Aesthetic Perspectives to Urban Technologies: Outlining the Experiential Sustainability of Smart City Solutions

15th Architectural Humanities Research Association Conference, Eindhoven

Sanna Lehtinen, PhD
& Vesa Vihanninjoki, MA

Helsinki Institute of Sustainability Science HELSUS
& Faculty of Arts
University of Helsinki

Abstract

The pervasiveness of **technology** has undeniably changed the way the **urban everyday** is structured and experienced. The experiential sphere consists increasingly of objects and activities that combine advances in technology and design in complex ways. Understanding the deep impact of this development on the **everyday experience and its aesthetic elements** is needed in order to determine how the skills and capacities to cope with the change, as well as to steer it, can be improved. We start with the inevitable recognition that **technology has already profoundly changed the way urban environments are perceived and experienced**. The overall aim is to describe how this shift within the experiential sphere is affecting people and their relationship with everyday urban environments.

Aesthetics?

- Philosophy of perception, sensory experience ("science of sensory cognition", Baumgarten)

- Aesthetics as distribution of the sensible ("partage du sensible", Rancière)

- The look and feel of cities affects its inhabitants through using of the city (both on conscious and unconscious levels)

- In this context, framework for assessing *how* the urban lifeworld becomes processed in the human experience

- Bringing together everyday and urban aesthetics with philosophy of technology (postphenomenology; see e.g. Ihde 1990 & 1993, Verbeek 2005)
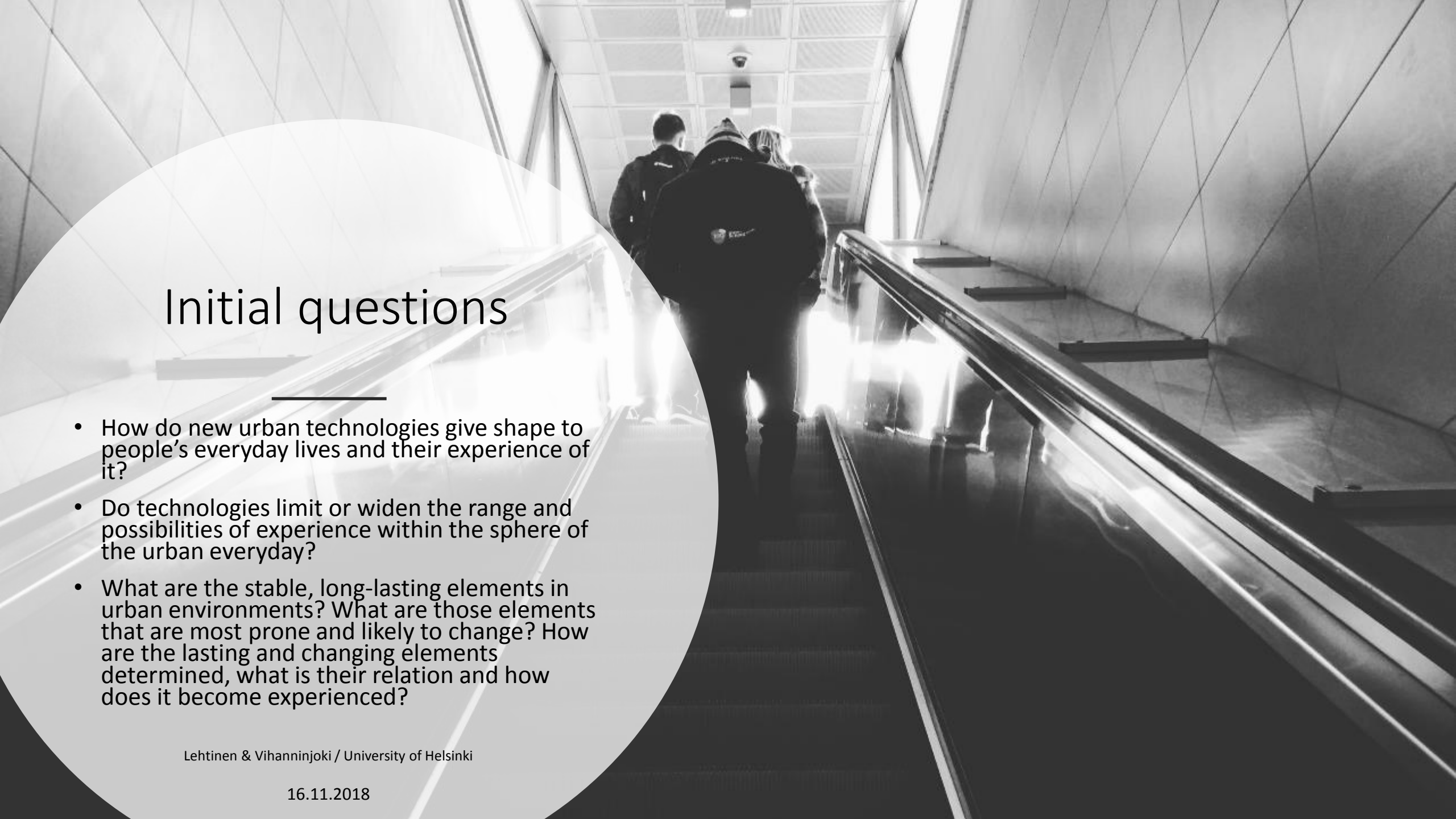
Urban Aesthetics

1. Attention to *exquisite or outstanding experiential qualities* of the environment; the "intentional attention to aesthetics" (Saito 2017, p. 9), *the tourist's gaze* (Urry & Larsen 2011)

2. Everyday *engagement* with the city, defined by *familiarity* (Haapala 2005), practices and routines; basal sensory-based experience of continuity that defines our relation to our own particular everyday environments

Implementing new urban technologies adds an element of strangeness also to the familiar urban lifeworld

Lehtinen & Vihanninjoki / University of Helsinki

Initial questions

- How do new urban technologies give shape to people's everyday lives and their experience of it?

- Do technologies limit or widen the range and possibilities of experience within the sphere of the urban everyday?

- What are the stable, long-lasting elements in urban environments? What are those elements that are most prone and likely to change? How are the lasting and changing elements determined, what is their relation and how does it become experienced?

Starting Points

- The experiential sphere of the urban everyday consists increasingly of objects and activities that combine advances in technology and design in complex ways

- Technology has already profoundly changed cities (objective, structural level) and the way they are perceived and experienced (subjective, experiential level)

- Contemporary cities cannot be understood without emphasis on human-technology relations
    - Contribution of philosophical traditions of thinking about the city?

Aim

- To understand how new urban technologies give shape to people's everyday lives and their experience of it

- To describe how this development and process of change within the experiential sphere is affecting people and their relationship with their everyday urban environments

- To increase the means of evaluating the experiential effects of particular technologies

- To show that urban aesthetics offers useful perspectives to discerning and assessing the experiential repercussions

16.11.2018

Lehtinen & Vihanninjoki / University of Helsinki

Hypotheses

- Implementation of new technologies initiates a process of deeper adaptation which transforms everyday experience of urban dwellers through changing their habits, expectations, preference, behaviour and, ultimately, values

- Change as such becomes naturalized through implementation of new technologies

- Technology acts as *an agent of change* in the urban environment changing also that which is seemingly beyond its immediate sphere

New urban technologies?

- Case: location-based mobile technologies, that affect and are used to assist in navigation and *urban wayfinding practices*

- Applicable to a wider range of (emerging?) technologies or even smart city ideology in general?

Case: Wayfinding

- Moving around in the city and the related wayfinding practises have undergone major changes due to the rise of portable technological navigation aids

- Previously out-of-reach places are now effortlessly and safely accessible to more people: numerous new environmental affordances

- Major change in which environmental affordances are *de facto* utilized and how

- "Skilled agent": the way people make use of affordances in their everyday life essentially affects their skills that eventually define the agent's relation to her environment – that is, "the way the meaningful world appears to her *in perception*" (Rietveld & Kiverstein 2014, p. 341)

- Applications are transforming the way we *experience* our environment: the way we distribute our attention and construct "mental maps" in order to orientate ourselves

- Such changes in environmental experience have also notable *aesthetic consequences*

Lehtinen & Vihanninjoki / University of Helsinki
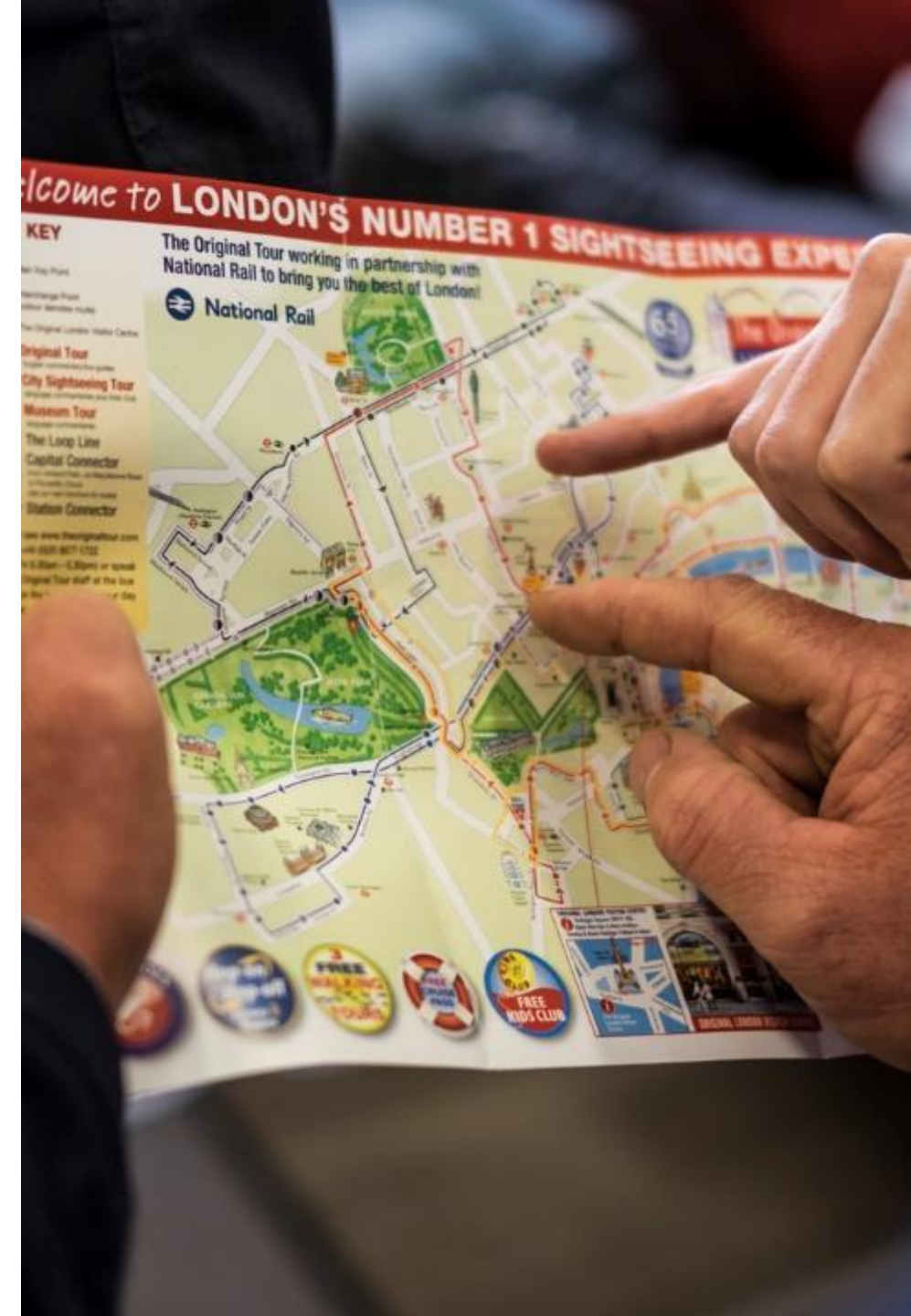
Case: Wayfinding

- The transformation of the experience has already been empirically proven, and the results are not too encouraging: "the users of navigation tools have *poorer memory* of surrounding scenes and *less accurate* configurational knowledge of travelled routes, compared with people who use maps or directly experience the routes" (Ishikawa 2016, p. 124)

- By bringing new places and regions within the reach of average citizens the applications quite literally *open up new worlds*

- By altering and possibly impoverishing our environmental experience they simultaneously "function like blinders [and] *narrow the world*" (Grabar 2014)

- Should we *check the balance*: what are the pros and cons? But *how*, exactly, should one evaluate and compare such short-term and long-term implications?

Lehtinen & Vihanninjoki / University of Helsinki

Figure 7. An augmented view of the NYU college campus. (Courtesy: NYU Media Lab)

Aesthetic consequences?

- If we become increasingly "blind" to our environments in general, we are more likely to become "blind" also to such environmental qualities and properties that make the surroundings *distinguishable* and *identifiable*

- If the *character* and the idiosyncratic *experiential quality* of the local environment remains more and more "invisible" to us, the related urban aesthetic values are also increasingly ignored

- The material environment remains unaltered, but there is no point discussing "potential values" without an experiencer *actually capable* of experiencing them

- In the short run, this is a contingent question of paying or not paying attention; in the long run, this is a question of *skills and capability*!

- Direct experience and the meaning of (human-scale) urban design: the questions of *legibility*, *continuity*, and *understandability*

Aesthetic consequences?

- Aided navigation also opens up various new possibilities of using and experiencing our everyday surroundings

- Unforeseen environmental affordances can certainly have notable aesthetic relevance

- E.g. the increased freedom of movement may give rise to a new kind of *aesthetic sensitivity* or *openness to aesthetic potentialities*

- When one does not depend anymore solely on the information provided by roads, buildings and other structures to tell where one is in a city, urban landscape and its perceivable components cease to function as mere guiding features

- Cities can be approached with increased enthusiasm and curiosity, providing an enhanced possibility of experiencing urban aesthetics anew, both on the level of *details* and on the level of conceiving *the city as a systemic whole*

Lehtinen & Vihanninjoki / University of Helsinki

Aesthetics of *Urbanity*?

_____

- ”Surplus of meaning” and the perceptual inexhaustibility of the city: there is *always* more to a city than a single human being could possibly experience and know thoroughly

- "The city remains a perpetual mystery, just as great art remains a mystery – extending *beyond our capabilities*" (Haapala 2003, p. 21)

Lehtinen & Vihanninjoki / University of Helsinki

16.11.2018

Aesthetics of *Urbanity*?

_____

- The vastness and radical otherness associated with the city: an experience of *urban sublime*

- "The city's human aggregates [...] inspire *ambivalent feelings*, mingling exhilaration with a threat to selfhood" (Den Tandt 2014, p. 127)

- Urban sublimity has its base in conceiving the city primarily as a *human context of massive complexity*, not as a mere collection of impressive physical structures

Lehtinen & Vihanninjoki / University of Helsinki

16.11.2018

How to proceed?

- There is a difference between the domain of *visual* or *mental images*, and the *bodily engagement* with the materiality of an environment: a basis for assessing the experiential repercussions

- Focus of concrete technological solutions and the everyday practices they are part of: e.g. is there currently an overemphasis on visual representations of the surroundings? Alternatives?

- How do people become acquainted with and make use of their surroundings: do they use navigation applications merely as "early stage" tools, or do they rely on them more continuously?

Lehtinen & Vihanninjoki / University of Helsinki

16.11.2018

References

- Den Tandt, C. (2014). Masses, Forces, and the Urban Sublime. In K. R. McNamara (Ed.): *The Cambridge Companion to the City in Literature*. Cambridge: Cambridge University Press.

- Grabar, H. (2014). Smartphones and the Uncertain Future of 'Spatial Thinking'. https://www.citylab.com/life/2014/09/smartphones-and-the-uncertain-future-of-spatial-thinking/379796/

- Haapala, A. (2003). The Urban Identity. The City as a Place to Dwell. In Sarapik, V. & Tüür, K. (eds.): *Place and Location*. Tallinn: Estonian Academy of Arts.

- Haapala, A. (2005). On the Aesthetics of Everyday. Familiarity, Strangeness, and the Meaning of Place. In Light, A. & Smith, J. M. (eds.): *The Aesthetics of Everyday Life* (pp. 39–55). New York: Columbia University Press.

- Ihde, D. (1990). *Technology and the Lifeworld.* Bloomington: Indiana University Press.

- Ihde, D. (1993). *Postphenomenology*. Evanston: Northwestern University Press.

- Ishikawa, T. (2016). Maps in the Head and Tools in the Hand: Wayfinding and Navigation in a Spatially Enabled Society. In Hunter, R. H., Anderson, L. A. and Belza, B. L. (eds.): Community Wayfinding: Pathways to Understanding. Switzerland: Springer.

- Rietveld, E. & Kiverstein, J. (2014). A Rich Landscape of Affordances. Ecological Psychology 26(4), 325–352.

- Saito, Y. (2017). *Aesthetics of the Familiar: Everyday Life and World-Making*. Oxford: Oxford University Press.

- Urry, J., & Larsen, J. (2011). *The Tourist Gaze 3.0*. London: Sage Publications.

- Verbeek, P.-P. (2005). *What Things Do. Philosophical Reflections on Technology, Agency, and Design*. University Park, PA: Pennsylvania State University Press.