

## Hidden Histories of Haptics

Organisers:    Marieke Sonneveld (m.h.sonneveld@tudelft.nl)  
                  Maarten Wijntjes (m.w.a.wijntjes@tudelft.nl)

The EuroHaptics community is multidisciplinary and at each conference, its members are getting increasingly more involved with each-others' research. Inherently, the focus of conferences is on current research while insights into the separate histories stays under exposed. There is no shared history of haptics, each scientific branch has its own, which stays largely hidden for others. Moreover, within each domain some parts of history did not receive the attention they deserved.

One needs to know the history to understand the present. This workshop intends to share and discuss our scientific histories and increase the understanding about the fundamental scientific questions that drive each field. In this symposium four speakers from very different haptic domains (philosophy, design, engineering and psychophysics) will give a historical account of their field of research.

Schedule:

14.00-14.15 **Introduction**

14.15-15.00 **Haptics in philosophy** (Mark Paterson)

15.00-15.45 **Haptics in design** (Marieke Sonneveld)

15.45-16.00 Break

16.00-16.45 **Haptics in engineering** (Vincent Hayward)

16.45-17.30 **Haptics in psychophysics** (Robert Volcic)

17.30-18.00 **Discussion**

## **Abstracts**

### **Introduction** (Maarten Wijntjes)

In an article from 1935, Joseph Becker laid the foundation of current research in haptic line drawing perception. This talk will review this paper and will show some recent data that complement his ideas.

### **Haptics in philosophy** (Mark Paterson)

The history of philosophical treatments of touch has been uneven. Since Aristotle, touch has been identified with the base or bestial, at the bottom of the hierarchy of the senses. Yet the role of touch in particular has been central to certain philosophical debates, flowering in Enlightenment discussions of knowledge in Locke, Berkeley and Diderot. This talk will provide an overview of this history of touch, bridging Aristotle to more recent discussion of the relationship between vision and touch, and the particularity of touch in embodied experience.

### **Haptics in design** (Marieke Sonneveld)

In the domain of industrial design, research on aesthetic experience of consumer products focuses mainly on the visual aspects. The aesthetics qualities of the tactual aspects of products seem neglected. Traditionally, tactual perception in product design was limited to the domain of cognitive ergonomics and physical comfort. This talk will give an overview of the tacit experience of product designers with the tactual aesthetic qualities of their design, and introduce a new framework to make this tacit knowledge explicit.

### **Haptics in engineering** (Vincent Hayward)

The development of machines such as airplanes or telephones has increased the demand for haptic feedback interfaces. On the other hand, the design of interfaces not only depends technological progress but on a myriad of other factors. This talk will give an historical account of the interplay between the general technological progress and the role of haptic interfaces.

### **Haptics in psychophysics: life and work of Emil von Skramlik** (Robert Volcic)

The work of Emil von Skramlik has received relatively little attention in comparison to his contemporaries Katz and Revesz. A special collection of the library of the University of Amsterdam contains the PhD theses supervised by von Skramlik that he sent to his colleague Revesz. This talk will review the life and works of this important haptic scholar.