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EDITORS' NOTES SINGULARITY OF URBAN ARCHITECTURAL RESEARCH: ON KNOWLEDGE CO-PRODUCTION OF A TRANSDISCIPLINARY KIND

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This mixed issue presents five scientific articles, two book reviews and two reviews of recent PhD theses. The articles have been framed by the concept of *disciplinarity* – the way they cross boundaries and challenge architecture as a complex discipline involving several external academic subjects and professional fields of knowledge. They illustrate several aspects of disciplinarity in architecture and urban design, such as design interventions as a tool in research-by-design, of becoming a cosmopolitan citizen-architect, on potentials in design and construction, the concept of place in urbanism and the story of an abandoned mosque project in Helsinki. Before we go into the specific articles and comment upon them, we would like to initiate a discussion on the question of *transdisciplinarity* as a singular feature of architectural research.

I.

Architecture is a discipline, a professional practice and an academic subject for teaching and research at universities. This is not a controversial statement. However, the discussion on focus and boundaries for architectural research have been on-going in the journal since the very beginning in 1987. In academia, we can also see a discussion emerging on *disciplinarity* as a concept for research policies to develop in particular into issues concerning *transdisciplinarity*. This production of knowledge represents a fusing of theories, methods and expertise across disciplinary boundaries involving non-academic partners. This transformation

represents a movement toward a new kind of knowledge co-production, which may be seen as controversial in architecture and urban planning, while confusing and challenging established demarcations.

One starting point of this recent evolvement was the early publications towards the end of 1990 by Julie T. Klein, a professor of humanities at Wayne State University, USA (Klein, 1990; 1996). Building upon these findings, the EU research programme COST Action has recently supported and finalized a five-year (2015–2019) collaborative effort under the name of *Intrepid*, with almost all member states represented. The mission was to identify and to explore ways to unfold new research policies and innovation strategies, essentially poised to explore new ways of knowledge co-production *beyond* academia, while including external partners from the business world and societal institutions like municipalities and regional authorities. The project involved a series of conferences, seminars and meeting exchange points. Some publications are now also starting to come out as documented results from the project, one of which is reviewed in this issue of NJAR (Fokdal, Ojamäe, Bina, Chiles, & Paadam, 2021; Hemström, 2018; Hemström, Palmer, Polk, Perry, & Simon, 2021; Lawrence, 2020).¹ As the focus was set on urban dimensions of *disciplinarity*, it also included as a side-line an architectural competition; this is concerned with visualisations and design reflections on how university premises of tomorrow can be adapted to support interdisciplinary and transdisciplinary pedagogical enterprises and processes. Competition entries presented the crucial question of what universities would look like if *transdisciplinarity* was a key principle of organisation in research and master class studio education?

II.

In the above indicated EU research programme, COST Action Intrepid, it was verified that most scholars use the notion of *transdisciplinarity* to signify a situation where academia acts in a co-creative pattern of knowledge production, while including commercial or societal stakeholders. In this way, the university reaches far beyond its established realms to address complex problems, in unison and by joint actions, from many different and mutually supporting angles. The notion of *interdisciplinarity* or *multidisciplinarity* is then reserved for cooperation between *several* different academic approaches relevant to the topic encountered, while *crossdisciplinarity* is about specific exchanges and collaboration between two major subjects, e.g., social anthropology and architecture design.² We might add to this scheme the notion of *intradisciplinarity*, defined as the process of refining or advancing and expanding the borders of a single, formerly well-established academic topic, in order to resurrect and renew internal cohesion, a distinguished academic position or to reconstruct a lost succinct identity (Frichot, Sandin, & Schwalm, 2019; Gromark, Mack, & Toorn, 2019).

1 Research Policy brief, from conference January 2017 in Lisboa, cf. Bina (2017)

2 Cf. as a recent example Stender, Bech-Danielsen, & Hagen (2021)

Within this context, urban architectural research with a transdisciplinary vocation or orientation may contribute with critical interpretations of socio-material dynamics. It can function as a complicit and interactive agent in the early stages of deliberations and co-creative situations of urban architectural conceptualizations. This can be done by collaborating with professionals with many different areas of expertise to outline design orientations for cities, public places and urban dwellings, or by making so called “silent” voices heard, and thereby potentially taking part as key actor and agent in the construction of new, inclusive urban spaces. By taking these consecutive steps the discipline of architecture and planning is initiating a strong, future inclination for cross-, inter-, and ultimately transdisciplinary, unexpected, academic and professional encounters. Such exchanges may amount to another kind of knowledge production, emanating from reciprocal *academic and professional transgression*. This reorientation implies the application and adoption of a new set of unconventional “hybrid” modes of inquiry. This will foremost include new forms of additional, collected material of a figurative, empirical kind, resulting in intriguing examples of what might be still the future in the world of responsible research and innovation.

III.

The reflections indicated above serve as an illustration of what transdisciplinary knowledge production would possibly entail to develop the arguments for the transdisciplinary *singularity* of urban and architectural research. Is it really so, as has been frequently argued, that the unfolding of an architectural project is an advanced way of producing new societal knowledge; that architectural research, as well as explorative architectural practice, already really are, according to the often reiterated and now famous formulation by Bryan Lawson that “...perhaps we are ahead of the game?”, even if seldom recognized as such within the wider frames of the established academic society (Lawson, 2002, p. 109-114). Or as other researchers like Doucet and Janssens note:

Acting as a discipline (theory, history) as much as a profession (practice) and having to incorporate this plethora of disciplinary and non-disciplinary knowledge forms, architecture and urbanism, indeed, behave par nature in a transdisciplinary fashion (Doucet & Janssens, 2011, p. 2-3).

The same authors conclude that to be more precise about what defines and what singles out *transdisciplinarity* in the world of architecture is the threefold hybrid combination and integration of discipline and profession, the ethical dimension and the designerly mode of inquiry. They continue further, in turn, to cite other colleagues, Pohl and Hirsch Hadorn from 2008, who argue that:

... transdisciplinary research is needed when knowledge of a societally relevant problem field is uncertain, when the concrete nature of problems is disputed, and when there is a great deal at stake for those concerned by problems and involved in dealing with them... (Pohl & Hirsch Hadorn, 2008, p. 427-432).

The dialogue process, as commonly observed in relevant cases of project-related knowledge co-production, evolves around an object, *the architectural project*, conceived as a *simulacrum*, as the renowned urban sociologist Michel Conan has observed, that is critical for insights provided and acquired throughout the entire process among participating stakeholders, *the architectural subjects*:

Actually, the ambiguities stimulate mutual explorations and debates among members of a group after a first moment of communion of shared fascination in front of the architectural project, leading to an architecturally projected new critical re-appraisal of their life world. --- It is these deep transformations introduced and implanted by the inventor of the simulacra in the mind of the architectural subject --- it is these debates and not the form itself given to the simulacra that brings out, produces this clarifying insight (Conan, Gromark, Jantzen, & Bilsel, 1998).

The singularity of architectural research is very much dependent upon the often-expressed, profound ambition to reach for the implementation of findings as critical projections and as the ultimate material realization in the real, livable world. Architectural research – as science can *explain* and as art is dedicated to *express* – is particularly inclined to *explore* as a major part of a professional, as well as a scientific, identity profile. In contemporary discourse, this salient attitude of making effects – arguing for an architecture of exploration in a transdisciplinary context beyond academia, based on interdisciplinary collaboration and intradisciplinary re-consolidation – is often considered as a significantly radical, new way of societal co-production of new knowledge. Such an orientation and positioning are challenging the established perceptions and demarcations of the scientific community at large. It is promoting an action-oriented, operational profile of the profession, which actually outlines the *singularity* of design research in urban architecture (Fraser, 2013; Gromark, 2000).

IV.

From this starting point for a discussion on knowledge co-production in architecture and urban design, we turn to the articles in this issue, to see in what way they could relate to this topic. Issue no. 1-2022 starts with an article titled *Engaging Urban Space – Design Interventions as Tools for Design Research* by Cecilie B. Christensen, Elias Christensen and

Andrea V.H. Bueno from Aalborg University. Three individual theses are in this case united in a combined effort to form an ambitious situation for PhD student projects' close internal collaboration, within a wider framework of interdisciplinarity. This formula is indeed a very good idea, and the results hereby provided and summarized are to be particularly commended and recommended. The commonly shared theme denominator has been the urban design of pedestrian, public places and the radical attempt to work towards a *research-by-design* concept, in order to provide a valid ground for research-based knowledge to inform – or to inspire – in a design situation. The solid description of the arguments for research-by-design forms a valuable intellectual background to the attempt to reach new knowledge through practical, explorative realisations, following the key concept of Design Interventions. The act of observing the induced *effects* and *affects* of such sensuously provoking experimental initiatives are conceived as microspatial works in real-life urban architectural situations.

The second article is *Becoming Cosmopolitan Citizen Architects: An educator's Reflections on Architectural Education across the Nordic Baltic Academy of Architecture*. The author is Massimo Santanicchia, PhD student at the School of Architecture at the Iceland University of the Arts. The ethos of a profession is born in education, which the word “becoming” in the title points out. Santanicchia has investigated the current status of architecture education. He has interviewed 17 heads of education at schools of architecture, all organized in the Nordic Baltic Academy, with members from Denmark, Iceland, Finland, Norway, Sweden, Latvia, Estonia and Lithuania. The questions posed to the heads of education are of a fundamental nature, such as what should be taught to students in architecture, what skills should be gained, how should these skills be taught and how can architectural education be of importance to society. Raw data for his findings are 24 hours of interviews with the heads of education. The method for transforming data from individuals into categories has been surprisingly the application of grounded theory, a methodological strategy for collecting and analyzing qualitative data.

The key concept for making sense of the findings in the study is *Cosmopolitical Citizenship Architectural Education*. Santanicchia finds that the schools he visited constitute a microcosmos devoted to the production, discussion and dissemination of architectural thinking. Creativity is not seen as a singular effort by educators, but a process-based dialogue. Singularity is exchanged by “thinking together”. Becoming a cosmopolitical citizen-architect is experienced by the participants as a complex journey, requiring a collaborative learning environment that promote personal processes and social skills, enabling the design of a better world. Santanicchia has identified fifteen fundamental traits for the renewal of architects as an agency for change. Finally, he argues that promoting a

cosmopolitical-citizenship-architectural-education means transforming the design studio – the very core of architectural education in Nordic and Baltic countries – into an inclusive platform for different ways of being, thinking and making architecture – of becoming.

The third article is *Lost Potentials? Unpacking the Tectonics of Architectural Cost and Value* by Eszter Sántha, Marie Frier Hvejsel, and Mia Kruse Rasmussen, all of Aalborg University, and AART Architects A/S. The article is also part of a PhD project, which explores the relationship between architectural quality and its value for different actors. The authors pay special attention to the interconnection between architectural quality and its benefits for future inhabitants as well as building investors and developers. The key to bridge these two spheres of interest, according to the authors, is to engage project partners in the so-called tectonic language. Within the explorative potential of this language, any participant is invited to take part in a dialogue, which highlights aesthetics and techniques as becoming an experienced reality through built constructions.

The aspect of transdisciplinary knowledge production is also apparent in this article. Convincing professional developers of the benefits of architectural quality, before the realisation of any project, stresses the linguistic and communicable aspect of architecture. Following the authors, this transdisciplinary dialogue should have the advantage of pre-constructing, rather than re-constructing, the performance of architectural form. In this way, describing “intended spatial gestures”, as the authors name their framework, invites architects as well as developers to take part in an imagined journey. Finally, this way of knowledge formation may or may not be accepted as equally socially and financially profitable.

The fourth article is entitled *The Concept of Place in Displacement Management*, by Håvard Breivik-Khan at the Oslo School of Architecture and Design. The author of the contribution, based on doctoral thesis research, puts the following question in focus for his far-reaching, theoretical investigation on the differentiated notions of place, non-place and *displacement* – with harrowing relevance to contemporary world catastrophes – “furthermore, how does the lexical and conceptual borrowing of these terms improve interdisciplinary knowledge at the intersection of displacement management and architecture and urbanism?” The ambition is to provide some common ground for these two professions to meet and to act in unison, enabling the transformation, at best, of indifferent *non-places* in becoming *places*: strengthening human bonds to a site and social relations with others in temporary or permanent, accidental displacement. The article includes descriptions of situations where strategies have been employed in various cross disciplinary ways to ease the sufferings and loss of belonging to a place among forced refugees. The included collection of case illustrations in the real

world is particularly striking. The conventional and much, sometimes questionably, celebrated concept of *place* in urban architectural practice is here posed in a different, challenging and revealing light.

The fifth and final article in this issue is called *Proudly Rejected: The Case of Grand Mosque Initiative in Helsinki* by Hossam Hewidy, Aalto University, and Kaisa Schmidt-Thomé at the Demos Helsinki. The article shows how some projects, in this case the planned construction of a new mosque in the center of Helsinki, also instantly become part of an overlying, general political debate. In a culturally more complex world, the political implications of architecture and urban planning are becoming increasingly relevant. And as the authors show, the architectural narratives are also supplemented by, for example, social, ethnic and religious values and narratives. This can also be understood as a part of transdisciplinary knowledge formation. Through a current project initiative, voices that otherwise would not have met, do meet, and different opinions are brought against each other.

The authors, for their part, argue for the need to lift controversial projects like the mosque case, out of the close connections between architecture, planning and politics. Through the article, they show, among other things, how planners treated the case as an urban development case like any other, while politicians were likely to include general views on Islam in the case in question. At the same time, the reader becomes aware that the actual site is in an area with a low proportion of the Muslim population and that the project was to be financed with funds from the Kingdom of Bahrain. In this myriad of voices, good intentions and old traditions, the authors want a more normalized debate. But perhaps the article also shows that such a desire for an external standard may not be within the scope of this type of project. The discourse itself becomes normalizing for how the world is perceived and for what choices are made. In a world where both local considerations and global tendencies meet in different arenas, the desire for normalization turns out to be one of many voices in, yet again, a transdisciplinary knowledge formation.

Reviews

The book *Enabling the City – Interdisciplinary and Transdisciplinary Encounters in Research and Practice* is reviewed by Pehr Mikael Sällström, Architect and PhD Student at KTH/Architecture in Stockholm. According to the reviewer, the book covers several aspects of interdisciplinary and transdisciplinary project management and includes philosophical reflections on the epistemology of the field. At the center of the discussion is a combination of theoretical case studies and stories from practice. The book is a result of the European network INTREPID, funded by EU Horizon 2020 during the years 2015–2019. The overall conclusion, which Sällström finds explicitly stated in the text, is that participation in

interdisciplinary and transdisciplinary projects produce a valid competency that requires specific promotion and position in the curriculum of architectural and urban studies.

Fokdal, J., Ojamäe, L., Bina, O., Chiles, P., & Paadam, K. (Eds.). (2021). *Enabling the City. Inter and Transdisciplinary Encounters in Research and Practice*. London: Routledge.

Dr. Nagham Al-Qaysi, Senior Lecturer and Researcher at the University of Technology in Iraq, reviews the recently published text collection book *The New Urban Condition: Criticism and Theory from Architecture and Urbanism*, edited by Leandro Medrano, Luiz Recaman and Tom Avermaete, and published by Routledge in 2021. He finds the book to serve very well as a valuable reading source for those taking an active part in the contemporary projections of new urban futures. The perspective presented is built from a wide, interdisciplinary range of scholars collaborating on a global level, mainly representing an architectural point of view, and returning to grand, now almost classical, sources of urban theoretical reflections, like Habermas, Lefebvre and Tafuri. The reviewer is in some cases however missing substantial descriptions of clarifying examples to underpin the advanced theoretical arguments put forward, something that unfortunately then becomes difficult to fully absorb.

Medrano, L., Recaman, L., & Avermaete, T. (Eds.). (2021). *The New Urban Condition: Criticism and Theory from Architecture and Urbanism*. London: Routledge

Dr. Marcelyn Gow, Southern California Institute of Architecture, reviews the thesis *Choreographing Flow: A Study in Concrete Deposition* by Helena Westerlind at KTH/Architecture. The focus of Westerlind's research is on the shift from casting concrete (through a practice of pouring into prepared formwork) to the deposition of concrete (through a practice of digitally choreographing material flow along a toolpath). This shift is highly relevant as it presents a re-evaluation of the identity or status of concrete in architecture. Gow identifies several important contributions in the thesis, on both a theoretical and practical level, as well as material histories in relation to sustainable practices. According to her reading, the dissertation interweaves historical, theoretical and practical knowledge, and ultimately presents reflections that invite the reader to create affiliations across the discourses and projects under consideration.

Westerlind, H. (2021). *Choreographing Flow: A Study in Concrete Deposition* (Doctoral dissertation). KTH Royal Institute of Technology, Stockholm.

Dr. Elmarie Costandius, Stellenbosch University, reviews the thesis *Learning for Future Knowing Now: Investigating Transformative Pedagogic Processes within a Design Faculty* by Bruce Snaddon. The thesis set out to explore and evaluate transformative, pedagogical processes for sustainability in the specific context of the Cape Peninsula University of Technology, South Africa. The research is presented in five publications, some of which were co-authored. Costandius finds that the thesis provides valuable insights for design educators who want to reflect on and investigate their practice through research. Snaddon provides a pedagogical framework of design education. In the conclusion, Costandius refers to an important point that Snaddon emphasizes: Learning that is truly transformative is complex and involves mediated movement across learning thresholds that are anything but clearly defined and sequential.

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