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UNIVERSAL DESIGN IN ARCHITECTURE – EDITORS’ NOTES

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ANNI VARTOLA

Architecture plays an important role as a physical frame for everyday life, for everyone. This role includes securing the possibility of participating in social and democratic life in public space. Participation requires access, and should be equal regardless of gender, sexuality, ethnicity, culture or disability.

Universal design is a design concept offering means to secure access and equal participation in the built environment. Universal design is a relatively new architectural concept and in particular in the Nordic context. The concept was originally coined by architect and advocate Ron Mace as a reaction to the terms *accessibility* and *barrier-free design* in the American context being increasingly perceived as stigmatizing and resulting in designs dividing users into “disabled users” and “abled-bodied users”. Mace wanted to move beyond this stigmatizing mind-set of special design solutions for certain user groups and hence defined universal design with the aim of offering a design concept that included all users, regardless of age, ability or gender etc. By considering users through a lifetime perspective instead of a disability perspective, Mace opened up for a way of discussing diversity in user needs as a parameter concerning everyone, not just a minority group. Throughout a lifetime everybody changes in size and ability, we will all experience disability eventually, either temporary or chronically, and we will all experience changing needs as users of architecture and design as we slowly age through life. Hence, we are all users of universal design. Universal design offers a means to discuss, develop and explore the accommodating potential of architecture in regards to user diversity and equality.

Ron Mace coined the concept in the late 1980’s and a group of American architects and designers further developed the concept as well as disseminated the ideas and values of the concept internationally. Universal design was first introduced in the Nordic region in the late 1990’s in

Norway, while its adoption in the rest of the Nordic countries has really first happened with the adoption of the UN Convention on the Rights of Persons with Disabilities (CRPD) ten years later. Universal design as a central concept of the UN Convention is not synonymous with *accessibility* but a new design concept. In the Norwegian context the concept has been translated into Norwegian as *universell utforming*, while in the rest of the region the concept is still mainly used in its original version. Yet, other concepts such as design for all, inclusive design etc. are often used and understood in practice as the same as universal design. The latter is also evident as one reads the papers in this issue.

The concept *accessibility* has long been prevalent in architectural practice and discourse in the Nordic region and the architectural interpretation has most often been a reflection of the American context 20 years ago: special design solutions to meet special user needs. In light of this, the Norwegian development and legislative approach to adopt universal design as core design concept in a national plan of action, offers a unique opportunity to re-frame the understanding of the architectural responsibility to accommodate for all users in a dignified and equal way. The Norwegian approach is only underlined by the international as well as Nordic adoption of the UN Convention which emphasizes the right to equal access for all, and the role architecture and the built environment plays in securing this fundamental right.

As a design concept, universal design offers the opportunity to develop and design new and equal solutions in architecture while at the same time paving the way for a broad interpretation of equality. Likewise, the concept encourages the inclusion of the sensory parameters of architectural quality like daylight and acoustics in the understanding of good architecture designed for all. Furthermore the concept offers a needed shift from a traditional and narrow focus on the actual building and specific ‘accessible design solutions’ to a more nuanced and complex understanding of needing to focus on knowledge and values as defining for the process, on the actual design and building process, on knowledge and expertise used in the design process, on communication and responsibility between the involved partners – as well as the end result. This shift in understanding of when, where and how to implement and assess universal design requires involvement, innovation and responsibility from practice and research as well as educational partners.

Universal design is a concept that accommodates a varied and complex understanding of user needs and at the same time opens up for a discussion of architecture’s role and responsibility in relation to physical, sensory, cognitive, cultural and social diversity. It is also a concept that requires a more nuanced understanding of quality and quality assessment. With the aim of accommodating for human diversity, the architectural interpretation of universal design is to meet diversity in user needs with diversity in solutions. Hence the shift in understanding has moved

from “one solution fits all” to the universal design solution being a range of different design solutions, or in other words, “a number of different solutions to meet different user needs”.

This theme issue on “Universal Design in Architecture” establishes an opportunity to address, and reflect up on, how it is possible in architecture to understand, interpret and work with universal design in the future. It was the intention to call for analyses, theories, practices, discussions and critique of universal design as an architectural driver in the future. We regarded the following questions as markers of the fields we wanted to address:

How can universal design strengthen the design process and function as a competitive parameter in an international practice? What is the role of the users and how do we enhance knowledge about user needs in the design process? How can we create architectural quality through working with the sensory, social and physical aspects of architecture in relation to universal design? How to improve equality in architecture through a universal design approach? How can universal design be applied in the planning of urban space?

Some of the questions raised in the call have been answered, yet some still appear open for answers. This reality most probably relates to universal design still being a relatively new design concept, but also to the earlier mentioned apparent need for practice as well as research to enhance involvement, innovation and responsibility in the process of implementing not only universal design in practice, but also in research, curricula, discourse and common understanding of architectural quality. Knowledge and information is a theme in a majority of the papers published in this theme issue. On different levels, these papers can be interpreted as a process of enhancing universal design in architectural practice whether it is through the curricula at the architecture schools, the understanding of universal design in a professional Master, or knowledge about the users in the regulative framework and design process – a process of creating knowledge with the aim of defining the best framework for universal design in the future.

Jonas Andersson from Sweden presents an overview of the Swedish development of universal design and focus on the regulatory framework over the years where different initiatives for disseminating knowledge have been launched. He emphasizes the role of usability in the Swedish context and suggests the concept of universal usability: Accessibility + Universal design = Universal usability.

Valerie Van der Linden, Hua Dong and Ann Heylighen from Belgium have studied perception, sources, tools, perceived barriers and motivations for universal design (they use the term inclusive design) among stakeholders in the architectural practice. They conclude that the perspectives of the diverse users are not present in the design process. They point to a

need for further research into how user experience can be addressed in architectural practice in a way that correspond to the architects' work process. Sidse Grangaard from Denmark has studied this issue in her paper on the important knowledge in the development of the architect's mindset in regards to equality and the design of the winning entry of an architectural competition. Her analysis shows that the concepts of 'experience' and 'eye-openers' inspires and contributes to the interpretation of the brief, the mindset and the final design.

Masashi Kajita from Denmark has focused on taking the current concept of accessibility one-step further based on universal design. Through the spatial analysis of four cases of shared access routes in housing projects, he has developed a new framework that aims to turn legitimized accessibility requirements into positive incentives by having a focus on social inclusion.

In his analysis of nine cases of housing for the elderly, Heitor García Lantaron from Spain points at universal design as next step on the logic evolution in design for elderly people. He emphasizes the capacity of universal design to focus on usability and inclusiveness and to contribute with solutions for the micro, meso and macro approaches on the whole design process.

Beth Tauke, Megan Basnak and Sue Weidemann from USA have studied the understanding, attitudes, and incorporation of universal design into the curriculum of architecture programs at universities in the US. The study shows that many programs see universal design primarily as accessibility - design for people with disabilities. The authors problematize that the content of universal design is not a fixed component of the curriculum at many universities but depends on few engaged faculty members who focus on universal design.

Camilla Ryhl and Anne Kathrine Frandsen from Denmark have written about the process of redefining the field of knowledge of universal design and the present implications and potentials of expanding the understanding of how universal design may be interpreted, framed and discussed within the architectural and building profession. The authors point at two important factors: understanding user needs in relation to methodology and ethical dilemmas, and the potential of working strategically with universal design.

We hope this theme issue of *Nordic Journal of Architectural Research* will bring new understanding and new perspectives to the concept of universal design – and thus inspire the Nordic research community to join the ongoing discussions on universal design and form a point of departure for developing and applying universal design in future architectural practice.

September 2016