

# Three perspectives on inclusive design in architecture

One-day seminar series

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Abstracts & background readings

## General background reading:

1. Heylighen A., Van der Linden V., Van Steenwinkel I. (2017). Ten questions concerning inclusive design of the built environment. *Building and Environment*, 114, 507-517. doi: 10.1016/j.buildenv.2016.12.008

## Seminar 1 Challenging prevailing ways of understanding and designing architecture

**Abstract.** In the context of architectural design, disability tends to be associated with accessibility norms, which are felt by architects as limiting their design freedom and taking away the challenge to come up with intelligent solutions. This seminar presents a set of studies which turn this association upside down: it acknowledges that, because of their specific interaction with space, disabled people are able to appreciate spatial qualities architects may not be attuned to. This holds for people living with sensory impairments (e.g., blindness, low vision), experiencing space from an atypical position (e.g., patients lying in a hospital bed) or living with particular mental conditions (e.g., autism, dementia).

Disabled people's perspective, the seminar will demonstrate, challenges prevailing ways of understanding space. It draws architects' attention to, for instance, non-visual qualities and their potential to define spaces; building features which (dis)connect and regroup people in various ways; or mental thresholds which we all do sense but never can point to that well.

These different understandings of space in turn challenge prevailing ways of designing space, in particular of representing space during design. Questions arise, for instance, as to what extent traditional spatial representations allow to address non-visual spatial qualities during design. Case data suggest a potential, both to visualize non-visual qualities more extensively in existing representations, as well as to (further) develop representations that combine visualization with other sensory registers.

These questions further challenge prevailing ways of understanding design, especially the outspoken attention for 'visual thinking' in design and the epistemological straightjacket it comes with. Extending our understanding of design beyond the cognitivist view of human cognition—which propagates the alleged superiority of vision over the other senses, but also of cognition over sensation—leads to a broader epistemological base. Including the role of non-visual senses, collaboration, and representational objects in design (research), may open up promising avenues for the future, be it in terms of researching design or developing new representational technologies.

## Background reading:

2. Heylighen A. (2012). Challenging prevailing ways of understanding and designing space. In: Bhatt M., Hölscher C., Shipley T. (Eds.), *Spatial Cognition for Architectural Design SCAD 2011 Symposium Proceedings* (pp. 23-40).

## **Seminar 2** Inclusive built heritage as a matter of concern: a field experiment

**Abstract.** Europe's built heritage is the world's most diverse and rich patrimony, and an important component of individual and collective identity. Its societal relevance is inextricably linked to sustainability: by opening up built heritage and using it appropriately, its upkeep is best secured and its protection from decline guaranteed. Integrated conservation therefore strives to give built heritage a contemporary role in society.

At the same time, inclusion policy strives for all people's participation in society, which requires that environments can be reached, entered, interpreted and used by people with diverse and evolving abilities. When built heritage plays a contemporary role in society, and different people participate in society, both meet.

Making built heritage inclusive—i.e., reachable, accessible, understandable and usable for as many people as possible—is a highly complex matter, however. Proposals to make historic buildings more inclusive, tend to raise objections from conservation authorities, which guard the historic values of built heritage. Current approaches to accessibility do not seem to deal with these concerns well. Built heritage thus remains beyond reach, both practically—from the perspective of disabled people—and legally—in terms of building regulation.

Is making built heritage (more) inclusive really beyond reach, the proverbial exception to the rule? Or can we address it from a different angle? This seminar focuses on an ongoing field experiment that addresses inclusivity of built heritage in a different way, by allowing a group of people to become concerned with this issue. The context of the field experiment is the University of Leuven (KU Leuven), whose campus features a considerable number of protected buildings. After introducing the origins and set-up of the experiment, the seminar addresses what insights it yielded so far, how these are received by different people and how they impact the real-world situation on campus.

### **Background readings:**

- 3\_\_\_\_\_ Heylighen A. (2012). Inclusive Built Heritage as a Matter of Concern: A Field Experiment. In: Langdon P., Clarkson P.J., Robinson P., Lazar J., Heylighen A. (Eds.) *Designing Inclusive Systems* (pp. 207-216). London: Springer-Verlag.
- 4\_\_\_\_\_ Vermeersch P-W., Heylighen A. (2016). Mobilizing disability experience to inform architectural practice. Lessons learned from a field study. *Journal of Research Practice*, 11(2), Article M3

## **Seminar 3** Building justice: How to overcome the inclusive design paradox?

**Abstract.** A major barrier to designing inclusive built environments is inherent to the very idea of inclusive design: this idea prescribes designing environments that address the needs of the widest possible audience in order to consider human differences, yet taking differences seriously may imply severely restricting 'the widest possible audience'. Inclusive design thus faces a paradox that is naturally connected with a question of justice.

In confronting this paradox, we are investigating to what extent the theory of justice as fairness may apply to design. According to this theory, whether a design allows for equitable use is to be deliberated by users under a veil of ignorance concerning their own capacities or limitations. Since this can hardly apply to single artefacts, the social distribution of usability seems the proper domain of fairness in design. Under this reading, differences in usability are acceptable if overall usability for the 'worst off' is maximized.

What this means for built environment design is explored in this seminar: how to understand usability, how to socially distribute it, and how to identify the 'worst off' in this context? In considering these questions, we seek to contribute to strengthening the theoretical basis of inclusive design, while offering built environment professionals a hold in confronting its paradox.

### **Background readings:**

- 5\_\_\_\_\_ Bianchin M., Heylighen A. (2018). Just design. *Design Studies*, 54, 1-22. doi: 10.1016/j.destud.2017.10.001
- 6\_\_\_\_\_ Heylighen A., Bianchin M. (2018). Building justice: How to overcome the inclusive design paradox?. *Built Environment*, 44 (1), 23-35.