# Toward emotional self-tracking: a phenomenological perspective

Carola Murari
Amon Rapp

The aim of this work is to outline how new ubiquitous/wearable technologies may support the individual's knowledge about her emotions, discussing opportunities opened by a "phenomenological" approach to technology design. Recent advances in the miniaturization of sensors and their incorporation into everyday objects may soon lead to a pervasive and unobtrusive sensing of emotions, enabling people to better regulate and reflect on them (Cernea & Kerren, 2015).

Traditionally, emotions have been tracked within clinical contexts through individuals' self-reporting, by requesting them to manually gather information. Nowadays, sensors allow people to automatically track emotions through their body symptoms, by collecting data about heat, heartbeat, breath (Zhang et al., 2017). "Smart objects", like bracelets, can "quantify" emotions feeding them back to users, allowing for an emotional self-awareness. Whereas, "smart environments" are able to integrate different users' information to understand how the context can influence their emotional states (Kanio et al., 2017). Such technological advancements, nevertheless, point to new design issues. Emotions are translated into numbers by these devices, risking to provide individuals with an excessively "quantified" and "objectified" perception of their living experiences: this would lead to a complete rationalization of visceral phenomena, as emotions are, somehow misleading the person's self-knowledge. In this perspective, a phenomenological approach to emotional tracking, where emotions are conceived as subjective experiences constructed by the individual interacting with the environment, might provide a useful theoretical frame to design. Phenomenology appears to be a resilient voice through decades in psychology community, and might highlight opportunities for creating novel smart tools and spaces empowering the natural way through which we live our emotions (i.e. by ascribing meanings to them), instead of pushing ourselves toward modalities of analysis closer to how machines "think". For example, designers might explore new interactive ways to "visualize" emotional data, by taking advantage of sensorial channels like touch (e.g. leveraging heat, stiffness) able to support subjective interpretations of emotions rather than their rational examination (Kirsh et al., 2017). Moreover, "intelligent" environments may help the individual co-construct her emotional living experience, by prompting continuous feedback to her (Fernandez-Caballero et al., 2016): the environment may reduce, amplify, regulate and mirror the individual's emotional processes by tuning its material characteristics (e.g. temperature, lights), whereby the user might exploit these stimuli to ascribe new meanings to her internal states.

**References**

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