

PIGs! Playful Interactive Gathering Technology

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Abstract

In an age of increasing complexity and widespread technological use, we are more incentivized to avoid people who are different, than do the emotional labor required to meet in the middle. In this essay I introduce Playful Interactive Gathering Technology, or PIG Tech, a proposed sub-genre of computational social technology, which takes an *active* role in *deliberately* improving the *quality, value or extent* of a social interaction through playful structure. Building on a concept introduced by Olsson et al (2020), I argue that games like *Pokemon Go* and interactive experiences which gather strangers in public like *Win Win*, or *Forest Lumina* offer 1) desirable structure around human-human social interactions, 2) the maintenance of human agency. These radical works envision a new kind of “social infrastructure” built in fun. PIG tech stands in stark contrast to social media, dating apps, and social VR which only passively mediate social interactions, and have the tendency to reduce human emotional complexity. This essay will also consider how the larger powers and political agendas that have influenced the development of these technologies, will present issues for the development of PIG tech. Given that we already live in a reality immersed in divisive social technology, I argue that a profound shift towards in-person social-empowering technology will be a societal net benefit and help repair damage to our rapidly failing public infrastructure.

During the pandemic, I, like so many others, compressed my big wide life into the confines of a small two person apartment. Also like others, wearing pajamas to my Zoom meetings grew old quickly, and the months of painful solitude gave way to a longing for something I had always taken for granted: the completely unremarkable joy of being in a crowd.

Moments we share with total strangers can range from being horribly traumatic, to touchingly earnest: an obscure conversation with an old lady on a train, a curious and confused tourist asking for directions, a familiar waiter making horrible food puns. Interactions between strangers are often short, polite, and seemingly unimportant at the scale of our big, busy lives – but I can't shake the feeling these tiny fleeting moments are greater than the sum of their parts.

Modern technology lets us dream of life where the inconveniences of others are minimized: meal delivery drivers leave food unceremoniously at our doors; movie theaters close their doors because everyone is streaming from their couch; grocery stores are lined with self-checkout machines. In addition to replacing service workers, we spend every other moment we have to potentially engage with others blissfully involved in a world taking place in our phones. We wait to match on Tinder before asking someone out. Technology tricks us into thinking that all discomforts can be solved. In the name of speed, convenience, and ease we neglect to take chances in the world in front of us.

For me, the pandemic lockdowns revealed an obscure characteristic of our fast-paced western lifestyles: we've created a lot of technology which treats our interactions with strangers as uncomfortable inconveniences. We live in parallel lives, sleep in apartments stacked one on top of the other, only interact when necessary. Meanwhile, we live in an age of growing complexity (Wheatley, 2011), which asks us not only to share the same planet, but to make collective decisions on its behalf. The urgency of this question is amplified amidst increasing political polarization and breakdown of civic infrastructure: For all the talk of the internet being a force for connection, why do I feel more dissociated than ever?

What is needed is a radical rethinking of what a “social technology”. Technologies which “enhance collocated social interactions” can take many forms, as outlined by Olsson et al (2020), in this essay I’d like to argue for a kind of social technology that empowers social interactions with strangers through playful experiences, let’s call them PIGs: Playful Interactive Gathering tools.

Perhaps the most pervasive example is ‘Pokemon Go’, the global phenomenon which sent people of all ages and cultural backgrounds to parks and public spaces in search of virtual Pokemon. In Pokemon Go, rare Pokemon types spawned in similar locations for all players, causing concentrations of people who would ordinarily not interact to leave their house and exist in common space together.

Researchers have explored this idea in more experimental settings, HCI researchers have created projects like *Street Pong*, a digital display attached to a traffic light, allowing pedestrians to play *Pong* while waiting for the light to turn green. Many interactive installation artists produce work aimed at facilitating connection, such as the “Portal Project,” a full body sized screen inside a shipping container which connects you via video call to a similar shipping container somewhere else in the world. “Forest Lumina” is a night path illuminated with projectors, creating space in nature for people to engage in storytelling.

While the context and form of these technologies varies, what binds them is that they all use play to deliberately improve the quality, value or extent of a social interaction in a way that a person may not experience without the assistance of technology (Olsson et. al, 2020), and in doing so, create a ‘social object’ around which to have a conversation (Simon, 2010). Other projects more directly mediate interactions between strangers, like Win Win, which uses a chat-bot to moderate a fun public debate. By directly providing a structured way for people to engage with one another, these technologies act as powerful facilitators, providing clear grounds on which a social interaction can stand.

I grew up around Toronto, in a neighborhood with people from a wide variety of cultural diversity. My well-meaning “melting pot” hometown suffered from an absence of shared anything: people in my town do not share a backstory, traditions, food, rituals, sense of community, or public space. We lacked a sport we could all cheer about, a bar to hang out in, or a food we could all make and appreciate. In such a diverse landscape, people tend to try to avoid offending others, wishing mostly to fit in. The cost of such politeness is a gray indifference. Without an obvious way to interact, we approach each other cautiously, if at all. If it’s not obvious what the first move should be, the next certainly won’t be. Out of a lack of fertile soil to build an interaction, we politely disengage.

It would be impossible to find common ground with every person, but the development of new rituals where we include one another, requires some form of first step. A moment of warmth that generates enough momentum to overcome that first awkward hello. Growing up in a multicultural melting pot, you see first-hand that it takes a lot of energy to have a meaningful experience with someone who doesn’t share the same cultural background as you. Engaging with people who are different from us is not easy or convenient, often requiring more emotional investment. As our countries and cities become more multicultural, as political forces push more people to ideological extremes, and as global problems like climate change dominate public discourse, it will become more important than ever to overcome this challenging activation energy and talk to each other.

Play is a powerful force because it can provide the energy necessary to overcome these early hurdles. Like a game with established and agreed upon rules, play inserts structure that creates common ground upon which we can build something bigger. We like to play mini-golf on first dates, or take our co-workers bowling because doing an activity with someone lets you interact without putting too much pressure on coming up with the right thing to do or say. In situations where people are less comfortable with each other, a well-established social script

cuts the tension. Additionally, the mindset we take on when we play is often open and curious, well suited for getting to know new people.

Engaging with people outside of our carefully curated social circles is uncomfortable for a wide variety of reasons. Too often, computing-based solutions address that discomfort through avoidance: dating apps appear to make it easier to give and receive rejection, self-checkout completely removes “unnecessary” human contact. Such an approach does not acknowledge that growth happens through discomfort, and by letting technology do the work for us, we don’t get the benefit. Instead of helping learn how to facilitate conversations across cultural divide, many technologies allow us to avoid it entirely. Instead of reducing social interactions, playful gathering technology could empower people to address and overcome their social anxieties. By treating fear of rejection, and awkward grocery store small-talk as important and healthy necessities of a flourishing public life, this class of solutions could empower people to be brave.

A pillar of these technologies is their ability to empower agency through structure. It is counter-intuitive, but structure is not antithetical to agency, and often the opposite is true. Like an artist staring at a blank canvas, a space without creative constraints can also be stifling. In her essay “Tyranny of Structurelessness”, Jo Freeman points out that seemingly structureless organizations end up replicating the problematic power dynamics they seek to dismantle, because in absence of intentional structuring, organizations default to promoting the loudest or most experienced voices (Freeman, 1972). Within constrained boxes we discover how to colour outside of the lines. The trick to empowering and not stifling structure is an agreement to flexibility and intentionality. Often when we play games, we edit the rules as we go along. Like playing for points with people who enjoy competition, and just “playing for fun” with people who don’t. Unlike schools which create rigid structures around what can and cannot be done, play is always under negotiation (Sicart, 2012).

While this class of tools seeks to mediate *in-person* interactions, it does not invalidate the benefit of online communities. Virtual avatars, anonymous communication, and global support

networks for marginalized people are all well-documented ways in which online communities can empower meaningful and playful social interactions (Turkle, 2011). However, the numerous and also well-documented benefits of socializing in-person speaks to the important role that our physical bodies and contextual realities play in feelings of connectedness and personal meaning making. While virtual gathering spaces can serve important social functions, they should not replace or impede on developing active public infrastructure for facilitating in-person gatherings. Considering that technology solutions tend towards online interactions, it seems that a greater emphasis ought to be placed on in-person interactions, so that they are not lost.

Dating apps, social media, and social VR are all examples of technology which claim to enable social connection, but have all received fair criticism for their power to divide users or make relationships feel transactional. The services that these platforms provide only passively mediate interaction, allowing users to make contact, but little else beyond. They provide a container for an interaction to take place, but miss out on the principles of gatherings that make them effective, like considering that good social interactions come when people “buy in” by putting energy, effort, and care towards crafting a meaningful social situation.

One potential downside of PIG tech, is that poorly designed structure can feel forced or manipulative. Structured socializing brings to mind overly-cheerful camp counselors, or forced corporate holiday parties. Poor timing, unmotivated players, and unaligned intentions can lead to unnatural and awkward atmospheres. There is nothing worse than being forced to play when you really don't want to. We are reasonably resistant to participating when it does not feel like we have a choice, or the rules are not within our control. This is one of the reasons that successful gatherings rely on well designed invitations (Parker, 2020), and well designed games really on empowering agency (Sicart, 2012). The onus of action must be on the player. A designer does not force a social situation, they create situations in which one may emerge. This is a subtle shift towards how we typically design technology, and it's not clear how a more

participatory method empowering agency would be followed, encouraged, or enforced among technology developers.

Another challenge to this technology is that it is unclear how to operationalize and measure this kind of design. It is difficult enough to define, and harder to establish what success looks like, since it can look like so many things to so many people. The literature on empowering collocated technologies is still in its infancy, making it a difficult design philosophy to follow, track, and rigorously test (Olsson et al, 2020). However, social play has long been a part of human experience, and rituals are well-documented examples of social structures empowering connection. Even without rigorously tested practices, we can turn to other systems of knowledge to validate that structured social systems are powerful and important practices to follow.

Nothing can be created without consequences, but if we don't acknowledge that the tools that we are currently building suck us deeper into our homes and farther from public life, then the consequence might be that we lose our way of relating to the very ground we stand on. I am personally filled with an urgency to push back against a system which seems content on automating away the little experiences, forcing me to interact through screens. In trying to make systems for people to play together, I hope we find out what it takes to be in relation to one another, and enjoy the discomforts that come along.

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