## The Scope of "Empathy" in Architecture From the design process to the user's experience and back

ANNE TÜSCHER, M.ARCH, PH.D. (COGNITIVE SCIENCE – PHILOSOPHY MAJOR), LECTURER École Nationale Supérieure d'Architecture de Paris La Villette, France anne.tuscher@paris-lavillette.archi.fr

## I. EXTENDED ABSTRACT

The phenomenon of empathy (and its related processes) can be considered at very different level in architecture, due to the domain's complexity. In this presentation I am going to review these various levels mainly from philosophical and cognitive points of view.

Along with personal empathy, which refers (in a narrow sense) to an affect-based understanding of another's inner life, there seems to be a form of empathy directly based on the perception of objects rather than persons, namely objectual empathy. The notion of personal empathy being conceptually and explanatory prior to the notion of objectual empathy, the latter is always an indirect way of understanding other (real or hypothesized) human beings.

First, I am going to discuss five types of object-based understanding and ask whether any of them illustrates the phenomenon of objectual empathy: objects as affordances, imaginative explorations of objects, bodily projections onto objects, objects as traces of action, objects as traces of emotion. Then, I will examine the relevance of these examples to architecture. One might ask, e.g., whether the perception of an architectural drawing can engage the same empathetic abilities that are enabled by the perception of the actual building itself, whether on the side of the designer's experience (embodied simulation of the future users) or on the user's (ability to understand the architect's intentions as a client in a commercial context or as a visitor in an architecture exhibition).

Finally, I would like to show that empathy can be educated through experience and teaching. In this respect, the use of images, artworks and other representational media often plays a significant role in the development of empathy. It has been argued that our experience of representations can evoke empathetic responses that our perception of the world beyond representations does not. Through learning, a high-level cognitive ability can become implicit and spontaneous, even if it was initially explicit and deliberate.

The study of empathy for the architectural object, its makers, its users, and even its representations, opens the way to future significant discoveries of great interest particularly in the context of architectural education.

Keywords: affordances, aesthetic experience, architecture, design process, empathy, representational media

## 2. REFERENCES

Currie G. (2011) "Empathy for Objects", in P. Goldie & A. Coplan (eds) Empathy: Philosophical and Psychological Perspectives, 82–95.
de Vignemont, F. & Singer, T. (2006) "The empathic brain: how, when and why?", Trends in Cognitive Sciences, IO (IO), 435–441.
Freedberg, D. & Gallese, V. (2007) "Motion, emotion and empathy in esthetic experience", Trends in Cognitive Science, II, 197–203.
Goldman, A. I. (2011) "Two Routes to Empathy", in P. Goldie & A. Coplan (eds) Empathy: Philosophical and Psychological Perspectives, 31–44.
Hogarth, R. M. (2001) Educating Intuition, Chicago: The University of Chicago Press.
Hurley, S. (2006) "Active perception and perceiving action: The Shared Circuits Model" in T. Gendler and J. Hawthorne (eds) Perceptual Experience, Oxford: Oxford University Press, 205–259.

Lopes, D. (2011) "An Empathic Eye", in P. Goldie & A. Coplan (eds) Empathy: Philosophical and Psychological Perspectives, 118–133.

Rizzolatti G., Camarda, R., Fogassi, L., Gentilucci, M., Luppino, G., & Matelli, M. (1988) "Functional organization of inferior area 6 in the macaque monkey", Experimental brain research, 71 (3), 491–507.

Rizzolatti, G., & Matelli, M. (2003) "Two different streams form the dorsal visual system: anatomy and functions", Experimental brain research, 153 (2), 146-157.

Schmidt, H. G., & Boshuizen, H. P. A. (1993) "On acquiring expertise in medicine", Educational Psychology Review, 5 (3), 205-221.

- Singer, T., Seymour, B., O'Doherty J., Kaube, H., Dolan, R., & Frith, C. (2004) "Empathy for pain involves the affective but not sensory components of pain", Science, 303, II57–II62.
- Wicker B., Keysers, C., Plailly, J., Royet, J-P., Gallese, V. & Rizzolatti, G. (2003) "Both of Us Disgusted in My Insula: The Common Neural Basis of Seeing and Feeling Disgust", Neuron, 40, 655–664.

## 3. AUTHOR BIO

Anne Tüscher was trained in philosophy before becoming an architect in Switzerland. She earned a PhD in cognitive science (Philosophy Major) by studying simultaneously psychophysics of space perception at the LPPA (Professor Alain Berthoz' lab at Collège de France) and philosophy of mind at the Institut Jean Nicod in Paris. She was a postdoctoral research fellow at the Neurosciences and Cognitive Sciences department of the Hanse-Wissenschaftskolleg in Delmenhorst (Germany), working on the visual and neural underpinnings of parallel perspective representation. Currently, she occupies a Lecturer position in Humanities at the École Nationale Supérieure d'Architecture de Paris La Villette (France), where she teaches philosophy and cognitive science to architecture students. She is a full member of the UMR CNRS MAP-MAACC and an associate member of both the UMR CNRS Institut Jean Nicod and the UMR CNRS CRAL. Her research interests focus on spatial perception and representation, mainly through graphic artefacts. She published essays in architecture journals as well as in philosophy reviews.