

**ABSTRACT**

How is space itself transformed by communication design? Informed by Schatzki's (2002) ontology *The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change*, the processes through which communication design might impact and transform public spaces are considered. Propositional in nature, this paper seeks to elicit a dialogue around the nature of such processes, harnessing insight into the transformative power of communication design. Reviewing examples drawn from Schatzki's account, it is suggested that defining public spaces as 'social sites' and focusing upon the interweaving of orders and practices that exist therein, to be key to this discourse. Two empirical case studies are used to illustrate these propositions in action: the design of interactive counter terror communications, and designing with the intent of influencing behaviour in virtual spaces. Taken together, this paper considers the site of the social to be an important point of leverage for understanding the processes through which communication design can enact public spaces. This paper concludes by drawing a number of propositions relevant to future work.

**FULL PAPER****Introduction**

In *Design Research Now* (2007), Beat Schneider defined design practice as the creation of meaningful order through an ideological commitment to transformation:

It is a conscious act that aims to create meaningful order, and is thus an essential part of our culture. Ever since it appeared in the early 19th century, design has been ideologically committed to transforming the world for the benefit of human beings ... (Schneider, 2007:208-209)

What do order, design practice and transformation mean for how space and its inhabitants are altered? Setting forward a series of propositions, this paper finds relevance in Schatzki's (2002) ontological account *The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change*. Offering insight into the intricate braiding of orders and practices through which social life unfolds, it provides a scaffold for understanding the transformative role of communication design in public spaces. Questions shaping this inquiry include:

- What can a social ontology lend to our understanding of transformation?
- How does viewing the site as a social entity impact the practice of communication design?
- What are the implications of 'orders' and 'practices' for communication design practice?

The paper opens by giving consideration to communication design as

a socially-situated activity, and in so doing emphasises the relevance of Schatzki's ontology. Schatzki's (2002) social site is then described, paying particular attention to its organisation as a set of interwoven orders and practices. Implications for how communication design might transform spaces through a restructuring of orders and practices are illustrated using two empirical case studies: the design of interactive counter terror communications; and designing with the intent of influencing behaviour in virtual spaces. The application of a social-theoretical vocabulary contributes to growing interest in the combined value of design and social science for understanding the "conception, production and use of objects, environments and communications" (Frascara, 2002:XIV). This paper closes with a review of how this approach might provide a platform for future work.

### **Communication design as socially-situated activity**

There is an alternative perspective of communication design that is taking hold. A stance described as "radicalized" (Haslem, 2009:3), it is one in which the practice of communication design is viewed as a social activity.

It becomes obvious that communication design is a social activity as the focus moves beyond the artefact; beyond the 'graphic', into the operational qualities of that 'graphic' and its location, facility and agency within the social setting it inhabits. (Haslem, 2009:22)

This is arguably a stance that is more progressive than contemporary definitions allow - see for example Frascara's (2004) definition of communication design as the production of visual communications for purposeful impact.<sup>1</sup>

With such re-positioning comes opportunity. It has been suggested for example, that approaching design from an ontological perspective allows one to view communication design in a 'different light' (Haslem, 2008). Adopting this line of thought, others have suggested value to lie in an understanding of communication design as "a fundamental human activity that strives to improve the condition of human life and our society through the creation of artifacts and activities" (Author unknown, 2011:1). What might philosophical study lend toward understanding communication design, the nature of reality: their categories, objects and ties?

### **The site of the social**

Schatzki (2002) claims "the best way to approach these topics [the nature of social existence, what consists in it, and the character of its transformation] is to tie social life to something called "the site of the social"" (XI). Described as "the stuff of social practice" (Shove, Watson, Hand & Ingram, 2007:12), it is claimed the social site forms the heart of social existence. Occurring through an intricate braiding of orders and practices, "the character and transformation of social life are both intrinsically and decisively rooted in the site where it takes place" (Schatzki, 2002:XI).

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1. ...the action of conceiving, programming, projecting, and realizing visual communications that are usually produced through industrial means and are aimed at broadcasting specific messages to specific sectors of the public. This is done with a view toward having an impact on the public's knowledge, attitudes, or behavior in an intended direction. (Frascara, 2004:2)

This is not an entirely new discourse to the field of design. Social practice has for instance, been used in discussions within product design, using the sociology of objects to illuminate connections between design and consumption (see Shove et al., 2007). Noting how moments of technological innovation provide insight into the pivotal role objects play in establishing routines and practices, Shove et al. consider how objects and practices co-evolve and how this understanding can transgress objects as simple carriers of semiotic meaning. What might the site of the social lend toward understanding the transformative effect of communication design in public spaces?

Considering this question, it is first necessary to disentangle terms such as ‘orders’ and ‘practices’ and their role in the characterisation and transformation of social life. These are complex terms and whilst this paper does not have the length to explore these concepts in any depth, it offers the following definitions:

‘Orders’ are defined as arrangements. Arrangements of the entities that enter social life (for example, people, artefacts, organisms and ‘things’) are structured through their relations, positions and meanings. The positioning of one entity is inextricably linked to its relation with others. Position is used to reflect where an entity fits into a nexus. Every entity has meaning, which can evolve over time. Anchored in regimes of activity called practices, these meanings are a reflection of relations, and relations reflect its meaning.

‘Practices’ are defined as organised nexuses of activity. These collections of activities (for example, cooking, rearing, farming...) are linked through understandings, rules and ‘teleoaffectivities’. Teleoaffectivities reflect the set of normativised and hierarchically ordered ends, projects and tasks aligned with normativised emotions and moods. They are not a set of properties of actors, but practices. Practices divide into two components: activity (for example, building fences, harvesting grain) and organisation (for example, negotiation, making an offer). Practices crucially form the context within which social orders are established.

Creating the basic structure of the social site, this meshing of orders and practices provide a lens through which to view the constitution and transformation of social life. Application of this school of thought to the 1850s Shaker herb industry (Schatzki, 2002), day trading on the Nasdaq market (Schatzki, 2002), the study of organisations (Schatzki, 2005) and education (Smith, Edwards-Groves & Brennan Kemmis, 2010; Schatzki, 2005), provide compelling examples of how we are constituted by social practices. In this spirit, two examples drawn from Schatzki’s (2002) *The Site of the Social* illustrate the inextricable binding of orders and practices and provide a foundation for the central thesis of this paper: that orders and practices provide a critical lens for understanding how communication design can transform public spaces.

Shaker herb industry, New Lebanon, New York

The 1850s Shaker herb industry in New Lebanon, New York, provides

insight into the character of social arrangements, the nature of practices and the contextualisation of arrangements in practices. Established in 1787, the Shaker community comprised seventeen villages, each village composed of a network of communes known as ‘families’ (typically two to eight), and within each family resided thirty to ninety individuals, which existed as an interdependent socioeconomic unit under the auspices of religious authority.

Shaker life was shaped by three teleoaffective regimes: religious belief in salvation through Shaker existence; autocratic hierarchies; and security and companionship in communal life. A belief in the practice of celibacy was enforced through extensive divisions in the Shaker community including physical segregation (separate entrances / exits, work spaces, eating and sleeping quarters) and the intense regulation of interactions (conversation between sexes was prohibited and separate lines of work enforced). Forming the context within which social order is established, it is hard to talk of practices without making reference to the arrangements of entities that enter social life and the relations, positions and meanings imbued in the division of the sexes and autocratic hierarchy.

The practice of herb production was one component of this broader net of Shaker existence. Each Shaker family owned an enterprise that served their own needs as well as those of the outside world. The preparation of medicinal herbs and extracts is one such industry, which coincidentally became the largest herb operation of its time. The division of labour was organised according to gender: men working outdoors and women completing less-manually-intensive tasks within the herb house itself such as the preparation of herbs, cleaning and pressing them as they arrived. The herb house (a former granary) housed a business office, packing room, papering room and storeroom. Hydraulic machinery used to compress herbs into blocks was located in the basement, powered by horses treading in circles. The attic provided a space for the women to spread the herbs out to dry, before storing them in large bins and lowering them for chopping and pressing. A hoist on the side of the herb house allowed herbs from the kiln (located in one of many outhouses) to be raised to the attic.

There also existed an extract house, which focused on the production of ointments, oils and powders. A greater variety of machinery existed here, where operations were organised around laboratory processes of boiling, pressing and extracting herbs and roots. For instance the extract house contained kettles, cylinder presses (for use in the pressurised extraction process of juices from herbs and roots), copper pans (for reducing the extracted juices), and a large boiler (for producing steam). The production of extracts and ointments required many of the same operations as the preparation of herb blocks. These operations were located on the first and second floors of the extract house and included for instance, crushing and powdering mills powered by steam.

What this example demonstrates is that it is near impossible, not to talk about the practice of herb production, without making reference to the particular arrangements of people, artefacts, organisms and ‘things’ which make the practice possible. A nexus within a nexus, one also cannot describe the practice of herb production without referencing the broader

context of Shaker practices such as the teleoaffective regimes within which it resides.

#### Day trading, Nasdaq market

A more complex arrangement of practices and orders can be found in day trading. At its most basic level, day trading firms exist as a nexus of practices and orders, and the industry as a confederation of these nets. Unique as a social site, the day trading industry exists as a set of “coherent, conflicting, and overlapping bundles and nets connected via an elaborate artifactual order” (Schatzki, 2002:174). This diverse set of relations between the practice-order nets that are day trading is considered below:

#### *Coherence*

The collection of practice-orders comprising day trading overlap with the nexus of practice-orders that are day trading firms. Coherence emerges from the conduct of activities within the same orders. For instance, there may exist chains of actions that contain input from both entities such as regulatory frameworks of practice, technical support, and training. These ‘shared chains of practice’ are mediated by elaborate technological arrangements. These include for instance, automatic deduction of commissions from trading accounts, new informational feeds or alerts to trading activity cross-firm. Through the lens of the social site, day trading practices are congruent with those of day trading firms. See McAndrew (2008) and McAndrew & Gore (in press) for empirical examples of how coherence can lead to the creation of new deals helpful to both sides of the transaction.

#### *Conflict*

‘Market makers’ is the term given to securities firms - banks and financial institutions that produce profit day trading on behalf of clients and for their own accounts. They ‘make’ the market through the large volume of institutional orders they place. The practice-orders of day trading and market making are fundamentally incongruent:

- The practice of market making involves the execution of clients’ orders; these type of transactions do not occur in day trading
- Market makers have exclusive knowledge of their client’s orders and large institutional transactions; whilst day traders operate as reactors to the market
- Market making is focused upon long-term profitability; day trading upon short-term gains

Due to the execution of large institutional orders, market makers are the primary actors in the market. Day traders behave as reactors, seeking to take profit by pre-empting market makers’ actions. This conflict results in a complex interweaving of strategies used by market makers to disguise their intentions and day traders to identify and counteract them amidst an elaborate array of technological arrangements. Such conflict can be exploited by day traders through price anomalies in markets known as arbitrage opportunities (for detailed description see: McAndrew, 2008;

McAndrew & Gore, in press).

### *Overlap*

In much the same way as the practice orders of day trading cohere with the practice-orders that are day trading firms; market making coheres with the nets of bundles that are security firms. Operating within a common framework of practices and arrangements, the practice of market making intersects with the actions chains of the security firm. This set of cohering, conflicting and overlapping bundles and nets connected via an elaborate order is undoubtedly more complex than the Shaker industry.

### Social change

An omnipresent theme throughout these accounts of the Shaker herb industry and day trading is social change, with descriptions of the social site as “one of ceaseless movement and incessant rearrangement and reorganization” (Schatzki, 2002:189-190). The ultimate demise of the Shaker commune, alongside technological developments in the practice of trading undoubtedly changed the nature of the social site. Coining the term “endless becoming” (2002:237), Schatzki reflects on the perpetual reordering of arrangements through actions. It is this reference to “movement and change” (Schatzki, 2002:189) that makes the site of the social relevant to communication design and the transformation of public spaces.

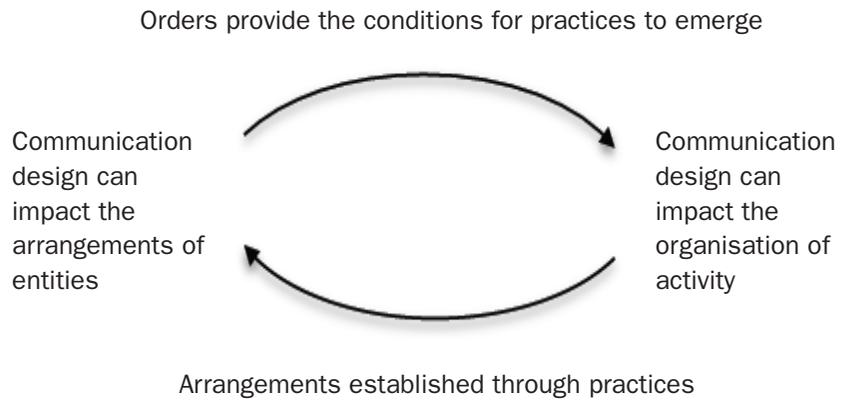
### **Communication design and the transformation of public spaces**

What might Schatzki’s philosophical account of the constitution of social life and change bring to the practice of communication design and its role in transforming public spaces? Returning to the basic function of design, Schneider (2007) notes:

...[design] simplifies and renders comprehensible complex and bewildering masses of data, information structures processes and objects. Design simplifies the world, making it easier to understand... It structures information in a way that promotes communication and activity... (Schneider, 2007:209)

What emerges is a striking resemblance to Schatzki’s practice-order nexus. This paper suggests that the use of information to structure processes and objects is analogous to ‘arrangements’, whilst the concurrent structuring of information to promote communication and activity echoes the notion of ‘practices’. An understanding of how movement and change can be produced through communication design with the ultimate objective of transforming space might be captured in the model below (see Figure 1).

Figure 1. Transforming social sites through communication design



As Figure 1 illustrates, there are two propositions that help deconstruct the role of communication design in transforming public spaces:

1. Communication design can impact the arrangements of entities  
One mechanism through which communication design might facilitate an emerging arrangement of entities is through the institution of new meanings and identities, specifically between arrangements of people, artefacts, organisms and ‘things’. As stated earlier, the positioning of each entity is inextricably linked to its relation with others. The act of impacting one entity using communication design can be enough to shift the underlying arrangement of orders and produce change.

2. Communication design can impact the organisation of activity  
The second proposition of this paper is that communication design might also impact collections of activities by facilitating change in existing understandings, rules and teleoaffectivities. As organised nexuses of activity, communication design could play a pivotal role in the re-organisation of activity, thereby creating new types of social order.

Two case studies that apply this thinking illustrate the possibilities afforded in using communication design to transform social sites and its inhabitants. *Safer Spaces: Communication design for counter terror* examines the potential of interactive communications to reduce fear and re-engage awareness in transport environments, whilst *Designing With Intent: Influencing behaviour in transitional spaces* explores the capacity of communication design to influence behaviour in virtual spaces such as *Second Life*. These are discussed in turn:

#### Case study 1 | Safer Spaces: Communication design for counter terror

*Safer Spaces: Communication design for counter terror* (2008/09) was a Research Council’s UK funded project that took as its focus transport systems in urban environments, scoping the potential of interactive counter terror communication to reduce fear and re-engage awareness in public spaces<sup>2</sup>. The call to understand “the routine practices by which security is manufactured on an everyday basis” (Büger & Gadinger, 2007:2) provided a scaffold for the *Safer Spaces* approach.

It is the design of communications and their role in changing the arrangements of entities and the organisation of activity within transport

<sup>2</sup> *Safer Spaces: Communication design for counter terror* was a multi-disciplinary project across seven UK institutions led by Professor Teal Triggs (University of the Arts London, UK) and Professor Mike Press (University of Dundee, UK), which sought to explore the potential of creative applications to address global security challenges.

environments, which is relevant to understanding the potential of communication design to transform social sites. Historically, this is not a new proposition, interviewed during the course of the research, one participant commented on the transformative effect of visual communications in the 1970s:

I was around for the IRA attacks in 1976 and missed 3 bombs by coincidences of fate. I appreciated signs saying to keep bags with you, as it gave me 'permission' to ask - in increasingly larger circles - 'does this bag belong to you?'

The graphic facilitated the emergence of a new social order in civic spaces, one that invited public participation in their monitoring and protection. It was the intervening graphic that assisted in the establishment of a new set of arrangements; not only between members of the public and the graphic artefact, but one that restructured the relations between commuters, objects and the authorities. The act of 'asking' created a new type of activity and opened the possibility for alternative practices of policing transport systems. It is this future Safer Spaces took as its starting point.

Safer Spaces generated these insights using a two-phase research design. Phase 1 collected data using focus groups (n=35) and cultural probes (n = 8) with a cross-section of London's commuting public (see Gaver, Dunne & Pacenti (1999) for a comprehensive overview of the cultural probe method). Illustrating the 'journey' visually (in the focus groups projections were used to prompt discussion which was digitally recorded, and in the cultural probes a comic book format was adopted providing a space for participants to record their responses), provided a lens into the construction of practices around information, communications and security technologies and their possibilities for reconstruction. These insights were used to inform the design of a prototype, evaluated through a second phase of focus groups (n=81) designed to assess the degree creative communication design makes possible new ways of engaging communities in dialogues about counter terror. The quotations included in this case study are drawn from these accounts.

Safer Spaces commissioned Jason Bruges Studio (London, UK) to produce a design prototype that would positively intervene in the lives of the commuting public. Reducing a sense of fear and re-engaging awareness in communities in public spaces was challenging, not least because of the prevailing social etiquette that is to be disengaged and docile, but also the fading effectiveness of graphic communications to connect with the public. Described as "a strange mix of polite exhortations and stern warnings, which seem a bit schizophrenic", participants frequently noted their indifference to visual communications: "I'm inured to them now because I have read them so many times." Producing innovative installations, interventions and groundbreaking works by creating interactive spaces and surfaces that sit between the worlds of architecture, site-specific installation art and interaction design, the approach of Jason Bruges Studio offered potential to mediate the social site. Considering communication design as a vehicle for the

propagation of new modes of information and engagement in public spaces, the design brief opened a variety of possibilities for interaction, such as the subversion of existing messaging systems<sup>3</sup>. As a hybrid of CCTV and digital advertising billboards, the design prototype sought to build upon the historical success of London Underground’s safety and security communications. Digitally rendered images of the prototype insitu (Figure 2) show how behind a digital billboard sits a camera, filming the person facing it the advertising space is transformed into a mirror. Each digital billboard houses two live feeds streaming visual activity from other billboards in proximal but, geographically distinct locations. Connecting seemingly disconnected spaces, the prototype invites playful engagement whilst at the same time seeking to (i) re-engage awareness in public spaces through remote peer-to-peer monitoring, and (ii) instill the commuting public with the visual tools to anticipate what ‘lies ahead’ in their journeys.

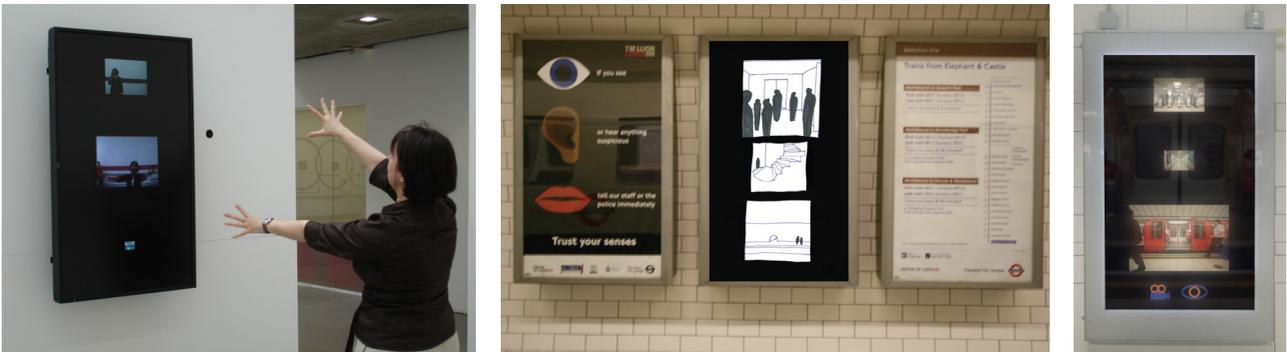


Figure 2. Left to right: Prototyping Interactive Security in Transport Environments – Well Gallery, London College of Communication, University of the Arts London (Photograph courtesy of Professor Teal Triggs); Connecting spaces – envisioning the design prototype in transport environments (Digitally rendered image courtesy of Jason Bruges Studio); Subverting advertising billboards – visualisation using site-specific video (Digitally rendered image courtesy of Jason Bruges Studio)

3. Although beyond the remit of this paper, it is important to note that the design brief was informed by psychological and design-led explorations of the connection between risk perceptions, behavioural responses, information requirements and communications in transport systems. Findings pointed toward public demand for reassurance that civic spaces are monitored by CCTV (note that since 2008, London Underground have undertaken an extensive programme of control room refurbishment, installing large vision panels to make staff more visible), the ability to “see what the cameras are seeing”; the seeming disconnect between spaces (e.g. ticket barriers, escalators, platform) with one participant declaring “It’s all about anticipation, trepidation”; and the need to embed the design intervention within the existing architectural fabric, entrenching it into the rhythm of the space, so it “forms a part of the machinery forming your journey”.

The playful, interactive nature of the prototype invited a new form of visual engagement that held potential to produce a different social order within public spaces. The arrangement of entities took the form of people and digital billboard (artefact). The prototype held potential to change the nature of engagement the commuting public has with advertising billboards from passive recipient of information, to one-to-one or one-to-many social interactions and communications. As one participant illustrated, the invitation to interact imbues new meanings and identities for the public in their contribution toward the protection of civic spaces:

It’s kind of a force of community policing at the tube. The point that everybody engages with it a lot because it’s interactive means it’s even more powerful.

Not only for those that interact, the effect of the visual form might also reach those that are being monitored themselves. The shift in relations between members of the public and those that pose a risk in public spaces might not only overcome the nonchalant disengaged commute but, provide a visual metaphor of a united stand against terrorism putting a sense of control back into the hands of the public. Can the act

of impacting the arrangement of entities using communication design be enough to shift regimes of activity and produce change?

This case study illustrates the second proposition of this paper - that communication design can impact the organisation of activity. As noted earlier, social practices are comprised of a set of doings and sayings organised by understandings, rules and teleoaffective structures. The design prototype almost certainly has the potential to change the rules of engagement in public space, providing a platform for members of the public to take ownership in the protection of civic environments. As one respondent remarks, "if they can consciously or subconsciously encourage a mentality of noticing and reporting then they are doing a useful job." Using communication design to engage the commuting public in the activity of watching can also bring with it a desire for action:

Maybe if you do see something going on, on the screens, there could be like a panic button or something you press, so it's immediate.

It is important to note that since this research commenced in 2008, London Underground have installed an extensive help system on the London Underground to directly facilitate response. The design of interactive counter terror communications might take note of this, complementing the visual connection of spaces with a simple button that can be pressed to contact security staff in the event of concern. In this way, it also permits a change in teleoaffective structures - described as a linking of ends, means and moods:

I'm not gonna get on my train if I see that someone's collapsed out on the other platform ...You've gotta have some part in life. You've gotta have some feeling.

Comments such as "It's quite reassuring. You wouldn't feel quite so isolated" reveal a sense of comfort, whilst others noted the softening effect through the interplay of art and security:

You know, it's a good thing if you are looking at it and it is looking arty [and] the intention is for security. So, it's not scary. In that sense, it's not imposing and you're thinking of the security. It's something you enjoy.

The subversion of existing billboards also permits an explicit change in the rules of responsibility - a shift of power from the authorities to one that is shared with members of the public. Whilst some members of the public were open to this, appreciating "It's about us being aware and making us aware ... Because it's a heavy load just to put on a security team", others were more resistant to the development of new social practices. Typical of this response was the criticism of the authorities for "Relying on the public to do their job. To do the protecting." Thus, whilst it is possible to impact orders (i.e. shift the arrangement of entities that is, people and artefact), anchoring them in regimes of activities with a view to constituting new practices can be met with resistance and the design of communications for such change ought to be viewed as a graduated process.

### Case study 2 | Designing With Intent: Influencing behaviour in transitional spaces

Designing With Intent: Influencing behaviour in transitional spaces (2010/11) was a project funded by the Defence Science and Technology Laboratory (Dstl), UK via the Centre for Defence Enterprise (CDE) initiative<sup>4</sup>. The call invited critical explorations of how psychological theory translates to the digital realm. Taking cyberspace as its starting point, it focused on influential communication activities aimed at shaping the behavior of individuals and/or groups.

Informed by practice theory, Everts, Lahr-Kurten & Watson’s (2011) suggestion that psychological states are both embodied and reproduced in social contexts provided a point of leverage for this work:

Conceptualising anxiety as a social practice opposes accounts that treat anxiety as an issue relating to individual bodies alone, be it as some form of individual phobia or personal pathology. (328)

Through the perspective of social practice, anxieties are “embodied and social, practical and practised” as well as “routinized, collective and conventional in character” (Jackson & Everts, 2010:2801). In this way, social practices can be involved in the management of anxiety-driven events such as terrorism or health pandemics, by containing and restraining their spread (Everts et al., 2011). It is this cultivating of psychological anxiety into more positive psychological states through social practice that forms the basis of Designing With Intent.

Designing With Intent sought to understand how the design of activities could be used to reconstruct social practices and influence psychological phenomena in virtual spaces such as Second Life. This work was grounded in three psychological concepts, robust enough to exist in physical and virtual worlds: attachment (a tie that forms between individuals that binds them together in space, and endures over time – four styles are measured i.e. secure, fearful-avoidant, anxious-preoccupied, and dismissing-avoidant, using Griffin & Bartholomew’s (1996) Relationship Scales Questionnaire); self-esteem (an appraisal of one’s self-worth – measured using Rosenberg’s (1989) Self-Esteem Questionnaire); and worldview (the overall perspective from which one sees and interprets the world – measured using two short essays adapted from Wisman & Koole (2003) that invite quantitative responses).

The research required a design commission that could enhance one’s sense of attachment and self-esteem in Second Life with a view to reducing worldview defensiveness. This hypothesis was derived from work in the field of terror management theory, which suggests the three elements to exist in a state of equilibrium (to achieve a balanced state, increases in one’s sense of attachment and/or self-esteem would result in a decrease in worldview defensiveness) (for more detail see: Hart, Shaver & Goldberg, 2005).

As an exploratory piece of research, this work employed a sample of postgraduate design students (n=9) enrolled at a UK Higher Education institution. Participants were invited to take part in an introductory workshop to Second Life that concluded in their participation - in

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4. Designing With Intent: Influencing behaviour in transitional spaces (2010/11) was a collaborative research project between the author, Professor Teal Triggs (University of the Arts London, UK) and Dr Brooke Rogers (King’s College London, UK).



The findings pointed toward distinct effects according to the type of attachment style, with less secure styles benefitting most from the design activity. Prior to engagement with the design intervention, the following styles of attachment were categorised using the Relationship Scales Questionnaire: secure (n=3); anxious-preoccupied (n=1); and dismissing-avoidant (n=2). Following interaction with the design commission, one participant required re-classification from dismissing-avoidant to secure. Distinct patterns between attachment style and worldview were found that appeared to endure over time:

- Secure styles: almost equal levels of agreement for value-supporting and value-threatening beliefs, with a low degree of differentiation producing little worldview defence
- Anxious-preoccupied styles: highest levels of agreement, with a mid-range degree of differentiation for value-supporting and value-threatening worldviews
- Dismissing-avoidant styles: lowest levels of agreement, for value-supporting and value-threatening beliefs, with a high degree of differentiation producing high worldview defence

In addition to these unique interrelations, following interaction with the design commission each attachment style displayed a decrease in worldview defensiveness. Secure attachment styles displayed the smallest decrease in worldview defence, dismissing-avoidant styles a mediocre decrease and anxious-preoccupied styles a substantial decrease in worldview defence. Note that there appeared to be no trends in the data relating to self-esteem. This is not surprising as the design intervention was focused on increasing a sense of dependency and collaboration, facets more closely associated with attachment.

These data trends support the suggestion that psychological states are both embodied and reproduced in social contexts (Everts et al., 2011), and that by cultivating positive facets of attachment such as collaboration and dependency they can be altered. Through communication design, activities can be used to reconstruct social practices. This is not just true for ‘anxiety’, but as *Designing With Intent* illustrates, other ‘insecure’ psychological states such as ‘dismissing-avoidant’.

Using designed activities to mediate experience, illustrates how the arrangement of entities (i.e. participants and digital cubes) can be reproduced through the organisation of human activity itself. A characteristic of the dismissing-avoidant style of attachment is that individuals feel unable or unwilling to share their thoughts and feelings and avoid face-to-face interactions (perhaps due to interpersonal distrust), despite possessing relatively high self-esteem. As can be seen in Figure 3 two participants characterised as ‘dismissing-avoidant’ constructed their cubes outside the bounds of the gallery space. Participant 3 positioned the cubes on the ground in an orderly fashion in the right-hand corner to the front of the gallery. Participant 1 constructed the cubes inside the gallery space, suspended in the air, building upon one another in a regimental fashion, until they were raised above the exterior walls of the space. The normativity associated with such teleoaffective activities provided the opportunity for others to instruct and sanction,

inviting a reorganisation of the cubes within the gallery. Necessitating dependency and collaboration, the rearrangement of entities allowed new meanings and identities to emerge, providing the context for alternative cognitive states to arise.

It is in this way that the organisation of activity can reshape social practices. Ethnographic observation showed participant 1 to be focused on the task at hand, contributing very little to group dialogue, a contribution that increased toward the end of the activity as his/her cubes were relocated into the gallery space. Participant 3, behaved similarly, however, the behaviour of this avatar was also marked by periodic moments of leaving the gallery space, disappearing from view altogether. Using communication design to engage in dialogue with these participants and draw them into the activity holds potential to create a new set of understandings, rules and teleoaffective structures.

Taken together, these case studies demonstrate the potential of communication design to “move beyond the graphic” (Haslem, 2009:22) to become transformative tools in social sites. Reviewed in this way, these works provide a first step in understanding the interplay of orders and practices in everyday life and the role communication design can play in transforming public spaces.

## **Conclusion**

Informed by Schatzki's (2002) ontology *The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change*, this paper has considered how space itself can be transformed by communication design. It is Schatzki's (2002) reference to “movement and change” that makes the site of the social relevant to communication design and the transformation of public spaces. What is constructive about such an account is that the rearrangement of orders and practices foregrounds individual action alongside collective presence and change. A number of propositions have been developed which, taken together, consider the site of the social to be an important point of leverage for enacting social spaces using communication design.

As a propositional piece, this work seeks to first and foremost encourage dialogue. Focusing on the two propositions generated in this paper, it is hoped that future work considers their relevance to the transformation of public spaces, uncovering synergies and discrepancies in research and design practice. One limitation of this work relates to the confidential nature of the research case studies reviewed (i.e. *Safer Spaces, Designing With Intent* and McAndrew (2008) and McAndrew & Gore's (in press) empirical account of day traders). Grounding this work in further detailed case studies is crucial for developing an understanding of the significance and value of social ontologies but also, the limits of these theoretical conjectures. How might some practices shaped through communication design anchor others? Is there value in giving explicit consideration to orders and practices during the communication design process? Through such agenda-setting activity, the criticism that Schatzki's proposition is limited in its applicability to ‘bounded social worlds’ (Cox, 2012) might also be more thoroughly tested and considered in relation to communication design.

Although beyond the remit of this paper, the case studies outlined also pivoted on the use of psychological insight to inform the design of communications. Schatzki (2001) has argued that the mind is crucial to understanding interactions with the material world and the elaboration of order within practices. It is precisely this interaction between mind, body and the material world that makes a social ontological stance relevant to shifting communication design practices. Whilst communication design can impact the arrangements of entities and the organisation of activity, it might be argued that the process of transformation is fundamentally psychological. To what end is there value in interjecting psychology into this nexus?<sup>5</sup> It is only through future work that considers such questions that the value of this new perspective on communication design and its role in the transformation of public spaces can truly be established.

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5. Note there is an extensive body of work in environmental psychology that focuses on the psychology of place (e.g. Canter, 1977) and growing traction in the application of social practice perspectives to phenomena within this field of study (see for instance Shove & Walker’s (2007) work on sustainability). However, with regard to the design of communications, the inter-relation of environmental psychology and perspectives such as Schatzki’s deserve detailed elaboration.

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