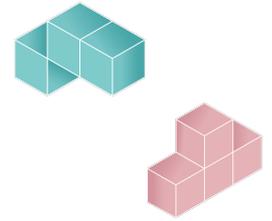


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BREATHING COMMONS: AFFECTIVE AND SOMATIC RELATIONS BETWEEN SELF AND OTHERS

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ABSTRACT

This paper reports on our ongoing research focusing on cultivating and exploring the topic of what we refer to as *breathing commons*. We approach breathing as an affective and somatic bodily function that ties the individual with the collective, and through that aim to foster affective commoning among bodies. We present two workshops, one physical and one online, that we have ran amongst our research group on breathing commons. Three themes emerged from the analysis of the workshop activities: a) The body as a membrane, b) feelings of intimacy, vulnerability and awkwardness, and c) mutual engagement and care. These show a path towards engaging with breathing, and potentially with other bodily functions and biodata, aiming to open up the design space of doing affective commoning through bodily functions that act as a connection between bodies – both human and non-human.

INTRODUCTION

Breathing is a vital bodily function, experienced as the individual somatic practice of inhaling and exhaling. But breathing is also shared and social, which our current times, with prevailing themes such as Covid-19 and the Black Lives Matter movement, greatly illustrate. The events connected to the latter, recently demonstrated to the world that the right to breathe is not equal for all but is linked to the skin colour and social and economic status: The words “I can’t breathe” have painfully become one of the most characterizing sentences of our time, chanted by millions of demonstrators during the global George Floyd protests in 2020. At the same time, in this Covid-19 pandemic, we wear face masks and keep social distance to our fellow citizens in order to prevent our exhalation to mix with another person’s inhalation. Breathing is that which keeps us alive, but also something that can potentially spread and contract airborne diseases; breathing folds exterior and interior, living and dying. These examples show how breathing has increasingly been becoming political, scaling from individuals to society, and vice versa.

Our work aims to open up the design space of exploring breathing in interaction design (e.g. Prpa *et al.*, 2020; Ståhl *et al.*, 2016) as an affective and somatic bodily function that ties individual with intersubjective experiences, which we have articulated as *breathing commons*. We draw on Singh (2017), who uses Caffentzis and Federici’s (2014) notion of *commons* as the practices for sharing the resources we produce in an egalitarian manner, but also as a commitment to the

fostering of common interest in certain aspects of our lives and political work. We build on theories and practices established within the two areas of Affective Interaction Design (Fritsch, 2018) and Soma Design (Höök, 2018). What we draw on from both these design approaches is the strong focus on affect and somatic experiences. We use these as a joint point of departure for exploring breathing as a bodily function that connects us to our own soma, acts as a connection between bodies – both human and non-human – is bodily performed and political, both on an individual level and as a common resource.

We present our ongoing research on the topic of *breathing commons* focusing on two workshops - one physical and one online - that we organised and ran among our research group. In each workshop we used breathing as a path towards unpacking and becoming attentive to affective and somatic experiences that emerged on a spectrum ranging from first-person, to intersubjective and collective. Breathing was approached both as a personal, subjective bodily function (soma) and at the same time as a ‘commoning’ experience that is shared among many bodies (affective interaction). The workshops were held in continuation of online breathing and other exercises, initiated in the spring as part of the Covid-19 lockdown to keep a sense of collectivity in the group when apart.

Reflecting on our experiences from the two workshops, we have identified 3 themes: a) the body as a membrane, b) feelings of intimacy, vulnerability and awkwardness, and c) mutual engagement and care. Our research shows a path towards engaging in affective commoning through breathing, drawing on the notion of *commons* that nurtures an ethics of care (Singh, 2017). It further opens up the space of engaging *with* and *through* bodily functions and biodata, emerging at the intersection of affective interaction and soma design.

THEORETICAL BACKGROUND: AFFECTIVE INTERACTION AND SOMA DESIGN

Affective Interaction Design has been proposed by Fritsch (2018) as an approach to HCI and interaction design, which takes into account the *relational* and *more-than-human* aspects of affect. Fritsch draws on a strand of affect theory, that has become prominent within the humanities and which builds on the philosophy of Spinoza (Deleuze, 2001; Massumi, 2002). Building on Deleuze’s understanding of Spinoza, Massumi (2002) has put forward a conceptualisation of affect centred around the ability of bodies to *affect and be affected*. This includes how living bodies are influenced, moulded, and changed during encounters with other bodies. Further articulated by Gregg and Seigworth, affect “*arises in the midst of in-betweenness*” as “*those intensities that pass body to body (human, nonhuman, part-body and otherwise)*”

(2010, p.1). Affect, then, should neither be seen as purely natural/physiological processes, nor solely cultural. According to Massumi (2002), affect is part of the pre/non-conscious dimensions of experience and is felt as transitions in our capacity to act: While positive affect is characterised by the ability to affect and be affected, negative affect leads to the inability to act or be acted upon.

Soma Design is a method of doing design research in HCI that takes a holistic perspective on the (human) mind and body – the soma – as a starting point in design processes (Höök, 2018). It has roots in theories of somaesthetics (Shusterman, 2008) and emphasises becoming attentive to and improving connections between movement, sensation, feeling, emotion, subjective understanding and values. Through this particular approach to designing interactive systems, one can approach the materials used in a design context (both physical and digital) from a perspective that places the whole soma at the core, which potentially leads to designing better systems for end-users (Tsaknaki et al., 2019). There is a variety of soma-based design strategies for engaging with the whole body, aiming to improve designers’ somaesthetic awareness and ultimately their ability to design rich experiences with technologies. Two of these strategies, that we adopted in our workshops, are: a) becoming attentive to one’s soma through practicing bodily exercises, and b) defamiliarising already familiar experiences for opening up a design space.

We see these two approaches as complimentary to one another and we deployed both for exploring the topic of *breathing commons*: On the one hand, affect is understood as an in-between, relational and more-than-human concept that colours our engagement with ourselves, each other and the world. Soma design, on the other hand, is a pragmatic design method offering concrete ways of engaging with one’s soma (body and mind as a whole), which supports the slow enhancement of one’s sensibilities to discern somatic and felt experiences with technologies.

OVERVIEW OF THE TWO WORKSHOPS

Both workshops took place in Autumn 2020, each lasting for two hours. All authors have participated in both workshops and some were involved in planning the workshop activities. While the first workshop took place in our research lab, where we were all present in the same physical space, the second one took place online, since our university closed down due to the second wave Covid-19 lockdown. Running two similar workshops on the same topic, one physical and the other online, offered a fertile ground for experiencing and reflecting on the topic of breathing commons from an affective and soma design perspective. In particular they opened up a space for considering how breathing can offer a concrete lens for becoming attentive to our own

body, and to other bodies in each context (physical and online). We will describe the activities of both workshops and specify the differences between the physical and the digital one, including what adaptations we made to accommodate for an online setting. The activities we engaged in during the sessions, centered on different aspects of breathing, foregrounding either the felt, acoustic or tactile sensorial impact of breathing. All of them aimed to support us in a) becoming attentive to our soma through connecting with our bodies via the breath, b) defamiliarising the familiar through novel ways of engaging with the breath and c) moving from reflecting on individual experiences of breathing to affective commoning through breathing.

BREATHING EXERCISES

We started both workshops with a guided breathing meditation activity in order to somatically tune into our bodies and become attentive to our breathing patterns, inspired by similar bodily activities used in soma design methods in interaction design (Höök, 2018). We followed the verbal instructions of a connoisseur in this domain, by playing a YouTube video suggested by one author (Lena), whose research is focused on mindfulness and designing for healthcare. While the video with the breathing meditation instructions was played, we all listened and followed the instructions simultaneously, as a group. We allocated some time before and after this activity to reflect on our first person experiences and document them in body maps (Loke & Khut, 2014) and ended this activity by sharing our experiences in the group.

LISTENING COLLECTIVELY TO RECORDED BREATHINGS

The second activity was focused on collectively listening to pre-recorded sound files that consisted of individual breathings of each participant (1st workshop) and a collective soundscape of individual recorded breathings (2nd workshop). This activity was based on a preparatory task that everyone had to complete before the workshops, namely to record, with a mobile phone, several breathing instances taking place in different contexts and days, and each lasting between 10 to 20 seconds. In addition to the breathings, each person also had to record brief reflections of this activity, which we played and listened to collectively. Participants were invited to reflect, for example, on their affective state while doing this activity, the context in which they recorded their breathings as well as how their somatic experience of becoming attentive to their breathing was influenced by the context and the activity itself. A few days prior to the second workshop, one of the organisers gathered the sound recorded breaths of everybody and combined them in a sound file, consisting of all the individual breaths. During the workshop we then all listened to this compiled sound file together. Upon listening to the breathings as a group (the individual in the first, and the collective in the

second workshop), we shared reflections on what the recordings of breaths do to our affective experiences of breathing as a sociosonic material, embedded in our everyday contexts.

EXPERIENCING BREATHING THROUGH SHAPE-CHANGE MATERIALS

In the first workshop that took place physically, we also experienced breathing through inflatable shape-change latex materials. We used inflatable air pockets in different shapes and sizes, which connect to an air pump system through long transparent tubes. One can manually inflate and deflate them at different rates and speeds, exploring different 'breathing' patterns. One by one, all participants experienced the 'breathing' of these materials against their skin. This was facilitated by one person holding the air pocket against the experimenter's body and another mimicking inhalation and exhalation patterns by manually inflating and deflating them. Afterwards participants shared their first-person experiences of having these 'other material bodies' breathe against their own.

BREATHING UNDER SOCIAL CONSTRAINTS

In the second workshop we included an exercise, which we called 'breathing under social constraints'. The purpose was to explore the sociopolitical aspects of breathing, even in the small context of our research group. The exercise was carried out in pairs. As it took place online, we used breakout rooms in Zoom. In groups of two, the participants were instructed to take one of two roles; a leader or a follower. The leader was instructed to take control over the breath of the follower during two minutes of time. During this time they could ask the follower to breathe fast or slow, deep or shallow, silent or with sound or to hold their breath and so on. It was up to the leader to experiment with different commands or requests. The follower was instructed to follow if they felt comfortable in doing so, being made aware that they could choose to resist at any moment. After around four minutes when everyone had tried both roles, the exercise ended with a discussion back in the main Zoom-room. We took turns reflecting on what had happened between us during the exercise and how this had made us feel, focusing on extracting key moments of interest, including experiences that had evoked feelings of comfort or discomfort among the pairs.

WORKSHOP REFLECTIONS: "COMMONING" BREATHING

From the reflections and discussions that took place during the two workshops and from returning to the recorded data (photos, sound recordings and notes) and discussing them in light of the experiences they offered, three themes emerged. These highlight concrete situations when breathing allowed us to shift from individual experiences to experiencing our group as

commons. They also show a path to engage in affective commoning through breathing, facilitated by combining affective interaction design and soma design.

THE BODY AS A MEMBRANE

The experience of focusing on breathing, a vital bodily function that most of the time passes unnoticed, surfaced particular qualities of our bodies and the perception of self and others. A notable reflection was that breathing, happening both inside one's body (inhalation) and also outside it (exhalation), put a focus on the 'in-betweenness' among bodies. Having to breathe collectively and paying attention to this act in the same space, digital or physical, and at the same time, made us aware of our own and of other bodies surrounding our own. Thus, we experienced a shift from the self to commons. Breathing was perceived as a connecting material with 'sticky qualities' (both vital and deadly in these times). Perceiving breathing in that way highlighted each body as a type of membrane that extends from the inside to the outside, and vice versa. The phrase "*observe the air that breathes you*" from the recorded breathing meditation was considered an evocative prompt that contributed to experiencing the body as a membrane: Although we, to some extent, are able to manipulate and consciously steer our breath, we cannot control the circumstance that, eventually, air *will* enter our bodies and we will 'be breathed'. In that sense breathing is at the threshold between controllable and uncontrollable, leaving us both autonomous and forever permeable at the same time. Just like membranes we will, despite of appearing and perceiving ourselves as separate entities, always be in a state of constant exchange with our environment. Furthermore, breathing, as an affective process, challenged the notion of the body as something merely 'fleshy': The perception of the body was shifted towards noticing the space in-between the flesh and the air outside of it, as breathing was externalised to the outside; it was heard and seen (as change on one's chest for example) or even controlled by the other workshop participants. The body as a membrane was also highlighted during the activity of experiencing the shape-change air pockets on our bodies. One reflection was that the illusion of breathing patterns from an external, non-human 'other body', put a focus on breathing as an action that fills the lungs with air that is then exhaled into the common air-space. The porous qualities of the latex air pockets resembled the porous qualities of our bodies and lungs, giving the material an almost organic character.

INTIMACY, VULNERABILITY AND AWKWARDNESS

Focusing on breathing also surfaced aspects of intimacy, vulnerability and awkwardness in our group. These were experienced mainly during our collective listening to the individual recorded breathings and the recorded reflections. A personal and private moment and space – the one in which the recording of the individual breathing took place – suddenly became a public and

shared experience that had an audience to which it was directed. This turned breathing into a 'performative' experience and moment, manifested as a recorded instance that was played out loud, listened to, and scrutinised by all the participants. Thus, in commoning breathing and in shifting the experience from the self to becoming attentive to other people's breathings, new experiences arose both for the person 'performing' breathing and for the one 'listening' to breathing, manifested as a shared intimacy for both. Similar experiences and feelings were evoked through the activity of 'breathing under social constraints' that took place during the online workshop. We shared and discussed how awkward, and to some extent uncomfortable it felt to be told how to breathe by a colleague, especially in front of a screen. Additionally, some participants shared that they felt vulnerable to be given instructions on how to breathe, which was also the reason why we tried this activity: To explore the space of both comfortable and uncomfortable shared experiences of breathing commons emerging among bodies. Having everyone taking the roles of the 'performer' and the 'listener' as well as the 'leader' and 'follower', dissolved any hierarchies that might have occurred otherwise and allowed all participants to experience both positions.

MUTUAL ENGAGEMENT AND CARE

Sharing experiences of intimacy, vulnerability and awkwardness among our research group, surfaced through breathing, also created a safe space of mutual engagement and care. Especially during the activity we all listened to the combined soundscape of the individual recorded breathings (2nd workshop), feelings of awkwardness were overshadowed by feelings of mutual care for one another. As we shared in our reflections that followed this activity, listening to the collective breathing soundscape highlighted notions of shared ownership of breathing. We found a novel sense of being connected through the message that was powerfully transported in these recordings: You are not the only person that breathes. Others breathe together with you, in their different bodies and everyday life contexts. This evoked feelings of mutual engagement and care for the others, whose breathings were heard in combination with one's own, verbalised as questions: Which situation were the other bodies in during these recordings? How did they feel?

DISCUSSION AND CONCLUSION

With the two workshops we organised and ran among our research group we have looked into breathing as a subjective bodily practice that is both intimate and personal, but shared and common at the same time. Through questions such as *what feelings are evoked when listening to individual recorded breathings or when listening to common breathing patterns as a group, and how does it feel when we verbally control or guide another person's breathing*, we sought to

experience and reflect on breathing, extending from the self to others. This allowed us to scaffold a space for the emergence of *breathing commons*, as being part of our research group. When playing the recorded individual and common breathings we experienced breathing as something intimate and intimately linked to the body – where sounds of the mouth and internal organs were also heard, revealing something private and deeply personal. But we also heard the breathings as something constantly shared and interrelated to others, something we all do every second of the day. In the second online workshop, we found that the focus on breathing connected us as a group of commons, despite of the non-physical presence. Witnessing and attending to our own and to one another's breathing in an online setting, brought about a strong somatic presence and connection, that we experienced to be surprisingly valuable in the digital sphere. Overall, our own perception of breathing was shifted through experiencing breathing commons, which surfaced the membrane qualities of the body, feelings of intimacy, vulnerability and awkwardness, but also feelings of mutual engagement and care for one-another.

Our ongoing research on exploring breathing as a commoning practice shows a path towards creating new relations with our bodies and other bodies. It can ultimately open up the design space of engaging with bodily functions and data produced by bodies, to account for becoming attentive to subjective somatic experiences and shared affective ones. We found the combination of affective theories and soma design methods for exploring this space to be very fruitful and generative, allowing us to constantly shift the focus from our own bodies to the surrounding ones, and vice versa, without prioritising one over the other. Along these lines, in future research it would be important to explore, how affective commoning can expand to include other, non-human bodies. Additionally, a limitation that we would like to address in future work is to look more critically into the 'commons' part in relation to breathing, expanding the concept of breathing commons from the rather small context of our research group, to explore affective commoning through breathing on a broader scale and social context.

We believe that there is value in becoming attentive to breathing commons, and to the shared ownership of breathing. Especially since, as previously articulated by Núñez-Pacheco and Loke (2020), connecting with the sensory realities of others can show us a path towards building empathic ties and thinking outside the boundaries of our preconceived ideas. Finally, we also hope that our work could contribute with bringing the domains of affects, emotions, and subjectivity in the study of the commons, something which has been somewhat neglected, as stated by Singh (2017).

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