The Body as a Source of Aesthetic Qualities for Design: Explorations and Techniques

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Abstract

Our bodily dimension plays a fundamental role in the ongoing construction of meaning. Exploring the potential of this perspective, this paper describes the structure of a one-day workshop entitled: The body as a source of aesthetic qualities for design: Explorations and techniques. In this workshop, participants will engage with a series of somatic exercises to get in contact with their senses, aiming to reach their tacit, less explicit dimension. Aesthetic qualities emerging from the act of filtering out ideas through the body will be used as generative tools for creativity, as well as for interrogation of subjective experience. By using a series of wearable devices and artefacts from everyday life participants will explore the nuanced differences between sensing and felt-sensing, and how the use of somatic tools and stimuli from wearables can shape the way personal narratives are expressed.

Keywords

Embodied design, wearables, aesthetic qualities

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

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Figure 1: Example of wearable artefacts to be utilised in conjunction with the Focusing technique to interrogate the role of bodily self-awareness in the process of meaning-generation. These props use digital and nontechnological means to generate direct sensory stimulation on the body. For instance, we use gloves with vibratory elements, and mini hot water bags to be placed in pouches of different textures. These artefacts and techniques have been previously explored in the workshop Somatic Evaluation Methods developed as part of the Studio component of the Master of Interaction Design and Electronic Arts at the University of Sydney [10].

Schedule

The body as a source of aesthetic qualities for design is a one-day workshop, consisting of two 3-hour sessions. Activities are divided into two main aspects, as follows:

1) Inquiring through the senses

Introduction, overview of programme.

• Presentation: The body as a generative source -Differences between senses, feelings and felt-senses, and their relevance for design.

• Exploring inner senses and subjective experience: The homunculus exercise.

• Exploring vibrotactile patterns with microelectronics and textures: Practicing haptic-based bodily sensing and evaluation.

2) Inquiring through the felt-senses

• Evaluation of wearables through the body: Utilisation of wearable props producing direct sensory stimuli (figure 1) in conjunction with the somatic technique Focusing, to explore how personal narratives are shaped by different bodily stimuli and awareness.

• The teapot exercise: Inspired by Norman's reflective dimension of emotional engagement with objects [9], everyday objects will be interrogated through Focusing. Later, participants will re-design the object inspired by aesthetic qualities emerging from the somatic exercise.

- Group presentation of ideas.
- Closing discussion: Lessons and challenges.

Detailed proposal description

The role of the body as a generative source of creativity and meaning construction still remains as a relatively unexplored area of study. Johnson [6, p.12] points out that we have bodies that "are acted upon by 'external' and 'internal' forces such as gravity, light, heat, wind, bodily processes, and the obtrusion of other physical *objects*". Such interaction with the environment shapes our meaning-generation process. As a result, bodily experiences are embedded in everyday representational constructions such as language [6, p.15]. Knowledge is generated by the ongoing integration of perception and action [2]. Even when design can greatly benefit from accessing the inner bodily dimension, purposely articulating its aesthetic qualities is a difficult task [4]. Within this context, we envision the potential of somatic techniques and wearable technology to elicit a process of transformation, facilitating the emergence of meaning and creativity, relevant for experience-centred design.

The workshop will explore how our bodily perception shapes the way we construct our reality, and the potential of wearable technology to assist in embodied knowledge, creativity and inquiry. We will utilise somatic techniques in combination with wearable artefacts on the self-aware body to unearth aesthetic qualities emerging from the tacit dimension. Wearable devices will be used to interrogate the role of technology in the development of personal stories. We will also explore how aesthetic qualities for apparently unremarkable artefacts can be extracted by focusing on the inner body. New ideas emerging from somatic exploration, including insights from the tacit dimension of participants will be used as components to re-design existing artefacts. Although some of the activities will be conducted in small groups and discussions will be fundamental to enrich each other's perspectives, some activities will have a strong individual focus, as

observing the self to access the tacit is one of the workshop's aims.

No previous experience in somatic techniques is necessary. Although the manipulation of wearable electronics and microcontrollers is involved in some of the exercises, no previous programming experience is required.

Topics: From sensing to felt-sensing

• The importance of understanding the inner self in design research and in the practice of experience-centred design

• Focusing as a somatic technique to access the tacit dimension of experience [3].

• The role of the body in the articulation of aesthetic qualities.

• Wearable technology as scaffolding for meaning generation, and how the body "find its way" to interpret phenomena despite potentially adverse conditions.

• Transparency is not the only way: The cycle of bodily self-awareness in the interaction with wearable artefacts.

Embodied interaction as a generative tool

Recognising that the nature of embodied knowledge has a strong tacit component, we envision some strategies to unearth the potential for generative ideation existing in this dimension. As Höök [4] has discussed, there are ways of bodily knowing that cannot be translated into any form of language, but rather assimilated as part of a more holistic experience. By exploring the concept of somatic discovering through attentive self-observation, the workshop principles are situated amongst the embodied interaction agenda. Through the lens of Ross and Wensveen [12], who describe some principles of embodied interaction designs, we propose new pathways to ideate artefacts with implicit value, which acknowledge the social and ethical dimension of the self-agent individual [13], and which involve the whole somatic as well as intellectual dimensions of people's experiences. Additionally, we also aim to access the tacit dimension, as an attempt to articulate those experiences residing in our bodily knowledge.

The workshop's way of approaching wearable artefacts is meant to reveal non-reductionist ways of understanding affect, facilitating embodied articulation in a similar vein to Koefoed Hansen and Kozel's [7] use of placebo objects. A careful work of self-observation will be encouraged through the use of somatic tools, towards the generation of insights and ideas for design. Previously, Lee, Lim and Shusterman [8] have applied Somaesthetical [13] principles as a tool for design ideation through the practice of Feldenkrais, which stimulates the focus on small, but meaningful movements and their aesthetic gualities. Embodied research transfer is still an underdeveloped field recognized by Wilde et. al [14], who have experimented with ways to document, report and reflect on embodied design methods in their workshop Embodying Embodied Research. Contributing to the development of the field and the articulation of embodied knowledge, we introduce the Focusing technique, which has not yet been explored in depth in the area of HCI, but has been applied to different areas of knowledge, including movement-based performance [1], creative writing [11] business [5], and so on.

Learning objectives and goals

Through the use of different tools, including the somatic technique Focusing, participants will learn how, by paying attention to the inner bodily dimension, to access tacit meaning and elicit hidden aesthetic qualities. These aesthetic qualities will be explored and discussed from the standpoint of the following aspects:

- Idea generation and imagination
- Evaluation / Interrogation through the body
- The emergence of unexplored tacit needs

Additionally, participants will learn:

• A practical approach that incorporates the body in the construction of knowledge.

• Novel tools for the articulation of somatic knowledge, including some notions regarding the somatic technique Focusing and its application in design.

• How wearable technology has the potential to shape the way we perceive our personal narratives.

• Evaluation through the body: How the reflective dimension of object perception can be articulated by engaging in somatic observation.

• The differences between sensing, and felt-sensing, and how these concepts are relevant to design.

• Ways of documenting phenomenological information grounded in bodily self-observation.

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