Tracking Well-Being – Design Explorations Through Object Theatre

Abstract
We introduce Object Theatre for Design as a hands-on approach to enable healthcare tracking to move beyond numbers and empower patients to monitor and convey their subjective well-being. A transformed perspective on relating to artifacts will drive tangible and bodily explorations in order to collaboratively create mockups for logging and expressing emotions and perceptions in novel tangible forms.

Author Keywords
Subjective well-being; tracking; object theatre

ACM Classification Keywords
H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous:

Introduction
Healthcare providers are increasingly tracking users in their daily routines at home; this can provide rich information to support accurate and cheaper treatment [8] or help to self-report pain and emotions [5,13]. In pre-digital times, data to support healthcare was logged through analogue methods, such as keeping a diary or a logbook, putting coins in a jar or cutting a spike from a comb. More recently digital devices such
as mobile phones, apps, cameras, audio recorders, smart watches and activity trackers has made it possible to collect data real-time without conscious actions from the user (Figure 3), and present and share it in multiple forms (visuals, audio, video, graphs). However the existing trackers do not enable rich manipulation with hands or body, and lack opportunities for logging and presenting data in a subjective way.

Wearable activity trackers (Figure 3) collect quantitative data based on movement, pulse or GPS coordinates, and use algorithms to transform it to graphs displayed on a screen (Figure 4). However there is very little attention given to "tracking" the patient’s feelings or their perception of well-being in tangible form. What can design do to support this function and help convey changes in well-being?

Are you feeling well today?
According to Desmet & Pohlmeyer “Subjective well-being represents a person’s personal perceptions or value judgments of her quality of life.” [4:10]. In the healthcare domain, only patients themself can feel, experience, sense and make sense of their perception of well-being in everyday life. We approach subjective well-being through Mead’s theory of the social self [10] and Stacey’s responsive processes of relating [15], where well-being can be understood as relational and emergent in interaction with other people, as constantly changing perception of oneself. For example, if you feel slightly under the weather, but then talk with a terminally ill friend, you might then not feel sick at all.

Existing research shows how frequent observations of a single precursor symptom may support the treatment of illness [8]. Researchers have proposed novel interfaces to self-report symptoms e.g. sensations of pain. Larsen et al. [8] present how the instrumentation of a wearable one-button tracker can result to deeper investigative dialogue about personal sensations based on the data. Rodríguez et al. [13] suggest self-monitoring through wearable interfaces to collect real-time information from chronic-pain patients. On the same note, researchers have been studying subjective self-reporting of emotions through digital interfaces, and found a potential for tangible user interfaces [5]. Physicalized data instead, presents the personal activity data in a tangible form [7,9,16]. The tangibility of data opens up for new conversations about user’s personal insights. We add to this development with a novel approach, exploring how techniques from object theatre and theatre improvisation contributes to designing for tracking subjective well-being in tangible forms.

Object Theatre For Design
In the workshop we will use techniques from Object Theatre to speculate with existing tracking practices, to relate to a role of an object (medium), to create novel tracking ideas with objects and to produce mock-ups to share your insights in tangible ways. Object Theatre is a form of theatre where performers use readymade objects, such as bottles, toys, household objects, sand or trash, to tell a story [12] (Figure 5). "In object theatre often the usefulness of the object is brought into question, altered, and made quite different.” [12:1]. Improvising with multiple, transformational objects eventually bring different interaction qualities to the surface (Figure 1).

Inspired by object theatre, and methods applied in interaction design, such as tangible tools [3],
interaction relabeling, scenario-acting with props and puppets [1,2,6], our humble aim is to take the theatre methods further from concentrating on single user’s perspective to exploring multiple stakeholder perspectives, as well as taking the object perspective (Figure 5). We find Object Theatre For Design beneficial as it suggests diverse ways of relating to everyday objects (animated, symbolic, props), and to switch freely between those. It prompts designers to move out from ‘normal’ way of relating to objects and people as separate entities, for instance by encouraging to approach an in-animate object as a living being, or to perform the object from within [2,14]. Different relating to objects is reached gradually through object theatre techniques applied in an exploratory design workshop. This might include emphasizing with an in-animate object by speaking and acting as the object, by playing multiple stakeholder perspectives to the object, or by interacting with it in a new and unforeseen way [2,14]. Through Object Theatre, designers can explore how to become the medium and embody object functionalities to develop personal understanding of object interactions and eventually re-design new products.

**Invitation to change perspective**

In the studio we want to be able to understand subjective well-being and how can we log and convey this to other people through explorations with Object Theatre For Design. We ask, how to imagine what can be tracked or logged in relation to your well-being? This raises a challenge to tracking/logging currently being driven by quantitative methods and a series of questions on how to record personal perception. The participants are invited to investigate this question in a novel way by applying theatre methods into a field often relying on algorithms and use of digital tracking devices. Studio participants will try out wearable tracking device and work in small design teams to take different perspectives.

**User, Relative/Friend, Object and Designer.**
The design process builds upon participant own tracking experiences as well as specific user cases. The participants will try out enacting design scenarios and taking perspectives different from their own, such as an activity tracker or a friend/relative. They will be guided through a process of improvising with objects in a bodily and collaborative series of exercises, exploring the material properties, senses and social connections with objects. Finally turning their fresh insights into product mock-ups to log and convey perceptions of well-being. Each team will produce at least one mock-up of their new idea.

We will provide simple tracking devices to capture activity data. We will also bring a set of selected objects and building materials to support the design explorations. Materials such as cardboard, sticks, toys and household objects are brought to the session to facilitate the work. We will strive to attract researchers and practitioners from a range of disciplines who are open towards collaborative experimentation.

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References