Settled and unsettling: Design and flows of affect in a hospital waiting area

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Abstract

Waiting in healthcare environments is common, and the design of waiting areas can profoundly participate in that experience. This paper describes a study drawing on Deleuze and Guattari's notions of 'affect' and 'assemblage' to investigate a hospital waiting area: exploring how the area currently participates in the generation of affect and how it could better support human 'becomings'. Analysis of generated observational data identified 'affective assemblages' that produced recurring affects encountered in the waiting area, here labelled *crisis, workaday world,* and *episodic home*. Thinking in terms of assemblages forced the analysis to direct attention to a wide variety of 'elements' that participate in the production of spaces and the affects encountered in this type of waiting area. These included bodies, objects, time, sounds and smells, social conventions and cultural norms. It also allowed a discussion of the effects of inter-action between affects – identifying aspects that, while initially interpreted as 'problems', may also be producing opportunities important to the functioning of the space. The paper concludes with a discussion of the implications for design, suggesting that analyses of 'affective assemblages' produces potentially fruitful 'lines of flight' for generating questions and possible responses that challenge notions of simply 'solving design problems'.

Waiting, Affect, Deleuze, Hospital, Healthcare, Spatial design

Introduction

Waiting areas are common in hospitals and other healthcare environments. The emotions and behaviours that occur within a waiting area affect the wider space that it

exists within, and like other environments, the design of the area can affect how it is experienced by both its intended users and others who regularly encounter it (such as staff). Despite this, the design of waiting areas is often done with little analysis of how those areas operate to shape the experiences of patients, families and staff. Work within human geography theorises the role that design and architecture in the experiences of waiting. However, there is a paucity of work that applies directly to the design of hospital waiting areas, particularly in relation to specific challenges in acute care waiting zones. In sociology, authors have published fascinating analyses of hospital environments and their dynamics (for example see Brown 2012; Roth 1972; Fox 1997), but the focus is on understanding socio-cultural dynamics rather than design opportunities. The present article describes a study that sought to explicitly analyse a critical care waiting area within a large urban hospital with respect to how the space itself participates in users' experiences, and the opportunities for designers who work in design-for-health to respond to this in a considered way.

Waiting in acute healthcare situations

Waiting for healthcare assessment or treatment, or waiting for news of the outcome of emergency or scheduled procedures is largely understood to be an unpleasant (and sometimes traumatic) necessity in healthcare (Rittenmeyer, Huffman, and Godfrey 2014; Plowfield 1999; Bournes and Mitchell 2002). How waiting is experienced can impact on wellbeing of patients and families and ultimately even affect 'outcomes' of healthcare (Rittenmeyer, Huffman, and Godfrey 2014). A systematic review of the literature on experiences of patients and families waiting in healthcare situations (Rittenmeyer, Huffman, and Godfrey 2014) concluded that organisations needed to find ways to acknowledge and address the anxiety and stress associated with waiting, and the impact it may have of understanding of healthcare information.

Despite generally negative reports of waiting experiences in the healthcare literature, waiting environments can themselves provide opportunities to positively influence people's experiences and moods. Peter Bishop's conceptual analysis highlights how architectural design can interact with existential experiences to create opportunities for waiting to be more than just "wasted time". For example, he suggests a waiting area can provide space for a much-needed retreat, or even significant life experiences (Bishop 2013). Other human geographers have offered analyses of 'waiting' that take this concept beyond the usual taken-for-granted cultural meanings and pose questions and challenges around the experiences and meanings of waiting, including how these are manipulated within design and architecture (c.f., Conlon (2011) on waiting and engagement with socio-political norms; Adey (2008) on the architectural design of airports; Clapton (2018)'s photo-documentation study of GP waiting areas). Building on this existing literature, the inquiry presented in this paper conceptualised the waiting area as dynamic and participating in the re/production of experiences.

Study setting

The setting for this study was a waiting area for whānau[1] and families located next to an adult theatre suite (including trauma, neurosurgery, liver and kidney transplant surgery), where some of the most urgent surgeries in the hospital take place. Whānau and families in this area are often waiting for news in situations where survival or critical outcomes for their loved ones are uncertain. The hospital itself is located in a busy urban centre in Aotearoa New Zealand with an ethnically and culturally diverse population. The history of the land on which the hospital is built is significant for Māori (indigenous peoples of Aotearoa New Zealand) as the land was gifted by a

[1] Whānau is a Māori (indigenous language) term referring to an extended 'family' and may involve networks of families that are closely related socially and economically.

local iwi (tribe), who are also partners in the local District Health Board under the guidance of the Treaty of Waitangi (founding document of Aotearoa New Zealand).

The waiting area had been identified by a hospital's 'improvement team' as needing attention due to ongoing tensions between various uses of the space: as a waiting area; a thoroughfare; and a place where staff stopped for lunch or conversations. After preliminary interviews and observations led by the design lab situated within the hospital, researchers and staff identified that additional research would be helpful – leading to this study. The overarching aim was to better understand the ways in which the waiting area was integrated into the production of experiences for families and staff, and investigate opportunities that could be opened up by reimagining that environment.

Study design and methods

Theoretical positioning and aims

The study was conceived as a trans-disciplinary (sociology, health, design) study involving researchers with expertise in clinical and health sciences (adult and child) and design for health and wellbeing. The theoretical positioning was post-structural, utilizing the philosophical writings of Deleuze (1988) and Deleuze and Guattari (1983, 1987, 1994), particularly their notions of 'assemblage', 'becoming' and 'affect', and drawing on the application of this philosophy within health and human geography. The study had three specific aims:

1) To analyse the waiting area as a series of assemblages, examining the effects of those assemblages in order to identify opportunities and constraints for users of the waiting area associated with design of the physical space;

2) To analyse how these opportunities and constraints may change as a result of re-designing the physical space;

3) To investigate how this theoretically-driven method of longitudinal observation could inform a design research methodology for future projects.

The current article focuses on the first aim (with a view to the other two), introducing the theoretical underpinnings, how the research team applied them methodologically, and a brief discussion of the questions and opportunities the analysis highlighted in relation to design in this particular study setting.

Becoming, assemblage and affect

To enable an analysis of the waiting area as assemblages, the research team drew on the writings of Deleuze (1988) and Deleuze and Guattari (1983, 1987, 1994). This section provides an introduction to this philosophy which served as the methodology for the research, guiding the methods and analysis (Feely 2016).

Becoming (within waiting)

In contrast to dominant Western philosophical thought, Deleuze (drawing heavily from Bergson and Spinoza) theorized life in terms of *becoming* rather than *being* (Colebrook 2002). In Deleuze's philosophy, all of life is unfurling at every moment – a plane of becoming in continuous iterations. Becoming in this sense is focused on a continual dynamism – all entities being in process – rather than the usual sense of the word, relating to the 'future' of individuals. Tuning into becoming (rather than situating ourselves as external static observers, perceivers and knowers) is a method by which we can encounter life in all its diversity, and open up new understandings (Colebrook 2002). Thus, in Deleuzian scholarship, waiting is not simply stillness or pause. Waiting is an event that continually participates in becoming; an integral part

of becoming. Similarly, waiting areas cannot be simply 'containers' within which people wait. They contribute in the becoming that occurs within the waiting.

Waiting area as 'assemblages'

The notion of the *assemblage*, from Deleuze and Guattari (1987), changes ways of thinking about what constitutes the 'reality' of everyday encounters, including how space and time participate in the world. We can think of a waiting area not as static, but as an ever-changing series of connections between a huge number of heterogeneous elements in various states of flux within the waiting area. These identified 'elements' are assemblages themselves: human bodies, emotions, behaviours, personal objects (such as clothing, digital devices, bags, baby strollers), food, furniture, walls, doors, windows, sounds, smells, weather, events (within and outside the waiting area), time of day, week, month, year, and so on, all constantly coming into and out of connection with each other. They are interacting and changing through (and as part of) space and time. Indeed, assemblages include both space and time, which are often theorized together within Deleuzian scholarship (e.g. see Massumi 2002). Assemblages both produce and include movements of becoming and flows of affect (Ringrose 2010).

In theorising the 'waiting area' for this study, we considered it to be multiple dynamic *spaces* that are continuously re/constructed as assemblages shift. The *place* itself – referring to both the physical location of the building and the socio-historical meaning of that particular location – also participates in these assemblages and in the spaces they produce (Gieryn 2000; Kearns and Joseph 1993). Although human beings and the multiple subject-positions they embody are also assemblages, the focus of our inquiry was explicitly on the ways in which the waiting area participated in the production of experiences for those positioned as 'staff' and 'families' (see above).

As such, for the sake of the design questions we chose to refer to the recurring 'person' subject-positions appearing in our observations – most often 'families', 'staff' and 'patients'.

Affect and the designed environment

In the early stages of analysis for this study, it became apparent that a particular focus on the concept of *affect* was likely to be most helpful in considering design questions and responses. Deleuze's work makes a distinction between emotional response, which is something personal to a particular human being, and affect, which is pre-personal: affect is produced in an encounter. It is a force that presents feeling, and its presentation is not situated from a particular point of view. An example of this force is when an artwork or a space compels people who encounter it to feel a certain way (Colebrook 2002). In his early writing about the philosophy of Spinoza, Deleuze discussed a 'becoming' that is made possible through encounters with other beings (other bodies, objects, environments, etc). People experience forms of sadness when we encounter a being that "decomposes" us. We experience forms of joy when we encounter a being that affirms and expands our own being, or "enters into composition with us" (Deleuze 1988, , p. 21). These encounters occur at the level of the body-mind, while consciousness is an awareness of travelling these "passages" between sadness and joy (Deleuze 1988, , p. 21). This Deleuzo-Spinozian account also suggests that 'joyful' encounters produce a greater capacity towards action (Deleuze 1988). Deleuze, in his later work with Felix Guattari, went on to characterise affects as one of the ways in which *art produces thought* (Deleuze and Guattari 1994). Encounters with affect are a means by which humans experience a slowing of what is otherwise continual, unconscious, becoming; and open up to a consciousness of realms of possibility (Deleuze and Guattari 1994).

In human geography, researchers have applied and expanded upon Deleuze and Guattari's discussion of affect specifically in the context of the effects of designed aspects of environments. For example, Adey (2008) shows how the deliberate design of an airport produces a certain affect which encourages people into the sort of dullness that is required to manage the processing a large number of people who are likely to be experiencing travel-related stresses. Anderson (2004, 2006) uses Deleuzo-Spinozan scholarship to theorize how encounters with music (another common aspect of designed environments) can shift emotional states and produce hopefulness. Specifically within health geography, affect has been recognized as a key concept within non-representational theories that help geographers considering the roles of environments – physical and cultural – in human wellbeing and healing (Halon 2014; Duff 2014).

Affective assemblages

In this article we use the term 'affective assemblage' in order to characterise assemblages according to the encounter with affect that is produced. The notion of the 'affective assemblage' has previously been used in similar (although not identical) ways. It is most often used to describe assemblages that are notable because of their capacity to produce affective encounters that shape what people can be/do (e.g. see Bignall 2010; Ringrose 2010). In this study, we used the notion of the 'affective assemblage' in order to prompt design questions and generate responses. Our application to design practice (as opposed to remaining at the level of theory) produces a tension with the notion of *becoming* because of the necessity to describe and respond to specified 'affective assemblages'. Our approach relies on a phenomenon that Bignall (2010) describes as a tendency for an assemblage to form "a characteristic consistency" (p. 84) that makes it recognizable as itself within a set of

internal and external relations. In describing 'affective assemblages' in our findings section below, we 'capture' a characteristic consistency in order to be able to discuss the design questions it raises and responses it prompts.

Data generation

The data for this study were a series of observational maps of the waiting area, created by five members of the research team (first 5 listed authors) with diverse expertise (sociology, psychology, nursing, design) who observed the waiting area over a period of ten consecutive weeks in 2016. The lead author provided training in using the observation protocol (see supplementary online material) to generate observation notes to map the assemblages, consistent with the Deleuzian theoretical orientation of the research (see previous section). Observations occurred during winter and included a range of times of day (between 7am to 7:30pm), all days of the week, and included two weeks of school holidays. A single observation session ranged from 10 minutes to 65 minutes. Most common was 15-20 minutes. The maps were created by observers at the time of the observation by annotating a floor plan of the area (example provided as online content). The annotations aimed to illustrate assemblages. Regarding 'physical' elements, this included descriptions of people and activities along with their locations, and interactions between the various elements of the space (including people, furniture, fixtures, personal objects, hospital property, sounds and smells). Researchers also noted the 'feel' of the space when they were there, and notable weather, local structures or international events that somehow entered into the environment (e.g. school holidays, sports events). Consistent with the Deleuzian approach, the intention was not to be exhaustive in capturing every detail, but to focus on salient elements of assemblage and affect. Acknowledging the researchers as part of the assemblages, they were also encouraged to note their own

thoughts and feelings that were prompted by being in the space. Some maps depicted a single observation, while others contained observations overlaid from different times during the same day, with times noted for changing aspects. In total, the researchers produced 25 maps for analysis, accounting for 47 separate observation sessions. During the data generation period, researchers met regularly to discuss observations, experiences and emerging issues.

Methods of observing and recording the observations were adapted according to what was assessed by the researchers to be least disruptive to the people using the area. For example, during busy times or when the researchers felt there was a need for privacy, they would walk through the area and note observations in another space. At other times, it was least disruptive to sit in an unoccupied part of the space. No details that could identify individuals or groups were collected, and researchers were careful to avoid intently watching people or other activities that would make people feel observed (as the intent was to observe the assemblages). All the observers were experienced in interacting with vulnerable people. A poster was displayed in the area during the observation period explaining the research (including photos of researchers) and inviting people to ask researchers about the study or ask researchers to leave if they felt uncomfortable or unsafe. The study protocol was approved by the University ethics committee where the researchers were based, and key staff within the hospital were made aware of the observations and the contact details for lead researchers.

The study team also gained permission to view notes from interviews with families (n=7) and staff (n=14) users of the waiting area that had been conducted the previous year in the context of exploring options for service improvement. Experiences in the space described by interviewees were treated as supplementary

data, read following analysis of observational maps (our primary data). Interview notes acted as an extension to the analysis regarding how the assemblages and the affects they produced were integrated into the production of experiences for people in the waiting area.

Data analysis

Analysis of the observational maps employed the theoretical lens outlined above and focused on three inter-related theoretical concepts from Deleuze and Guattari: *becoming*, *assemblage*, and *affect*. The analysis group included the researchers who generated the observations, a senior researcher experienced in post-structural analysis using Deleuze and Guattari (BG), and a doctoral student (KW). Three researchers had experience in analysis using this philosophical lens (JF, BG, KW) and the others had training from the lead author prior to data generation. There is no fixed 'structure' to this type of analysis, as it is focused on viewing the data through the theoretical lens. Rigour is related to coherence of the interpretation with the philosophical lens used, including the commitment to letting the philosophy guide interpretations (St Pierre 2011). This was monitored by the lead author and the senior author. During preliminary analysis, each researcher noted key theoretical questions that were prompted by reviewing the observational maps alongside the theoretical concepts. Following this, we had a series of meetings to address these questions and develop the analysis, including reviewing and contrasting findings with relevant literature in human geography and sociology (e.g. relating to waiting and healthcare environments). Following these meetings, the lead author and the senior author collaborated to further develop the analyses using a recursive process of moving between data and an in-depth reading of the Deleuzian texts and multiple meetings to

build on the developing interpretations. These were then shared with and further refined by the entire team.

In the final stage, the lead author and one of the design researchers (HC) used the analysis to articulate a set of design questions that could be used in consideration of the future design of this and similar waiting areas to shift opportunities and constraints for human becoming. This involved identifying aspects of the assemblages and their interactions, and was conceptualised as the first stage in identifying how opportunities and constraints may change with a re-design of the space (aim 2 of the study, beyond the current paper). The process that we undertook involved identifying possible opportunities from the analysis of affect, then exploring possible effects of change. Consistent with our intent to keep possibilities open at this stage, we did this in a creative, playful way, placing existing objects or design features in the waiting area on a continuum of possible meaning through comparison with completely different assemblages. This approach forced us to think about the role of various object/design features in the assemblage. For example, heavy furniture, some even screwed in place in the waiting area was compared with the movability of furniture in a preschool, and their functions within their respective assemblages compared – allowing a consideration of that element of the assemblage on affective possibilities. An example sketch from this process is provided as Figure 1. The application to the articulation of possible design opportunities is covered in more detail in the discussion section below. However, it should be noted that a full discussion of design solutions is beyond the scope of this paper.

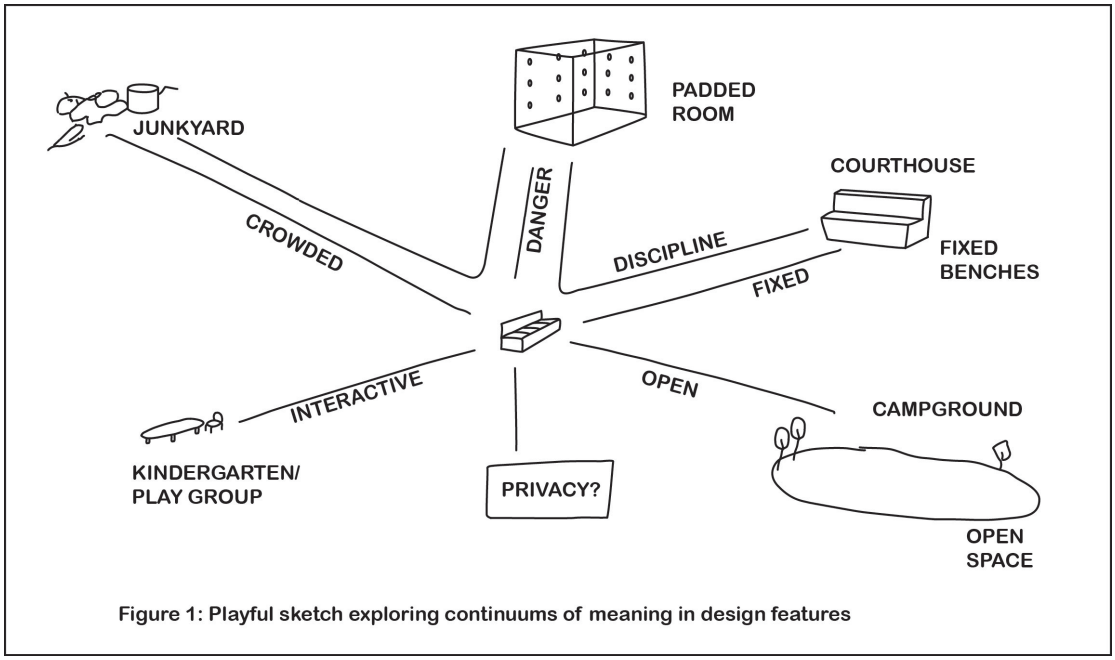

Figure 1: Playful sketch exploring continuums of meaning in design features

Affective assemblages

'Waiting area' assemblages that produce affects

The following sections sketch out three recurring and interacting affects in the waiting area and the assemblages that produced them. This is followed by a discussion of the implications for waiting area design. For the purposes of describing the analysis, the research team took the approach of giving names to recurring affects encountered and then describing the assemblages that produce them as 'affective assemblages' – that is, assemblages that produce encounters with affect. As discussed earlier, there is a tension in that naming affects risks artificially fixing particular elements and their relations as static *being* (as opposed to fully attending to dynamic *becomings*). However, given the applied nature of the project, the advantage in directing attention to affective assemblages by naming recurring affects produced was that it allowed the research team to focus on how affect could lead into design questions/directions.

First, we name and sketch out three recurring affects and key aspects of the affective assemblages that produce them. For each, we first discuss 'elements' and forces that were observed as significant in the assemblage that produced recurring affects, then we describe encountering these affective assemblages. Following this, we will discuss the relations amongst and between the affects and the assemblages that produce them, and the implications for waiting area design.

Crisis

Crisis assemblages communicated intense emotion, and a critical element in these assemblages was knowledge about the intended purposes of the waiting area – the association with acute surgery wards, immersed in a waiting-for-news assemblage of bodies, expectations, worries, procedures and the physical configuration of the place. Researchers (observational notes) and families and staff (interviews) were aware they were encountering their own and each others' grief, forming a shared grief-assemblage alongside attempts at privacy/separation. This knowledge sensitised the people encountering this space to 'seeing' other elements that make up the assemblages that produce affects of *crisis*. These other elements included spacial organisation, organisational protocols, objects and behaviours.

A separation between 'patient' and 'family' produced by spatial design and protocols (an aspect of being-in-the-hospital) was a key component of *crisis* assemblages. This was most notably expressed in three elements: 'staff only' glass doors that mark the start of the wards; the proximity of the main entrance (a lift/elevator bank) to these glass doors, with the main waiting area located beyond this; and a loudspeaker mounted on the wall in the waiting area that 'staff' were able to use to call 'families' into the ward. The glass doors were an ever-present physical barrier that was both close to the entrance to the space and the closest families could

physically get to the loved ones who were 'patients'. Although the families of patients could be observed moving to spend more time in the larger waiting area beyond (rather than the area adjacent to the lifts in front of the glass doors), this shift into the 'intended' waiting zone could take several hours or even several visits, and observations noted groups of people 'all looking towards the wards' (Observation: 28, June). Behaviours that signified shock and uncertainty were encountered in the entrance area: individuals and groups of people hovering by the lifts (the area not quite 'in' the waiting area but not in the outside world either); individuals on the phone with an upset tone of voice or crying / red eyes; intense conversations; sitting on the edge of the chair; crowding in the area by the glass doors; withdrawn or stressed expressions or postures. As such, a key element in *crisis* affects was the immediate entry into a section of the waiting area where grief and uncertainty were apparent and exposed.

When assemblages that produced affects of *crisis* were encountered, they enacted the weight of waiting for uncertain and possibly unwelcome news. These affects acutely attuned people to certain elements that seem to be vitally important (such as human expressions, postures, location of the wards) and closed off to other elements (such as a view, weather, social and cultural events, subject-positions outside of those important to the 'patient') that were 'backgrounded'. *Crisis* affects could connect a present geotemporal situation with other moments of crisis – in this time-space, or in others – folding past and present together. For example, encountering an affect of *crisis* stimulated comments from researchers about previous thoughts and experiences – crises in their own lives: 'being in this space just brings back every major family illness memory I have, I remember being stressed out and numb, on edge and fearful' (Observation notes: 4 August).

Workaday world

In stark contrast to, but existing alongside, affects of *crisis,* assemblages that produced affects of *workaday world* were encountered in the space. *Workaday world* affective assemblages were primarily encountered in the part of the waiting area containing two large rooms alongside a corridor which staff and some visitors used as a thoroughfare between different parts of the hospital. The corridor was lined with chairs, and was situated next to a large window with a view across the city. The rooms themselves were viewable from the corridor and indeed could be looked right through, as they had glass walls on each side also faced the windows (there was also a set of windows and another corridor on the opposite side, although this was not used as a thoroughfare).

Bodies and behaviours within and through the environment were significant in the production of *workaday world*. Fast, directed movement, chatty conversations between those idenifiable as 'staff' ('Group of 9 chatting, happy staff, pass through' – Observation: 28 July), 'staff' settling in the same corner or set of seats day after day at a particular time ('Group of 4 staff, sub-group of same people from Wednesday?, having lunch and talking loudly. Music playing.' – Observation: 1 July) – all communicated a familiarity and routine. Similarly, objects like packed lunches and cooked food – small pieces of planned, ordinary life – were key parts of *workaday world* affective assemblages.

Uniforms and hospital identification badges played a particular role. In making individual people identifiable as hospital employees, these markers enacted a separation between work life and personal life – drawing in wider cultural understandings that order and divide 'worker' from 'family member' with associated behavioural expectations. Although *workaday world* and *crisis* affects overlapped in

the waiting area – opening up opportunities for encounters with both – the symbolic connection produced by uniforms and badges brought into the assemblage a societal expectation that people need to be able to carry out a work day without being continually confronted with the emotions associated with *crisis.*

When encountered in our observations, *workaday world* enacted a feeling of being part of routine life, containing nothing particularly notable. *Workaday world* affects communicated an ordinariness of space-time and a reinforcement of cultural expectations of a boundary between the subject positions associated with work and those of personal lives.

Episodic home

'End room has large pile of supplies/groceries (chilly bins, cans of food and drink) with 2 women – one brushing wet hair. They are talking' – Observation: 28 June).

Episodic home assemblages communicated a claiming and structuring of space-time through: home-associated objects brought into the area such as food, blankets, pillows and appliances; the arrangement of people in family groupings; arrangement of furniture to more closely resemble beds and home-spaces; claiming space and not shifting to allow (other, 'not-us') people to move through. Like *workaday world,* they were associated with the larger part of the waiting area where there were rooms and more seating. The observational maps noted rooms being 'claimed' by personal objects such as bags of groceries and electronic devices, even when there were no people present: 'Air mattress (double) and small blanket on floor. No people. Pushchair' (Observation: 19 August).

Behaviours noted conveyed intimacy and exclusivity such as one might expect at home – playing recorded music; touching and cuddling; breastfeeding; disciplining

children; talking and laughing as one might in a family home assemblage. Signals of and knowledge about families washing and sleeping in the space were also key elements in assemblages that produced affects of *episodic home*.

Assemblages that produced affects of *episodic home* enacted a feeling of being in or observing a portion of someone's (or more often a group of people's) private space. *Episodic home* affective assemblages could be seen to be actively constructed by individuals and/or families, including observed actions and material artefacts (food, linens, music, etc.) that conveyed a sense of recreating a home space-assemblage. This opened a link between the affect encountered and knowledge and feelings usually associated with homes – e.g. need for privacy, intimate connections, everyday routines. It was simultaneously home and not-home by attenuating differentiations between the home and the hospital – who is in control, the different etiquette, the different subject positions, the level of knowledge about what is doable and possible.

Inter-acting affective assemblages

These affective assemblages overlapped in the waiting area, co-existing as well as leaking and flowing within and between each other. One example was the insertion of *workaday world* affective assemblages into those of *crisis* or *episodic home*. This could occur when members of the public, staff or researchers walked through the space. The effect for the researchers was an uncomfortable feeling of voyeurism. Our team's initial reaction was to characterize this as a 'problem', i.e. that the design of the area did not (but should) prevent staff, public, and families waiting for news from being in view of each other. However, a more in-depth analysis exploring the effects of this interaction suggested a much more complex picture. For 'staff', both *crisis* and *episodic home* were encounters with 'their patient' as a connected person who acts and feels with/in networks of other people/things/places/ideas/values. Although the

interviews indicated that the waiting area was sometimes actively avoided by staff due to worries about being confronted by families wanting information about loved ones, even avoidance in a way indicates that there is an opportunity for this encounter. This is important in the context of concerns that people are often viewed as just a 'body' in the context of acute medical procedures (Cassell 1997). On the other side, the ability to see 'normal life' going on when encountering an affect of *crisis* is sometimes unsettling and other times reassuring or grounding (for detailed work articulating experiences of waiting in a hospital environment see Bournes & Mitchell (2002)). In the context of this analysis, it becomes not so much a 'problem' to be removed, but a question of what design can do to open up possibilities.

Transportation through affect?

Affective assemblages of *episodic home* were of particular interest in the analysis because this affect was least expected, and it also showed up in the most heterogeneous ways in our observational maps. One such surprising example occurred in relation to an observation on a Saturday evening, when the researcher had been coming in for observations since late-morning that day. She commented on the observational map that the feeling was 'like a campground at night' – 'relaxed, settling in' (Observation note: 6 August). On analysing this in relation to other observations, the research team identified that what people might usually identify as a 'campgrounds' are also time-spaces that enact *episodic home*, albeit different in expectations of sociability, joviality and playful engagements. We theorised this observation could be viewed as an example of the time-space of an affect of *episodic home* as produced in the waiting area folding into a more enjoyable, perhaps more familiar, affect of *episodic home* produced in another time-space. A slowing of the flow of perception to the extent that the affect produced is capable of effecting

transportation into another part of life, similar to an epiphany in literature (see Deleuze (2004)). We discuss our exploration of the design possibilities of this idea in the following section.

Generating design questions

While there were many opportunities and constraints produced by the flows of affect in this waiting area, we focus here on those that were particularly interesting for prompting design questions/directions. The three we detail here we have labelled 'entering into *crisis*', 'inter-action of *workaday world* and *episodic home* affective assemblages', and 'transportation through affect'.

Entering into crisis

One of the notable aspects of encounters with *crisis* affective assemblages was that they were associated with particular locations within the waiting area. These were the entry point around the lift bank and the area directly adjacent to this near the entrance to the wards. This was of particular interest to the research team because *crisis* was very likely to be the first affective assemblage encountered for anyone coming into to the waiting area ('Came up the other lift bank this time, feels much less confronting' – Observation: 7 August). We termed this 'entering into *crisis*'. The possible effects of 'entering into *crisis*' include a reinforcement of the liminal aspects of the experience of waiting, and of behaviours that were part of the *crisis* assemblage, potentially prolonging occupation of the area closest to the wards and the encounter with *crisis* (for a discussion of liminal 'hotspots' see Greco and Stenner (2017)). Indeed, our observational maps and analysis of the existing interview data suggested that people did not register the existence or possible use of the larger waiting area for hours or even days.

Design opportunities may exist to interrupt this flow of affect. While shifting the entry point may be logistically difficult and have arguably undesirable effects such as increasing the traffic through the zone where we encountered *episodic home*, design cues that direct people into the larger waiting zone may be more possible to implement and test, such as changing the placement of partitions and arrangement of furniture to allow for a clearer line of sight into the larger area. Maintaining a clear line of sight along with the visual lines implied by the furniture arrangement provides an implicit cue to draw people further into the larger extended space. Design aspects that could potentially disrupt the affective assemblages that produce *crisis* such as living plants or images of natural scenes could also be tested.

Inter-action of *workaday world* and *episodic home* affective assemblages

Our analysis identified that the affective assemblages of *workaday world* and *episodic home* both produced effects that were described by families and hospital staff as necessary to the effective operation of the area. At the same time, the inter-actions between them generated both an uneasiness and connection to something meaningful – *episodic home* as a connection to the 'patient' as a 'connected-person' and *workaday world* as a reminder of a world outside of the liminality of waiting. From a design point of view, it seems important to be mindful to retain the possibility of these inter-actions, but there is also an opportunity to reconfigure the space in a way that might reduce the level of confrontation apparent in our analysis. One approach was to replace the large rooms and corridors with semi-permanent open plan arrangements based around a custom designed piece of furniture (Douglas et al. 2018). The furniture design consisted of a wide V-shaped seating booth with the back extending above standing head height that also acts as a partition. However, consideration is needed regarding the extent to which these 'booth' structures allow for an assemblage

of *episodic home*. It may be easier for multiple groups and smaller groups to each create a semi-private space, but perhaps harder to assemble a 'home' affect due to a lack of totally enclosed space to 'occupy'. It is also important to design the area in such a way that the thoroughfare for staff and public is clearly signalled to avoid a need to weave through waiting families – a situation that could force more inter-action than the current configuration.

Transportation through affect

Perhaps the most ambitious of the design questions raised through our analysis is the possibility for design to influence the 'lines of flight' (Deleuze and Guattari 1987) or points of possible departure from the observed affective assemblages in the waiting area. Our cue to consider this was the observation described in the previous section that was likened to a 'campground at night'. Many people have demonstrated the enormous potential of interior design to generate affect (e.g. see Crawford & Thompson (2000), Adey (2008)), but the extent of this possibility comes into question when there are heavy constraints on what is 'okay' to feel and do in a particular environment. The research team analytically explored these constraints specifically of the waiting area. The idea this prompted was that a possibility for temporary transportation between waiting area time-space and emotionally 'lighter' time-space may be helpful for families who are experiencing uncertainty and anxiety during extended waiting time. Indeed, being able to key into a specific idea like 'episodic home' is a tool commonly used by designers to think through possibilities. These idea-generating time-spaces can provide a cohesive set of values, ideas, and design cues that can be drawn on to explore possibilities for similar affects in a different time-space.

Conclusions

Our trans-disciplinary collaboration and use of Deleuzian philosophical concepts has allowed a very different approach to generating design questions and possible responses in this project when compared with an approach led purely from the perspective of 'solving' design 'problems'. In particular the analytical strategy of naming 'affective assemblages' and considering their effects, inter-actions and trajectories of becoming, enabled us to see a complex picture of how the waiting area was operating and how it could be otherwise, considering both opportunities and constraints. Sometimes these opportunities and constraints prompted ideas that might, on first view, appear counter-intuitive – such as retention of the visibility of families and staff to each other. The complexities revealed challenged the design team to think more subtly and creatively about design responses.

A major limitation currently in determining the utility of this approach is the need for a follow-through to re-design and to see the effects through further research. However, at this stage the design team considered the experience of enough value to incorporate the learning into the initial phase of their design process for new projects (specific aim 3).

Considering hospital waiting areas more generally, this work extends the literature that has focused on individual experiences of waiting and the challenges of hospitals and staff responding to the needs of waiting families – going beyond the individual experience to consider the affective encounters that are produced in the assemblages that occur in/of a waiting area. These encounters are influenced by design, and subtle changes to design based on analysis of affective assemblages could potentially open up new possibilities in responding to existing challenges.

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Declaration of interest statement

The authors have no conflicts of interest to declare.

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