Social Icebreakers Everywhere: A Day In The Life

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Abstract.

     Developing systems to spark face-to-face interactions between strangers is a recurring challenge that may benefit from drawing together inspiration from many different creative fields. This paper presents a design fiction that makes accessible over 50 diverse examples of objects and environments that might help foster new social encounters. Unlike most design fiction, this narrative is not about the future, but about an alternative present. The designs discussed are all real objects - either functional prototypes or interactive exhibits. The fiction is that these already existing artefacts are a commonplace, and not particularly remarkable part of the everyday. Thus the strange is made familiar by unusual designs being presented as a universal normality. Each individual element is "real" in that it has not been invented for the purpose of this review, however the overarching story uses a fictional frame to place all this work in the same world. We hope immersion in this narrative can enrich perspectives and debates around designing to support social interaction.

1 Introduction

1.1 CSCW and supporting new encounters

CSCW has become increasingly interested in the development and application of systems that attempt to strengthen the social side of the workplace through

supporting the initiating of new relationships and other informal exchanges. Such projects include circulating photos through shared proactive displays (McCarthy et al., 2008) and encouraging the snatching of unique image files from colleagues (Mentis et al., 2012), tangible interfaces to enliven access to company information in coffee corners (Fachry et al., 2007), and online conversational agents to provoke offline gossip (Foucault et al., 2007).

A more challenging but potentially highly valuable arena for CSCW related research is the development of systems for public and semi-public places with the aim of supporting or even initiating collaboration and sharing between individuals who may not have previously established relationship with each other. A range of devices and platforms has been explored in this respect for supporting or establishing collaboration or shared experiences between people engaged in leisure activities such as backpacking (Axup et al., 2006), patronizing coffeehouses (Yoon et al., 2004) and even whilst motorcycling (Esbjörnsson et al., 2003). Others have addressed how collaborative behavior can be induced through the ad hoc sharing of digital files such as photos (Kohno and Rekimoto, 2005), music (Håkansson et al., 2007), playlists (Baumann et al., 2007) and song selections (Seeburger et al., 2012).

Most of these endeavors, like the workplace sociality and plethora of electronic badge (.g. Paradiso et al. (2010) and other conference social support systems e.g. Oh and Lee (2012) aim to strengthen existing ties in terms of shared interests, mutual employers, or connection to a conference's subject matter respectively. A far greater challenge to developers is initiating positive encounters between individuals who have no such ties, but just happen to be occupying or passing through the same place.

In this paper we aim to contribute to addressing this challenge by enriching understandings of designing to support new encounters. We present a vision of a world in which all artefacts and environments have been designed to support social interaction and collaboration. The concepts that populate our narrative are drawn from an ongoing design space review of creative work concerned with how objects and environments can help foster social interactions.

1.2   Going forward by looking around

Various authors have made useful contributions in reviewing interventions to support new social encounters – most notably a recent systematic review of collocated interaction research by Olsson et al. (2019), Hespanhohl and Dalsgaard's analysis of interactive media installations (Hespanhol and Dalsgaard, 2015) and recent work from concerning social wearables (**?**). However, most such reviews overwhelming have a focus on a particular media, and in particular (Dagan excepted) an emphasis on visual displays.

Artists, designers, architects and inventors have proposed all kinds of means to help social icebreaking. However, despite many years of concept generation and experimentation, both within and outwith academic research, there has not been

huge progress in the overall endeavour of designing to support collocated new encounters. As Katherine Isbister recently noted, even though many leading experts in human computer interaction have turned their attention to supporting collocated encounters: "somehow, this work is not making its way in a sustained fashion into the everyday fabric of technologically enhanced life, nor into the sustained public perception of what technology can do for us as human beings" (2019).

One factor in this lack of progress could be the apparent absence of any systematically presented collection of relevant design examples drawn from across a full range of different disciplines and media. To address this, we have been conducting an extensive design space review examining examples of both high and low-tech efforts for sparking social interactions. This is an attempt to systematise a still growing corpus of over 1000 design examples (as described in Mitchell and Olsson 2017, but see also Mitchell, 2019, and Mitchell and Olsson 2019).

We contend that enabling a broad and deep cross fertilisation from different fields and media is beneficial for designing to support social encounters. However this is troublesome to disseminate. It is not easy to entice readers to cross disciplinary fields to inspect designs from radically different traditions. And page limits, and other scholarly conventions make it difficult to convey a breadth of possible inspiration in an easily accessible format. Thus we have begun to explore less traditional routes to synthesising and making accessible insights and inspiration from our corpus, and turned design fiction.

1.3   Design fiction and speculating upon alternative presents

Telling stories and tales purposefully, through tools like design fiction, has become a valuable way to explore and understand complex ideas, and situate work in human experiences and contexts. Within HCI, design fiction is an approach that has consistently challenged the narrative conventions of academic articles. The uses of fiction within the academic literature are as varied as the definitions attributed to it. But most influential has been Bruce Sterling employing Kirby's notion of "diegetic prototype" (Kirby 2010) as technological artefacts that function within the context of a story. Sterling defined design fiction as "the deliberate use of diegetic prototypes to suspend disbelief about change" (Bosch 2012).

Emphasizing the central role of narrative in design fictions, Theresa Tanenbaum et al. stressed that "Design fiction uses narrative elements to envision and explain possible futures for design" (Tanenbaum et al., 2012). Precisely in terms of challenging narratives, design fiction has been used to critically explore the functioning of abstracts (Blythe, 2014b), full papers (Lindley and Coulton, 2016), and even conferences (Kirman et al., 2018). However our concerns here are not methodological but provoking readers' engagement with the designs we present. Thus of particular relevance for this paper, is how design fiction may be used to critique technological scenarios such as Weiser's (Blythe 2014a, Linehan and Kirman 2019). Together with Blythe we acknowledge how narrative

descriptions of technology in the form of scenarios such as Weiser's often hide social conflict and struggle (Blythe, 2014a). In this, we ally ourselves with James Auger who identifies how design proposals based on existing technology can conjure up "alternative presents" to ask questions about the current state of the world (2013). Such "speculative" designers create artefacts to provoke the re-thinking of existing technologies, ideologies and practices. Our aims are similar, but instead of design proposals we are interested to see what happens when many different contemporary artefacts can be combined through a simple narrative into a coherent, but open-ended vision.

1.4   Entering a design space through entering a design fiction

As an experiment in bringing our design space review to life, and provoking reflection, dialogue and exchange between different kinds of experts and other stakeholders, we present a "day in the life" narrative populated by examples from our corpus of social icebreaking designs. This narrative was originally made for a oral presentation/performance as a highly visual keynote lecture.

The examples featured in this paper comprise around five percent of the total corpus. The criteria that motivated selecting these examples were threefold. Firstly, it was important to populate as many different contexts from a typical day as possible. Some contexts in the narrative feature many more design examples than others. This is broadly representative of our corpus of design examples – for instance, we have seen many more relevant installations and artefacts explicitly designed for places like bars and cafes where socializing with strangers is generally considered to be more likely. Many designs have been created for gallery and museum exhibition. Seeing museums as social places, we inserted these artworks into the more typically convivial contexts in the story.

Secondly, designs were selected for inclusion in order to represent the breadth of the design space review in terms of media, scale, sources, and design approaches. By design approaches, we mean the strategies or logic whereby the design might support social ice-breaking. For instance, the narrative includes examples of a wide range of different strategies to boost reduce barriers to social interaction such as various means of filtering interpersonal space (Mitchell and Olsson, 2017) a range of ways to lubricate social proximity (Mitchell, 2019), exploiting temporal aspects of collocated actions, and providing reasons to initiate an interaction (Mitchell and Olsson, 2019).

And thirdly, drawing upon a background in presenting science communication events and cultural production, the first author attempted to craft an emotionally engaging sequence of design examples. The intention was to take the original live audience for the narrative on a journey that alternated between moments of repetition and variation, and recognition and shock. Instrumental to crafting a sequence of such qualities was reflecting upon commonalities in how previous audiences had responded when exposed to different portions of the corpus. His earlier facilitation of over a dozen design workshops, conducting several focus

groups and many expert interviews, plus presenting at a number of design talks and teaching events, gave a good basis for anticipating the likely reactions to different examples. This supported selecting examples to provoke a full range of audience responses, spread across a hypothetical daily routine.

Translating the fiction from oral to written form may reduce the vivacity of the narrative, but we contend that this loss is counterbalanced by gains in allowing a reader to take their time in apprehending each example. A document more easily allows revisiting and thus affords the reader to dip in and out and more readily make comparisons between different designs from different episodes of the day. And of course, this document also serves as a reference list for the featured designs. So we recommend that you will gain most from the scenario if you have someone read it out loud to you. Or if you read it out loud yourself directing your words towards one or more humans. in any sectors of the CSCW matrix (Johannsen, 1998) of your choosing. I.e. your listeners maybe collocated or remote, and they might hear you synchronously or asynchronously. Taking it turns with a reading partner to verbalise a paragraph each can also work well. But whatever the format, one thing is beyond doubt: after you share a reading out loud, you will have lots to talk about together. The topic is social, so it would be fitting that you encounter the text without being entirely solitary.

In our narrative we playfully appropriate Mark Weiser's "Sal" scenario (Weiser, 1991) to present a vision of a world in which nearly all objects in a domestic, workplace, urban and leisure environments appear to have been designed in order to address an interpersonal priority that differs vastly from most existing typical artefacts and environments. The designs discussed are all real objects - either functional prototypes or interactive exhibits. The fiction is that these already existing artefacts are a commonplace, and not particularly remarkable part of the everyday. Thus the "strange is made familiar" by the unusual qualities of these designs being presented as universal normality. Unlike most design fiction, this narrative is not about the future, but about an alternative present.

In line with criticisms of Weiser's Sal scenario, our main character is not given an identity. Instead, the "flatness" of design is "broken" through the narrative being conveyed in the second-person form so that "you" the reader are the protagonist. The story puts the reader into the role of an able-bodied, urban dwelling character with an office job, but leaves other characteristics such as gender, nationality etc. entirely open. The empowered individuality depicted in Weiser's vision is deliberately challenged. Instead of the "disappearing computer" in his vision, we have a faceless, nameless character whose individuality disappears into their relationship with other individuals. Are you sitting comfortably? The narrative is about to begin. You can also begin to read whilst laying down, just like the protagonist.

2   A DAY IN THE LIFE

The day begins like every other day with you lying down with your eyes closed. You are awoken by your alarm clock. You jump up quickly, because you know that your clock has taken control of your mobile telephone. Instead of a snooze button, if you don't get up within 3 minutes your alarm clock tells your telephone to call a random number in your telephone's contact list (Wang, 2009).

Although it is a bit risky, you much prefer this prospect of real life interaction compared to how your previous clock functioned. Your previous device woke you with an audio message from a random social media contact, but this message was pre-recorded, so was lacking any sense of live connection (Kinzer and Gerhardt, nd).

NOW YOU ARE AWAKE! Great! Because today like every other day, is not about telephone conversations or other remote communication. No! It is about same place, some time, social experiences. So you stumble to your bathroom... you are so happy that your social toilets are gender neutral and classic in design. They are just an identical pair of standard sit down western-style flush toilets half an arms length apart - with no barrier or screen separating them.

These are a wonderful improvement on your much less inclusive previous twin toilets (Schweder, 2001). Although these consisted of one female and one male urinal, they were mounted on either side of a wall, so the main social aspect was seeing the bodily fluids mixing as they dribbled down a shared drain (Schweder, 2009).

Making best use of your large electric toothbrush also requires a co-pilot. The handle is so heavy and controls for the brush are so far away that a companion is needed to operate the device for you (Schlegel, 2009).

And after going to the toilet, that is the best time to weigh yourself isn't it? So you step onto the bathroom scale and ask for assistance to read the numbers. The load measured by your weighing machine is displayed on a panel inset into a sidewall of the device (Wang, 2009). This (almost) face-to-face design is a great upgrade on the earlier version which sent your weight to someone else via SMS (Wang, 2009).

As normal, you enjoy a quick simple breakfast, you and your companion feeding each other with one metre long spoons (in the bath) (Balina, nd).

2.1   Getting Dressed

Then it is time to deal with what you have been worrying about ever since your alarm clock sounded. WHAT ARE YOU GOING TO WEAR TODAY? You take a look in your cupboard...

It is not easy is it? Your eye catches your silversmith designed armature that provides elbow supports angled so as to encourage the wearer's arms to continuously adopt an open and approachable posture. But you grew up wearing

things like this, so for you to appear friendly, you need little help from this kind of aluminum prosthetic-like apparatus (Youngblood, 2013).

Nevertheless, signaling that you are listening closely to someone also has its advantages, so you pause to consider whether to put on your headset of silicone cast hands (Borland, 2011). Held in place by a band over the top of the head, the life size silicon hands are cupped around the ears so that the wearer can hear better in the direction that they are facing.

But in regards to fashion today your mood is classic and minimal. So you opt for wearing powerful magnets underneath your everyday clothing. When you get quite close to another person wearing the same thing, these super strong magnets will pull you towards them (Moriwaki, 2011). But you need to be careful because depending on the poles, magnets also repel.

Since you are not the tallest person in the world, you wear your usual footwear - your smartphone controlled, adjustable level platform shoes. This mechatronic footwear means you can be eye-to-eye with anyone taller than you (Marom, 2011). And of course, since like many people, you are concerned about how attractive you look, you will need a sensor to monitor how upright your posture is, and respond with haptic feedback and annoying sounds when you slouch (Ryan, 2009b) .

2.2   Into the world

You are the kind of person who appreciates the healing power of human-to-human touch, but sometimes you feel a bit too shy to ask for it. So as you leave your apartment you are really relieved to see that the anonymous hugging wall in your street is fully operational. A pair of shoulder-length gloves is incorporated into vertical fabric surface. This means a person on one side of the wall can wear the gloves and thus give mutually unsighted hugs through the textile membrane (figure 1) (Dixon, 2008).

At the bus stop, you have these lovely repositional seats. The seats rest on a bed of marbles so after you start talking to other passengers, you can easily glide a bit closer to them without standing up and changing seats (Niedderer, 2007)(Farkache, nd).

Getting on the bus, of course you rush for the new seats that are clearly marked as reserved for strangers who wish to become acquainted. Even though you are not the kind of a person who needs help with deciding what to do talk about, you appreciate that these seats come with a reliable supply of post-it notes suggesting conversation starters (Biscoitos Zezé, 2014).

After getting off the bus, you take a shortcut down an alleyway towards your workplace. You find it really easy to meet and greet new people here because of the stretched fabric that funnels pedestrians together (Coles et al., 2009).

2.3   At Work

As you enter your office you take a moment to look at the floor projection of recent footsteps. These projected white footprints provide a useful way to estimate who
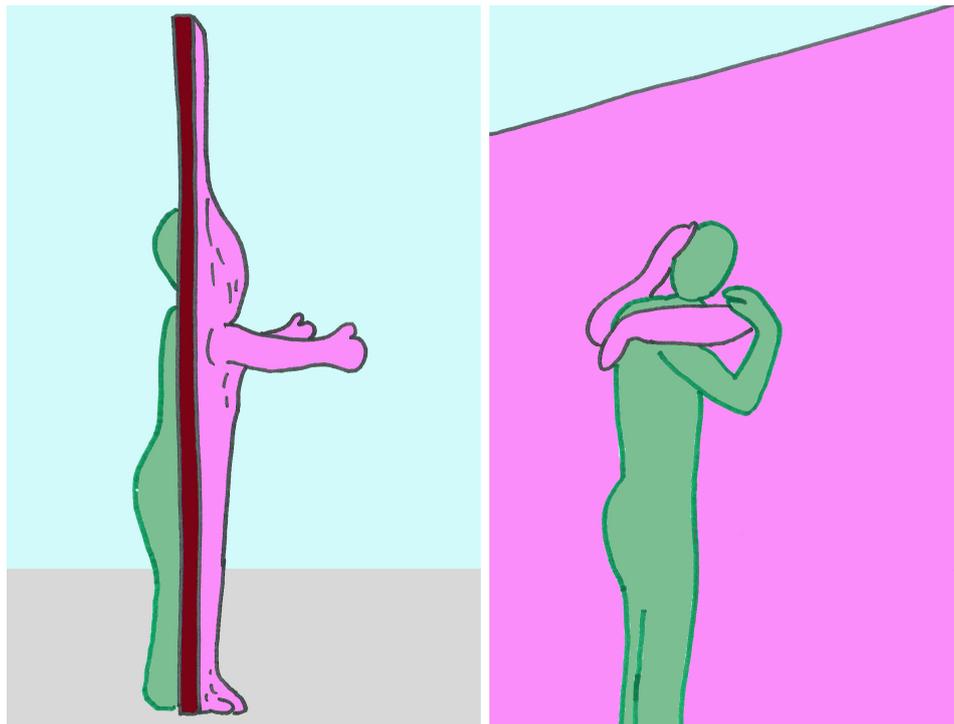
Figure 1. The Anonymous Hugging Wall by Keetra Dean Dixon(Dixon, 2008).

might be in the building and which office is occupied (Monastero and McGookin, 2018).

Your company has recently been taken over by a rival multinational, so there is a bit of tension in your workplace. These days a powerful way to help starting to heal conflicts is still performing the ritual of handshaking. However not everyone is ready to actually squeeze each other's flesh. In such instances, a glass vitrine containing a pair of thick stiffened gloves plays a useful role. At opposite ends of the glass case, is an opening that allows insertion of a hand into one glove. The fingers and fists of both gloves are interlocked in a handshake position so that the gesture of handshaking can be performed without direct physical contact (Wilcox, 2010).

During meetings, you and your colleagues choose carefully where to sit, in order to achieve the right balance between assertiveness and humbleness. The main options are between chairs largely similar in appearance. However one design has a seat that is rather too narrow, and through tightly squashing its user's legs together, makes its users more likely to adopt a meek or subservient looking posture. By contrast the other chair has a very generously wide front that fosters more relaxed, or confident, dominant looking poses. This chair has a slightly broader backrest, but the arms of the chair are angled, opening away from the backrest so that the seat cushion is an isosceles trapezoid shape (Toretti, nd).
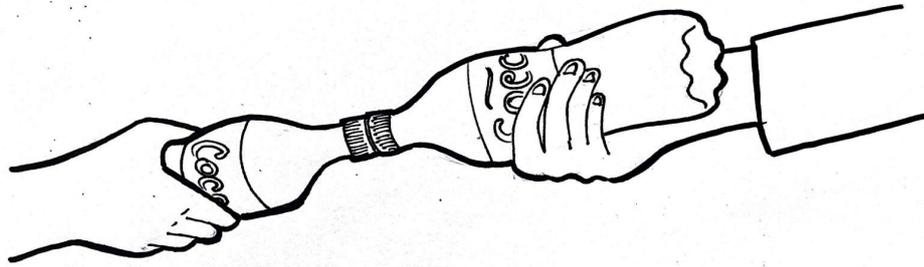
Figure 2. Coca-Cola & Leo Burnett (Monllos, 2014).

Your office vending machine is the same as vending machines everywhere. It sells bottles of drink that can only be opened by using another the bottle of another person to unscrew the lid (figure 2) (Monllos, 2014).

But you prefer a hot drink. Intertwined colorful ribbons are tied between pairs of cups around a circular table. The short length of the interconnected ribbons means that drinkers perform a bowing like gesture to the people opposite them. Although a particularly intense collaboration is required with the drinker at the opposite end of your ribbon, all the hot drinks are loosely connected so you are very happy to get spend your coffee break entangled with a few colleagues from other departments (Mitchell, 2013).

2.4   Lunch

But anyway, soon it is lunchtime. YAY! One of your favourite cafés, features tables cut in half. So that half the table is in the cafe. And the other half is on the other side of the glass, actually inside the cafe (figure 3). This means that is really comfortable to share a table with a stranger, because although you are very close, you are not really in the same place (Ha, 2015).

But you actually really fancy going to that nice sushi place. Here, like in all takeaways nowadays, in order to open the food box, several people need to pull a string each, in different directions, but at the same time (figure 4) (Chen, 2008).

Soya sauce makes you a bit thirsty, so you join another collaborative string pulling activity. This room-filling contraption is much larger than the sushi-boxes, but despite the size, it dispenses refreshment much more slowly, and is designed for use by two people, taking it in turns to moisten each other's palette. So you alternate between imbibing and dribbling drink into another person's mouth. This is much more hygienic than it might sound. With your mouth open, you stand, facing up beneath a ring of pipettes. Each pipette is connected to a different hanging rope
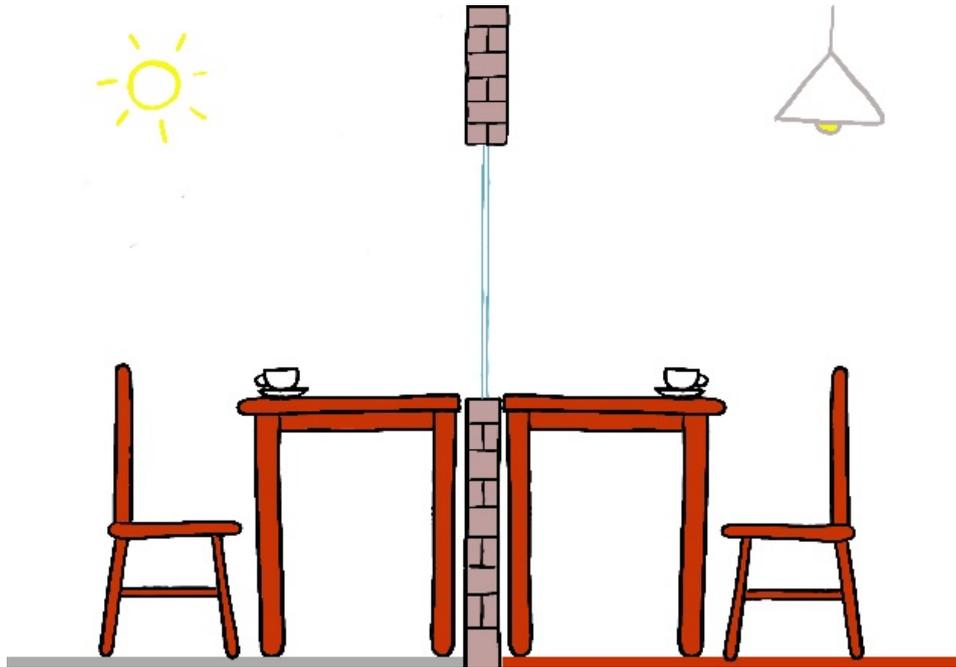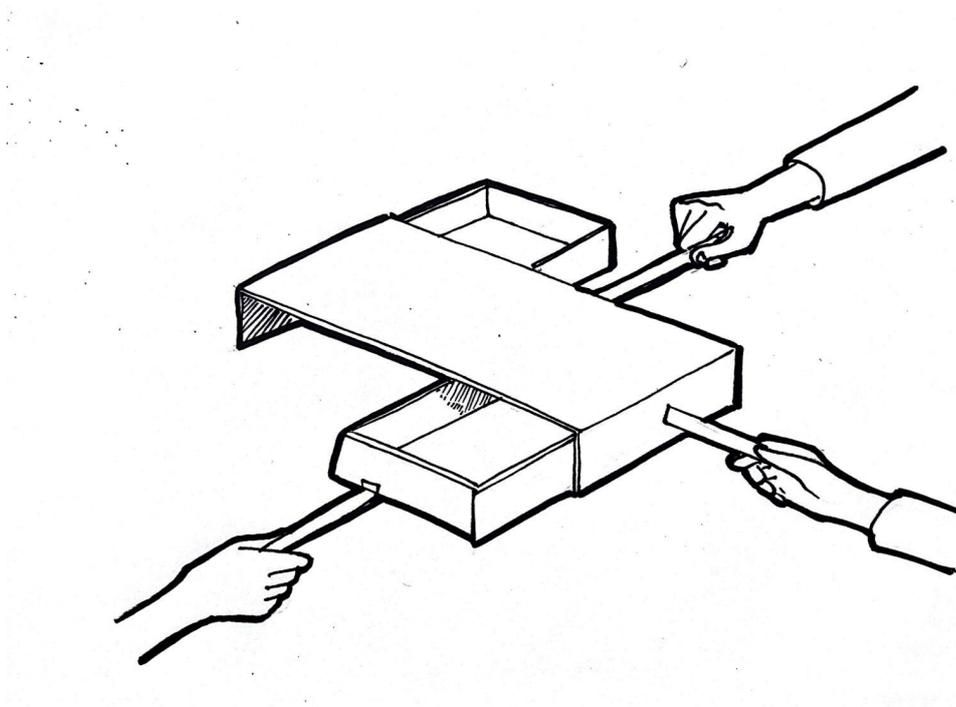
Figure 3. Table for Two by Shani Ha(Ha, 2015).

Figure 4. SHARE by Stephanie Chen(Chen, 2008) .

that you cannot reach. Thus you are dependent on an ally to pull a rope and release some drops of drink into your mouth (Vogelzang, ndb).

2.5   A walk in the park

It's a nice day, and you have time for a short walk in the park. You enjoy seeing two different kinds of benches that encourage people to sit closer together. Both are of a similar material and scale to classic timber park benches from the 20th century. One provides encouragement to increase interpersonal proximity via interactive lighting. This furniture has the form of a classic park bench, but features embedded sensors and various shapes of LED lamps discretely mounted in the backrest. The sensors detect where people sit on the bench. When two people are seated far apart, arrows shaped lights pointing on the backrest are turned on. These arrows point towards the other person. When two people are sitting close together in the centre of the bench, red heart shaped lighting appears either side of them on the backrest (Dekel et al., 2005).

The other kind is more low-tech. The legs and backrest of this bench also resembles that of a classic bench. However, when viewed face on, the seating surface resembles the curve of a smile, sloping inwards from each end so that people sitting on the bench find themselves gently sliding together into the dip (Hein, 2013).

Other picnicking folk prefer to sit on the grass facing each other. Nevertheless, they enjoy similar reliance on their dining partner as the users of the seesaw benches. Here the two people form the legs of a table with the bodies, so that they suspend a lightweight, but potentially unsteady surface by draping each end around their shoulders (Chan, 2016)

You also see some furniture similar your usual bus stop bench that gives people opportunities to move close together. In the park is some seating that offers some related benefits but like the seesaw benches fosters inter-dependency between its users. This bench has a central sturdy metal post supporting two metal beams. The beams are independently horizontally rotate-able and on each is mounted two plastic seat tops. Both beams are horizontally jointed halfway along their length, so that there is a seat either side of the joint. Furthermore, the seat bases themselves can also rotate approximately 180 degrees. A user sitting on one seat can apply pressure on the ground to attempt to adjust the orientation of their seat and its distance to other seats. But each individual's control of seating position and orientation is dependent on if, and how other users are also attempting to manoeuvre their own seats (Mitchell, 2019)

The inscription on a low stone plinth offers amusing photo opportunities that brings some strangers together . This knee high truncated rectangular pyramid displays on one side the text: "We don't know each other, we're just hugging for the picture. When we're done, I'll walk away quickly" (figure 7). This provides a caption for anyone or anything that chooses to stand on this platform. This text

thus indirectly and humorously provides the suggestion for people unacquainted with each other to share a hug on the platform (figure 5) (July, 2009).

Water drinking fountains are also arranged to bring people into closer awareness of each other, even though it can be hard to make eye contact or converse when your mouth is full . The drinking fountains are spread out across the top of an arrangement of waist high concrete walls (figure 8). Each fountain has multiple waterspouts around its basin, and the fountains are distributed so that on sunny days, nearly anyone who bent over to quench their thirst, would be closely facing another person gulping water (figure 6) (Blum, 2005).

2.6   Kids Today

You leave the park and on the way back to your office, you pass a high school and notice lots of noise and action around a cluster of wobbling schoolyard benches. You remember reading about the new equipment that might be exciting these young people. Namely, loosely encircling an unusual looking lamppost are five backless benches. These long seats wobble because instead of solid legs, each bench rests on standard playground equipment springs. Motion sensors installed in each bench control different properties of the dynamic and kinetic lamp atop the central pole. Furthermore, wiggle motions detected in one bench can also output as vibrations felt by people sitting in one or more of the other benches (Tieben et al., 2014). And looking over the fence of the kindergarten next door, you catch a very brief glimpse of some intense multiplayer action. It is much clearer what is happening here. A bunch of kids are clambering over a 3m tall replica of the classic Atari joystick. They interact with onscreen video game action by collaborating to push the enormous stick and stamp or jump on the giant push button (Flanagan, 2006).

2.7   Evening

After work, you look for more mingling to relax. But by this time, the batteries for your platform shoes are running out. Actually, the batteries in the shoes are fine, it's the phone controller that is low on juice. So you make your way to a bar that provides and requires its patrons to wear non-adjustable vertical footwear extenders (figure 9). This means that each bar goer wears a pair of platform shoe inversely proportional to their own height, so that everyone present was equally tall. So some shorter people wear huge platforms, which makes them rather unstable, whereas the very tall have flat sole shoes (figure 7) (Smith, 2010). However, being on the same level doesn't solve all challenges to social interaction, does it? So you move on the next bar.

Making and keeping eye contact is is uncomfortable for some people (IT CAN BE LIKE LOOKING INTO A FIRE). And it seems some people much prefer looking at themselves. So this bar offers many opportunities to combine images of self and other. Seeing your face mixed up with the face of someone else can be a good way to give at least some attention to the other person. You enjoy both the

Figure 5. Eleven Heavy Things by Miranda July (July, 2009).

Figure 6. Public Space by Andrea Blum(Blum, 2005).

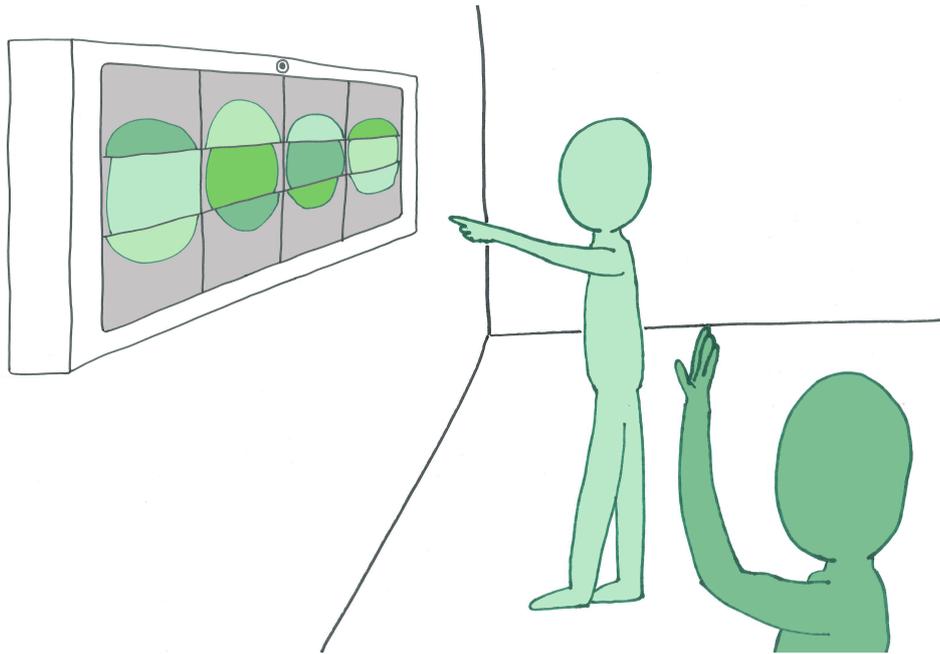Figure 7. Level by Hans Hemmert(Smith, 2010).

Figure 8. Reface by Levin and Lieberman (Levin, 2010) .

digital and non-digital editions of this experience. The simplest version is sitting across from another sitting person and looking at each other through a frame that alternates strips of mirrors with equal sized gaps. So when both of you are positioned at a similar distance from the panel of mirrored slats, you both view the illusion of a single face that half looks like yours, but half looks the seated person on the other side of the frame (Exploratorium, 2015).

Mixed up video group portraits are also displayed on wall monitors. Face-tracking technology records, aligns, cuts up and joins images of visitors' faces, to dynamically combine headshot segments of different patrons (figure 8) (Levin, 2010).

Feeling slightly peckish, you head towards a set of mirrors which features only one round gap, near its centre. You enjoy how attention to your own reflection can be increased further when there is this gap in the mirror around where you might expect to see a reflection of your mouth. And someone on the other side is spooning food through this opening into your actual mouth (Vogelzang, nda)

2.8   Piazza People

After you leave the second bar, you hear in the distance, some strange music. You follow the sound to the piazza. Here a small crowd has gathered on both sides of a large canvas screen. Bodily contact on either side of the opaque and stretchy canvas triggers musical samples (figure 11). This enables getting acquainted through exploration of music and intimate cooperation. The closer people on
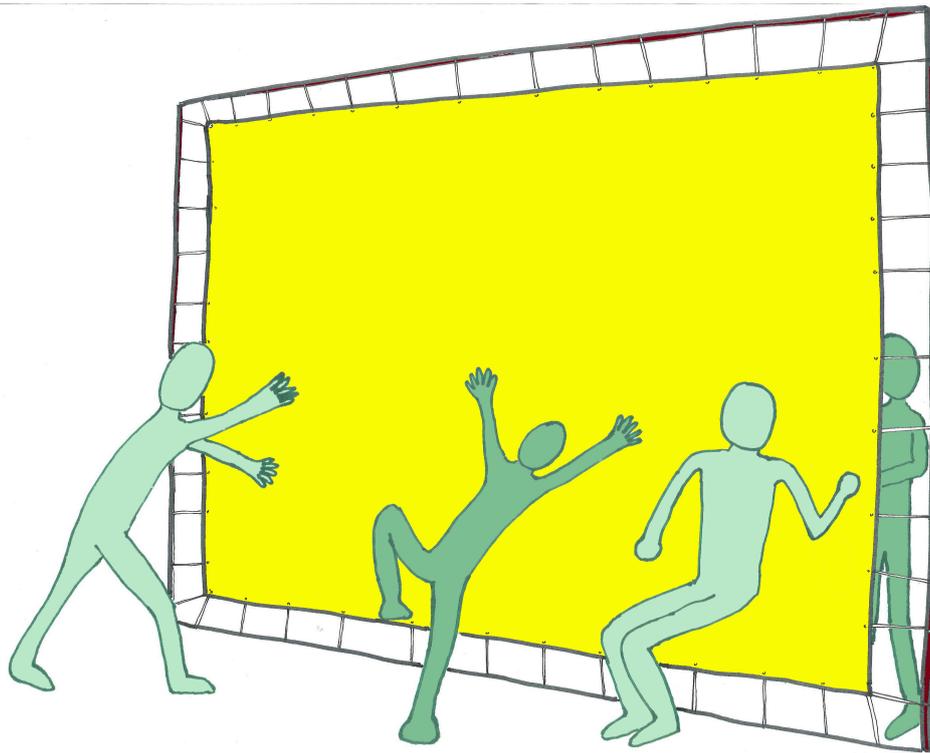
Figure 9. Touch Me Dare by Boerdonk et al. (Boerdonk et al., 2009).

opposite sides of the scree are to touching the same point on the canvas, the more rewarding the audio feedback (figure 9) (Boerdonk et al., 2009).

There are no public telephone booths in this urban environment. But in corner of the piazza, a pair of timber-walled, one-person booths provide a different kind of opportunity for shyer people to converse unseen by each other . The booths feature comfortable cushions to encourage lingering. They are positioned so that lattices in their side-walls are close enough together to all for conversation to flow between the two structures. People using the booths are visible to passersby, but not to their conversational partner in the adjacent booth (**?**). In another corner of the square, is an opportunity to explore mutual attraction, regardless of appearance, gender, voice or language. Using only the sense of smell. you stand on one side of a wall plastic tubes connecting your nose with the smellier parts of someone else's body on the other side of the wall (figure 10). And SNIFF, breathe in and breathe out, and breathe in.. And breathe out... (Auger Loizeau, 2009)

Speaking of smellier parts of the body, you realize that you have not been to the toilet since before breakfast. The doors of the nearest public toilets feature digital displays displaying gender icons like the doors of yesteryear. However every five minutes the displayed gender icons switch sex which helps break down this artificial divide (Carpenter and Høbye, 2008).
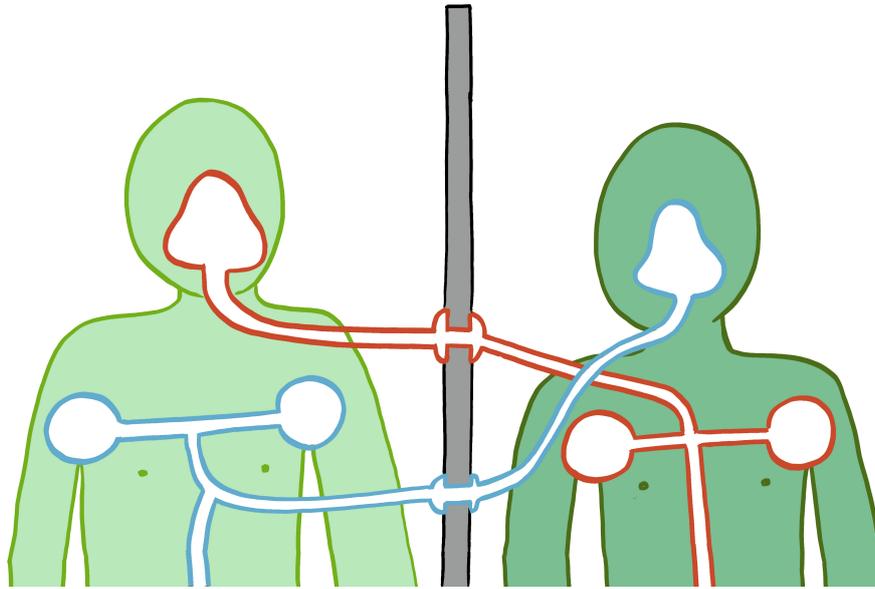
Figure 10. Smell+ by Auger Loizeau (Auger Loizeau, 2009).

2.9 One more bar

Time for another drink? In the next bar alas, there are no platform shoes provided. However, a very large, wooden revolving door offers some help in equalising different sizes and strengths. The door stands in the centre of the room like a giant turnstile fringed by a near continuous ring of chairs. The panels of the door pass very closely over the knees of people seated around it. The closer you are to the centre of the circle, the heavier the door is. But people sitting down can push the wooden panels very easily, almost effortlessly. The seated and the standing people are linked through a continuous game of peekaboo, as neither knows who might be revealed. Those standing can also find themselves helping or obstructing each other. So people can be collaborating even if they do not realise it. In the old days, you might go to a bar and hide in a cosy corner and not meet anybody new. Here there are no corners, the changing shape of the space, means people are continuously mixed up (Mitchell, 2009). In this bar, the drinks are served in metallic containers that have bases shaped like half an egg or a bullet. So they are very wobbly. This means order to rest your glass, you need to put it down next to another glass so that they can interlock and balance each other (Niedderer, 2007).

2.10 Bar 4

The furniture in this bar attempts to offer moments of intense interpersonal focus. You can stick your head up into various structures.

First you try a inflated fabric construction, hung at shoulder height and designed for two people. On the underside at each end of this balloon like form are two

Figure 11. La Parole by Pablo Reinoso (Attias, 1999).

openings which you can unzip and stick your head into. The zeppelin-like shape is maintained by electric fans continuously pumping in air (figure 11). Although the thin textile of the structure does not offer any sound proofing and it is only semi-opaque, the bubble gives a feeling of isolation and thus focus towards any other person whose head is inserted (Attias, 1999).

Another version is a slightly lower hanging cylinder shape made of black lycra and fiberglass poles. This one has four head sized holes spread spaced across its lower horizontal surface. The opaque stretchy material means this is a place to meet new people without being too aware of their clothes, their body shape, and even their height, or if they are in a wheelchair (Mitchell, 2013).

2.11 Nightlife

You have been in the pubs for a while, so when you are back on the street it is night time. You join the crowd whooping, hollering and clapping in front of the church. They are energized by the dynamic projection on the exterior of the ecclesiastical building that changes in response to the sound made by the crowd. The system detects difference in cadence, pitch or rhythm. Under the cover of darkness, it is not easy to tell whose input is creating which visual effects (Haque, 2007). This anonymity is very liberating. So you scream and shout for a while - at the church. Now you feel ready for a nightclub...

Upon entering the club, the first thing you see is an abstract representation of yourself on a big screen. (Yes that is you. Nice and large). This interactive

Figure 12. Hoop Down by Robb Mitchell (Mitchell, 2013).

projection is tracking your movements real me. BUT THEN IT GETS EVEN BETTER. On the screen a bold line is now displayed, linking your avatar to that of a stranger near you. Increasing your awareness of each other, and offering an excuse to play (Hespanhol et al., 2011).

Above the main dancefloor is a grid of 64 hula-hoops cable tied together. Most of the time you hardly notice them, apart from the circular shadows they cast on the walls. But at the climax of the party, the grid of hula-hoops is dropped onto the crowded dance floor So almost everyone that was underneath is loosely caught inside a hoop together with someone standing close to them (figure 12). The grid as a whole briefly creates a giant net which briefly creates a common, crowd connecting chaotic structure (Mitchell, 2013). However, the clubbers informally collaborate to escape the clutches of this plastic honeycomb mesh, folding up the hula hoops until they end up as colourful geometric sculpture in the middle the dancefloor.

WOOF! Deep breath... now you need to chill out for a bit...

2.12   After Party

At the after-party, all the seating and cushions follow a similar principle. The couches and armchairs are inflatable, and what is more, each air pipe connects each armchair to another (figure 13). So regardless of whether you choose a two-person or one person seat, you need to synchronise your sitting down with someone else, otherwise, all the air goes to the other seat, and you sink quickly to the floor (**?**).

Something that can put people off starting new encounters is not knowing how to escape the interaction. Getting stuck with someone you don't like or not knowing how to say "go away". Because all this socialising can eventually become a little tiring, at the end of a very long day, you are glad of the motorized fan mounted at seated head height, halfway along some of the couches. The fan opens
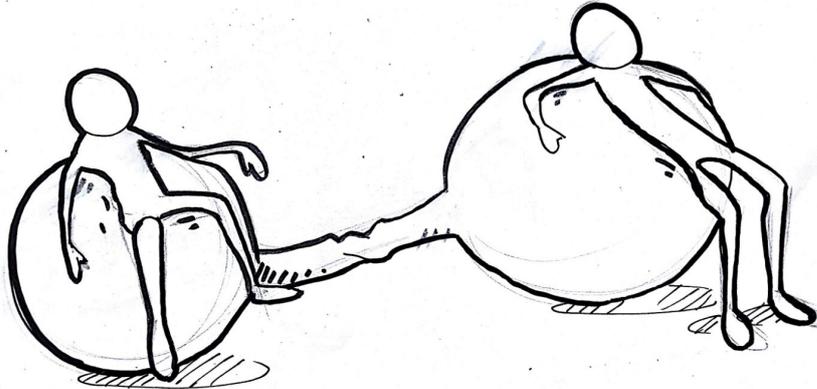
Figure 13. Communicant Chairs by Pablo Reyes(**?**).

and closes and random intervals. When it is uncurled, it creates a visual barrier between you and your fellow couch sharer - to give you both the option of a pause in your conversation (McCarthy, 2011).

And then home. You are very happy to see your own toilets again, brush your teeth...

3   Discussion

Our narrative contrasts to much design fiction in that the reason that the described objects do not feature in our current daily lives is for reasons other than technological challenges. Thus this narrative potentially turns inside out the "gap" between the social requirements and technical capabilities that Ackerman (2000) highlighted as a core concern of CSCW. We hope that the narrative generates many responses we could not foresee, but in the following we offer a brief commentary on a couple of aspects that may have puzzled you.

3.1   How was it for you?

The narrator/protagonist describes their experiences with the presented designs in very positive terms. However, the dispositions and responses of the other inhabitants in this envisioned world are deliberately not conveyed. Readers thus

are left to fill in the gaps through imagining the responses of other citizens, possibly by picturing how they themselves might react to encountering the narrator in some of the situations described.

The narrator might be a typical citizen in the fictional world, or their enthusiasm for the presented designs might reveal that they have unusual needs and preferences, perhaps even to the point of social deviancy or insanity. In written form, sarcasm can be very hard to detect, so it is up to the readers' interpretation whether the narrator's upbeat attitude is intended to be genuine or as a contribution to some form of satire, parody or farce.

These ambiguities are hoped to open a space for reflection and comparison concerning the desirability of current practices with both solitary and multi-user systems. What would happen if we replaced the strange designs in the text with those from a "day-in-the-life" of an office worker's reality in 2020? Could an equally enthusiastic description of an office worker's encounters with the collaborative and non-collaborative technologies and practices that surround them be more or less believable than the positivity of our narrative's protagonist?

Face-to-face social interaction that involves intense collaboration or conversation is one way to "switch off" and forget demanding careers. But if chat and cooperation with co-present others is ubiquitous, how might that influence preferences and practices for professional collaboration?

In our narrative we made an effort to leave certain spaces unexplored. The contents of the working day, for example, are deliberately not described. The intention is that readers are left to imagine what kind of collaborative work practices and technologies might exist and thrive in a world where designs to promote interpersonal relating permeate every other aspect of their waking lives. For instance, these days, due to the always-on internet connectivity of portable devices, and increasing collaboration across time zones, many workers suffer from pressures always of feeling on duty and connected to colleagues. Groupware can transgress many attempts at work-life balance. This design fiction flips the hard-to-escape networked communications with bosses, clients and colleagues to offer an alternative vision of a world where it is non-professional collaboration with collocated people that is inescapable.

3.2 Bigger than you, and more important?

The time and place in which you encounter this text are likely to have an impact on both your personal and professional response to this fiction. The narrative was created and this paper submitted before the declaration of the COVID-19 pandemic. However at the current time of revising the paper, a serious coronavirus is extremely widespread and many, many countries are subject to some form of lockdown and attempt to enforce "social distancing". Thus the desirability of most design examples featured above might now be questioned from the perspective of public health. Most examples, but not all, as several designs incorporate some

form of interpersonal barrier that might make them more practical in pandemic situations.

What would need to change from our present reality to make the fictional world more likely? What kind of events do you think could have lead to the world depicted? Or put more simply: WHO IS PAYING FOR ALL THIS STUFF?

This is another aspect we deliberately left open for your imagination. Did you consider the public space design values in the fiction were imposed through regulation? And if so, did you picture a benevolent welfare state attempting to boost social cohesion? A centrist municipality trying to attract tourists? Or a totalitarian leaning government interested in its subjects gaining "herd immunity"?

In pre-pandemic times, many feel-good urban social interventions such as those depicted have been funded as part of corporate branding publicity exercises. But in our fictional world, how might sponsors try to attract attention if social icebreaking stunts becomes mundane? Our narrative stretches from both the public realm into intimate and private places such as bedrooms and bathrooms. Compared to the depicted public and semi-public locations, do you find it easier to imagine the domestic aspects of our vision becoming reality through individuals voluntarily spending their disposable income?

The scenario implies an alternative present with very different design values. Such values do not exist in isolation but ricochet off each other to effect In 2000, Steve Benford et al. highlighted an important distinctions between designing to enable, enforce or encourage collaboration (2000). A close reading of the individual design examples in our scenario could certainly tease out these qualities when inspecting designs one-by-one. However, when taken collectively, things and meanings may change. When there are so few options to not collaborate, the distinctions between e.g. encourage and enforce can become less clear or shift along the spectrum of where we might currently draw a line to separate them.

3.3 Everyday humdrum

We hope that you read the narrative out loud like we suggested? Some silent readers have commented that the narrative in places feels a bit repetitive. This is intentional. We propose that a certain sense of tedium can be appropriate and beneficial for conveying the normality of the lived experiences of inhabitants in this fictional world. For them, these designs to boost interpersonal collaboration and conversations are entirely ubiquitous and commonplace. If you, the reader starts to experience a lack of surprises in the text, then this might be a sign that you have become accustomed to the fictional world presented. And so you may have incorporated the totality of the vision into your thinking. If at times whilst you were reading, you felt that you knew what might be coming next in the narrative, then you might now be well placed to adapt and extend this vision yourself by considering situations, contexts and technologies that we have not described.

The narrative may lack the richness of plot and characters that are seen in a typical design fiction. However, rather than seeing this blandness as a weakness,

we view our narrative as more like a movie script. Screenplays only become alive when actors take ownership of words and action. Thus we argue for the benefits of a "blank slate" as a means for you the reader to project yourself into this fictional world. And we imagine that you are beautifully rich and complex. So might we ask, as you read this fiction, or had it read to you, which "you" were you? A socially outgoing version of yourself - happy to be so readily meeting so many new people? Enjoying the novelty of many of the designs? Curious to understand their impact? Or were you cringing, at the endless need to make small talk? Furious at having your personal space invaded or your autonomy impeded? Perhaps you alternated between all of these responses or more? Reflecting upon both the degree and direction of your own reactions to different designs encountered in the narrative is an aspect of the plot that we hoped you enjoyed, but of course also a route to evaluating both the overall desirability and specific details of designing to increase collocated social interactions.

4   Conclusion

We have presented a design fiction, in which we tell a story about interpersonal technology. This is a vehicle to argue for a consideration of context through a collective and connected lens, as a journey through design space rather than a tour of isolated objects. Our fictional world, which is collectively proposed by the designs, may generate insight and provoke debate through exposing connections and conflicts between these existing ideas by placing them in the same space, and revealing implications as constellations.

Our intention with this vision is neutral regarding whether it is utopian or dystopian. We also offer no comment as to whether this vision is achievable, or what might be the obstacles to its adoption. Rather we hope that through engaging with the vision, readers may gather practical design inspiration concerning the theme of the presented examples, have a useful and actionable overview of a design space and be provoked into a critical examination of values and philosophies that underpin design activities. Furthermore, we aim to provide a methodological platform to stir debate upon how insights and values can never truly be separated when reviewing a design landscape.

This extreme vision is hoped to provoke reflections with CSCW researchers concerning how if widely adopted, and emulated, the systems we design may affect not only near-future work and leisure practices, but also may (in the longer run) influence human experiences and dispositions much more broadly. Winston Churchill's observation when addressing the English Architectural association in 1924 that "We make our buildings and afterward they make us" was echoed at less macro-scale by Woolgar's contention that "a chair configures its user" (Woolgar, 1990). Thus we hope by considering this alternative vision of human relations, CSCW researchers might pause to consider both the means and ends of their efforts. Imagine the consequences of your own visions for technologies becoming the new normal for human collaboration. Would you welcome such success?

5   Acknowledgments

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