Sites of Encounter

Engagement Potentials and Considerations for Encompassing Respect

ANDREAS ALMQVIST
ABSTRACT
In this work, I address challenges of situated alienation from people and place. Using interaction design for placemaking, light is shed on a design space of social places with opportunities for planned and spontaneous activities to be done alone, with known people or with strangers. In research through design, four conceptual design instances were created, drawing from first-person and participatory perspectives, to unpack potentials for engagement and considerations for encompassing respect (meaning vigilant of neoliberal capitalist and masculine power relations). I contribute with sensitizing questions making interaction design aspects more accessible for designers entering this public design space.
SAMMANFATTNING
Detta arbete fokuserar på utmaningar om platsbaserad främlingskap från människor och platsen ifråga. Interaktionsdesign används här för placemaking, där en designrymd för sociala platser med möjligheter för spontana och planerade aktiviteter att utföra ensam, med vänner eller med främlingar utforskas. Genom en research through design-metodik med förstapersons- och participatory-perspektiv skapades fyra designkoncept som användes för att tydliggöra potentialer för engagemang och omtanke för allomslutande respekt (vilket berör neoliberala kapitalist och maskulina maktrelationer). Jag bidrar med känsliggörande frågor som gör interaktionsdesignsaspekter mer tillgängliga för designers som ger sig i kast med denna publika designrymd.
Sites of Encounter: Engagement Potentials and Considerations for Encompassing Respect

Andreas Almqvist
Royal Institute of Technology (KTH)
Stockholm, Sweden
aalmqvis@kth.se

ABSTRACT
In this work, I address challenges of situated alienation from people and place. Using interaction design for placemaking, light is shed on a design space of social places with opportunities for planned and spontaneous activities to be done alone, with known people or with strangers. In research through design, four conceptual design instances were created, drawing from first-person and participatory perspectives, to unpack potentials for engagement and considerations for encompassing respect (meaning vigilant of neoliberal capitalist and masculine power relations). I contribute with sensitizing questions making interaction design aspects more accessible for designers entering this public design space.

Author Keywords
sites of encounter; placemaking; public; collocated; social interaction design; research through design

INTRODUCTION
"Beings do not preexist their relatings. " Donna Haraway [22]

"A world’s degree of liveability might well depend on the caring accomplished within it. In that sense, standing by the vital necessity of care means standing for sustainable and flourishing relations, not merely survivalist or instrumental ones. " Maria Puig de la Bellacasa [11]

In the light of the epigraphs above, one of humankind’s most urgent and fundamental challenge is laid bare. It concerns the nurturing of relations of care between human to human and human to non-humans on a continuously damaged earth. Rising from such neglect in closeby and distant relations are hardships of climate crisis, ecosystem degradation, inequality and “resource” depletion, all of which are tightly bundled up and codependent [52, 58, 20]. In addressing these issues, there are voices advocating the need of reimagining our societies as naturecultures where we, in essence, no longer separate ourselves from our contexts in human exceptionalism and individualism, but instead acknowledge and celebrate our interdependence, inseparability and intimacy [22, 21, 53]. As Puig de la Bellacasa puts it, we have to engage in efforts of imagining, creating and fostering other ways of becoming, fundamentally as other beings [11]. This is an increasingly prevalent grounding for interaction design research [37, 35, 56, 24, 25, 26, 36, 38, 14, 36, 32, 33, 24].

In this work’s research through design methodology [63], I design for sites of encounter located in public spaces [50] intended to draw diverse people together where they can interact, play, share experiences, practice care, and potentially develop kinship; without insisting on productivity (e.g. outdoor gyms) and monetary interests (e.g. pubs). This is something I and others see as lacking in many public places [23]. This approach is guided by placemaking guidelines that works for how a place can come to accommodate the diversity of its inhabitants better. I present my work as an annotated portfolio [8, 15] of four designs. In annotated portfolios, a collection of designs are brought together to bring out resembling qualities and to enable broader concerns to become concrete, while respecting the individual designs’ character. So I unpack potentials for engagement and considerations for encompassing respect. Encompassing respect is understood as a strive towards graceful inclusion of diverse inhabitants, aware and vigilant of neoliberal capitalist [64] and masculine power relations [10].

I situate this work in my multicultural neighbourhood of extreme in- and out-flow of residents, where I have lived six years. I have identified challenges of alienation from this place of living and from the people within it. Alienation appears to contribute to a lack of responsibility of a place, which seems take part in hindering collective concerns within it to take shape and become actionable. This is problematic because locally and collectively coordinated actions are an important way of addressing the challenges mentioned initially [53]. The sites of encounter intends contribute to relations of acquaintances to develop within the place, which can serve a development for a sense of community in the place [50, 55].

BACKGROUND AND RELATED WORK
We always find ourselves in places. What do these places mean and feel to us? How can we improve on these places? Through this kind of accommodational thinking [23], I understand the relations being formed in places we inhabit as strongly influenced by the intentions investing meanings in these places.

Placemaking through Right to the city
The philosopher Lefebvre argues that the capitalist city values space primarily for its exchange value and that it means to separate inhabitants “in an effort to produce passive consumers instead of active citizens” [50]. He means that this relationship with inhabitants contributes to an important extent
to inhabitants’ alienation from place and each other, which creates a need to reappropriate spaces for their own purposes, i.e., to participate in the right to the city. This can be done by seeing sites of struggle, narrating those and helping the ones struggling to flourish [50]. Project for Public Spaces [44] elaborate on what this can means: "When people of all ages, abilities, and socio-economic backgrounds can not only access and enjoy a place, but also play a key role in its identity, creation, and maintenance, that is when we see genuine placemaking in action" [45]. Two of their stated core attributes of placemaking that I embrace in this design work is about creating social places with opportunities for activities, and that the place is accommodating for all genders, as often neglected in public space design [10].

The site of struggle
Using Lefebvre’s notion of "site of struggle", I identified one to narrate and help flourish in the neighbourhood I have lived in for about six years (see figure 1). This is Stockholm’s largest campus residence, with more than 2000 students being housed [57], located by a big lake, forests and fields, and within biking distance to universities. Students usually arrive alone to this very multicultural area with residents from South and North America, Africa, Asia, Europe and Oceania. Typically, students here are between 19-30 years old and live here from six months to two years, with many Swedish students staying up to five years. Most students have their own bedroom and bathroom, and shares kitchen, dining area and cleaning duties with up to 13 other people.

I lived in such a corridor for three years, and three years in a shared apartment with private kitchen. With the large and frequent in- and out-flow of students, I experience it is often hard to develop sustained social connections. It is complicated to get people to care about shared spaces like the kitchen, dining room, and to reach a common consensus is sometimes so hard it is not reached before corridor mates leave. This greatly influences relationships in the corridor. Similar issues are experienced with outdoor areas like barbeque stations. This makes people not want to spend time in these areas, and this may contribute to a kind of snowball effect [60]. In my experience, collective corridor activities can help to foster respect for each other through a responsibility for the place.

Similar to other parts of Stockholm, engagement in small talk with strangers is not a big part of the everyday cultural practice. The darkness and cold weather during large parts of the year contributes to a scarce form of street culture, where it otherwise can provide "emotional satisfaction and increase the sense of community in neighborhoods" [48]. In the summer half of the year, weather makes more outdoor areas available for socializing, like local barbeque places and grass fields, but there are few other dedicated places for people to specifically go to to explore and enjoy the wider area. This is something that I see as lacking in many urban places including my neighbourhood: playful public places accommodating of adults without insistence of productivity and monetary interests.

Within the neighbourhood, there is a non-profit tenant association that strives to make the neighbourhood a better place for its inhabitants by mediating with the estate owners and organizing social events [39]. This organization is poorly known among the residents, hindering more activities that could be made possible through recruitment and collective participation. One of the reasons to this, which I myself experienced in my two year involvement as a part of the board, is the varying and often limited capacity of engagement of the board members (a common problem of NGOs [4, 5]). A stronger sense of togetherness in the neighbourhood, coming from social connections, could make engagement in the organization more active and potent.

Technologies for collocated social interaction
Technology for sites of encounter can broadly be understood as collocated social interaction design. A recent literature review of this field suggests collocated social interaction design as concerned with "somehow improving the quality or extent of social interaction" that is synchronous and direct between people within approximately 100 meters physical distance [48]. The relatively little attention this field has received leaves its outlined characteristics so far rather limited [48].

In identifying common approaches to collocated social interaction design, the review lists notions of asymmetric abilities, shared attention, open space for shared activity, and self-expression; all of which is utilized in the topical work. Asymmetric abilities means to orchestrate how people relate to one another in an interaction by imposing a constraints that are different for the participants. An instance of this is the multiplayer game Flashlight Jigsaw [9], where users have different abilities in orienting jigsaw pieces. Shared attention is a way to establish common ground between people to foster social engagements, as exemplified in a project on interactive floor [49]. To make use of open space for shared activity is something Memarovic et al explore in FunSquare [42], where a local fun fact quiz is open for "everybody to easily opt-in and participate" [48]. Self-expression encourages social interaction by providing personal prompts, which has been utilized for conversation starters through digital displays on mugs [31].

In uncovering this design space, spatiality has proven to play an important role in engagement. For instance, in a wall-based
facade interaction, Ficher and Hornecker [13] observed how the spatial arrangement contributed to the different roles and transition from them. They observed features like pillars and walls can offer places where people can comfortably observe the interaction without being forced to join in until they feel ready. In addition, Wouters et al. [61] understand trajectories and influences of engagement through their Honeypot Model where they have defined roles of how people can be engage in the place of the interaction design (passer-by, bystander, audience member, participant, actor and dropout). By providing an understanding of different ways people transition between roles, they strive for an understanding of how to "allow for different forms of engagement to emerge, and allow for their co-existence and sustainability over longer periods of time".

Knowledge gap
How can interaction design contribute to placemaking through sites of encounter intending to draw diverse people together where they can interact, play, share experiences, practice care and potentially develop kinship?

With the aim of uncovering further characteristics of sites of encounter for placemaking, I contribute with four conceptual design instances and sensitizing questions orienting designers regarding engagement potentials and considerations for encompassing respect in the places they contribute to.

METHODOLOGY
In a research through design approach [63], where instances, methodologies and concepts for design can be considered contributions, I explore the design space of sites of encounter intended to draw diverse people together in experiences of social interaction, play, sharing, and practices of care. In my process, I was primed towards notions considered meaningful for such social experiences, like spontaneity and playfulness [19, 16], curiosity and interpretative appropriation [17, 18], and serendipity and unpredictability [2].

Ideation
Initially, I engaged in a phenomenological dialogue with the larger neighbourhood area (see figure 1) by walking, biking and photographing. In the activities of moving around in these areas, I draw from a pragmatic understanding of experiences inclusive of a person’s felt physical and social environment [40]. More particularly, my practice is informed by somaesthetic interaction design methodologies, where the lived bodily experience of the designer is an essential resource to and driver of the design process [29, 30]. The value of the practice of photographing [6], complemented by the somaesthetic activities, helped to cultivate a deeper sensitivity for the meaning of places, e.g. about what they are used for, how they feel, and what distances to and within these places (could speculatively) mean. This contributed to some places appearing particularly potent (see figure 2), for instance: an open field inspired a wonder of how it would be to phone a stranger you see from a far; a tunnels reverberation and rhythmic sound of walking inspired a curiosity of possible musical accompaniment; and a central square with a large lit up tree, could that be used for something?

In the ideation process, I used existing social practices as pivots, as well as exploring more alien ideas in less occupied places (see figure 3). In creative leaps around these pivots, I started shaping ideas through common design techniques of collaging and drawing on photographs, writing narratives, detailing technical implementation and discussions with peers. All of these methods contributed to grounding the conceptual design ideas in physical places and assisted in imagining what different configurations of the interactions could do to the social experience of the place. Some ideas taking shape are visible in figure 3.

From this process, I focused on what I considered to be the strongest and most diverse design ideas that aligned with my intentions, which could together potentially reveal interest-
ing aspects of the design space through what sociality each contributes with to each respective surrounding place. (A description of each design is found in the coming section Design Instances). To help uncover such aspects, residents of the neighbourhood were invited to an in-situ bodystorming workshop.

Teasing out aspects through in-situ workshop
In a three hour bodystorming workshop, seven neighbourhood residents participated in reflecting in the sites where the designs are situated. The participants were university students that had lived between one to five years in the neighbourhood, and their cultural backgrounds ranged between India, USA, Moldavia, Spain, and Sweden with study backgrounds in computer science, chemistry, interaction design, biology and feminist studies. Each design was presented at their site as cardboard posters and read-out-loud explanatory scenarios, with other design-specific materials (like cardboard prototypes and/or soundscapes through speakers) as boundary objects and props for enactment (see figure 4). The use of this lofi material meant to orient the thinking towards what could be, rather than what is [47].

I directed the participants in scenarios while encouraging improvisation, and used the props to wizard-of-oz interactions. I documented observations on post-its to put up on the posters. At the end of each enactment, we reflected and speculated on experiential qualities of the interactions with the help of the post-its and prepared questions. These questions concerned how and what made the interaction design and its place more or less enjoyable through the significance of chance factors, the extent of anonymity, contrasts with differently crowded locations, day versus night interaction for different gendered people, privacy regarding sensors in the public, and more.

Enactment was often difficult to make genuine. This was not a strict requirement, which was pointed out to the participants. I emphasized the importance of enjoyment during the workshop to foster a curious and playful attitude towards the design instances to draw out tacit and insightful reflections. The workshop activities brought together residents that were strangers, and contributed to relations being formed between the neighbours.

Process of understanding aspects
After the workshop, I began to structure aspects of the design instances. In parallel, I continued to shape the designs as my understanding of challenges to their place based social enjoyment developed. I provide the methodology of this often perplexing iteration process of structuring insights from conceptual interaction designs. (1) Compile and familiarize yourself with notes from the workshop; (2) fully describe design instances focusing on possibilities for and challenges to social enjoyment (aided by the posters); (3) concatenate interaction attributes by similarity; (4) group the attributes after what they may impact. (Note that the same attribute can have several impacts). After this, I addressed the impacts with questions to open up an application space for the aspects (which is to be found in the section Design Potentials and Considerations).

DESIGN INSTANCES
What follows are detailed annotations of the particular design instances that unfolded throughout the design process: Screamtree, Tunnelbeat, Treebells and Phonehat. Each instance is explained with emphasis on their intended social implications.

Screamtree
Overview: Screamtree is an interactive artwork located in the central square of the neighbourhood, marked as purple in figure 1. The neighbourhood has a tradition of screaming for a couple of minutes starting at 22:00 on Tuesdays [41] in an activity translated into the “anxiety Scream”. The scream is seen as a fun activity, as a kind of release, and as a shared celebration of anxiety. The artwork feeds on the loudness of screams and its visual appearance is altered. In this way, Screamtree explores the social happening of the synchronized scream by adding an incentive to congregate.

Technical details: Microphones on roof tops are activated on Tuesday nights. LED stripes on the tree are pixel mapped and reacts in real-time to scream loudness in a preprogrammed way with somewhat unpredictable color combinations informed by the day’s environmental colors. The higher loudness, the further out to the tips of the branches and the more intensively the LEDs shine.
Explanatory scenario: Lucy comes home from university in the evening. When she comes in to the kitchen later to cook, she meets a corridor neighbour. The subject of the scream night comes up in their conversation, and they decide to go down to the square at ten just to see the tree shine up, as it kinds of feeds on the screams. Lucy is not sure she will scream though; screaming among other people would feel a bit strange. When they come down a couple of minutes before ten, there are not many people there. The clock strikes ten and they hear distant screams. Lucy’s neighbour starts screaming, and so do a couple of other people in the square. Lucy screams too. It is fun. She looks at another person who screams, and she screams back. They start to talk, half-jokingly, about why they had a need to shout out loud tonight. A couple of days later Lucy runs into her at the bus stop, heading to university. They chat.

Anonymity of participation: Typical participation in the traditional scream is manifested by people shouting from the window of their rooms or they gather in the common corridor kitchen to shout together semi-anonymous. It is an act that is performed individually and together, for oneself and before others. Some people are hesitant to scream at all; some are comfortable with close friends in their rooms; some are comfortable in the kitchen with acquaintances. The interaction of Screamtree offers a playful and exciting argument in the negotiation between more anonymous and more exposed participation with the traditional scream practice. The social value of such a site of encounter, where this atypical act can be atypically shared, is meant to be manifold: a heightening of feelings of weird and shared enjoyment through the thrill provided by the risk of making yourself vulnerable to embarrassment; the social "set up", i.e. the slight and temporary change of norm of social interaction that can lead to conversations in the moment or later through emerging relationships like those of familiar strangers [43]; and in the longer-term perspective, a social cohesion of the place through this face to face ritualistic collective activity.

Sharing attention in a place: The artwork intends be an aesthetically curious object around which people can share attention, offering common ground to socialize around [49]. By giving a congregation this direction, it takes some of the potentially awkwardness away from standing around and screaming, a reflection that came from the workshop. The centrality of the square location offer easy access for most neighbours to go there before typical bedtime. At the same time, the loudness of the scream is likely to increase more in the square than before. However, as it is lasting only for a couple of minutes, and the traditional scream is loud enough to be heard from pretty much any place in the residential area, this decision is assessed to not make the situation substantially worse for apartments facing the square.

Appropriation and graceful integration: Algorithms can detect individual voices in real-time, and when the loudness reaches a certain height, individual voices’ loudness and pitch fluctuation can be distinguished on the LEDs at the tips of the branches, encouraging crazier screams. When people scream with the same key or in harmony, there are more dramatic changes in the appearance. This might encourage exploration which intends to incentivize more spontaneous collaboration. The design strives to gracefully integrate with the already existing activity by providing an unobtrusive option of sharing the scream in person. The intention of screaming does not necessarily change - people can go about their scream in the same way as always, but locally in the central, participation is encouraged to take of different exploratory forms.

Unpredictability: The unpredictability may enrich this site of encounter: will someone step out of their comfort zone and scream more than usual, and will people react to that in some way? What will be people’s reasons to shout? What will the artwork look like?

Tunnelbeat

Overview: Tunnelbeat is a musically enhanced tunnel where a rhythmic instrumental soundscape is triggered by, sonically fed by and synced to pedestrians walking.

Technical details: Piezo microphones are placed beneath certain tiles on the ground in the tunnel, serving two functions: they retrieve walking pace information, and retrieve sound qualities propagating from impacting the tiles. Speakers are placed by the light compartments.
Explanatory scenario: Morgan walks through the short tunnel most days going to and coming back from the university. Sometimes when she walks through it, a kind of laid-back instrumental music plays and syncs to her walking. Often, she was hesitant to move to the sound, it felt weird. Now when she walks with a friend, she sometimes walk a bit silly to the music in the tunnel. The tunnel seems to pick up some of her sounds, and she think she has identified where that happens, so she plays with it by making different kinds of sounds at those places by stepping, dragging something or maybe dropping some rocks. When the sounds syncs with her walking, it sometimes sort of softens her up, making her aware of her tensed way of walking as she rushes in the mornings. This tunnel sound has spurred some awkward and fun moments with other people she was not familiar with at the time, where they added sounds to the soundscape together, amusingly stepping through.

Placement: Tunnelbeat is placed placed in one of main two closeby transitional pathways between the neighbourhood and the larger school campus (seen as pink in figure 1) where people also go to the subway and head into town. The tunnel is a place of mundane practices of typically just passing through without much interaction taking place between strangers.

Sound for enjoyment and sociality: This site of encounter can be playful regardless if one passes through alone, with friends, or with less-than friends from the neighbourhood. The syncing up with walking intends to engage by-passers both to draw attention to their bodily experience of walking, and to offer an opportunity to playfully coordinate to the music in any way that one finds enticing. It means to provoke favorable circumstances for people to spontaneously acknowledge or interact one another through interactive sound. As [3] puts it: "Using audio rather than visual content can provide opportunities for participants to continue to make eye contact as they interpret the content, which increases the likelihood that conversation will emerge between them". The potential social encounters are set in close proximity where participants are easily identifiable to each other. This may provide a sense of sudden excitement, much like in Screamtrees, but the participation in Tunnelbeat require less: if one feels like participating, one can walk in sync, nod, feed it some particular sound or make something else complementary to the sounds in the tunnel. In the very least, it could be something pleasant to occasionally hear as you walk through the tunnel.

Suggestive and changing soundscape: The reverberation is an interesting attribute utilized strategically to scaffold an ephemeral, special and immersive experience. The soundscape is not always triggered when someone passes through. The unpredictable may also contribute to how it can attract one through curiosity, making the experience serendipitous. The rhythmic instrumental soundscape could vary in laid-back genres that flourish in tunnel reverberation, as appreciated in the workshop, circling around styles like "song of the sleeping forest" by Susumu Yokota proceeding from 2:51 [62], "Let’s Go Faraway" by Monster Rally proceeding from 2:01 [51], or "While You Dooo" by Tees [59]. The music would be customized, but the with qualities of the examples, making it fitting to listen in the background, but the responsiveness and intricacy of the production still makes it interesting to focus on. The music offers improvisational space to be filled: percussion-wise by what the piezo microphones pickup, and vocally by the lack of a strong lead melody. The recorded and distorted percussion from the pedestrians stays only temporarily as a part of the soundscape. The soundscape aesthetics change depending on weather and time-of-the-day conditions of the interaction moment.

Vandalism: The piezo microphone hinders destructive behaviour to be easily recorded, like it would be with a normal air microphone. Furthermore, it does not trigger during nighttime as it could contribute to a scary experience, and also to prevent problematic congregation in the tunnel that could make passing through at the very slightest an uncomfortable experience.

Treebells

Overview: Treebells are placed a 10 minute walk away from the neighbourhood in the woods by a crossing of four paths. A treebell is a container of a notebook and a pen that can vertically move, hanging from a tree. In their open-ended design, they draw from a practice of sharing in book format that is commonly found at hike sites like summits in enclosed boxes. Examples of what people typically may share are artistic expressions, confessions, gratitude, advice, opinions, wishes; sometimes quite intimate things.

Technical details: As an available Treebell have been opened and closed, it retracts. Motors are fastened to the tree and controls the vertical movement of the Treebells. Cameras
in treetops monitoring the color palette of the environment, changing LEDs on the underside of the Treebells accordingly.

Explanatory scenario: Kim do not go out that much around the neighbourhood area, except for the corridor kitchen and the grocery store. Since they discovered the Treebells, they have now feel like they have a reason to take a walk, sometimes with friends, to explore them. The site is in an intersection of four paths, so they don’t have to walk the same path every time to pass by. It is a cozy place, a bit hidden in the wood, and they don’t know how many people know of this place. Wooden chimes sound as they come near, contributing to the serene feeling of this lightly magical place. Kim is curious about what bells are available this time. They open the available one and reads the book, before expressing something that has been troubling them lately. After closing the bell, it retracts up back into the tree. Maybe someone from the neighbourhood will read it, and even comment. Kim thinks it is exciting how you can share something with neighbours, without knowing exactly who these neighbours are.

Placement, sound and light: The placement is far away from the possible bustle of the central neighbourhood, seen figure 1. This is a place where people go on walks and jog. The foresty coastal soundscape complemented by the wooden chimes intend to make the experience of the place serene. Particularly when it is darker outside, the Treebells are enchantingly glowing, providing light for reading and contributions when they are lowered. Curiosity is encouraged in Treebells by the soundscape of wooden chimes it provides, a sound that complement its surroundings but still unusually heard in forests. The sound can encourage exploration of what that sound comes from and what that place is like. "In contrast to a visual display, people cannot turn away from a sound and are often drawn to its origin" [3].

Asynchronous social interaction: In this type of interaction, the sharing is without real-time connection to other people. This design makes it possible to share a long history of expressions from people living in the area through pen and notebook. This intends to enable a high degree of anonymity and together with the aesthetics of the place encourage contemplative and calm explorative experiences.

Movement: The act of picking something down from the tree, and then giving it back for keeping, the tree symbolizes a kind of secret keeper. This movement-based interaction between person and the tree, within the context they are situated, may give rise to ritualistic associations that could contribute to a deeper value of the experience.

Unpredictability: The erraticness of what Treebells are available intends to contribute to a richness and curiosity of the interaction. Maximum two Treebells and minimum zero are available at a time. If you expressed something in a book and want to know if someone answered, it might take a while before you are able to access that book again, it will have to be by chance. Multiple visits are necessary to explore the all of them, and in between visits new expressions might have appeared. This intends to create a more engaging and living atmosphere around the books compared to a more static environment where the site can be exhausted at one time.

Phonehat

Overview: Phonehat consists of two connected phone booth-y constructions. Calls can be made and messages can left from the caller station, which is placed on the outlook. Calls are received and messages are listened to at the receiver station on the grass field. The conversations are scaffolded with a ludicrous quiz that feeds a horoscope giving advice. These are only accessible from the receiver station. The phone stations are placed within visual sight of each other about 300 meter apart, about a ten minutes walk from the residency area.

Technical details: The phones are connected in a local network. Each station has a phone and a numpad, and the receiver station has an additional small and simple screen. The receiver station announces a call being made with changing color of the hat.

Explanatory scenario: Florian is feeling a bit isolated after studying alone the whole day and goes for a walk through the woods, eventually finding himself by the outlook over the field. At the same time, Eliza is restless and take a bike ride. She passes by the big grass field and sees the Phonehat glowing. She looks up across the field seeing someone standing by the other Phonehat, and she walks up to the phone and decides to pick it up. An unknown distorted voice greets her. Florian: "Hi, would you like to do the quiz with me?" Eliza: "Hey! Sure, why not". As Eliza picked up the call, multiple-answer
questions pop up on the lofi screen, one question at a time. The questions are a blend of nonsensical and personal, where nonsensical could be: What is your dream way of greeting a dog? I greet wildly; I crawl on the ground; I pet it on the head, looking down on it; or, I carefully escape the situation. A personal question could be: What is a trait of yours that you sometimes struggle with? Being easily annoyed; Not sharing what you feel; Bossing people around; Being bad at keeping long-distance friendships up. Eliza asks Florian these, and picks one of the answers read to him. After five questions, the machine makes it known that it knows enough to give advice through a calculating sound. Eliza reads Florian the astronomic advice offered from the machine: "Looking around corners without taking the step will not let you know what's really there. If you find courage to step out of your comfort-zone the next few days, the wind will be in your back". Amused reflecting on it together, they try to fit it to Florian’s situation. After a while, they hang up and go separate ways; Florian feeling a bit tighter and Eliza content.

Purpose of placement: The grass field is not frequently visited by the majority of residents. The grass field is more busy during weekend days in the summer half year where people go out for walks, not only the close residents but other people too. In other times, the place might be quite sparse on people. The designs intend to make the place more attractive to take a walk to by offering possibilities of spontaneous and social activities. The caller station is placed on one of the paths of a large network of paths that wriggle through the forest. The caller station overlooks the field and the receiver station; it is a good place to see and to be seen. The receiver station is located in the open field, close to other paths and easily accessible by sight and physically. Depending on what person(s) one see by the other end, one can choose to engage with the interaction without necessarily having to engage with them. The way that they are placed within visual sight means that one can identify some aspects of the person(s) that are being talking to. The extent of which you can semi-identify the other speaker by sight and sound is meant to condition the experience of the conversation in certain ways: encouraging a similar kind of honesty expected in face to face interactions, but with a bit less vulnerability to engaging in conversations of possibly personal matters. The use of individual phones are meant to make the sharing of an interaction more intimate as people bow together to hear.

Option for calls and messages: The option of making a call or leaving a message serves two purposes. First, it accommodates both more inwards and outwards way of socializing. Second, it is an incentive to approach the interaction even though no one is calling or present to receive a call. A call is performed by lifting the phone and pressing a call button on the numpad, visible in figure 8. A message is left from the caller station by entering an arbitrary number and then audibly leaving a message. This message is encoded to be listened to by entering another number at the listener station. The message encoded with the closest number to what the person(s) at the listener station inputs will be heard. This way a message is left and listened to intends to provide some mystery to the interaction through the complexity and chance as to what message the listener will come to hear. A message degrades through distortion with each listen of it, where they are still fully intelligible but with aesthetics closer to old school radio transmissions, making them last only for a few listens. This intends to play on the engaging cultural connotations of mysterious, secret and strange phone calls that the design may evoke.

Quiz and horoscope for conversation: The call structure of quiz and horoscope intends to orchestrate the conversation in a relaxed way that can incentivize playful and flexibly meaningful and interplay. As Gaver reflects on the value of horoscopes, their appeal comes from their useful ambiguity and how they encourage contemplation of issues and possibilities in ways that may go overlooked [17].

Graceful integration: The slowly changing colors in the Phonehat when being called is meant to be a graceful integration in the environment that does not introduce undesired environmental noise like ringing sound.

DESIGN POTENTIALS AND CONSIDERATIONS

In this work, I understand placemaking as a valuable foundation for local, collective and coordinated action, an especially interesting perspective for a neighbourhood of multicultural and frequent in- and out-flow of residents. Such action can and is playing a great part in addressing big contemporary challenges of social and environmental sustainability [2]. I explore the design space of how interaction design can contribute to placemaking through sites of encounter intending to draw diverse people together where they can interact, play, share experiences, practice care and potentially develop kinship. Through four design instances, I draw sensitizing questions and notions of potentials for engagement and considerations for encompassing respect meaning to help a designer orient their design process of placemaking.

What is the place and social practice already? What do spatial distances to people and other places mean to the activities and experiences in this place? This question builds further on user-centered [1] and participatory design [54], where the designer seek to understand the greater context beyond a particular interaction that is being designed in. As my design process was carried out in already built and planned places (but still ongoingly appropriated by its inhabitants), engagement with such questions was a requirement for a worthwhile work. I approached my places autobiographically and through first-person reflections in a tradition of somaesthetic interaction design, in moving about with attentiveness to how it feels and what the place (could speculatively) mean. These considerations appears appropriate to engage with initially in a design process for sites of encounter.

How could more inward- or outward-oriented dispositions to social interaction be accommodated in the site of encounter? When designing, one may consider a range between more inward- or outward-oriented preferences of socializing to serve a diversity of people and inclinations in a place. I have identified two aspects that appear useful to consider for this purpose: the temporality of social interaction and the extent of anonymity. The temporality of the social interaction concerns the range between synchronous (real-
time) and more asynchronous (non-real-time). The extent of anonymity concerns how identifiable a person’s features are within an interaction. A given combination of temporality and anonymity can be understood as a specific of entry point encouraging particular trajectories of expression and sharing. I will substantiate this with the design instances.

Treebells manifest asynchronous and anonymous interaction in how there could be long time between an expression being shared and that the identity of the person is likely to not be easily identified. Not only could this accommodate a disposition of more indirect social interaction, but it could also foster other ways of expression and other meanings of expression than a real-time encounter would culturally afford. This could possibly lead to expressions of more vulnerable aspects, as seen in the sibling artifact the secret book in the woods.

Tunnelbeat, in contrast, materializes the possibility to synchronous and visually identifiable interaction, which is a bit more risky of social embarrassment and therefore possibly exciting. Such interactions could offer opportunities for more outward-oriented dispositions to playfully interact, while also a place where more inward-oriented preferences could be lightweightly challenged.

Phonehat makes possible yet another configuration of temporality and anonymity in social interaction. The voice communication gives some personal characteristics away, as do the long distance appearance. The accommodation of dispositions fitting with this comes with opportunities to develop a kind of relation where users get to know each other a bit more than total anonymous interactions would, but at a distance that could contribute to slightly more personal exposure that comes with anonymity to come forth.

Screamtree is synchronous but, contrasting it to the traditional practice, encouraging less anonymity. At a glance, it may seem that more outward-oriented dispositions would be more accommodated. However, as with all the designs, a longer-term deployment could make a culture of social practices around these places into exceptions of normative behaviour - they could all possibly serve more dispositions than these initial speculations.

Striving for engagement and personal meaning-making, how can an interaction design make use of unpredictability and space for appropriation? Through the design instances, interaction qualities of unpredictability and space for appropriation appear particularly attractive in designing sites of encounters for mentioned purposes. Unpredictability appears to be inherent in social encounters, as the range of possibilities of how one might act seem unobservable. In some situations, this unpredictability can be a quality of enjoyment. Space for exploration and appropriation in interaction designs have previously been argued to enrich engagements [17, 19, 18, 27, 28]. I contribute with reflections in the topical context.

To clarify how these aspects may be designed, I exemplify how the designs encourage appropriation in what content is shared in what way. Phonehat enables messages and calls to be used for various reasons in ways that the user’s seem fit, same with messages with Treebells. The screams with Screamtree may take the form people find amusing or otherwise fitting. In Tunnelbeat, how to input sound and how it can be accompanied is also very much up to the user’s inclination. This is in line with placemaking guidelines, where there a choices of things to do and possibilities to do it alone or in group, with strangers and already known people [46].

Furthermore, the unpredictability within and encouraged by the designs may enrich the experiences with them. The designs unpredictability in what content is there and when it is available. The Treebells are not all available all the time with their vertical movement, and the content is whatever one deemed fit. Tunnelbeat sporadically activates, and the sound-scape differs depending on environmental conditions and type of sonic impact on the ground tiles. Phonehat may give some insightful advice to be reflected upon with another person, or other kinds of messages. With Screamtree, maybe a user will stumble upon a person they know from the neighbourhood.

In addition, residents could potentially be involved with the design instances beyond a particular engagement. Could the residents participate in deciding how Screamtree will look like in terms of color palette or response patterns? When the books of Treebells are full and need to be substituted, could they be shared in a common place in the neighbourhood?

How can a site of encounter be shaped to manifest considerations of encompassing respect?

Manifesting inclusion and discouraging destructive behaviour is something lacking in the public space, as brought up by [10]. She brings to light considerable shortcomings in urban planning which marginalizes large parts of its inhabitants, largely accommodating males and glossing over female experiences. Public spaces open for appropriation will also always suffer a risk of destructive behaviour. When designing for public space, these concerns are urgent matters to make places better accommodating for a diversity of inhabitants. In the design instances, such concerns are striving for to be addressed. Aspects of the interaction designs that can help one address such concerns appear to be unpredictability and extent of anonymity.

For example, tunnels can be experienced as unsafe places, especially in night time when it is dark and when there are fewer people around. The enclosed architecture of tunnels could make it hard to be noticed and escape if danger is present. Tunnelbeat’s attractive qualities may have a congregational effect, which might be particularly problematic in the night when people may come back home late alone, forcing someone to go through a pack of people which might not be desirable, as reflected upon in the workshop. The design of Tunnelbeat manifest three aspects intended to make this issue less prevalent through the placement, the unpredictability, and the requirement to be on the move (not to mention the fact that Tunnelbeat is not on during the night). Firstly, as the chosen tunnel lies in parallel to a path which is a common way to pass the low-traffic road, a part of this issue is thereby mitigated. However, at the time of writing, this path is blocked off due to construction, which forces people to go through the tunnel, unless they are willing to take a larger detour. These types of volatility of place can be useful to keep in mind for public
designs. Secondly, part of the decision to include the unpredictability in availability intends to diminish the willingness to congregate in this place. And thirdly, as the interaction requires a walking pace to be synced to, it requires people to be on the move in the tunnel, which might also alleviate some attraction to stay put, unless one circles the place.

Moving on with anonymity, total anonymity seem to enable different kinds of behaviour different from typical face to face implications. In Treebells, one might make destructive expressions enabled by the anonymity, and at the same time enable one to expose intimate vulnerabilities, as observed in the inspirational secret-book. This is an inherent challenge with public design. The extent of anonymity in Phonehat, where one’s voice can be identified and the appearance is identifiable to some extent, intends to mitigate some of the potential to destructive behaviour. In how it is closer to a face to face interaction than an online anonymous forum intends to make it more likely discourage spontaneous slur. Dix insists that "with appropriation comes a sense of ownership" [12], which could be an additional way the designs mitigate this. Regarding risks of vandalism of the artifacts, biodegradable materials could make the artifacts more a graceful part of the environment in which it is situated.

Optionality is a quality designers may consider as a way to shape a sites of encounter to accommodate needs to be left alone. As [55] argues, sites of encounter should be approached as opportunities, thereby respecting people’s need for anonymity. This is exemplified in the location where Tunnelbeat is placed gives opportunity to bypass it. Instead of passing under the tunnel, a common practice is to cross the very low-traffic road. Likewise, one does not have to engage with the Treebells, nor answer the off-path placed Phonehat which subtly rings when messages can be left, nor to participate in scream in the square of the Screamtree.

Recuperation, as used in sociological terms by [34], is a risk designers run to participate in doing when designing to enhance already occurring bottom-up social practice, like with Screamtree. In Screamtree, a risk of recuperation can be understood as a risk of institutionalizing, making official or claiming this bottom-up and local cultural tradition of screaming, which manifest (albeit somewhat undirected) mischievous and rebellious elements. Through this, Screamtree could risk a subversion and normalization of this practice, even though I as a designer and fellow long-time resident in the neighbourhood have good intentions without interest of instrumental exploitation in implementing something like this. What are then ways to handle such risks of recuperation? Two ways to handle this, as I understand it, might be through interventionist and/or participatory means. In interventionist ways, this would be deployed without involvement of estate owners as a kind of activism, thus striving towards associative detachment from neoliberal capitalist interests. In participatory means, which is a route I have explored in my design process, local residents are involved to not just inform the design into the most appropriate it could be, but also to participate in the production of place not only in ways for someone, but together with those who dwell there. This could be a way to authenticity.

Privacy is a central concern with sensors placed in the public space, as contemplated by Zuboff in Surveillance Capitalism [64]. Even though sensors are placed in the public space with explicit intentions of closed systems without sharing of data to externals, there might be, rightfully so, lingering unease of being tracked and exploited. These concerns are present in Screamtree, Tunnelbeat and Phonehat. One way this have been approached is through shy sensing which have been utilized in the Home Health Horoscope [17]. In that context, shy sensing is about monitoring "meaningful [indirect] indicators of the home’s well-being without invading people’s privacy", to then feed it to a horoscope generator. This could be, instead of video-tracking people in the home, track the pattern of open doors in the home or the weight of the coffeemaker [17].

In Tunnelbeat, this concern was tackled by the use of piezo microphones rather than air microphones to engage with the interaction. The biggest concern of the design instances might be with Screamtree, where microphones are utilized to sense screaming. I was considering weight sensing in the square and weight sensing on windowsills for people leaning out the window. But as it is an interaction with real-time response meant to mirror screaming, which is hard to interpret through such sensing, those approaches were not seen as attractive enough. Another way to approach this, as mentioned, is deployment through participatory means with local residents, maybe led by the non-profit tenant organisation.

CONCLUSION
For engagements with placemaking through interaction design, this conceptual work contributes with insights on sites of encounter, which are social places with opportunities for activities to be done alone, with people you know or strangers. Four situated designs are brought together to extract sensitizing questions and reflections on this design space. They concern (1) how one can engage with what a place through phenomenological means to identify design leverages; (2) how a variety of more inward and outward dispositions to social interaction can be accommodated by considering extent of anonymity and temporality in an interaction design; (3) how unpredictability and appropriation can be encouraged to make the site of encounter attractive; and (4) how a site of encounter can manifest encompassing respect, vigilant of neoliberal capitalist and masculine power relations. Future work could involve the building and deployment of these designs.

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REFERENCES


https://tees.bandcamp.com/track/while-you-doooo


https://susumuyokota.bandcamp.com/track/song-of-the-sleeping-forest

