Architecture & Collective Life Abstract

Pieter de Kock, Silvio Carta

Disruptive visual urban forcefields: reconstructing the social

This paper discusses the idea of disruptive visual urban forcefields and aims at mapping out ways of re-inhabiting the city. It analyses social configurations in relation to urban assemblages. It consists of three parts: firstly, a photographic inquiry exploring aspects of social relationships and shifting themes that colour modern-day visual existence. Several key coordinates are elaborated on, including the notions of a visual urban forcefield; reinterpreting the concept of the flâneur; the idea of territory; and lastly how these have become associated with deterritorialization and reterritorialization. The second part focuses on differences in visual structure over time. Observations are made about previously documented buildings in urban settings, specifically in relation to disruptive urban forcefields. It looks at how these urban settings evolved and changed over a similar time period. The third part discusses the impact of technological visual forcefields and their influence over the social dimension of cities. How space is increasingly being coded with digital meaning. People are reacting to a creeping sense of intrusion in the urban, of constant surveillance and of being monitored and observed. This has meaning, specifically in relation to concepts of flâneur and territory. The call to action is centred on the idea that society needs a visual forcefield to disrupt modernday urban assemblage. We should resist the gaze of technology by adopting the gaze of the good flâneur, through relational visual thinking. We must adopt a strategy of 'disruptive urban assemblage' to counter worlding (McCann et al., 2013) and social degradation produced by one-sided intervention. In mapping ways of re-inhabiting the city lies the declaration that visual meaning "names the constitutive processes of assemblage, while assemblage is the spatiality of' (2011b) visual meaning. A visual forcefield to disrupt modern-day urban assemblage is required that circumscribes our existence, locating visual sustainability at the source.

Keywords: visual, urban, forcefields, needs, assemblage, visual sustainability

Introduction

Cities as spatial forces "not just inhabited but... produced through that inhabiting" (McFarlane, 2011b) have become compression chambers of emotion, alienation, and isolation (Salingaros, 1999; Dovey, 2017). We must rediscover how "cities tick" as "complex adaptive assemblage" (Dovey, 2017). For self-actualisation we are foundationally driven by visual sustainability, because "people will place self-identity above even survival" (Appleyard, 1979). Assemblage exists in qualities of association, relationship, comfort, and affordance (Glanville, 2010; Heft, 2013; Searle, 2011); in both orientation and object (McFarlane, 2011b); as well as tool and option, where meaning is an orienting reflex (Jordan B Peterson, 2017). Lefebvre describes spaces "populated by visible crowds of objects and invisible crowds of needs" (2011, emphasis added). Power relations (Searle, 2011) inform visual networks serving the linkages of our collective existence. The scientification of cities, pervasively agglomerated "across different territories" (Wang, 2017) promotes negatively biased social participation. This calls for a careful reconsideration of the states of equilibrium between the physical and the digital. The tipping point at which Baudrillard's postmodern simulacrum, powered by the self-regulating functions in 90% of our brain, may not be too far off. We can no longer be sure of what we see or of what sees us. Leaving us with 'nowhere to hide' our physical space has been reconfigured to be even more open and contiguous than noted by Kromm of the nineteenth century (Kromm, J. Gaze and Spectacle Introduction. In: 2010, 133). This paper will dwell on the positive aspects of disruptive urban forcefields in restoring and reconstructing the social.

Key coordinates

The traditional visual urban forcefield

Human cooperation produces power structures that we collectively agree to (Searle, 2011, 00:07:00, 2014, 00:39:30). And our digital presence has arguably made new realities even easier to construct and rapidly deploy in the social. We intend for these power structures to provide for continuity of life and individual expression.

In a physical sense we use the environment as "a complex of surfaces, edges, textures and, importantly, movements" (Rodaway, 2011, 20) to store information (Clark, 2005; Wilkens, 2014) and to re-use when we need to. This speaks to a concept of visual sustainability. Visual then in two ways: firstly, in the sense of symbolic reassurance, mind mapping, and metaphor. Metaphor where "the emotional correlates... structure people's behaviour in very powerful ways" (Ortman, 2012, 00:56:00). And secondly, visual in (what we perceive as) the real sense: of seeing the meaning in both visible and invisible interactions around us. And this is the way it has worked for centuries. But is all that about to change?

The bad flâneur

It may be that the duplicity of visual forces, between concrete and abstract, will see the return to our urban of the concept of the flâneur; the "bad dialectic, that which, against its own principles, imposes an external law..." (Merleau-Ponty, 1968, 94). The traditional flâneur has in a physical sense, it can be argued, been replaced by the object. Discarded are the relationships or patterns discussed by Kepes and others (Anderson, N. Visual Models and Scientific Breakthroughs. In: Kromm and Bakewell, 2010, 118). The "object of focus" (Kromm and Bakewell, 2010, 133) has instead been turned inside out: and our objects now gaze back at us; in an experience where, detached and emotionless, structures and constructs now watch the outside from the inside. The new reality is that we are now the picture (Lacan, J. What is a picture. In: Mirzoeff, 2010, 126). We have moved beyond the point of certainty because no-one really knows who is watching who.

This angst of the scrutiny meted out by the bad flâneur has, we propose, been reinvented in two ways: Firstly, physically in the conditions where the space between objects has increased and human scale become distorted (Salingaros and Coward, 2005; Salingaros and Mehaffy, 2006); by what may be best be described by Stafford, as our inattentiveness (2010, 1:06:00, 2014, 00:09:00). And secondly, digitally through the ubiquitous reach of technology where we also exist as digital flâneurs through our online presence. Where we lurk, listen, watch, record, consume and are consumed simultaneously in byte sized chunks of data. Often digital flâneurs exist in a state of constant mirroring; watching and being watched. We see thus stirrings then of a society inverted in panoptic servitude; "both the subject and the object of [its] own gaze" (Batchen, G. Spectres of Cyberspace. In: Mirzoeff, 2010, 241).



Figure 1. Our changing social.

Baudelaire and Benjamin's perfect flâneur transposed with Bentham and Foucault's panopticon. https://www.publictechnology.net/articles/news/london-man-hit- %C2%A390-fine-after-covering-face-front-police-facial-recognition-cameras

The good flâneur

If our urban is slowly being mesmerised by the gaze of technology, the antidote to disrupt that gaze may lie in Merleau-Ponty's good dialectic. By encouraging urban conditions of psychogeography (Seal, 2013): to force the mind to re-establish itself in spaces that we now feel uneasy in. Much like Debord's *dérive*, or unplanned walks (Seal, 2013; McFarlane, 2011a, 52) we can "map out... an 'alternative cartography" (Seal, 2013); in an "attempt to unsettle the city's bordered, administered, mapped and controlled" areas (McFarlane, 2011a, 52). By adopting a "flâneur methodology "to make the strange familiar, and the familiar strange" (Elliot, 1950, p. 259), and to embrace both the insider and outsider roles" (Rizk and Birioukov, 2017, 3271) we can reassert collective ownership over public space. This will reinforce the idea of "the urban as a whole... defined by ... [a] sense of social centrality" (Shields, R (1996), cited in Rizk and Birioukov, 2017, 3282).

In cities that have become compression chambers of emotion, alienation, and isolation the concept of the flâneur, if properly harnessed, exists it can be argued, as one of a number of disruptors of harmful visual forcefields, and presents itself as a first step in reconstructing the social by understanding "who we were, who we are, and who we will become" (Rizk and Birioukov, 2017, 3283).

Territories

In both senses described above, our buildings have traditionally established territories. Spaces "where a particular order prevails or seems implicit" (Ballantyne, 2007, 58–60). In the comfort that a "building is a little song" (Ballantyne, 2007, 58–60) with which we orient ourselves (Deleuze and Guattari, 'A Thousand Plateaus', cited in Ballantyne, 2007, 44–45), we have for the most part been "sustained and enriched in daily life by visual relationship we hold dear to our surroundings" (De Kock, 2019). And in the collection of songs we create daily, we see assemblages emerge. Which can then together be converted back into territories (Wang, 2017, 6), reflecting a high level of visual sustainability (De Kock, 2019). And these assemblages, or melodies, can be thought of also as a way of orienting "to the world (eg a form of thinking about urban policy production) and as an object in the world (eg an urban policy, house, or infrastructure)... assemblage as orientation and assemblage as object" (McFarlane, 2011b, 652–653).

In orienting and trying to establish our identity — to "discover where the real power lies" (Appleyard, 1979, 146) — we use our environment to assign meaning to parts; and it can be argued that we use parts of buildings to jog or assign meaning to our memory. And as power has shifted through globalisation and worlding, where once we gazed, it can be said that we are now gazed upon.

As the power and persuasion evident in technology takes hold, a visual forcefield to break the gaze and to disrupt negative aspects of modern-day urban assemblage is proposed through a mental reconfiguration of urban and digital space. An iterative process of reconfiguration which can be initiated by establishing new realities through Searle's theory of human cooperation and collective intentionality. To understand how this may occur, we will take stock of some social relationships and themes that colour modern-day visual existence. We will then set about understanding reconfigured space through historical analysis; of differences in visual structure over time. And finally, we will look at ways of neutralising the negative effects of 'bridging technology': adopting the cloak of a modern-day flâneur by, despite the passive aggressive modern-day aura, becoming active participants in our own urban; owning our surroundings, not being owned by them.

Deterritorialization and reterritorialization by data

As the notion of physical abstraction in the built environment gains momentum in the work of developers, city-planners, and architects we have been offered "incoherence under the banner of coherence" (Lefebvre and Nicholson-Smith, 2011, 308, 313). Our spaces have been "flattened out" to an Euclidean abstraction (Lefebvre and Nicholson-Smith, 2011, 308, 313). As "volume leaves the field to surface" the abstract space has taken over, "a space thus shattered into images, into signs, into connected-yet-disconnected data... like a mirror to the thinking 'subject'... [who in turn] becomes a lived abstraction (Lefebvre and Nicholson-Smith, 2011, 313–314).



Figure 2. Urban snippets: gradations from the individual to the collective. We exist as data. New York 2019.

Production through inhabiting (McFarlane, 2011b). Gradations of Debord's spectacle. A "flâneur methodology (Rizk and Birioukov, 2017). Images © Pieter de Kock, 2019.

Once we were inward-looking cybernauts of the nineteenth century (Batchen, G. Spectres of cyberspace. In: Mirzoeff, 2010, 238); then outward-looking astronauts of the twentieth century. Now it appears we stand as a society at the threshold of a new frontier, as 'diginaughts' of the twenty-first century, as purveyors of data. Where, to look outward into the universe we must turn inward again, searching for our collective soul.

Visual structures over time.

In this part and within the remit of this paper we will look specifically at examples where displaced space gazes back at us. How buildings have become, what Rose refers to, as signs that exist in relation to each other. Architects (on behalf of their employers) especially look at ways of projecting the status functions, that Searle talks about, in relation to their creations; in an elaborate, often sophisticated way of "shifting signifieds from one signified to another" (Rose, 2007, 89). A process "structured through codes" that bring to light ideologies that in turn become "preferred reading" (Hall, 1980, 134, cited in Rose, 2007, 98, 105).

We see for example, differences in visual structure in Vergara's time-lapse photography of urban spaces. In Figure 3, a building is transformed from a barely functioning mix of uses to a giant billboard. Its primary function now is to be a picture that conveys sense-data, and not an urban artefact that orients and signals affordance through use. This signification is relayed so that we too sense ourselves as pictures (Lacan, 1977, 106, cited in Rose, 2007, 128).

There is arguably also a more discrete signification at work: that the building looks out onto the intersection in a two-directional gaze of surveillance; transmitting 'idealised images of ourselves' (Williamson, J. 1978, 60-70, cited in Rose, 2007, 112). In 2016 the building is replaced by an identical box typology, a god-like structure resplendent in the act of one-way surveillance, the gaze of the reflective glass bordering on judgement. Perhaps even more determined than ever to render the urban space below as hostile to its users as ever before.

In another example (Figure 4), over a 38-year period we see social change reflected in the signage. While larger 5-7 storey buildings appear in the background, this urban edge has all but disappeared. Both these examples are typical of urban inattentiveness, streets abandoned by relationality (Beauregard, 2016) providing perfect conditions for displaced space through the gaze of the bad flâneur.

In Melbourne under similar depressed economic urban conditions, a relentless series of small-scale interventions illustrates how alienation may be overcome. Alleyways and disused service lanes presented the perfect new foil for the arcades of the eighteenth century flâneur. Meaning was grafted on to the physical and visual structure of a dying city centre.

Conditions of intimacy and seclusion provided a much-needed return to scale and intimacy. Analogous of deeply embedded archaic remnants (Jung et al., 1964); of the primitive; where small campfire stories once rose from under protective circles of trees bedded in at the entrances to secret caves — and away from the stark open plains that offered no protection.



Figure 3. Urban snippets: typologies of alienation.

The unfamiliar rendered familiar (Cohen, J. Creativity, technology, and the arts. In: Reichardt, 1971, 36); a duplicitous artefact transformed by reason, to signify what we are told we should expect it to signify.



Figure 4. Urban snippets: typologies of disfigurement. How visual meaning affects conditions of urban alienation in society. Rendering the familiar unfamiliar (Cohen, J. Creativity, technology, and the arts. In: Reichardt, 1971, 36).



Figure 5. Urban snippets: typologies of urban renewal. Evidence of disruptive visual urban forcefields that help reconstruct the social.



https://theconversation.com/how-a-three-decade-remaking-of-the-city-revived-thebuzz-of-marvellous-melbourne-91481

Figure 6. Urban snippets: typologies of orienting.

Paying attention to the intangible and invisible interactions of the surrounding urban.

The impact of technology on visual forcefields and the social.

The impact of visual forcefields in the making of public space can be understood through the lens of digital technology and its growing presence in our daily lives. From the 1990's the Internet was a relatively vast place where users browsed in search of information and out of curiosity. Works such as the Cyberspace (Benedikt, 1991) and Cyberspace (Dodge and Kitchin, 2001) can be considered as a first attempt at mapping the cyberspace and making a sense of the implications of the new virtual dimension for people. We fast-forward to Mark Weiser and his idea of Ubiquitous Computing (Weiser, 1993) whereby the notion of cyberspace becomes an interconnected dimension with multiple access points. The digital world of the 1990s was perceived as a sort of vast and growing encyclopaedia of human knowledge with clear boundaries. The demarcation between the physical and the digital worlds were very distinct and the digital dimension ended when the modem was turned off. Today's cyberspace is a continuous and parallel world to the physical one in which we live. We live de facto in the two dimensions (physical and digital) simultaneously and we transition from one to the other seamlessly. Whilst we may be away from a node, our digital part is still active, receiving feeds, comments or likes. Conversely, when we are actively online, our physical world keeps flowing without our full attention.

Some recent studies have started looking at the next phase of this interaction between physical and digital dimensions of our lives. In particular, the ideas of *code/space* and *transduction* (Kitchin and Dodge, 2005) are helpful in providing a theoretical framework to understand how the two worlds are mutually interacting. Moreover, the idea of *urban assemblage* (Carta, 2019) is useful in explaining how the built environment and the ubiquitous presence of code/software are intertwined with human activities in the urban context. In particular, this paper is concerned with the extent to which the physical dimension of our public life is influenced by the digital one.

In this sense, visual forcefields in the physical experience can be considered as the result of digital activities and, more generically, of the presence of the data infrastructure (Graham et al., 2002) that surrounds us. Following this idea, we could argue that our daily activities are increasingly influenced by the use of various apps, social media networks and self-trackers. We are surrounded by a number of vectors that represent forces that drive us towards certain places or suggest us to avoid some others. These forces are data-driven and invisible to the naked eye, yet a fundamental part of the urban environment. Digital forcefields surround us, yet we are conscious of their existence only because we are very well aware of their action and importance in our daily activities. A simple example can be the real-time traffic information that suggest people change route and means of transportation, based on the current level of congestion or delays in the network. Waze, the popular navigation app is a very strong example of

collectives of drivers that contribute to the making of the same information system, based on real-time and punctual feedback and suggestion of traffic blocks, speed cameras or accidents. Another case can be information shared through social media whereby a specific location (say a restaurant) may generate more attractive result than another based on real-time comments of people, instant reviews and images shared by influencers.

By the same token, these visual forcefields dictate the way in which we perceive urban environments and navigate through them. Such data-driven vectors can influence our behaviour as bad or good flâneurs. They also influence the construction (or avoidance) of urban collectives, aggregating or dispersing individuals based on information sharing, real-time comments and other online activities.



Figure 7. Responding to our changing social. Technology vs technology. Protecting the right to privacy. A sophisticated response to the bad flâneur? Image © Urban Spectacles (The Vagabond Shall Flourish, 2019).

The presence of urban forcefields, alongside the idea of ubiquitous computing can be a very effective strategy to improve deprived and alienated urban areas. If the Internet and the digital presence of data are considered pervasive (Cuff, 2003), this implies that visual forcefields can permeate the entire urban space, including interior and exterior spaces. At least in theory. Digital vectors can be deployed to generate new activities in

new areas and drive people to occupy and make lives in and from those spaces; improving the urban qualities of those places. Although at a very prototypical stage, projects like Streetscore (Lab, 2018), a software based on a binary classifier algorithm have been developed by Nikhil Naik and colleagues at the MIT. This rates the perception of safety (Naik et al., 2014), and demonstrates how people can change their perception of safe urban areas as the result of the algorithmic work of software. Thanks to the new images returned by Streetscore, people can reconsider the urban quality of certain parts of the city and this then generates new levels of trust in these urban conditions. The promise of these kinds of software is encouraging and would then make it possible to attract new activities and businesses, while also changing previously held prejudice of affected areas.

Discussion and conclusion

In order to better understand the changing visual order in our cities; how social integrity is being compromised (De Kock, 2019); and how we may disrupt conditions that perpetuate a sense of alienation, we have looked at the idea of an urban "produced through... inhabiting" (McFarlane, 2011b). The point is that, whether in a bottom-up or top-down process, by paying attention to our physical and digital surroundings we have the potential to act as markers or proxies of disruptive visual urban forcefields. We have seen what is possible in an unwieldy construct such as a city, where in Melbourne everything was simplified to just three zones "no go, slow go and go go" (Rob Adams, The Marios Talks. In: Dovey et al., 2018, 212–213). The results are a city centre which was reconstructed by its social: "It's the opposite of branding. Melbourne's subtle, a city of discovery" (Rob Adams, The Marios Talks. In: Dovey et al., 2018, 226). The magic of mixed-use lies in the fact that each one of us is "a creator of meaning" (Williamson 1978, 41, cited in Rose, 2007, 99). "Power is everywhere, since [visual] discourse too is everywhere" (Rose, 2007, 143). In the absence of attentiveness, visual meaning ceases to exist. This paper has introduced the idea of a new behaviour, represented by the good flâneur, who pays attention. In contrast with the bad flâneur, who, like the bad dialectic, can only stare cynically back "having eluded its own double meaning" (Merleau-Ponty, 1968, 94).

A final thought is that there is a sense of validation in the iteration we see around us, of visual deterritorialization and reterritorialization (Adkins, 2015, 49); of disentanglement and re-entanglement (Beauregard, 2016) at work in the urban snippets

presented in this paper. We are forced to think about social reconstruction and the potential, through participation, of creating something new. Adopting the approach of a flâneur increases the potential for improving our methods of discovery about effective disruptive physical and digital visual urban forcefields.

References

- Adkins, B. (2015) Deleuze and Guattari's A thousand plateaus: a critical introduction and guide. Edinburgh: Edinburgh University Press.
- Appleyard, D. (1979) The Environment as a Social Symbol: Within a Theory of Environmental Action and Perception. *Journal of the American Planning Association*, 45(2) 143–153. Available from http://www.tandfonline.com/doi/abs/10.1080/01944367908976952 [accessed 12 December 2018].
- Ballantyne, A. (2007) *Deleuze and Guattari for architects*. Thinkers for architects. London; New York: Routledge.
- Beauregard, R. (2016) Robert Beauregard: Alexander von Humboldt Lecture: 'Buildings, Cities, and Material Semiotics'.
- Benedikt, M. (ed.) (1991) Cyberspace: first steps. Cambridge, Mass: MIT Press.
- Carta, S. (2019) *Big data, code and the discrete city: shaping public realms*. Abingdon, Oxon; New York, NY: Routledge.
- Clark, A. (2005) Intrinsic content, active memory and the extended mind. *Analysis*, 65(1) 1–11. Available from https://proxy.library.lincoln.ac.uk/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=15631121&site=eds-live&scope=site [accessed 12 January 2019].
- Cuff, D. (2003) Immanent Domain. Journal of Architectural Education, 57 43-49.
- De Kock, P.M. (2019) The Meaning in Seeing: Visual Sustainability in the Built Environment E. Lester (ed.). *AMPS Proceedings Series 16. Stevens Institute of Technology, New Jersey.* 17 19 June,.
- Dodge, M. and Kitchin, R. (2001) *Mapping cyberspace*. London; New York: Routledge.
- Dovey, K. (2017) Kim Dovey, KTH Centre for the Future of Places, Oct 27, 2017.
- Dovey, K., Adams, R. and Jones, R.A. (eds.) (2018) *Urban choreography: central Melbourne, 1985-.* Carlton, Victoria, Australia: Melbourne University Press.

- Glanville, R. (2010) A (Cybernetic) Musing: Design and Cybernetics. V!RUS. N. 3. São Carlos: Nomads.usp, 13.
- Graham, S., Marvin, S. and ProQuest (Firm) (2002) *Telecommunications and the City: Electronic Spaces, Urban Places.* London; New York: Routledge.
- Heft, H. (2013) The ecological approach to perception & action.
- Jordan B Peterson (2017) 2017 Maps of Meaning 6: Story and Metastory (Part 2).
- Jung, C.G., Franz, M.-L. and Freeman, J. (1964) *Man and his symbols*. New York: Anchor Books.
- Kitchin, R. and Dodge, M. (2005) Code and the Transduction of Space. *Annals of the Association of American Geographers*, 95(1) 162–180. Available from http://www.tandfonline.com/doi/abs/10.1111/j.1467-8306.2005.00454.x [accessed 31 July 2019].
- Kromm, J. and Bakewell, S.B. (eds.) (2010) *A history of visual culture: Western civilization from the 18th to the 21st century*. English ed. Oxford [England]; New York: Berg.
- Lab, M.M. (2018) *Streetscore* Available from http://streetscore.media.mit.edu/faq.html [accessed 31 July 2019].
- Lefebvre, H. and Nicholson-Smith, D. (2011) *The production of space*. Nachdr. Malden, Mass.: Blackwell.
- McCann, E., Roy, A. and Ward, K. (2013) Assembling/Worlding Cities. *Urban Geography*, 34(5) 581–589. Available from http://www.tandfonline.com/doi/abs/10.1080/02723638.2013.793905 [accessed 30 January 2019].
- McFarlane, C. (2011a) *Learning the city: knowledge and translocal assemblage*. RGS-IBG book series. Chichester: Wiley-Blackwell.
- McFarlane, C. (2011b) The City as Assemblage: Dwelling and Urban Space. *Environment and Planning D: Society and Space*, 29(4) 649–671. Available from http://journals.sagepub.com/doi/10.1068/d4710 [accessed 30 January 2019].
- Merleau-Ponty, M. (1968) *The Visible and the Invisible*. C. Lefort (ed.). Northwestern University Press, Evanston IL.
- Mirzoeff, N. (ed.) (2010) The visual culture reader. 2. ed, repr. London: Routledge.
- Naik, N., Philipoom, J., Raskar, R. and Hidalgo, C. (2014) Streetscore -- Predicting the Perceived Safety of One Million Streetscapes. In: 2014 IEEE Conference on Computer Vision and Pattern Recognition Workshops. June 2014 Columbus, OH, USA: IEEE, 793–799.
- Ortman, S. (2012) Reading Ancient Minds: Metaphor, Culture, and Complexity.

- Reichardt, J. (1971) *Cybernetics, art, and ideas*. Greenwich, Conn: New York Graphic Society.
- Rizk, J. and Birioukov, A. (2017) Following the Flâneur: The Methodological Possibilities and Applications of Flânerie in New Urban Spaces. 20.
- Rodaway, P. (2011) Sensuous geographies: body, sense, and place. 1. iss. in paperback. London: Routledge.
- Rose, G. (2007) Visual methodologies: an introduction to the interpretation of visual materials. 2nd ed. London; Thousand Oaks, Calif: SAGE Publications.
- Salingaros, N.A. (1999) *Urban Space and its Information Field, by Nikos A. Salingaros* Available from

 http://zeta.math.utsa.edu/~yxk833/UrbanSpace.html?utm_medium=website&u

 tm_source=archdaily.com[accessed 3 September 2018].
- Salingaros, N.A. and Coward, L.A. (2005) *Principles of urban structure*. Design, science, planning Science 4. Amsterdam: Techne Press.
- Salingaros, N.A. and Mehaffy, M.W. (2006) *A theory of architecture*. Solingen: Umbau-Verl.
- Seal, B. (2013) Baudelaire, Benjamin and the Birth of the Flâneur. Psychogeographic Review.
- Searle, J. (2011) John Searle on Language & Social Ontology.
- Searle, J. (2014) Unity of Reality new realism. Prof. John Searle.
- Stafford, B.M. (2014) 140409 barbara stafford images precisely.
- Stafford, B.M. (2010) Designed to Hesitate: Consciousness as Paying Attention.
- The Vagabond Shall Flourish (2019) *REFLECTACLES: IRpair, Phantom & Ghost* Available from https://www.reflectacles.com [accessed 23 August 2019].
- Wang, J. (2017) Assemblage Urbanism. In: *The Wiley Blackwell Encyclopedia of Urban and Regional Studies*.
- Weiser, M. (1993) Ubiquitous Computing. *Computer*, 26(10) 71–72. Available from https://doi.org/10.1109/2.237456.
- Wilkens, J. (2014) *John Wilkins Technology & Affordance YouTube* Available from https://www.youtube.com/watch?v=H6nbx2RhWrA [accessed 12 January 2019].