elements can be identified with the street pattern (as an overlay of Roman, mediaeval and later wall systems) and with the hydrography and natural elements (as in the case of Rimini, the Marecchia canal port). Secondly, there are settlement systems, i.e. urban agglomerations interdependent on structural elements, but also responding to internal rules (such as the old Roman insulae, now closed blocks; or open blocks, or linear or terraced agglomerations). Homogeneous morphologies are part of the settlement systems, defining a collage of areas characterised by certain densities, layout structures, and prevalence of building types. Homogeneous morphologies constitute certain taxonomies of urban forms, they are therefore groupings of aggregations of building and architectural typologies that present similar characters, inscribed within a morphological category such as closed blocks or urban fabric with typologies arranged in a line. The coexistence of such characters and the stratification of the processes of remodelling of urban materials constitute the hereditary and identity elements that the city shows today (Figure 1).

The description of the city's form structure is not a conclusion of the urban analysis, but an attribute that opens multiple design opportunities based on the understanding of the complexity of formal stratifications (Albrecht & Galli, 2021). Therefore, this kind of analysis allows to define a taxonomy of the built environment through the recognition of different forms of aggregation on the basis of typological units (Caniggia & Maffei, 2017). In the historic centre of Rimini, five homogeneous morphologies have been identified that contribute to defining its urban identity. These include a compact fabric characterised by blocks with stratifications, an urban fabric with special buildings, a fringe fabric with discontinuities of elevations, a fabric with buildings aligned along streets, and a fabric in which there are architectural units extraneous to the urban environment. These different morphologies contribute to creating a complex and varied picture of Rimini's historic centre (Figure 2). The different clusters were identified according to the types and aggregations defined by Caniggia and Maffei (2017) relative to basic buildings. The identified morphologies are:

a. The compact urban fabric, composed mainly of closed blocks, owes its configuration to the Roman-style street system.
b. Clusters with special buildings generate polarities due to their historical, architectural, political and religious significance.
c. Margin fabrics are configured by their variation with respect to the topography or anthropic elements.
d. The outlying villages, generated by the extension of the Roman road structure, present different forms and typologies compared to the central core.
e. Historical fabric with extraneous typologies out of scale, that generate blind facades.

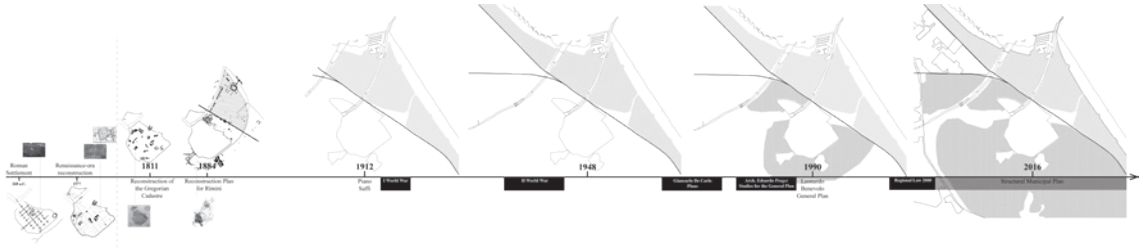


Figure 1. *Transitional morphology of Rimini's settlement (Source: author 2023).*

Figure 2. *Morphological clusters in the historical centre of Rimini (Source: author 2023).*

To understand these characteristics, each morphological cluster has been studied through the extraction of a tissue sample on which a morphological analysis and a meta-project (the *device*) has been conducted. Each *device* is useful not only to suggest prefigurations of the urban environment that conform to the identity of the places, but to generalise the reasoning from the sample to the remaining urban fabric with the same morphological characteristics.

The study of morphological clusters was conducted by analysing the formal transition of the sample urban fabrics, identifying repetitive characters and variations at each stage. The table (Figure 3) shows how the evolution over time brings out the typical characters of each sample and allows them to be compared. For example, it can be seen that in sample A, i.e. the one referring to the compact block fabric, it emerges that the curtain configuration of the blocks is sometimes betrayed by a porous character. In the second sample (B, fabric with the presence of special buildings) it emerges that the balance of the curtain is totally disregarded over time. In the sample of margin tissue (C), one notices the reconfiguration of the sample according to the margin communicating aspects of fragmentation and disintegration. Then, in sample D (fabric with buildings in line) the relationship between urbanisation and the street appears clear, and consequently the relationship between façades, building heights and building types. Finally, in sample E (urban fabric with extraneous buildings in relation to the surrounding buildings) the variations due to urbanisation phases are evident, but the discontinuities created by these typologies are not noticeable. In fact, one of the possible characteristics of extraneous buildings in relation to the surrounding fabric is that they conform to the aggregative principles of the fabric in which they are inserted (since they sometimes replace other units) but present architectural and typological characters that are clearly different from the surrounding fabric.

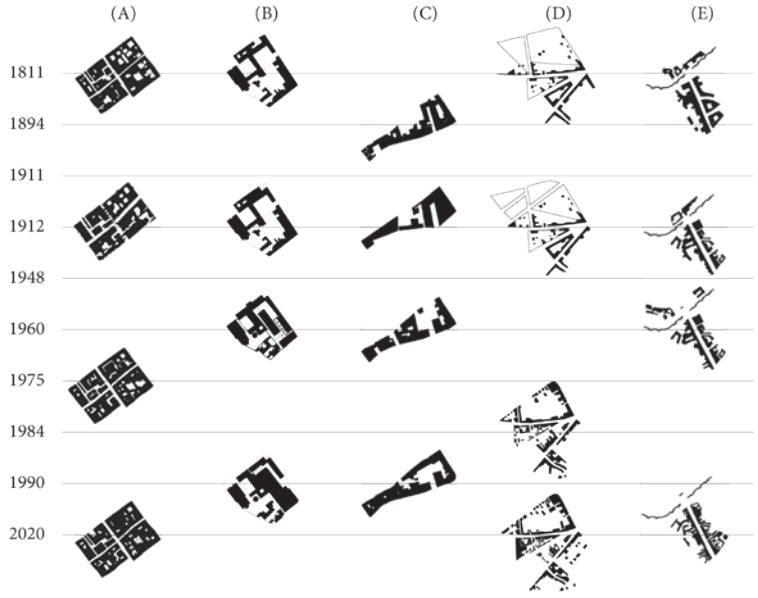


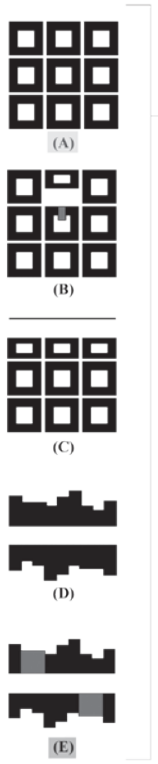
Figure 3. *Formal urban transition of the study samples of the five morphological clusters in Rimini (Source: author 2023).*

3. From Form to Urban Design

As demonstrated for sample E, the analysis of morphological transition is not sufficient to intercept all the characteristics of historic urban fabrics. For this reason, each sample was studied according to a typological abacus, in order to better define the qualities present in the urban fabric at several scales. Therefore, in order to favour a global view of all clusters, a summary table of the analysis conducted was drawn up. The table (Figure 4) is divided into two main parts, the first three columns summarise the main characteristics and relationships of the forms analysed, while the last two columns show the areas in which to act and some strategies, in the form of objectives, to favour urban regeneration processes according to the data analysed. The table descends in scale from top to bottom, from settlement to urban fabrics (schematised graphically), from streets to buildings, to architectural components. For each scale, the characteristics of the elements and the relationships they form intrinsically and extrinsically are summarised. Qualitative specifications indicate the areas in which intervention is possible: from internal courtyards to individual roof elements. Finally, the quantitative specifications identify the objectives to be achieved in order to regenerate the consolidated urban fabric by preserving the identity of places and acting at different scales.

This operation favoured design experimentation on each sample of a *device*. For the compact urban fabric with blocks (A), experimentation focused on light and temporary interventions of urban acupuncture to preserve inherited identity. For sample B (urban fabric with special buildings), the approach involved morphological reshaping of the fabric through specific competitions and design based on the polarity of existing monuments. The marginal fabric (C) lends itself to the use of parasitic architecture and the utilization of residual spaces. The fabric with buildings in line (D) was tested with the device of dynamic growth, where a building can grow in height relative to its taller neighbour. Lastly, for the fabric that features extraneous buildings compared to its surroundings (E), mechanisms related to the use of air rights were experimented with. In order to show the reasoning conducted to set the design strategy, the work done on two urban fabric samples (A, E) is shown here.

(A) In morphological terms, the theme of the block project emerges when global visions exist, not when individual interventions on the scale of the individual building are imagined. Nevertheless, the urban project can become unitary if each intervention (contiguous or not) is related to the others. An operational concept closely linked to the local character of project interventions is that of urban acupuncture. These are small injections that trigger mechanisms of well-being that



Field of observation	*Characteristics of elements*	*Intrinsic and extrinsic relationships*	*Qualitative specifications (interventions)*	***Quantitative specifications (objectives)***
Settlement (Rimini)	Mixed urban areas with a mixture of typologies	Position and relationship with the natural and anthropic territory	Urban landscape	**Urban regeneration of compact fabrics while preserving local identity**
Urban fabric (cluster)	Compact fabric with blocks (A) Fabric with the presence of special buildings (B) Margin fabric (C) Townhouse Fabric (D) Fabric with presence of extraneous buildings (E)	Porosity (A) Influence of the poles (B) Discontinuity and fragmentation (C) Continuity with the eaves line (D) Extraneous typologies and blind fronts (E)	Internal courtyards, facades and roofs (A) Exceptionality in the urban fabric (B) Private and collective space (C) Relationship with the road (D)	**Increase in building capacity in terms of surfaces and volumes** **Greater use of collective spaces**
Streets and collective space	Driveways (A, C, D, E) Pedestrian routes (A, B) Public squares (A) Cycle routes (E) Parking (A, B) Courts (A, B, C)	Ratio between squares and driveways (A, B, C) Ratio between the different degrees of transit (D, E) Ratio between inside/outside of thr block(A, B, C)	Path hierarchy distribution (A, B, C, D, E)	**Accesses** **Openings** **Facades and height of buildings**
Building typologies	Courtyard buildings (A,B,C,D) Special buildings (A, B) Ordinary building (A, B, C, D, E) Buildings arranged in line (D, E)	Position of lots in relation to the road hierarchy (A, B, C, D, E) Setbacks (B) Property boundaries (A, B, C, D, E)	Maintaining Architectural Principles (B) Maintenance of morphotypological and identity characters (A, B, C, D)	**Surface reports** **Dimensions of the building** **Height of buildings** **Distances**
Building Components	Roof typology (B, D, E) Elevations and facades (A, C, D, E) Structural components Porches, balconies, overhangs (C, D, E)	Relationship between openings (doors and windows) (A, C, D, E) Eaves lines (D) Railings (D)	Materials (A, B, C, D, E) Ornaments and decorations (A, B, E) Green roof (A, E) Superelevations (D, E)	**Dimensions of surface and volume additions** **Roof slopes** **Maximum overhangs and overhangs**

Figure 4. *Qualities and Quantities summarised after the analysis of the sample in Rimini (Source: author 2023).*

affect the entire city organism. The 'injections' are interventions at various scales that socially, economically and urban revitalise the portions of the city concerned. Using such a strategy of intervention in an historic centre, such as Rimini's, and in conditions of compact, isolated fabrics, means considering acting on the residual spaces of fabrics with a strong identity. In prescriptive terms, admitting small interventions (even temporary) within courtyards, or on solar slabs, or even admitting the redevelopment of fronts on the edges of urban blocks, could improve the perception of space in the historic centre. In this sense, the urban acupuncture project/device contributes to creating a direct communication with the rest of the city and will naturally integrate if one has the tools to include it. The possible trigger for such a transformation may come from the drafting of a typological abacus of possible interventions, i.e. the type of structures and the extent of intervention affecting the consolidated tissues (Figure 4).

(E) Air rights also refer to the right of ownership that surrounding buildings have over the airspace above their properties. There are a number of ways in which these rights can be transferred, such as: the addition of a new completion volume above the roof; the use of air and ground rights; the use of air rights of the street belonging to the public sphere; the transfer of GFA (Gross Floor Area) to other buildings; the partial transfer of GFA; and the transfer of GFA from the ground floor. The design exploration of buildings outside the surrounding urban fabric, which have blind façades, has led to a number of possible configurations, based on the case histories present mainly in the study sample. This resulted in two types of devices relating to the expansion of private spaces and two concerning the addition of volume for the creation of collective spaces. In the first case, volume addition refers to the inclusion of a private space between existing buildings with the total or partial transfer of air rights. This allows the creation of new interior spaces, e.g. to extend a residence, create a workspace, an accessory space or an outdoor space. As with private spaces, the addition of volumes or surfaces for the creation of collective spaces includes the total

or partial use of the space between two buildings. In this case, however, the intervention involves several parties who collaborate so that the increase in space is available to the community as a meeting place, common area or space accessible to citizenship (Figure 4).

4. A Matrix that Generates a Code (prescription)

What emerges from the synthesis of the analysis of Rimini's urban fabrics is that every consideration regarding urban regeneration comes from a morphological perspective. Therefore, the analysis of fabrics, their aggregations, and typological cells forms the basis of any prescriptive or codifying reasoning. The *devices*, on the other hand, represent a test suggesting design actions to achieve regeneration objectives. These considerations lay the foundation for the construction of a synoptic matrix that serves as a preparatory consideration for writing a code, starting from the relationship between formal analysis and operational devices. The following table (Figure 5) represents the five morphological clusters, the morphological requirements of intervention zones (IF), the possible actions on urban fabrics deduced from device simulations (ALLOWED), the entities responsible for regeneration actions (PROMOTERS), the benefits for the involved entities (ADVANTAGES), and finally, the measures and quantities of operations allowed in each cluster (LIMITS/QUANTITIES). Although the table shows the work carried out on each sample, two examples are given here in full (A, E).

(A) *Compact Fabric arranged in blocks*: If there are conditions of compact building fabric with closed blocks and stratifications, it is allowed to rethink urban space to make the fabric more porous through temporary interventions in the void system (courtyards and inner facades), interventions on roofs and terraces. These interventions aim to promote porosity of the blocks and urban acupuncture interventions to improve spatial quality. The promoters of these operations are the property owners, with specific agreements with the municipality for the use of courtyards and terraces. If there are environmental improvement projects that benefit the community (not only residents of the intervention unit), the municipality could grant incentives on environmental taxes, in addition to allowing increased surface area. The measures and limits of these interventions fall within private land occupancy under private concession and the increase in surface area according to building typology.

(E) *Extraneous Typologies to the Surrounding Urban Fabric*: If there are compact urban fabrics that feature extraneous typologies (out of scale and with blind facades), it is allowed to increase volume by adding volumes and surfaces through air rights transfers. The increase in surface area and volume is permitted through agreements between adjacent plot owners. Once agreements are reached, it is allowed to fully or partially occupy the footprint of the lower plot with structures that catalyse good urban quality. Allowed operations include: adding the maximum volume between buildings (private spaces), adding a percentage of the maximum volume (private spaces), adding volume to connect two buildings (collective spaces), and adding the maximum volume for multiple buildings (collective spaces).

This reading mode, applied to all five generalised sample areas according to their morphological-typological fabric, defines a series of relationships between spaces, entities, and possible guidelines for the development of Rimini's historic centre. The flexibility of interventions is guaranteed by allowing a certain number of variations within these fixed systems. The use of typological-morphological analysis allows for the deduction of parts, components, and their arrangement, thus establishing which variations and modifications are possible in a fixed system such as Rimini's historic centre.

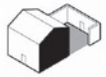
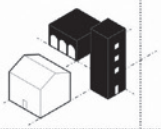
URBAN FABRIC (cluster)	IF (morphological characters)	IS ALLOWED (operations permitted)	PROMOTERS	ADVANTAGES	DEVICE	LIMITS QUANTITIES
	There are conditions of compact building fabric with closed blocks and stratifications	Rethinking the urban space to make the fabric more porous through: • temporary interventions on the system of voids (courtyards and courtyards); • interventions on the internal facades; • interventions on roofs and flat roofs.	Private owners	• Remediation • Incentives on environmental taxes • Increase of surfaces	Urban Acupuncture 	• Occupation of private land by the public on private concession • Surface increase in accordance with the building typology.
	Types of special buildings that have polar characteristics with respect to the surrounding urban fabric	• Remodel the urban fabric while maintaining the layout of the special building; • Recognize the morphogenetic archetypes of the tissues affected by polarity; • Parametrically modulate the interventions between the identified morphogenetic archetypes.	Public administration	Increase in surfaces and volumes as a percentage of the urban fabric under analysis.	Morphological replasmation of tissues 	• Occupation of private land by the public on private concession • Surface increase in accordance with the building typology.
	Margin tissue conditions are present with proximity to topographical and/or anthropic borders	Recover cubage through: • the increase in surfaces and volumes served by walkways or paths; • the temporary occupation of private open spaces (courts and courtyards if any) by the public administration to create public spaces or gardens.	Private owners Investors Public administration	Increase of surfaces and volumes	Parasite architecture 	• Occupation of private land by the public under concession • The overhangs must respect a maximum overhang comparable to the addition of balconies on the street facade • The "parasitic architectures" must occupy no more than 20% of the façade on which they are built.
	There are compact urban fabrics with typologies arranged in line (row houses)	• Increase the building capacity of surfaces and volumes by addition while preserving the characteristics of the original typology • The elevation of buildings is enabled through a dynamic index which is governed by the height of the tallest adjacent building	Private owners Investors	• For urban quality, the preservation of local identity • For investors, increase in area/ volume	Dynamic growth 	Height raising with dynamic index: • h= h near +1 • traditional standard maximum height • 5 floors Adding volume to the facade: • Maximum projection: 1 m • Coverage of the existing facade: max 20%. • No addition of ground floor towards the public road. Roof: • Compensation gauge (partial or total • Residential destination • Addition of dormer window • Partial removal max 20%
	There are compact urban fabrics that have extraneous typologies (out of scale and that have blind facades)	Increase the cubic capacity by adding volumes and surfaces through the transfer of air rights.	Private owners Investors	Increase of surfaces and volumes	Air Rights 	• Occupy all or part of the outline of the lowest lot with structures that are catalysts of good urban qualities. • adding maximum volume between buildings (private spaces); • added as a percentage of the maximum volume (private spaces); • addition of volume to connect two buildings (collective spaces); • addition of the maximum volume for more than one building (collective spaces).

Figure 5. *Synoptic Matrix (Source: author 2023).*

5. Towards Formal Urban Codes

The selection of the analysis samples was conducted starting from the urban forms of Rimini which, due to their intrinsic strength, possess the potential to remain active with new dynamics. *A posteriori* from the analysis conducted, at least two orders of observation can be emphasised: the first linked to the morphological analysis, the second to the *devices*. Firstly, the study on Rimini highlighted that the entire historic centre is composed of compact fabric and that most of this is aggregated in closed blocks. This does not mean that the historic centre can be considered indiscriminately, but that there are a series of spatial organisations and morpho-typological subcategories that can be distinguished. That is to say that each cluster analysed is a specific declination of the compact fabric and that at least three out of five samples (A, B, C) are particular block aggregations that, however, present identity characteristics that go beyond the mere 'block' classification. This denotes that when analysing the urban fabric there are general classifications (compact urban fabric) and evidence at the local level (deformations or replacements) that can contribute at different scales to define the relationships between urban organisms. In the second instance, the classification into clusters implemented for urban fabrics has allowed the conception of *devices* that are more or less incisive with respect to urban design. In fact, it is possible to catalogue devices according to the degree of urban transformation they could generate. This distinction is not accidental, but comes from the recognition of the identity of the places. Where the *cardus* and *decumanus* meet is the most fertile place in which to graft buildings of power and representation, so the fabric that develops in the centre of the historic core presents well-rooted morpho-typological characters and recognisable architectural principles. This approach indicates the presence of two regeneration times: a slower and more concentrated one within the historic core and a faster and more incisive one in the outer boroughs.

The approach developed in this research has a high potential for generalisation to other contexts. Since the proposed matrix summarises the morphological transition, formal abacus, dimensional criteria and suggested transformation *devices*, closely based on and related to the morphological analysis of the study sample, it is possible to reformulate these paradigms for other historic centres. The main advantage of this process is that all the recommendations are site-specific and thus able to foster and promote local identity. More generally, the approach presented is suitable for any established urban fabric, as the main requirement is to have a pre-existing built environment with a recognisable image to inform the form-based transitional analysis abacus. In this sense, the approach presented so far can guide not only the transformations of the most representative and symbolic part of the city, such as the historic core, but also the regeneration of more ordinary or peripheral areas, recognising their different urban role. For these reasons, the future prospects of this study are to develop interdisciplinary research linking urban design with public law and parametric design (Oxman, 2017). The field of public law can help develop specific regulatory tools, supporting urban codes that deal with dynamic and non-absolute criteria based on morphological typologies, while the parametric design approach would offer effective digital tools to visualise and simulate the multiple morphological outcomes of dynamic regulation of urban growth. Another possible integration is the use of spatial analysis and tools such as Space Syntax (Hillier, 1996). This tool addresses a number of issues relevant to the formation of land-use strategy and location considerations: promotion of economic growth, revitalisation of core areas, increasing social sustainability and improving cycling and pedestrian access. The tool offers an evidence-based approach to decision-making (Brown & Corry, 2011), informing the accessibility and walkability of an urban area and helping to test strategic interventions and project proposals.

Although urban codes are not only concerned with physical form, but also regulate land use and other planning issues, they can help create variety associated with both aesthetic ideals and the mediation between individual and collective interests. Codes are not necessarily con-

servators of the established order, but can help offer alternatives to conventional visions, from the combination of planners and other figures who may work to draft them. In conclusion, the generative vision of the urban environment offers a proactive influence on urban form.

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Plenary Session: Fostering Synergies

Advancing Collaboration Between Academia and Professional Practice. Friday, 8th December 2023

Keynote Speakers

Oya Atalay Franck (President – EAAE_European Association for Architectural Education), Dubravko Bačić (ACE_Architects Council of Europe), Ruth Schagemann (President – ACE_Architects Council of Europe, online participation)

Invited Contributors

Gregoris Patsalossavis, Michalis Cosmas, Alessandra Swiny, Chrystalla Psathiti, Pantoleon Skayannis, Panayiota Pyla

Session Chairs

Nadia Charalambous, KAEBUP Coordinator
Alkis Dikaios, President Cyprus Architects Association
Christos Christodoulou, Architects Council of Europe

This roundtable session brought together voices from both academia and professional architectural practice to explore how synergies between these domains can be meaningfully strengthened. The discussion was anchored by three central questions, each addressing a key aspect of collaboration and cross-pollination:

1. Sustainable Collaboration Frameworks: In what ways can academia and small-scale architectural practices – particularly those without formal Research and Development (R&D) departments – create sustainable platforms for ongoing communication and collaboration?
2. Curricular Integration of Practice: How can real-world professional insights be systematically integrated into higher education curricula? What channels or methods can support a consistent flow of practical knowledge into academic environments to enrich student learning?
3. Cross-Sectoral Synergies: What strategies can promote collaboration across fields such as architecture, urban planning, engineering, and urban studies? How can such cross-sectoral exchanges of curricula, expertise, and resources be organized to improve educational outcomes and prepare students for the complexity of professional challenges?

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Introduction and Welcome – Nadia Charalambous

The session opened with a warm welcome from Nadia Charalambous, who introduced herself as one of the moderators, alongside Alkis Dikaios, President of the Cyprus Architects Association (CAA), and Christos Christodoulou, a practicing architect in Cyprus with long-standing involvement in both ETEK and the CAA.

Charalambous extended her gratitude to the distinguished guests participating in the roundtable. Among the international contributors were Oya Atalay Franck, President of the European Association for Architectural Education (EAAE); Dubravko Bačić, representing the Architects' Council of Europe (ACE); and Ruth Schagemann, President of ACE, who would be joining the discussion online. The session also welcomed several esteemed local participants from both academia and professional practice. These included Chrystalla Psathiti, a practitioner based in Paphos and academic at Neapolis University; Michalis Cosmas, primarily a practitioner but also engaged in a variety of initiatives; Gregoris Patsalossavis, a practicing architect in Nicosia; Alessandra Swiny, faculty member at the University of Nicosia; and Panayiota Pyla, Professor at the University of Cyprus.

In attendance were students from local institutions as well as participants from the KAEBUP conference. The roundtable marked the concluding event of the KAEBUP project – Knowledge Alliance for Evidence-Based Urban Practices – a three-year EU-funded initiative focused on bridging academia and practice. The project involved partners from four European countries – Croatia, Italy, Portugal, and Cyprus – and was hosted primarily by academic institutions, with the aim of fostering collaborative teaching and training methods involving students, researchers, and professionals alike.

Charalambous outlined the two core aims of the KAEBUP project. The first was to explore and co-develop pedagogical approaches through a combination of online and on-site workshops, intensive training sessions, and collaborative activities. The second aim involved the development of business model workshops, conducted in partnership with business departments, to identify essential transversal skills needed in architectural education. The project also included professional training sessions for faculty and internship opportunities for students in all four participating countries.

Framing the roundtable's relevance within this broader context, Charalambous introduced the session title, *Fostering Synergies*, as an invitation to further explore how collaborations between academia and professional practice could be deepened and sustained.

She then presented the three discussion topics that would guide the session:

1. Sustainable Frameworks for Collaboration – How can small-scale architectural practices, which often lack formal R&D departments, engage in meaningful and ongoing partnerships with academic institutions?
2. Integration of Practice into Curricula – What mechanisms can be introduced to ensure a continuous and productive flow of professional experience into higher education curricula?
3. Cross-Sector Collaboration – How can collaboration across disciplines such as architecture, planning, urban studies, and engineering be structured to enrich learning outcomes and prepare students for the complex realities of the professional world?

Charalambous concluded by inviting the keynote speakers, Oya Atalay Franck and Dubravko Bačić, to share their opening remarks, before opening the floor to contributions from the local participants and the broader audience.

Positioning Statement – Oya Atalay Franck (EAAE)

Oya Atalay Franck began by expressing her gratitude for the invitation, noting the pleasure of participating in the event and her enthusiasm about being in Cyprus for the first time.

She introduced the European Association for Architectural Education (EAAE), an organization with nearly five decades of history and a membership of approximately 150 schools across Europe focused on architecture, planning, and design. The EAAE, she explained, is fundamentally committed to advancing the quality of both architectural education and research – two domains it views as inseparable. The association acts as a platform that connects institutions, individuals, and stakeholders, and it plays an advocacy role, albeit on a smaller scale compared to organizations like the Architects' Council of Europe (ACE). The EAAE's broad community includes schools of architecture, urbanism, landscape architecture, and design.

Drawing on data from the ACE Sector Study 2022, Atalay Franck noted that there are approximately 620,000 architects in Europe. The United Kingdom alone hosts 65 architecture schools, with numbers continuing to rise, while Germany displays similar trends. Italy and Germany count around 150,000 and 120,000 licensed architects respectively. Significantly, one-third of these professionals operate as sole principals, underscoring the critical role of mentorship and hands-on learning in the workplace. She emphasized that architectural education must reflect this diversity of practice – ranging from sole practitioners to partners in firms and salaried employees – rather than idealizing the image of the singular, iconic architect.

Turning to the current challenges facing architectural education and practice, Atalay Franck pointed to the complex, post-Bologna landscape of degree structuring, and the increasing importance of lifelong learning and continued professional development, particularly in light of emerging specializations in the construction and design sectors. She situated these issues within broader global vectors such as internationalization, mobility, and European funding alliances – developed in response to major global issues including war, pandemics, migration, inclusivity, democratic society, sustainability, and artificial intelligence. She stressed that these challenges are shared by both academia and professional practice.

Atalay Franck highlighted the built environment's responsibility for 40% of carbon emissions, and noted that as urban populations grow – projected to reach three-quarters of the global total – cities are becoming ever more central to sustainability debates. She called attention to the EAAE's partnerships with global and European networks, such as ACSA (Association od Collegiate Schools of Architecture USA/Canada), and discussed recent events like the 2021 Biennial Educators Conference focused on "curricula for climate agency, design, and action". The association has continued this work through initiatives such as the EAAE Annual Conference hosted by the Politecnico di Torino on architectural education, where cultural and contextual specificity – local as well as institutional – was emphasized as integral to any pedagogical reform.

Despite pressures of globalization, Atalay Franck argued, local culture and institutional identity remain vital in educational settings. She invited participants to the upcoming EAAE Deans Summit on Transformations in Amsterdam, to be held in April, and referenced a recent Erasmus+ funded study on the "afterlife" of architectural education – i.e., its impact across multiple sectors. This study reaffirmed the value of architectural education in producing generalists, who are exposed to a rich curriculum spanning natural sciences, applied sciences, humanities, and formal sciences. While some schools may emphasize one domain over another, this diversity of training offers students a broad base of potential and critical thought. However, she acknowledged the persistent tension in architectural education: students are often trained to do "everything", which raises the question – *why?* – and

whether a more focused or specialized approach might be beneficial. This tension, she noted, remains unresolved.

The first joint conference between EAAE and ACE, held recently in Brussels, was another significant milestone. Organized in collaboration with ENACA (referring to the European Network of Architects' Competent Authorities network regarding the topics of professional admissions all around Europe), the event addressed themes of upskilling and educational practice. Here too, the emphasis was on forging stronger ties between education, research, and practice, which she identified as essential to tackling major societal issues – particularly climate change. She went on to emphasize how schools are proactively addressing this challenge by adopting resilient design curricula, experimenting with new materials, exploring waste-as-resource strategies, and promoting climate literacy. Nonetheless, there is a shared recognition of the urgency for new knowledge and skills, which continues to serve as a key driver of change.

Turning to the roundtable's three thematic questions, Atalay Franck shared three illustrative case studies:

1. Germany – Neuperlach, Munich «NEBourhoods» – A New European Bauhaus Lighthouse Project. This project, led by TU Munich, is situated in Neuperlach – a post-war urban settlement of 65,000 residents facing significant social and infrastructural challenges. The project involves 24 partners, including local citizens, government bodies, scientists, and artists, working in co-creative teams to renovate buildings and neighborhoods. The initiative stands out for its integration of entrepreneurship, empowering residents to launch new ventures during the physical transformation of their environment. Although not solely about collaborations between academia and small-scale firms, the project actively involves such firms in workshops and development processes, demonstrating how large-scale projects can foster engagement at smaller, localized levels.
2. Denmark – Circular Urban Transformation – «DESIRE» Designing the Irresistable Circular Society. Organized by Danish architecture schools, this second example also includes 24 partners and focuses on developing irresistible circular solutions for urban regeneration. Spread across eight locations in Denmark, Italy, Latvia, the Netherlands, and Slovenia, the project emphasizes social inclusion, symbiotic transformation, and reconnection with nature. Collaboration spans local governments, academic institutions, and other stakeholders, offering a replicable model for cross-sectoral engagement in urban development.
3. European Consortium – Art and AI Integration – «CrAFT – Creating Actionable Futures». The third project is led by ELIA (European League of Institutes of the Arts) and lead by the Norwegian University of Science and Technology. With a focus on AI, smart cities, and citizen empowerment, the project links students, startups, and over 70 European cities – including participation from Cyprus. While the first two projects were primarily school-led, this initiative gives students a prominent, independent voice in shaping urban futures. The centrality of art and creative expression makes it a distinct case of cross-sector collaboration, where practice, academia, and civic participation are fully intertwined.

Reflecting on these examples, Atalay Franck noted the intensifying pressure on architectural education to respond to changing professional demands. In the UK, for example, the registration board has expanded its graduate competency framework from 11 to 39 skills, placing new burdens on schools to adapt curricula accordingly. While core architectural competencies remain constant – designing space and creating place – these are no longer sufficient in isolation. Architecture must now also deliver economic, ecological, social, cultural, and political value.

She concluded by emphasizing the need for a systemic approach to sustainability, requiring holistic thinking and cross-disciplinary collaboration. In a world marked by disruption and flux, the integration of research, teaching, and practice is not merely beneficial – it is essential. "Even if it's about disruption, discontinuity, and radical change", she said, "when we have co-creation, collaboration, and communication, we really reach our goals in a more efficient way".

Positioning Statement – Dubravko Bačić (ACE)

Following Oya Atalay Franck's remarks, Alkis Dikaios thanked her for her insightful contribution and congratulated the European Association for Architectural Education (EAAE) for its work in strengthening education and research. He then invited Dubravko Bačić to share his perspective on bridging the worlds of education and professional practice.

Bačić began by expressing his appreciation for the invitation to participate in the conference. He introduced the Architects' Council of Europe (ACE), describing it as a European network composed of professional associations, chambers, and regulatory bodies from across the continent. As referenced by Atalay Franck, ACE collectively represents approximately 620,000 architects through its 37 member organizations. These include all 27 EU member states, three members with special status (Switzerland and the UK among them), and six observer members representing countries in the process of joining the EU.

Bačić outlined the three core purposes of ACE:

1. Collaboration – Facilitating knowledge exchange between member organizations and learning across national borders. ACE also engages in partnerships with global counterparts, including the EAAE and other transcontinental professional bodies.
2. Advocacy – Representing the interests of architectural professionals at the European level, particularly in relation to legislative and regulatory developments which are first shaped in the EU before being transposed into national law.
3. Promotion of the Profession – Supporting the visibility and societal relevance of architecture through strategic projects and outreach.

ACE's work is structured into four thematic areas:

- Access to the Profession, which includes standards and requirements for registration.
- Practice of the Profession, addressing practical matters such as insurance, team dynamics, and architectural competitions.
- Quality of Architecture, with a focus on defining and assessing architectural excellence.
- EU Research Projects, a newer area that Bačić would return to in connection with the discussion topics.

Bačić emphasized the value of ACE's biannual Sector Study, a Europe-wide survey that gathers consistent, long-term data on the profession through member organization networks. This data forms the backbone of ACE's policy work and is widely used by practitioners and institutions alike.

Drawing on this data, Bačić addressed the first discussion topic: collaboration between academia and small-scale architectural firms. According to the Sector Study, there are roughly 150,000 architectural offices in Europe, the vast majority of which are very small. Specifically, 78% consist of one to two people, and 90-93% have five employees or fewer. As a

result, most of these offices do not have dedicated R&D departments and often struggle with time and resource constraints. Yet, Bačić argued, the capacity for research and innovation remains embedded in architectural education and in the exploratory nature of the design process itself. From Brunelleschi to contemporary practices like Foster + Partners or OMA/AMO, architecture has always been a field where design is closely tied to investigation and experimentation. Recent professional exhibitions, such as those presented at the Venice Biennale, reflect this increasingly research-oriented trend.

Bačić expressed concern that the profession may have lost some of its innovative momentum in recent decades. Historically, architects were often technological innovators – master builders who developed construction methods themselves. Today, architects are more likely to adapt and apply technologies developed elsewhere. Nonetheless, he insisted, the relationship between education, practice, and research has always existed, especially because project-based learning – the pedagogical foundation of most architecture schools – mirrors the iterative, exploratory nature of professional design work. Even without formal research departments, many offices conduct investigative work, particularly in heritage preservation and urban planning, both of which rely heavily on research-based methods in day-to-day practice. In this sense, Bačić offered a diagnostic perspective on the systemic gaps between education and practice, proposing several pathways to better integration:

1. Lifelong Learning and Continuous Professional Development (CPD) – Bačić emphasized the importance of CPD, noting that most CPD programs are developed and delivered by universities. This creates a valuable interface between research and practice, allowing small firms to access emerging knowledge. According to ACE data, European architects engage in an average of 20 hours of CPD per year.
2. Practitioners in Academia – He called for a better balance of practitioners in academic roles, highlighting the importance of having both educators and practicing architects on faculty. However, he acknowledged a major shift: architecture schools have become increasingly absorbed into university structures, where career advancement depends on peer-reviewed publications, conference presentations, and formal research projects. This institutionalization has, in some cases, made it more difficult for academics to stay connected to professional practice. That said, variation across Europe remains significant – what applies in Ireland may not hold true in Bulgaria or Italy.
3. Student Internships – Bačić strongly advocated for internships as a critical point of connection between academia and professional practice. When coordinated effectively, internships benefit both students and firms, with students acting as carriers of new knowledge between the two spheres.
4. Inclusive Conferences and Accessible Research – He called for research-driven conferences to include more small offices and practitioners, ensuring wider dissemination and utility. He noted the proliferation of academic journals and publications, questioning their reach beyond academia. Making research freely available online is essential so that even small firms can access and apply it in practice.

Although ACE is not a research institution, Bačić noted its active role in EU-funded research projects, often in partnership with the EAAE. ACE frequently acts as a dissemination partner, ensuring that the outcomes of conferences, workshops, and publications reach member organizations and practitioners across Europe. This dissemination role is crucial not only at the European level but also at the national level, where schools can collaborate with professional associations to bridge research and practice more effectively.

Bačić reflected on the need for hybrid identities within the profession – those who both teach and practice, alternating between roles as necessary. While dedicated academic re-

search is a specialized pursuit, broader participation in practice-relevant inquiry remains essential.

Acknowledging the complexity of these issues, Bačić emphasized that there are no simple or immediate solutions, but that the pursuit of relevance in research must remain central. As someone who teaches, he observed a growing concern that many research topics have become overly esoteric, disconnected from practice. Still, he maintained that any well-articulated research topic has potential value, and while some may seem obscure at first, they may later find resonance and application in professional settings.

Finally, he referenced international exhibitions such as the Venice Biennale, which have increasingly incorporated research themes and outputs. For instance, Rem Koolhaas's *Fundamentals* exhibition explored foundational aspects of architecture in a research-intensive format. These events, he argued, play a significant role in making research accessible and inspirational to practitioners.

Bačić concluded his remarks by reaffirming his belief that research, education, and practice must remain connected, especially if the profession is to evolve and stay relevant in a rapidly changing world.

Positioning Statement – Ruth Schagemann (ACE)

Following Dubravko Bačić's contribution, Christos Christodoulou welcomed Ruth Schagemann, who joined the session online. Schagemann began by greeting her colleagues, Oya Atalay Franck and Dubravko Bačić, and expressing her pleasure at participating in the roundtable, even from a distance. She emphasized that the topic under discussion – the relationship between research and practice – is of crucial importance in the current moment.

She then highlighted two specific developments at the European level that reflect the relevance and complexity of this connection. First, Schagemann pointed to ongoing discussions surrounding the New European Bauhaus (NEB) and its integration into the Horizon Europe research framework. Horizon Europe is one of the EU's largest funding programs for research and innovation, and there had been significant debate over whether the New European Bauhaus should be recognized as a "sixth mission" within the program. This was not merely a bureaucratic matter, but one that underscored the need to advocate for architecture and urban planning as integral fields within the broader research landscape.

She noted that both the European Association for Architectural Education (EAAE) and the Architects' Council of Europe (ACE) worked closely together to maintain the visibility of the NEB within Horizon Europe. Although the effort to designate NEB as a sixth mission ultimately did not succeed, a compromise was reached: NEB will instead be implemented as a Mission-Enabled Deployment (MED) Facility. This format will allow for the targeted allocation of research funding specifically within architecture and urban planning.

Schagemann stressed that the debate behind this decision was challenging and highly significant. It was not easy to persuade stakeholders that the built environment – architecture and urban planning – should be recognized as a key driver of research and innovation in Europe. The next phase of the initiative will focus on supporting the European Commission in crafting research calls that tightly connect architectural and urban practice with research and development goals.

As her second point, Schagemann introduced the work of Marcos Ros, a Member of the European Parliament (MEP) from Spain, who has served as rapporteur for the New European Bauhaus and has shown strong commitment to advancing this agenda. She explained that, within the European Parliament, each of the 705 MEPs is entitled to propose projects. Annually, more than 1,400 proposals are submitted, and only 30 to 40 are selected for im-

plementation. Ros was successful in having his proposal selected. His project centers on the idea of simulating the New European Bauhaus as a grassroots initiative, and consists of two core components:

1. Creation of a Hub – A digital or physical platform where researchers, architects, urban planners, and universities can collaborate, share ideas, disseminate research findings, and exchange practical experiences.
2. Development of Vouchers for Small Cities – A funding mechanism that enables small-sized cities to apply for vouchers valued between € 30,000 and € 40,000. While modest in scale, these vouchers are designed to support existing local initiatives, facilitating real-world application of NEB principles through architecture, design, and community-based planning.

Schagemann underscored the symbolic and strategic significance of this effort. It demonstrates that the transformation of the built environment – toward more sustainable, inclusive, and high-quality living spaces – requires not only design excellence, but deep integration of research and innovation.

She concluded by highlighting the importance of aligning national-level programs with European initiatives and architectural values. Creating effective alliances between Member States and EU institutions, she argued, is essential if architectural quality and innovation are to be supported across all levels of governance.

Following the keynote presentations, moderator Alkis Dikaios opened the floor to the roundtable's invited educators and practitioners, inviting them to share their perspectives on the connections between education, research, and practice, and how these align with the principles of the New European Bauhaus. He invited Alessandra Swiny and Panayiota Pyla to speak first, representing academic institutions, and noted that Chrystala Psathiti, with one foot in both education and practice, would follow.

Positioning Statement – Alessandra Swiny (University of Nicosia)

Alessandra Swiny began by thanking the moderators. She noted that the University of Nicosia, and private universities in general, have a slightly different role than public institutions, particularly in terms of funding and availability of research.

She emphasized the importance of discussing the relationship with small-scale firms, noting the need for proper infrastructure to enable this dialogue. In her view, this kind of infrastructure is currently missing. She suggested that something enabling better communication of availabilities and needs would be helpful.

As the conversation turned toward the industry, she observed a real lack of connection. Although efforts had been made over the years to encourage this connection, she noted that there were ebbs and flows, often related to economic pressures. In the past, there had been much more collaboration. Swiny pointed out the need for more funding to support classes that would allow practitioners to participate more easily. Without such support, practitioners end up sacrificing their working time to participate. She explained that they are not paid to attend critiques, which can last up to six hours, effectively costing them a whole day.

She reiterated that some form of infrastructure would be very useful, especially in enabling student communication within a mentorship framework. Such a system would allow students to connect with certain architects and offices during their education, potentially

leading to better relationships as they enter practice. She noted that nothing like this currently exists in Cyprus. She asked whether mentorship programs exist internationally, particularly in Europe, and suggested that such a model would be very useful.

Positioning Statement – Panayiota Pyla (University of Cyprus)

Responding to the invitation from Alkis Dikaios to share her insights, Panayiota Pyla began by reflecting on the long-standing nature of the dialogue between academia and practice, noting that various forms of exchange have existed for some time. However, she argued that in order to move this dialogue forward, it is necessary to understand its mechanics and the challenges involved.

As she listened to the previous speakers, Pyla was prompted to focus on two key points. The first was the issue of research and development. While, as mentioned earlier in the session, it is common to say that every small office engages in research, Pyla stressed that this form of research operates with very different mechanics compared to academic research. In design practice, she noted, every line on a drawing may represent a research question, making the process arguably even more intense. However, this form of inquiry is different from the academic model, where a topic is systematically explored and formally published.

To bridge these differences, Pyla suggested the need for analysis and recognition of how the same terms – like "research" – are executed differently in professional practice. Understanding these differences, she argued, is key to identifying new modes of dissemination and making the work done in small offices more visible and communicable within broader research frameworks.

The second point she raised was the issue of economics. While market pressures also exist in academia, they are often more bracketed compared to professional practice, where economic concerns are dominant and unavoidable. She argued that it is crucial to acknowledge and identify these economic tensions and mismatches if new forms of collaboration are to be developed.

As a concrete example, Pyla pointed to recent regulatory changes in Cyprus's housing policy, including new laws that tax larger houses. She described these changes as revolutionary, and noted that they align with discussions that have long been taking place within academia. To her, this represented a clear opportunity to establish a more substantial and meaningful communication between academic knowledge and professional practice.

Response – Dubravko Bačić (ACE)

Dubravko Bačić responded by clarifying that his earlier remarks were not intended to tie research strictly to institutional or political structures. Rather, his aim was to explore how small practices might benefit from research, and to identify similarities between research and the problem-solving or design thinking inherent in every architectural project. He acknowledged that while statistical models describe the structure of offices one way, reality is often more nuanced. In his view, research needs to reach small offices, because practitioners typically have limited time to seek it out themselves. The challenge lies in ensuring that research findings, questions, books, and publications are made accessible and readily available to smaller practices in forms they can use effectively.

Response – Oya Atalay Franck (EAAE)

Oya Atalay Franck followed with a further reflection on the position of small offices. She cautioned against speaking about small firms as if they were passive recipients of knowledge.

These practices, she emphasized, are not disconnected from research – they are formed by individuals like us, or our students, and they know how to conduct research. The issue is not a lack of capacity but a need to maintain and reinforce connections with the knowledge and skills they developed during their education.

She argued that the mindset and culture of research instilled in students during their academic years can and should carry over into their professional lives. If these values are nurtured properly, they become embedded in the DNA of young architects, enabling them to remain active participants in collaborative and research-based projects throughout their careers. Atalay Franck concluded by noting that it is essential to ensure small offices stay connected to calls for projects and opportunities. She stressed that this connection must be mutual – it cannot be a one-way effort. Institutions and practitioners must work together to sustain the flow of communication and collaboration.

Positioning Statement – Chrystala Psathiti (Neapolis University Pafos / Practitioner)

Following the discussion on how to sustain connections between practice and education, Chrystala Psathiti shared her perspective as both an academic and the head of a small-scale architectural practice. She began by emphasizing the importance of clearly defining the skills students are expected to acquire. While a broad European framework exists – comprising eleven key competency areas – it may be too general to be effectively applied. Psathiti noted that there is a lack of clarity regarding how these skills are addressed in different academic institutions, and how they translate into professional settings.

In order to bridge this gap, she argued that more investment and funding are needed to support training initiatives specifically for small-scale architectural offices. Drawing from her own experience, she explained that while she is able to conduct research through her academic role, practice presents different challenges. Time is limited, and practitioners must regularly deal with legislative hurdles, client demands, and budget constraints, all of which make it difficult to pursue research to its full potential.

She suggested that financial support for training programs could offer small practices the flexibility and incentive to engage more actively with research. With dedicated funding, these firms would have the time and resources to invest in training, which in turn could support and improve their work. Psathiti gave the example of current legislation in Cyprus requiring solar studies, which has created a more research-based framework for energy and solar performance evaluations. However, she noted that no similar requirements exist for other aspects of design, such as social or material considerations. This imbalance, she suggested, reflects a missed opportunity for broader research integration in practice, and highlights the potential for legislation to play a more constructive role in promoting research.

She also noted that while many small practices do engage in research-like activities, these efforts are typically unsystematic and often go undocumented. Firms tend to acquire knowledge through day-to-day challenges but do not store or organize this information in a way that can be reused or built upon, as would be done in a formal research context.

Finally, she stressed the need to teach students about knowledge management, particularly how to decode legislation and understand it as a form of research. She described this as a core activity within small-scale practices – one that is already happening but is often overlooked as a learning opportunity. Without systems for recording and reflecting on these experiences, such knowledge is gained passively, rather than actively through structured research processes.

Positioning Statement – Michalis Cosmas (Architect)

Following Chrystala Psathiti's contribution, Christos Christodoulou invited Michalis Cosmas to share his thoughts. Cosmas began by reflecting on the nature of the conversation, noting that the ongoing discussion about the disconnect between education, research, and practice was particularly fascinating. He pointed out that architectural practice, in its current form, is relatively new, especially when compared to its apprenticeship-based origins.

In his view, the platforms for dialogue between research and practice already exist, and it is important to continue investing in and utilizing these platforms – through discussion events such as the roundtable itself – to strengthen communication and collaboration.

He emphasized that architecture is a pluralistic profession, where each practitioner carries their own set of individual polemics. As such, he expressed skepticism about attempts to codify the profession through universal points, directives, or legislation. Instead, he argued that meaningful collaboration can only occur among individuals who share common interests.

In the Cypriot context, he identified the challenge as one of matching the interests of research groups with those of practitioners. Rather than identifying as a "practitioner", Cosmas described himself and others in the profession as producers of space, each operating through a personal filter of priorities, skills, and knowledge. Successful collaboration, he suggested, depends on aligning these differing interests, which could then lead to productive outcomes.

Response – Dubravko Bačić (ACE)

In response, Dubravko Bačić posed a question to Cosmas, asking whether, in a small professional and academic environment like Cyprus, where everyone tends to know each other, there is any evidence of shared interests emerging across the sectors.

Reply – Michalis Cosmas

Cosmas responded by noting that such alignment of interests is not a primary focus in Cyprus. He explained that Cyprus's academic architectural environment is relatively young. Although architecture schools have existed for over a decade, university-hosted architectural discussions are a much more recent development. He pointed out that most local practitioners have studied abroad, resulting in a community that speaks different architectural languages. In his two decades of experience in Cyprus, there have been only a handful of moments where a shared architectural conversation truly emerged.

Cosmas noted that architectural professionals in Cyprus tend to discuss a wide range of topics, and if something interesting arises, it may be extrapolated into further dialogue or exploration. Otherwise, individuals continue along their own paths. Whether or not something collaborative emerges depends on whether shared interests with researchers exist. If they do, he noted, there is potential for something valuable to come out of the interaction. If not, practitioners will continue learning and growing through their own work. He concluded by expressing appreciation for Bačić's earlier remark about research having the capacity to feed itself.

Response – Oya Atalay Franck (EAAE)

Oya Atalay Franck contributed a perspective from Switzerland, noting that in that context, the professional title of "architect" is not protected, meaning that anyone can claim the title and open a practice. She explained that in Swiss schools, most design studios are taught by

part-time practitioners, with very few full-time academic staff. This creates an intense overlap between practice and education, where conversations similar to those discussed by Cosmas occur naturally and frequently – sometimes as often as two days a week. Atalay Franck highlighted the value of this mixed culture within schools, as it allows participants to identify what is relevant or shared, and to recognize that it is also acceptable to have topics that are not mutually followed. However, she also acknowledged that there are moments when it is unfortunate that things do not come together. In her view, architecture schools have a responsibility to foster and support such conversations and collaborations.

Positioning Statement – Gregoris Patsalosavvis (Architect, Nicosia)

When invited by Alkis Dikaios to contribute, Gregoris Patsalosavvis reflected on the conversation with a note of concern and urgency. He remarked that while the presentations from the European guests had been interesting and informative, many of the initiatives and developments discussed do not reach local practitioners in Cyprus.

"There are a lot of things going on at the European level", he said, "which we don't know about. They don't reach us. We don't know about the research". He emphasized the need to create mechanisms to ensure that local professionals are exposed to what is happening in Europe. "I think we are neglected. Somebody has to wake us up – we are sleeping".

Patsalosavvis agreed with earlier speakers on the importance of education and the development of skills for students, noting, "Education is very important, I agree with what you all said on all these topics". He reflected personally on his early experiences in architectural education: "I remember reading for the first time, and learning to draw. I was a bit scared because I had to wear appropriate trousers and fix my shoes and all these things". Though the profession has changed, he believes architectural education today lacks broad knowledge. "The topics are very interesting", he said, "but the schools and the programmes lack broad knowledge".

Response – Ruth Schagemann (ACE)

Ruth Schagemann responded by underscoring the need for practitioners to be more integrated into the development of funding calls and research programs, particularly those oriented toward real-world projects. She stressed the importance of practice-based research – research that emerges from and supports the existing built environment.

This, she argued, would allow research ideas to translate into actual projects or components of real projects, closing the gap between theory and application.

Comment – Audience Member

A participant from the audience added to the discussion by emphasizing that the relationship between the market and academia should begin early in a student's education, ideally during undergraduate (bachelor's) studies. Students should engage with practice from the start, working alongside practitioners to see how the field functions in real-world contexts. The speaker noted that architectural education is more than a career choice: "They do not merely study this. They choose a way of life… it's something you live". The speaker also proposed that small firms be required, through competition regulations, to include at least two students in international design competitions. This, they suggested, would allow students to become actively involved in professional environments and experience competitions – which inherently involve research-oriented processes – as a platform for connecting education and practice.

Response – Christos Christodoulou (Moderator)

Christodoulou responded to the idea, suggesting that such involvement could be formalized within the academic year and even regulated. He acknowledged that while architectural academia often aspires toward idealistic goals, in practice, real-world constraints must be taken into account. Referencing Oya Atalay Franck's earlier observation that most design studios in Switzerland are taught by practitioners, he asked how many similar cases exist in Cyprus. "We should consider this also", he said. "In Cyprus, how many studios do we have where only practitioners teach?". For Christodoulou, the issue went beyond relationships: "It's much wider than that; it's a question of culture".

Response – Alessandra Swiny (University of Nicosia)

Alessandra Swiny then pointed out a key mechanism that had not yet been addressed in the discussion: curriculum design, particularly in the context of the second and third discussion topics. She praised the Erasmus and Erasmus+ programmes, crediting them with transforming interdisciplinary communication and collaboration across Europe. "It's just completely exploded the relationships in Europe", she said, contrasting this with the situation in the United States, where the same level of institutional connectivity does not exist if one is not working within academia. Swiny suggested that a similar framework could be developed for professional practices, not just universities. This could create a European network for practices, enabling collaboration beyond academia and into the professional realm.

Response – Oya Atalay Franck (EAAE)

Oya Atalay Franck returned to the discussion to address the real pressures faced by small offices, typically composed of one to five people. She acknowledged that every hour spent on research is an hour not paid. Small firms face constant pressure from clients, deadlines, and daily operational issues, which push research priorities aside.

She questioned why no funding mechanisms currently exist to support these efforts: "Who has to pay for it? Do we need to free public money for it?". She also raised the issue of institutional responsibility, asking why chambers or schools are not in a position to provide such funding – whether to pay for extra hours or to compensate practitioners for their time.

Atalay Franck noted that while the lack of support is a longstanding issue, many project outputs and research reports are available as open access resources. "It's in your hand", she said. "You have all the reports and it's an invitation to make use of the results in your own practice".

She concluded by highlighting the broader systemic problem of limited investment in research outside of large industries. "It's a question of shifting this kind of knowledge into your daily life", she said. "How could we get [small firms] into the fold, to stitch everything together?".

Audience Discussion: Key Themes and Reflections

During the open floor session, participants raised a number of important reflections that expanded the discussion beyond the invited speakers. A central concern that emerged was the structural limitations of architectural education. One audience member emphasized that architectural programs are expected to deliver an overwhelming volume of content, spanning both practical and theoretical domains. The result, they argued, is a curriculum over-

loaded with expectations, leaving little time to focus on essential research skills. Students are often sent into practice without proficiency in technical drawing, software, or construction knowledge, while simultaneously lacking training in research methods and critical inquiry. This, the speaker suggested, stems from a mistaken belief that five years of architectural education should produce fully formed professionals. They proposed that universities should instead focus on cultivating curiosity and the ability to ask foundational questions – skills more in line with academic training – while professional development should continue through structured training after graduation, as is the case in other disciplines.

Another recurring theme was the potential of architectural competitions as a bridging mechanism between academia and practice. One contributor proposed that students, educators, and practitioners could collaborate through competitions, which naturally combine research, design, and real-world constraints. They suggested that requirements be introduced – particularly for international competitions – that compel small offices to include students on their teams. This would expose students to live projects and enhance their understanding of the profession, while also making competitions more inclusive and pedagogically valuable.

The role of practitioners in academia was also highlighted as an essential pathway for knowledge transfer. One audience member pointed out that teaching in universities provides practitioners with a means of staying up to date in a rapidly evolving field. If small offices feel disconnected from current research, they argued, participating in academic studios allows them to remain engaged and bring valuable insight back into their own practices. This point was reinforced by another speaker, who noted that architecture is an industry characterized by fast-paced innovation – especially in sustainability and zero-emission technologies. Without parallel involvement in practice, academic teaching risks becoming detached from the real challenges facing the built environment. In some countries, such as Italy, regulations prevent academics from practicing, which was seen as a serious limitation. In contrast, in Norway, where this dual role is encouraged, professors are expected to remain professionally active precisely because of these rapid developments.

Several participants stressed the importance of building structured relationships between academia and practice. Consultancy was raised as one possible form of collaboration. Given the limited time and resources available to small offices, it was suggested that they could benefit from engaging with existing academic research, rather than initiating their own. Universities, in this view, could serve as sources of applied knowledge, offering insights and expertise to support practice. Communication challenges were another major concern. Nadia Charalambous acknowledged the difficulty of conveying research findings beyond academic settings. Research is often complex, and simplifying it in ways that make it useful or impactful for practitioners and policymakers is not easy. Nevertheless, she stressed the importance of investing in this process – what she described as building a "chain of knowledge" – linking stakeholders and improving awareness across sectors.

The discussion also turned to the structure of professional training following graduation. Gregoris Patsalosavvis raised the issue of post-educational development, noting that the current model in Cyprus – where a graduate works for a year before being signed off by an employer – is insufficient. Drawing on his own experience completing the RIBA Part 3 in the UK, he argued for a more formalized and structured training system overseen by a professional body such as ETEK, and developed in partnership with universities. Christos Christodoulou added that what matters is not the duration of post-graduate practice, but whether it is structured. A 12-month structured experience, he said, could be more valuable than three years without clear objectives or evaluation criteria.

This led to a broader debate about the purpose of architectural education. Christodoulou questioned whether universities are meant to produce professionals ready to enter practice immediately, or "architectural thinkers" equipped to grow and adapt over time. He argued

that some skills can be learned after graduation, and cautioned against reducing education to technical training. This point was echoed by another participant, who argued that the profession often expects academia to deliver graduates fully prepared for office work, which is both unrealistic and counterproductive. Instead, practice must take on part of the responsibility for continued training.

Finally, the conversation returned to the potential of universities to act as initiators of research in collaboration with small-scale practices. One guest praised the openness and curiosity of the students at the host university, noting how important it is for both students and faculty to gain real-world experience. Alkis Dikaios suggested that universities could play a more active role by offering funding to small practices to carry out specific research projects. If funding were made available, he argued, small firms would welcome the opportunity, as it would allow them to expand their teams, engage with research, and ultimately improve the quality of their work. In this way, universities could become catalysts for applied research and innovation, aligning with the principles of initiatives such as the New European Bauhaus.

Concluding Reflections

As the roundtable drew to a close, Nadia Charalambous invited final reflections from the three keynote speakers – Oya Atalay Franck, Dubravko Bačić, and Ruth Schagemann – to offer their thoughts on the rich and wide-ranging discussion.

Oya Atalay Franck began by expressing her wish that such a conversation could take place in the Chamber of Architects, with practitioners, students, and colleagues sitting side by side. She emphasized the need to go beyond internal academic discourse and ensure that such dialogues are shared more broadly. She acknowledged the diversity of cultures within schools and professional practices across Europe. Even though European directives outline common skill sets and curricular frameworks, the ways in which these are taught and interpreted vary significantly between institutions. A school, she noted, provides not only mindset, method, and craft, but also a sensibility toward the quality of the built environment. Rather than aiming to define a fixed set of skills that make a good architect, she argued that education should focus on giving students an inner compass – a sense of curiosity, criticality, and self-confidence to ask not just *what is right or wrong*, but *how can it be done better*.

Atalay Franck stressed the importance of collaboration and negotiation, acknowledging that architecture has become too complex to navigate alone. She shared that her institution is considering curriculum reform to support part-time teaching and learning, allowing students to work while studying – an economic necessity for many. While this was once resisted in favor of full-time academic immersion, changing conditions demand more flexible models of education. She concluded by reaffirming the importance of maintaining quality while exploring new systems, and expressed appreciation for the discussion: "This was very exciting for me – I learned a lot".

Dubravko Bačić echoed the view that not everything can be learned in school, and pointed out that different schools have different cultures, traditions, and contexts, which must be respected. Education, he argued, must strike a balance between foundational knowledge and the capacity to adapt and grow, a balance that is necessarily dynamic and always in flux – hence why education is always under reform. He shared a personal anecdote from a recent visit to Christos Christodoulou's office, where he saw three young architects working on a competition. On their desk was a book by Charles Baudelaire, something he found surprising and moving. He reflected on how architectural culture, once built around bookstores and reading, is evolving in a time when such habits are in decline. Yet moments like this

affirm the continued intellectual engagement of younger generations, even amid broader societal changes.

Ruth Schagemann offered three succinct reflections. First, she emphasized that research and practice must work together, particularly given the urgent challenges facing the built environment. This collaboration must be interdisciplinary, involving connections across architecture, urban planning, and beyond. Architecture, she stressed, is not just a professional field but a relevant topic for research and innovation, and it should be recognized as such in funding and policy priorities. Second, she called for a sharper focus on identifying the key problems we face today – social, environmental, spatial – and working collectively to develop targeted solutions. Third, she underscored her strong belief in collaborative innovation between universities and practices. Only through this alliance, she argued, can we begin to develop meaningful responses to pressing issues such as urban inequality, sustainability, and the transformation of our living environments. "I think we are finding solutions", she concluded, "and we need to continue doing so – together".

In closing, Nadia Charalambous thanked the speakers and participants, and reaffirmed the intention to disseminate the outcomes of the discussion. "I hope that it doesn't stay in the room", she said, acknowledging the value of the exchange. She offered thanks to Christos Christodoulou and Alkis Dikaios for moderating the session, and to all who contributed to the conversation.

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