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A Hauntology of Participatory Speculation

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ABSTRACT

In this paper I conduct a hauntological analysis of participatory speculation, within the context of a study into understanding the potential for increasing recognition of LGBT+ young people's experiences of hate crime and hate incidents. Hauntology provides a means to further situate accounts of speculation in Participatory Design by sensitising us to the interplay of the virtual and the actual that enables us to expand our sense of the possible. Through understanding how participatory speculation is shaped by absent presences, this paper contributes to the discussion of post-solutionist practices in PD that foster care and responsibility across multiple sites and forms of participation in the face of issues that resist resolution. I conclude by considering by translating speculation into shared spaces of wonder, Participatory Design can foster ethical commitments that stay with the trouble.

Author Keywords

Speculative Design; Hauntology; Hate Crime; LGBT+; Feminist STS

CSS Concepts

• Human-centered computing~Human computer interaction (HCI); Participatory design;

INTRODUCTION

In recent years, Participatory Design (PD) has expanded its discussion of the forms and sites of participation to include a broader range of human and non-human actors. In this paper, I will extend this discussion by going in search of *absent presences* that haunt speculative practices within PD. By performing a hauntological analysis of speculative workshops on the topic of hate-crime reporting conducted with a group LGBT+ young people in the UK, I hope to deepen understandings of how participatory speculation is shaped by *virtual* as well as *actual* entities.

Hauntology is a term coined by Jacques Derrida that 'supplants its near-homonym ontology, replacing the priority of being and presence with the figure of the ghost as that

which is neither present nor absent, neither dead nor alive.' [16:373]. Cultural critic Mark Fisher has identified two hauntological patterns through which virtual entities come to act upon the present [19]: the first is something that is no longer present, but still has an effect even after it is gone. This can manifest itself in a compulsion to repeat what has gone before. The second is something that is anticipated, but never manifested. This anticipation can also shape our behaviour, even if the thing anticipated is never realised. Speculation, as a practice that aims to generate previously unanticipated futures, could be understood as an attempt to reconfigure these patterns so that both futures and past might manifest themselves differently [41].

In this paper I will explore how these patterns are evident in PD by performing a hauntological analysis of a small interdisciplinary research project that aimed to explore potential design interventions to support LGBT+ young people to report hate crime and hate incidents. This project built upon the criminological research conducted by James [Anonymised] as well as his experiences as a youth worker. I was part of a team working with James that also included expertise in social psychology, Participatory Design and computer science, in addition to the perspective drawn from my graphic and communication design practice. Together, we planned two workshops to bring together young people and criminal justice workers to discuss the reporting of hate incidents and to engage in Participatory Design activities.

In this paper I will focus on the second of these workshops, which was intended to allow the young people, criminal justice workers and researchers to jointly consider on forms of reporting that could better meet young people's needs. This workshop used a speculative approach that enabled the discussion of hate crime reporting to be reframed. What had become clear in the first workshop was that, as well as the practical barriers that prevented the young people from reporting hate incidents, there was also a reluctance to engage with reporting as framed by the community-policing agenda. With this in mind we used Anderson's Magic Machine Workshop [2-4] to speculate on alternative framings of reporting hate incidents. While interpreted broadly in PD and HCI, central to the Magic Machine Workshop format is the production of non-functioning 'magical' material prototypes. Magic Machine Workshops use structured activity, material-making and performance elements to enable participants to engage in PD as form of inventive problem making. This offered a basis to structure

open-ended exploration of complex topics where there were going to be no clear solutions. As Andersen and Wakkary have written, these workshops create a temporary discursive space in which 'we may consider complex, difficult and naive things; and propose solutions that, while they may not solve anything as such, touch upon notions of dread or desire.' [4:112]. Rather than asking the participants to make 'serious' design proposals, we asked them to produce 'magical' reporting devices in order to speculate about other ways that these experiences could be recognised and reported.

As a result, the problem we initially presented ('How can we make better tools for you to report hate incidents?') was largely ignored or avoided by the participants. However, through their engagement with speculative methods, the participants presented us with new inventive problems that open new ways to think and talk about hate crime. However, unlike the original problem, these new problems weren't neatly located in 'criminology', 'design', 'computer science' or some interdisciplinary constellation of the three. These problems demanded responses far beyond our collective abilities as a team of researchers. Despite our shared commitment to respond to the participants, we could not do so adequately, let alone imagine that we might 'solve' the problems as designers and researchers.

Recent work in PD has used speculative processes to engage communities and publics to explore a range of issues including food futures [18], public safety [24], smart cities [14,20] and plastic pollution [31]. While these speculative practice in PD draw upon Speculative and Critical Design (SCD), speculative PD places a greater emphasis on speculation as a collaborative and ongoing process of imagining futures rather than the production of fixed artefacts or images [24]. However, in common with SCD, speculative PD responds to critiques of 'solutionism' within design discourses [7] by making a shift to design as a practice oriented towards finding compelling and novel ways understand and engage with problems [17]. However, these post-solutionist design practices also force us to confront the limits of our capacity to produce adequate responses, either individually or collectively. This presents a challenge for PD of how to make and sustain commitments to messy, insoluble problems that go beyond the easily defined site of participation [31].

In response to these challenges, PD has engaged with a range of concepts from feminist STS in order to develop practices that have the capacity to *stay with the trouble* [27] in a range of contexts [28,34,37]. Such commitments foster PD practices marked by a 'willingness to open up to the world in its complex relationality, responsible and accountable for the open-ended and unexpected.' [34:1]. Central to these discourses is Haraway and Barad's relational framing of ethics as response-ability [6,26]. Response-ability reframes ethical commitments as an ongoing effort to increasing our

capacity to respond to, and entangle with, the world rather than a set of predefined rights, duties and relationships.

Such response-abilities extend beyond human actors and so ask us to consider how Participatory Design shapes, and is shaped, by non-human actors. Hauntology extends this further by asking us to consider how *virtual* entities (things that are unrealised) as a well as *actual* entities (things that are realised) shape participation. Halewood calls for a situated understanding of speculation as imaginative leap that creates new thoughts and realities but one where 'the jump doesn't come from nowhere' [25:58]. Hauntology prompts us to consider how speculative PD practices work to expand and collapse our ability to perceive new possibilities through an interplay between virtual and actual entities. As such, hauntology provides a heuristic with which to interrogate and situate speculative practices in PD.

Beyond providing a means to further situate our accounts of participatory speculation, hauntology also offers a means to consider how speculation can be translated into on-going commitments to problems that exceed our shared and individual capacity to adequately respond in the present. Speculation asks us to renegotiate our relationship with what we perceive to be possible, plausible, probable, and preferable. However, the outcomes of speculation remain tantalisingly out of reach, something glimpsed but not grasped. Further, speculation itself offers no direct means of realising the virtual presences it makes us witness to [25]. However, hauntology enables us to consider the way that virtual presences can still have an effect on those that are present. In this paper I will use hauntology to explore how speculation give us a means to get in touch with absent presences in ways that lessen the capacity that what-is has to dictate what-may-be [21].

I conclude this paper by arguing that speculation becomes effective through its capacity to not just happen once, but to keep happening and to keep happening differently. This paper is itself a repeat performance of events that have been previously reported in a co-authored paper [22]. By reenacting these events we can speculate again, in search of new meanings and readings that allow these events to (re)appear differently [13]. This approach is informed by Barad's concept of a diffractive research methodology [6]. Recently, Luján Escalante has pointed to the value of diffractive methodologies to account for the emergent nature of PD practices [32] and, crucially for a hauntological approach. These methodologies ask us to consider not just what has happened, but what has failed to happen in the course of doing research. As a result, rather than providing representational readings of what data 'really' means, diffractive methodologies ask researchers 'to make matter intelligible in new ways and to imagine other possible realities presented in the data' [30:267]. As such, this paper iteratively performs the previously published accounts of this research project to (re)considers and (re)visits both the sites

and data to wonder about how it could be reported and responded to differently.

ENCOUNTERING HATE

In many ways, hate incidents are an inversion of the face-toface encounter that is the starting point for Haraway and Barad's concepts of response-ability. Coming face-to-face is to be present and responsive to an other who we recognise as different from ourselves. A 'face' is not always a literal face but instead any surface that allows us to perceive others (human or otherwise) as possessing an alterity that is separate from us [36]. Hate incidents are an encounter in which difference is perceived but is responded to with violence rather than care. As Ahmed puts it, in a hate crime 'the other is forced to embody a particular identity by and for the perpetrator of the crime' [1:55]. Hate incidents are rooted in a confrontation with an other that seeks to violently reaffirm boundaries and identities through a refusal to become with and respond to that other's alterity. In doing this, hate crime renders its victims as harmable others 'who have no presence, no face, that demands recognition, caring and shared pain.' [26:71 emphasis in original]. Efforts to record and recognize hate crime and hate incidents can be read, on some level, as an effort to restore the victims face in the eyes of wider society.

The ways in which anti-LGBT+ hate crime is recorded is 'part of [a] broader historical struggle for recognition and problematisation of forms of inequality and oppression' [15:66]. Progress has been made in the UK with increased civil rights, legal protection, and a degree of popular acceptance for LGBT+ people. However, discrimination is still a common-place experience. For young LGBT+ people, homophobia, biphobia, and transphobia are are common experiences across all areas of life, including in schools, in public places, in the home, and, increasingly, on social media [11]. This creates a gap between these experiences of discrimination, and a popular perception that the fight for LGBT+ rights has been won. As one of the Criminal Justice Workers (CJW) participating in our study put it: 'There are a lot of straight people who think that homophobia is gone and who have never even thought about transphobia'.

Under UK law, some of these experiences of homophobia and transphobia may qualify as criminal acts, but many of them will fall into the broader category of *hate incidents* [12]. Distinguishing between the two is not always straightforward, even for criminal-justice professionals. However, policing guidelines in the UK mandate that police take an active role in the recording of hate incidents, as well as in prosecuting hate crime. Hate incidents are recorded through direct reports to the police, but third-party-reporting centres offer a community-based alternative for groups who have historically been *over policed and under protected* [10]. Systematic surveys, such as the national crime survey, and those undertaken by researchers or third sector bodies such as anti-LGBT+ violence charity GALOP, try to assess the gap between reported and unreported incidents. However,

most hate incidents go unreported, with victims being deterred by fears that they risk being further othered by police officers, or that the criminal justice system lacks the ability to respond adequately [11].

Our project began from this starting point with the question of how the criminal justice systems, that seek to recognise and record the harm done in hate incidents, could be made more approachable to young LGBT+ people. However, as previously indicated, speculation caused this problem to be remade in ways we had not anticipated. Indeed, despite the seriousness of what is at stake in addressing this question, our shared experience was funny, silly, joyful, and warm, as well sad, painful, angry, and serious. The young people who participated in the workshops demanded 'recognition, caring and shared pain', but did so with the humour and wit that they had learnt from a culture and community of resilience, forged in the face of discrimination. Just because the participants expressed themselves in all manner of silly and non-serious modes, doesn't mean the hurt they suffered was any less serious, or the desire to have this pain recognised was any less heartfelt. One of the things I learnt from these participants was that taking joking seriously, and seriously joking, are more than coping mechanisms; they represent sophisticated ways of parsing and navigating problems which exceed our ability to resolve.

Hauntology shares some of this same spirit of playfully facing things that exceed our ability to resolve them, and not just because it is a pun taken very seriously. Hauntology asks us to respond to something we can never fully grasp in the moment: 'Attending to the ghost is an ethical injunction insofar as it occupies the place of the Levinasian Other: a wholly irrecuperable intrusion in our world, which is not comprehensible within our available intellectual frameworks, but whose otherness we are responsible for preserving.' [16:373]. Hauntology allows us to bear witness to the ghost of speculation in ways that raise questions as to how PD can be responsible for preserving the otherness we encounter.

ANTICIPATING SPECULATION

For Haraway, coming face-to-face with others 'demands work, speculative invention and ontological risk. No one knows how to do that in advance of coming together in composition' [26:83]. Producing a discursive space in which thoughts, needs, and desires, unanticipated by designers, can be expressed is perhaps a central tenant of PD. Reflecting this need to make room for the unanticipated, Muller has described how Participatory Design workshops should aim to make a space in which designers and participants can meet in a 'mutuality of unfamiliarity' [33:1067]. Magic Machine Workshops and similar practices in PD provide a means through which we can prepare for speculation to take place by paradoxically anticipating the unanticipated. They do this by using techniques that lessen the gravity of the 'real' world through the use of the concept of magic, playful making, absurdist materials and a heightened performative

atmosphere. These elements prepare the ground from which speculative jumps can be made.

In our case, this atmosphere of performative play was heightened by the unexpected absence of the police in the workshops. Two uniformed police officers were meant to attend the workshop along with a civilian criminal justice worker. However, due to a break-down in communication, the police officers could not find the venue. The absence of the police officers became a running joke throughout the workshop: at various times both the researchers and the participants commented that they are glad the police weren't there to witness 'inappropriate' jokes, subjects or designs. In this way the police, while not physically present, became a remarkable absence which had a strong presence on proceedings. As a result, in our case, the ground was prepared not only by the presence of people, materials and cultures, but the unanticipated absence of the police as representatives of authority in the real world.

However, the authority of the past to shape the present did not disappear within the workshop, even if it did appear to become more distant. Speculation is then always doubly haunted, once by the ghosts of the virtual it calls forth, and also by the inevitable return to what has been actualised. As I will discuss below, for some participants, this distancing of authority allowed them to embrace *being-as-playing-a-role* with camp enjoyment. Others more cautiously renegotiated the expectations of which roles were available to them to play. Below, I will reflect upon the ways that these speculations were shaped by the people and materials both absent and present.

Provisional Seriousness

In the first workshop, the 'seriousness' of hate crime had been a recurring source of tension between the message that the police were delivering and the ambivalent attitude towards reporting, expressed by the young people. While the police and criminal justice workers emphasised how 'seriously' they took hate incidents both personally and institutionally, the young people expressed concerns that reporting such incidents would not be treated 'seriously' in how they were listened and responded to. Indeed, many of the participants seemed to find adopting a tactic of not taking such incidents seriously as a more effective means of dealing with discrimination than that offered by reporting. The apparent 'seriousness' of the hate-crime-policing message wasn't connecting with the experiences of the young people. However, what remained unclear from these discussions was what treating hate incidents 'seriously' might mean for the young people.

This tension between serious/non-serious would be more clearly expressed by one of the participant's magic machine in the second workshop:

"Stuart leaves Powerhouse and gets verbally harassed by some drunk students. He doesn't report it because he doesn't think it's serious enough for the police to take notice". Now I think it's very serious [laughter], so I've made this ... I was originally going to go for a suit of armour, like your words don't hurt me, but due to time and cost I had to scale it back to 'fuck off please' [laughter]. [...] this little thing [indicates windmill], I thought if it got too heated you could spin this and local authorities could be contacted and then I put this [indicates 'I love camping' sign] in to reassure myself and the students that I'm really camp and that I accept myself for who I am and they can fuck off please (Chris, 15, gay, cis man).



Figure 1 Chris's Magic Machine

In the second workshop, Chris and the other participants started to play with what it would mean to take hate incidents 'seriously'. Chris's deadpan delivery of 'now I think it's very serious' uncovers an element of camp in the police's repeated insistence that they would take reports seriously. As Sontag notes '[t]o perceive Camp in objects and persons is to understand Being-as-Playing-a-Role' [38:57]. In both workshops, camp was identified by the participants as a resource available to them to foster resilience and agency in the face of hate crime and social injustice.

However, in his Magic Machine, Chris also identifies an element in the police messaging that fits into a variety of camp described by Sontag as 'a seriousness that fails' [38:58]. Chris and the other participants identified such a failed seriousness in the police messaging as a result of gap between the police's repeated claims that they will take reports seriously, and their ability to take meaningful action to respond to or prevent further hate incidents. For the participants, this perceived lack of an adequate police response undermines any claims of taking reports 'seriously'. Chris' presentation and device plays with failed seriousness, but also opens up other ways in which seriousness could be expressed. This reflects the way that the Magic Machine Workshop format facilitates speculation by creating a space in which seriousness is reconfigured. The structural, material and conceptual elements of the format allow participants and facilitators to 'temporarily engage in subjects we might not otherwise address; subjects that are either too difficult, or too banal' [4:112].

In our case, this sense of Being-as-Playing-a-Role was heightened by the choice of materials provided for the central making activity of the workshop. This is always an important consideration since, as Andersen puts it, these materials would inevitably 'drag the outcomes in certain directions' [3:101]. In preparing for our workshop, I choose to deviate from the Magic Machine's 'recipe' which specifies materials that lend themselves to as broad an interpretation as possible [ibid]. We supplemented plain materials like cardboard, string, and glue with materials collaboratively selected from a Pound Shop, by the researchers who had been present in the first workshop. Indeed, the 'I Love Camping' sign would seem to be a poor choice for inclusion in a Magic Machine workshop. Its verbal specificity seems to overly anticipate a single use or story. However, this sign's very direct connection to histories of subversive citation within LGBT+ communities and media, enabled Chris to recognise and use camp as a resource with which to reframe the discussion of 'seriousness' from the previous workshop.

In selecting materials such as the 'I Love Camping' there was a risk that we might too strongly anticipate and prescribe the participants responses to the task. However, the selection of materials also gave us an opportunity to respond to what we had witnessed in the first workshop through the materials we chose. When we went to buy the material, we were at a pivot point between recalling the events of the first workshop and anticipating the events of the second. As a result, this shopping trip became a collaborative process through which all three researchers selected elements that would form the basis of the material vocabulary we presented to the participants. We walked the aisles, selecting materials, sometimes for construction potential (string, tape, card, flower pots, balloons, etc.). Often though, we choose them for their potential for resonance with our participants and their experiences: water pistols, toy phones, diamantes, shot glasses, plasters, cocktail umbrellas, fake moustaches, glow sticks. These objects were overloaded with potential meanings, but also seemed to reflect the playful and even silly atmosphere that had occasionally surfaced in the first workshop.

As we collectively negotiated which materials we would bring, we walked a fine line between anticipating what would be needed and leaving space for unanticipated responses. We were working to make elements of discussions from the previous week present, but in such a manner that they could be played with and reconfigured such that they could return differently. We didn't fully verbalize our choices, but we tried to find a consensus on the materials selected. This collaborative process foreshadowed the thematic analysis of the workshops we would later conduct together. Conducting the thematic analysis was a shared effort to identify, and properly name, themes in a vocabulary that would allow them to participate 'seriously' in an academic discourse. In the Pound Shop, we went in search of a material vocabulary that would make allow us to enter into a speculative

discourse in which the terms of seriousness could be reconfigured.

Indeed, many of the materials we selected from the Pound Shop have a 'failed seriousness' to them. While there are typical types of products you might expect to find in Pound Shops, they don't have regular or reliable stock, instead selling whatever can be purchased at wholesale on the cheap. This often includes grey-market or remainder goods, things produced for a speculative demand that never manifested itself. The 'I love camping' sign used by Chris seems to anticipate a cosy heteronormative world of family holidays, a return to nature, rest and quiet, but it ended up becoming part of something very different. Such acts of appropriation are not exceptional, or even unusual. However, it is worth noting that while it is true that the sign might have 'dragged' Chris's device in certain directions, Chris's performance equally had the effect of 'dragging' the material in same way that drag artists subversively cite the signifiers of gender. By allowing these material elements and citational practices to come together in unanticipated ways, the workshop became space of provisional seriousness in which we could begin to imagine what it might look like if hate incidents were taken seriously.

Our choice of materials was greeted by the workshop participants with their own sense of being-as-playing-a-role. Within the structure of the workshop, these elements came together in order to begin to make present previously unanticipated ways to talk about, and respond to, experiences of hate crime. However, while these novel forms of response were anticipated in the workshop, they were not made fully manifest either in the workshop itself or subsequently. For Andersen, the results of Magic Machine Workshops 'are visions of what-may-be, and as such they do not foreshadow the future, as much as they present an opportunity for the participants to reflect on their everyday lives through the imagination of impossible things.' [4:112]. Crucially then, Magic Machine Workshops ask participants to imagine impossible things, but they remain just that: impossible. Chris's speculative device didn't suspend his disbelief in the police's message: instead it played with the ambivalence towards its believability. Camp as an orientation towards Being-as-Playing-a-Role provided a resource with which to express such ambivalent relationships with what is and what might be. Devices such as camp offer a means of engaging speculation in more ambivalent and dynamic ways than the binary of belief that can suspended or unsuspended.

Jumping Tentatively

For some, like Chris, the real world felt distant enough that they could commit to the provisional seriousness of the workshops. While for others, their real-world fears were never far away from their speculative concerns. Camp was one cultural resource that the young people could draw on to help reposition themselves. However, it was notable that, as a resource, it was far more widely used by the cis gay men present. Camp as sensibility *enjoys* artifice, but for some of

the trans men and genderfluid participants a sense of *being-as-playing-a-role* was often more ambivalent. These different levels of caution in approaching speculation highlights the feature that, while for some giant speculative leaps into the unknown may be possible, others need to approach speculation in more tentative ways.

This can be seen in GayArtist's 'Pronoun Corrector' that was designed in response to a scenario set in an LGBT+ space. GayArtist (22, non-binary/trans gay man) begins by describing its function as giving a clearly visible indicator of a person's preferred gendered pronouns (e.g. he, she or they): 'It has a beacon on the top so everybody around you will know exactly what pronouns you prefer [...] and then, when there is just a very stubborn person, there is like a little mini army man on the top and it will shoot them with the pronoun you prefer and knock them back into queerness.' He then clarifies the function of the device further ('shoots them and also they get misgendered'). However, GayArtist goes on to contradict his initial desire for the device to be a clear signal of his gender identity; by ending his presentation with 'and also it's invisible so there is no way they can blame you for [being misgendered]'. This wish for invisibility echoed fears expressed commonly by the group that reporting, or taking other actions in response to hate crime, will only make things worse for them. In making the device, GayArtist begins to imagine what taking action might feel like, but his fear that such action will likely backfire continues to haunt him.

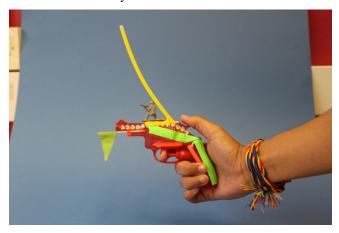


Figure 2 The Pronoun Gun

For Halewood [25], making speculative jumps requires faith that the ground that meets us is one that is capable of responding to our speculations with novelty. For the young people participating in our workshop, their prior experiences made it difficult to have faith that the world is capable of responding differently to their experiences of hate and discrimination. None-the-less these participants did tentatively experiment with what such a faith in the world might allow them to imagine, even if real-world concerns did reassert themselves.

Trouble Making

Many of the devices involved a similarly violent imagery to GayArtist's Pronoun Gun, albeit framed in the same cartoonish terms. As researchers, it was difficult to know how to respond to this. On one hand, we had explicitly asked the young people to express themselves. We had even supplied water pistols, army figures and fly swatters (though balloons, glow sticks and ear plugs were also transformed into weapons). On the other hand, these expressions didn't fit within our understanding of what an appropriate response to victimisation might be [8]. For Alex (15, bisexual, nonbinary/genderfluid), the absent presence of the police combined with performative structure of the workshop allowed them to dissociate from the ongoing responsibility of representing themselves to the world. Despite having had a positive interaction with the police the previous week, Alex seemed to relish the idea that we had temporally escaped from the view of the authority of the police.

The carnivalesque unsettling of authority allowed Alex to play more extensively with a role of being a 'bad' victim. Rather than presenting themselves as a vulnerable and passive victim in need of protection from the police, Alex's plays with adopting a persona that responds to abuse with cartoonish violence:

'Esther is on the Metro ... is jolted by a man wearing a swastika badge. She doesn't report it because he didn't say anything, and she thought it wouldn't be taken seriously...' So, I know I'd be pretty intimidated ... so [gesturing to their device] like, if they are like getting close, connect with them and that would stab them with the spikey thing.

Alex continues to describe a 'blinding flash', a 'deafening noise', a fly swatter for persistent 'flylike people' and their device's various defence features (ear plugs, flash bangs, escape routes). Alex's device is structured as a series of semiimprovised and-thens, that add attack- and defence- features to the design, but with little regard to how these cohere or interact as a whole. Alex's presentation had a child-like quality and was the most highly-animated presentation of the workshop. Alex stood to physically perform the potential uses of the device with sound effects ('This one is like a big force field, so like pheew') in contrast to how the other participants presented their devices: sat down, in a low-key fashion. While Alex's self-conscious management of others' perceptions quickly returned, during the presentation Alex is temporarily able to drop their concern for how others perceive them. The subject of Alex's speculation here is not only what it might be like to take violent action in the face of abuse, but what it might be like to be less self-conscious of other people's gaze. In the closing discussion, as we returned to the real world, James commented that the designs had 'been a bit too violent, slightly on the terrorist side'. Alex responded 'Well, you know what, it's time we fight back...I'm sick of being the minority.' What had been expressed in gleeful cartoon-violent and power fantasies of

many of devices produced, was more plainly articulated as anger by Alex once back in the real world.

After the speculation has taken place, after the world has reasserted its presence, the newly-imagined possibility can be haunting in another sense — we now have something anticipated but not realised. This second hauntological aspect is arguably the more challenging and troubling part of speculation for PD. Both the potential and risk of speculation is that it will take us somewhere unexpected, somewhere we might not necessarily want, or know how, to respond to. In the case of our workshops, we were faced with difficult questions about what to do with the anger we had given the space to be expressed. How could we respond to it without risking the same kind of 'failed seriousness' as was perceived in the community-policing response?

This question of how to respond in a way that takes the devices (and the desires the devices imagine) seriously, troubles the underlying assumption about what to do with the outcomes of such workshops. While in many ways the format is designed to resist instrumentalised outcomes that can straight-forwardly be translated requirements', the outcome is still expected to elicit a designedly response in other ways. Andersen and Wakkary [4] draw parallels between the outcomes of Magic Machines Workshops and that of Cultural Probes, as something that could 'inspire or caution design' [23:53]. But how can anger inspire design? What does anger caution us against exactly? The source of this anger cannot be solved with the immediacy of the participants' magic devices. It demands response, but it also directly confronts me with the limits of my agency as a designer and researcher. I cannot 'solve' GayArtist's fears, Chris's anger hidden behind irony, or Alex's desire to be seen by the world on their own terms

While empathetic engagement with users has been a long-standing component of human- and experience-centred design [29,42], only recently has discussion turned to the work required to manage the emotional aspect of such engagements. Balaam *et al.* have reflected upon the ways in which researchers, designers and participants all work in different ways to build and maintain the relationships needed for this kind of design work [5]. The authors identify how empathetic engagement requires a breaking down of boundaries between researcher and participants, with researchers, to a greater or lesser extent, 'taking on' the emotions of the participants and vice versa. However, this frequently results in a flow of emotions that threatens to overspill the professional and project boundaries unless properly managed.

In our workshops, the emotional overspill took the outcomes of the project beyond the scope of (what was conceived as) a small exploratory project to gauge potential interest in digital reporting tools. However, if we are to embrace PD as a form of *inventive problem making*, the production of, and sense of responsibility for, problems that exceed and redraw our boundaries is to be expected. This is not to say that

researchers do not need to manage emotional and professional boundaries with participants. To claim otherwise would be to fail to engage ethically with the inevitable power imbalances between researchers and participants. However, the emotional overspill that results from these encounters can also be what sets us in motion in search of other ways in which such boundaries can be drawn.

Sara Ahmed has discussed the ways in which feminism has addressed this difficult question of what to 'do' with anger [1]. Ahmed outlines the importance given to making space for pain to be expressed and listened to, as part of feminist practices. However, Ahmed also warns that pain should not be allowed to form the basis of a wound culture in which we become overly attached to pain and anger. Instead, Ahmed suggests that feminist practice should learn to read pain in such a way that its causes can be traced. In doing this, we 'do the work of translation, whereby pain is moved into a public domain, and in moving, is transformed' [1:173]. Feelings of anger that result from both our own pain, and reading the pain of others, can drive this transformation by helping us to name the source of pain: 'Anger is creative; it works to create a language with which to respond to that which one is against, whereby "the what" is renamed' [ibid: p174]. In our workshops, emotional boundaries were redrawn sufficiently that the pain and anger felt and shared by the participants could be translated into new forms.

Wondering about Hate

However, these were not the only emotional boundaries to be redrawn. The participants weren't just fearful or angry. They were defiant, playful and hopeful too. In the workshop, boundaries were redrawn around the relationship between the problem of hate crime and LGBT+ identities in more fundamental ways. The Trollinator 3000, that was designed by Steve (15, trans man, gay) to tackle online abuse that could not be traced by the police, is an example of this:

I introduce to you the Trollinator 3000... Okay, concept: you put this against your computer screen it absorbs through these sorts of pink sparkly and orange things, those are the troll. And then these guys, are your personal sort of troll attackers and they will cross land and sea. They will anywhere basically go, and like, stab the trolls, in the fingers or something, something really like owh. Stab in the fingers, if they get stabbed in the fingers then they can't write any more. And feel like these two are a couple that they fight together. And that is it.

While this is similar to Alex's and GayArtist's devices, prioritizing (violent) direct action over reporting, in this narrative the Trollinator is only incidentally related to LGBT+ identities. The presence of the gay couple is not central to the device's narrative or function, instead it is a mundane part of the technology and the work of policing. Steve presented the device in an unironic, deadpan manner that was received with delight by the group. This device and its presentation not only project a future where LGBT+ identities and hate crime are not inevitably interlinked, but

even seems to suggest that it could be possible that such identities might be considered barely worth remarking upon. Steve's device invites us to wonder about a world in which being gay or trans could be a mundane point of difference, rather than one that is vulnerable to being violently othered.

According to Ahmed, wondering, in the way that Steve's device invites us to, can act as a bridge between the pain and anger that results from injustice, and the hope for a better future [1]. Ahmed acknowledges that while anger can energize feminist thought and action, she also argues that it can become stultifying if allowed to become too fixed. Ahmed suggests that wonder offers a way to move through such sticking points without dismissing them entirely. Wondering is a means of thinking critically (I wonder why ...), but one which is open to the surprise of becoming differently (I wonder if ...). Wonder asks us to see things, as if for the first time, but not to cut ourselves off from the past: 'This first-time-ness of wonder is not the radical present -amoment that is liveable only insofar as it is cut off from prior acts of perception. Rather, wonder involves the radicalisation of our relation to the past, which is transformed into that which lives and breathes in the present' [1:180].

Wonder as an orientation towards surprise and novelty has some clear connection with speculation. However, Ahmed brings into sharper focus the reason why speculation is both emotional and politically important: anger is energy that can drive our response to encounters, that demand from us shared pain, recognition and care. Wonder, on the other hand, allows us to be open to the necessary transformation that such response will require. Ahmed argues that even hope can cause us to become 'stuck' if we become too stubbornly attached to certain hoped-for futures. Wondering does not ask us to give up on either anger or hope; it gives us a means through which these things can be transformed.

Crucially, Ahmed's wonder differs from speculation in that its requirement for faith in a world-in-the-making is less dramatic. For many of the participants in our workshops, experience had taught them that the world that met them was too often hostile to commit to such faith. However, where speculation requires a faith that asks us to leap blindly, wonder allows us to feel our way along boundaries and probe how they might be redrawn. Wondering is not without risk either, but wonder suggests that such risks might be shared as, for Ahmed, it 'opens up a collective space, by allowing the surfaces of the world to make an impression, as they become see-able and feel-able as surfaces' [1:183]. In our workshops, many of the devices might have resulted in individual shifts in how hate crime and reporting were perceived, and the presentations gave space for the group as a whole to consider and build on this shift. And so, while the departure from what is might be individual, wondering can be a collective practice where the ground on which such leaps land can become a matter of shared concern and response.

This kind of collective wondering was present in the workshop in the discussion of The Hate Crime Bomb produced by Sapphire. The Hate Crime Bomb is thrown at homophobic attackers and covers them with rainbow-coloured paint. Sapphire (19, cis man, gay) was slightly older, and seemed much more assured in his identity as a gay man, than most of the participants. In the first workshop he had been one of the most prominent proponents of an attitude towards reporting that we would later dub 'the greater good'. Sapphire explained: 'Although I won't report things myself, when I was working on the gay scene, I was always reporting things that I heard from someone else'. This framing of reporting as something done for the good of others was the one most commonly associated with positive attitudes, or actual examples of making reports, by the participants.

After Sapphire introduced the device, the group collaborated in refining and extending the idea, with even the civilian Criminal Justice Worker joining in (having previously declined to participate in the making activity). Together, the group began to wonder about what the Hate Crime Bomb might do to the attackers. Chris offered that it would make the attackers' 'idiocy' visible, 'so you'll be walking home, and they'll be covered in paint and you'll be like, that idiot is a homophobe'. The group then shifts to considering about how it might make the attacker feel. In the end, Sapphire describes the effect of the rainbow paint on the attacker as: 'everyone will think they're gay and they'll have to deal with what we have to deal with'. In doing this, the group has shifted the function away from simply publicly shaming an offender, towards the offender being forced to experience and acknowledge the harm done to victims.



Figure 3 The Hate Crime Bomb

The device's aim to have offenders acknowledge the harm they do is similar to the central tenant of restorative justice. However, restorative justice is considered especially challenging in the case of hate crime due to the power imbalance and social disconnection between offender and victim [40]. The violent imagery of Sapphire's 'Hate Crime Bomb', like the 'Pronoun Corrector', evens the score by putting the power in the hands of the victim. However, while it helps us to imagine how power could be distributed differently, the visual and material qualities of the Hate

Crime Bomb works to remind us that speculation is limited in its capacity to realise these virtual presences. There is a sense of pathos about a balloon with some glitter pompoms inside, with a shaky, hand-written label, claiming to be a hate crime bomb. The gap between how the 'bomb' appears and its proclaimed function reflect the gap between the power fantasy the device invites and the reality that the young people are faced with.

Ahmed's concept of feminist wonder provides a model for thinking about how speculation can be translated into a collective space in which the fears, risk, surprise, and anticipation involved, can be shared. This kind of shared act of wondering could be seen as the participants collaboratively discussed what the hate crime bomb does to a hypothetical attacker. Due to the victim-centred framing of community-policing agenda, there had been very little discussion of the people who commit hate crime and hate incidents up to this point. Here though, the participants tentatively wonder what it would take to transform the encounter with their attacker so that they could demand 'recognition, caring and shared pain' as Haraway put it [26].

The workshop is haunted by the question of what it would mean to take hate incidents seriously. And the perhaps uncomfortable, often unworkable in the present, answer seems to have little to do with strengthening the lines of communication between the victims of hate crime and the police. Instead, it might be a case of finding ways to change the relationships between the attacker and the victim in order to restore face to both. As previously noted, such restorative justice approaches are notoriously difficult to put into practice and as such, are not considered a serious option by many working in criminal justice, hate-crime-support organisations and criminology. However, as the participants begin to wonder about it in the workshop, this proposition takes on a provisional seriousness that invites us to wonder further about other ways in which we can take hate crime seriously.

CONCLUSION

'Put my face on everything ... Everyone will want to download it.'

I keep returning to this line of transcribed speech. It demands a response and yet I don't know how to. It didn't have this effect on me at the time it was said. It was near the end of a workshop and we were wrapping things up. We offered a last chance to contribute to ideas or comments on any of the design proposal we had devised and discussed. Alex exclaimed it excitably in response. It seemed to be part of the slightly manic, silly atmosphere of the speculative design workshop. I took it as sign that we maybe should have wrapped things up earlier; that the group had lost focus.

But later when I read it back, it caused me to pause. I was checking through the typeset transcripts before distributing copies to the rest of research team when it jumped out at me. I had just finished meticulously obscuring Alex's face in

dozens of photos. This act was not unusual, the universityapproved ethical procedures for the project included the standard anonymisation of the participants identities. Alex and the rest of the participants are made unidentifiable through pseudonyms, through the withdrawal of certain details, and through hiding their faces. I stand by this anonymisation: there is too much risk from exposure, too little benefit from doing otherwise. Alex, who identifies as non-binary and genderfluid and asked to be referred to by gender-neutral pronouns (they/them), was 15 at the time of the workshop. They presented themself with a mixture of vulnerable uncertainty and self-conscious outrageousness. When I met Alex, they were delicately forming a sense of identity in a world that was often hostile to them expressing that identity. To further expose Alex to scrutiny seems unlikely to result in a positive outcome for them. However, Alex's request still bothers me: how do I respond to it?

Perhaps a slightly different question is called for: who am I responding to? Whose face is it that I am being asked to share? Is it the flesh-and-blood young person, the one who chose Alex as their pseudonym, and whose request I was too distracted to listen to in the closing moments of the workshop? Or is it Alex, a figure created through the apparatus of research, a result of transcription? In some senses, this Alex is my invention: I transcribed the speech, typeset the transcripts, edited words and images to make Alex distinct from the person who first uttered those words. And yet, Alex is not my invention alone: there was and remains a flesh-and-blood person who uttered those words, who took part in that shared performance captured in still photography and audio recordings. A person whose speech often resisted my efforts to transcribe it through at times whispering or shouting, through using sounds and gestures, rather than words. These acts remind me of all of the things in the workshop that the transcripts can never represent. Despite, or perhaps because of, this failing this Alex who appears on the page can make their own original demands on

In this paper I have built upon recent discussions in Participatory Design about Response-ability in order to begin to explore the ways in which ethical commitments in PD can be made and sustained through as interplay of absence and presence. My encounter with Alex on the page is a prime example of how a research apparatus like a transcript allows us to build and sustain a capacity to respond to participants long after an original encounter with them. Sarah Pink has written about how transcripts are not just 'texts' to be read and interpreted but are a way for researchers to reconnect through memory and imagination with the moment in which the research encounter took place [35]. More than texts to be analysed, transcripts allow us to return to a past, to once again be present in a workshop or interview. As such, transcripts allows the workshop to reappear but the moment that 'returns' is distinct from the original just as a ghost is distinct from the person who once lived [9].

This haunting quality that I have come to associate with speculation raises the question of when speculation happens. To begin to address this question, I would like to point to Critical Incident Technique (CIT) as used in Education [39]. There are some parallels between forms of critical inquiry in PD and CIT, since both worked to make mundane instances of ubiquitous technologies, or teaching practice, critical through a process of uncovering their connections and significance within a larger system. Crucially to this discussion of when speculation happens, for Tripp, critical incidents are not things that just happen. Instead, incidents are made critical. For Tripp, this is done in two stages: first it is made as an incident when it is noted and described; then the incident is made critical through its connection to a broader analytic framework. Something happening, and it being noted as an incident does not necessarily have to happen simultaneously. In fact, Tripp suggests that, more commonly, incidents will be made from something that seemed unremarkable at the time it happened, and it is only through a process of analysis that they become critical. As such, incidents are made critical only retrospectively.

I would like to suggest that the same is the case for speculation. That often events when they first occur may not be obvious in their potential as source of speculation. They may appear to be silly remarks, asides, noisy outliers. Indeed, they might barely be noticed at all. As such, it may often be the case that these events only become speculative in retrospect. However, speculative events differ from critical incidents because speculative events are marked by their capacity keep becoming speculative. Events are not just made speculative once, but events are made speculative through repeatedly being made differently. Speculation compels us to repeat and reconfigure events and, in doing this, enables us to keep wondering about these events.

If post-solutionist PD asks us to consider how participation takes place across multiple sites and involves a variety of human and non-human actors, hauntology extends this discussion to consider how participation happens across multiple temporalities. Hauntology therefore affords a concept with which to examine how PD can foster responseabilities that go beyond what is immediately present to include what once was, or in the future may be, present. It sensitises us to the fact that '[t]he past is never finished once and for all and out of sight may be out of reach but not necessary out of touch' [6:394]. By considering how the not-so-distant past and anticipated futures manifest themselves before, after, and during speculation, I hope to contribute to discussions of PD can remain committed to problems that exceed our capacity to respond adequately in the present.

I was wondering when I read those transcribed words: 'Put my face on everything'. Seeing those words as if for the first time led me to wonder what they meant, in ways that never occurred to me when I first encountered them. They spurred me to wonder about what kind of surfaces constituted a face in the context of PD. It compelled me wonder how I could

respond to participants who are both absent and present and how these forms of participation could be translated into shared spaces of commitments and care. If the transcripts brought forth a ghost, wonder made me open to making contact with it. Wondering doesn't 'solve' problems, it doesn't even guarantee response, but it does allow us to keep coming back to problems. And since wonder accepts responses as provisional, it keeps us open to the possibility of responding again and responding differently. The challenge posed for PD by a sensitivity to such absent presences is to consider how collective spaces of wonder can be extended beyond the immediate site of speculation.

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