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## EDITORS' NOTES DIVERSITY IN ARCHITECTURAL RESEARCH

STEN GROMARK, MAGNUS RÖNN AND  
PETRA THORPERT

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This mixed issue presents four scientific articles, a book review by Dr. Anne Marit Vagstein, and a contribution from Dr. Marius Fiskevold reflecting on his assignment as editor-in-chief for the journal. The articles are all characterized by a certain *diversity*, expressing architectural research in general terms as a truly interdisciplinary and even a particularly transdisciplinary field of knowledge production. The evidence for that assertion can be found in the published articles touched on below.

The fields of research and development (FORD) classification is used to sort R&D units and resources into fields of inquiry that represent broad knowledge domains based primarily on the content of the knowledge they produce. The classification is used by the UN and OECD for collecting and reporting data on R&D<sup>1</sup>. How shall we understand architectural research in this context? According to Swedish standard for the division of research topics, updated in 2016 by Statistics Sweden (SCB) and the Swedish Council for Higher Education (UHÄ), architecture is considered a fundamentally interdisciplinary research topic that belongs to three different tracks leading to scientific knowledge and innovation. Thus, this is not just a question of bridging the gap between art and science. The standard for what constitutes a research topic follows the OECD's classification established for the field of research and development (FORD). Interdisciplinarity in architecture is thus an internationally recognized feature and understanding of our subject. So far so good. However, the tracks to knowledge have very different directions, which in turn makes it difficult to communicate research issues, internally as well as externally. The tracks simply don't speak the same language.

1 See: <https://unstats.un.org/unsd/classifications/Family/Detail/1039>

There are three tracks of knowledge production in architectural research. The first track has a signpost called **Engineering and Technology** (No. 2). Along this track you will come to *Civil Engineering* and eventually to *Architectural Engineering* (20101). The second track has a signpost named **Humanities and Arts** (No. 6). Continue this track and you will arrive at *Arts*. Don't stop. Further down the line you'll find *Architecture* (60405), *Design* (60406) and *Art History* (60407). The third track has a signpost titled **Agricultural and Veterinary Science** (No. 4). After a while you'll get to *Landscape Architecture* (40108), including *Planning*, *Design*, and *Management*. These tracks direct us and envision for us different futures for the development of architectural knowledge. From this point of view, it may seem strange that architectural research actually acts from a distinctive common core but is intertwined with research questions of mutual and interrelated interest from many different angles, thus projecting an apparent diversity and potential lack of consistency in the eyes of the general academic research community.

## Articles

The first article in this mixed issue, by Canan Akoglu and Anne Corlin, is called "Navigating Socially Sustainable Urban Design Projects." This contribution focuses on how design can be used for connecting communities in underserved neighborhoods. The authors also reflect on how professionals can engage as active partners in urban design development projects that have social sustainability as a main objective. The background is segregation in Danish cities, primarily in Copenhagen, Aarhus, Odense, and Aalborg. In their contribution, Akogule and Colin present the conceptual frameworks for social frictions, social city, and affordances. They combine this approach with a discussion of action and roles for designers and architects in urban design development projects striving for sustainability. As case studies, Akogule and Colin use two student projects in the Design for People master's program at Design School Kolding in Denmark. The combination of learning from research and education is a method for producing architectural knowledge that is often used by teachers and researchers supervising students in design studios in architecture schools at universities in the Nordic countries. Showing possibilities is one typical outcome of this knowledge production.

The article describes and analyzes the experiences of students and teachers in a joint venture testing a conceptual framework. The students were given a design brief that required them to independently identify a challenge in supporting the social connection between an underserved residential neighborhood and the surrounding city. The empirical data used in theorizing have been collected through a) discussions with collaborating actors, b) following student projects for eight weeks, c) taking notes based on the project processes, and d) looking into the presentations and the outcome. The conceptual model presented in the article

is the author's way of understanding and structuring everyday social life to make future-oriented assignments more effective for designers, architects, and urban planners working with socially sustainable urban development. Complex contexts and the variety of stakeholders show that professionals need to be able to change roles and navigate differently in these assignments. It is crucial that they contribute to creating, repairing, and sustaining cohesive communities, according to the authors. This statement is not controversial. Instead, what is at stake for academia is developing the concepts, methods, and tools for describing the connectedness between social frictions, social city models, and professional roles that designers, architects, and city planners need for projects to create cities, towns, and communities that are economically, environmentally, and socially sustainable.

The second article, by Havu Järvelä and Antti Lehto, is entitled "Design Through Availability: Architectural Design Process Reform for Reuse." The authors of this contribution offer a detailed insight into the professional role in modern society of architects who are engaged in reusing construction materials to achieve environmental goals such as reducing CO<sub>2</sub> emissions. Extensive interviews reveal a rewarding experience for partners who are involved in a process of mutual discovery of design practices based on three thorough case studies in Nordic societies. The responsible design architect takes on a central position in this narrative as a driving force behind the radical endeavor; however, a teamwork of dedicated professionals with a transdisciplinary profile has created a joint situation of transgressive invention confronted with the unusual mission of searching for reclaimed building materials, especially framing members and façade elements for building envelopes.

A common spirit of collective ownership of an unusual architectural project has been thriving in this cooperative climate. The architects are confronted with the quite unusual design challenge of researching construction components in unconventional forms of practice that sometimes rely on chance and luck, if not pure serendipity, when a piece in the bigger puzzle suddenly appears from an unexpected location. This presents architects with radical new aspects of aesthetic quality. Environmental concerns of a technical nature are here encountered with fresh emblematic expressions.

"Exploring Material Lifespans in Danish Architectural Heritage: Using the Building Historical Investigation to Discuss and Qualify LCA in the B and C Stages," by Birgitte Tanderup Eybye and Henriette Ejstrup, is the third article. In this contribution the authors examine the method of building historical investigation (BHI) as a means to discuss and qualify material lifespan scenarios in a life cycle assessment (LCA) context. They apply the method to Agerskov House, a listed building in Denmark located in Southern Jutland. A background to the study is the 2023

Danish building regulations requirement to calculate buildings' CO<sub>2</sub> emissions and making LCA mandatory for new buildings. Increased sustainability in renovations and demolitions makes it highly relevant to test how strong demand for reducing CO<sub>2</sub> emissions affects heritage buildings with cultural values and particular architectural qualities. The application of LCA to listed heritage buildings raises important questions about functionality and legitimacy, not least because the tool is designed for a linear construction process from material production stages (A stages) through usage (B stages) to end-of-life (C stages) and beyond boundaries (D stages).

Tanderup Eyby and Ejstrup focus on methods developed in the field of conservation to discuss and qualify materials from a lifespan perspective to the B and C stages of LCA. They start by pointing out that *originality value* and *age value* are key concepts in architectural conservation. This field of knowledge in Denmark is characterized by a certain degree of tacit knowledge. In practice, values and qualities in architecture are maintained by activities called repair, preservation, restoration, and replacing minor parts in buildings. Heritage buildings may therefore have lifespans that far surpass the C stages in LCA. The investigation also showed that the assumed lifespan for the C stage in LCA (end of life) diverged substantially from the findings at Agerskov House. Despite the house being well documented, it was not possible to establish the age of all its materials and components. The authors recommend that a critical mass of data be collected by from other studies of BHI on historic/ existing buildings and the results centralized. More knowledge is certainly needed.

The fourth and final article in this mixed issue is titled "Exploring the Link Between Urban Density and Accessibility to Kindergartens," by Fabio Hernández Palacio and Todor Kesarovski. This contribution investigates criteria for 10-minute walkable access to main city structures. It offers a distinctly promising methodology for inquiries into urban phenomena. Contemporary tools for aggregating huge information packages of empirical evidence like GIS and big data, underlined further by the arrival of AI for enhanced massive analysis of data, can also be revolutionary for architecture and urban planning practices. Such tools may provide tangible, empirically grounded, and trustworthy results as the basis of design for creative projects for developing a high-density cityscape. The detail and high-resolution perception of parameters presented in this article, which considers proximity kindergarten, is quite stunning and points to a new reality of urban analysis and research-informed design in the immediate future.

In what way then, is this to be considered a valid contribution to architectural research? The contribution by Palacio and Kesarovski indicates the potential of an electronic version of Neufert's *Architects' Data*. The first

edition of this world-famous publication was published in 1936, and it is now in its third edition. In this article, the authors use its estimation of the pace at which an adult moves on foot in the dense city (4.86 km/h) to calculate how long it takes to walk to the kindergarten, even accounting for stopping at traffic lights.

According to the authors, this perspective on the urban condition is largely rooted in Bill Hillier's special space syntax analysis of movement patterns in different structural circumstances, whether apartment layouts or urban grids. The conceptual approach of the study follows in the footsteps of Hillier, effectively summarized thus: "street network configuration, building density, and land use diversity are highly interrelated aspects of urban form."<sup>2</sup> This article concludes, moreover, that an optimal relationship between urban movement and building density is crucial for providing the conditions for urban life and welfare.

2 Cf. this issue, #1–2024, p. 93

## Book Review

The author of our book review is Dr. Anne Marit Vagstein, an architect for the City of Oslo's planning and building department. The book she reviews is in Danish: *Værelser til tilværelser – fra, om og med bygningskunstens helhedsdannelser* by Thomas Ryborg Jørgensen. The theme of the book is the overall impact that architecture has on humans. Vagstein begins with an image of a window with a view to the outdoors. She notes that, in order to explain how the experience of wholeness works in art or architecture, she must use a complex writing style that is related to artistic empathy. Gradually, the author develops a series of concepts and an architectural theoretical starting point for architecture that may be of use to the reader. Vagstein finds the research impressive and the graphic design excellent. However, the book makes for challenging reading for professionals. Finally, the reviewer highlights the importance of agencies that provide financial support to make this kind of architectural research possible. As a concluding remark from the editors, it seems obvious that Ryborg Jørgensen's understanding of his research subject locates it somewhere along the track called **Humanities and Arts** on the way to *Architecture, Design, and Art History*.

Title: *Værelser til tilværelser – fra, om og med bygningskunstens helhedsdannelser*

Author: Thomas Ryborg Jørgensen

Publisher: Arkitekturforlag V, 2023

## Reflection on Editorial Work

We conclude this mixed issue with some reflections by Dr. Marius Fiskevold. He has been one of three chief editors from 2020 to 2023, having been appointed by the Nordic Association of Architecture Research, the

journal's publisher. Fiskevold is a landscape architect by profession, and thus he represents the third track in knowledge production starting in **Agricultural and Veterinary Science** and leading to *Landscape Architecture*. This research subject also covers *planning, design, and management*.

Fiskevold starts by putting two important issues on the agenda: What is architectural research? and What is the Nordic in architectural research? As editor-in-chief, Fiskevold has been forced to develop an opinion on the boundaries for architectural research and take positions whether manuscripts the journal receives are inside or outside that scope. The classification of architecture as a research subject shows this is a tricky and a never-ending question. The debate is crucial, of course, and the question must be answered by editors on personal, professional, and academic levels.

In the 1970s, the number of PhD projects in Swedish architecture schools expanded. Architectural research gradually began to be used in Sweden as an umbrella concept for the emerging research at the schools of architecture at Chalmers, KTH, and Lund University. The very first issue of the journal, published in 1987, including contributions that discussed the nature of architectural research. This issue has been a challenge ever since for each new editor-in-chief. It is typical of submissions that have been regarded as outside of the field of architectural research thus far that they have been too technically oriented and lacking architectural understanding of place and space, which are key concepts in a spatial understanding of the built environment.

The second question Fiskevold raises is about identity and has been the main topic at a symposium in the Nordic research community. In 2020, for example, *Northernness* was the focus of a symposium held in Finland and organized by the Nordic Association of Architectural Research in a joint venture with the Oulu School of Architecture at Oulu University. In clarifying the journal's Nordic identity, Fiskevold notes the fact that it publishes scientific contribution in Norwegian, Swedish, and Danish in addition to English. Language is a tool for communicating findings as well as a part of the research object. A second Nordic aspect is related to the specific conditions here, which are rooted in nature and the culture, which in turn is influenced by the fact that landscapes are dark during a long winter, waiting for the sun to return. This kind of nature- and culture-based experience may be seen in research on Nordic topics or by scholars from abroad who are or have been affiliated with a university in Norway, Sweden, Finland, or Iceland. The lack of submissions on such topics from Nordic researchers makes Fiskevold wonder if they take the Nordic for granted or if this perspective is no longer relevant for the research community here.

In the 2020 symposium, Peter MacKeith, Dean and Professor of Architecture at the Fay Jones School of Architecture and Design at the University of Arkansas, was invited to give a keynote lecture on what is distinctive about the architecture of the Nordic countries. The resulting publication from the symposium included an article by MacKeith entitled “The Building Art, the Social Art: Reflections on a Nordic Public Architecture.” In this contribution, first published in 2012 in the Danish journal *Louisiانا Revy*, MacKeith investigates a Scandinavian way of understanding community, how this thinking is constructed, what characterizes it, and how this understanding manifests itself in architecture and urban design. MacKeith suggests that culture in Nordic countries may be expressed in how a society provides the architecture for literature, education, and well-being – public space as a social art. From this point of view, there is evidence of a Nordic sense of culture and community in the built environment.

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