Introducing i-Docs to Geography: Exploring interactive documentary's nonlinear imaginaries

Abstract

This paper introduces interactive documentaries, or i-Docs, to Geography through an analysis of one i-Doc; *Gaza Sderot*. Interactive Documentary is an increasingly popular documentary form. I-Docs are defined by 'nonlinear' spatiotemporal organisation as their interactive capacities enable multiple pathways through documentary footage and materials. It is often argued that this nonlinearity is politicized by i-Docs to enable polyvocality and the destabilisation of dominant narratives. I argue that i-Docs deserve Geographical attention for two key reasons. Firstly, if Geographers have long explored articulations and reformulations of space-time through media then i-Docs offer an insight into contemporary constructions of nonlinear spatiotemporal imaginaries through interactive medium. Secondly, nonlinearity and its politics has also become foundational to Geography's own approaches to space-time, making pertinent the explorations of nonlinearity and its socio-political implications that engagement with i-Docs enables. In this context, I analyse *Gaza Sderot* to explore its construction of a nonlinear spatiotemporal imaginary and question the political perspectives that imaginary generates for its subject of the Gaza conflict. In concluding, I also suggest that i-Docs could be a valuable methodological tool for Geographers.

Key Words: Interactive Documentary, Nonlinearity, Space-time, *Gaza Sderot*, Imaginaries, Politics

Introduction

Interactive documentary is a new form of documentary that is swiftly gaining prominence. I-Docs can take many digital forms but are defined by their 'nonlinear' spatiotemporal organisation and interactive capacities. Rather than presenting footage in a predetermined order, i-Docs offer collections of material such as video clips and still images which users can navigate in various ways. The novel deployment of nonlinearity in i-Docs have led media theorists to position them as more than 'the extension of linear documentary into digital media' but "something else" entirely (Gaudenzi, 2013, p. 12). A key aspect of this professed "something else" is a politics which hangs on multiplicity, contingency and the ability 'to change and evolve' (Gaudenzi, 2013, p. 13; Dinmore, 2014; Favero, 2013). As a medium typified by modularity, variability (Gaudenzi, 2013) complexity and choice (Nash, 2012) i-Docs supposedly allow multiple, open ended narrativizations of their subjects; mobilizing interactivity to destabilize representations of issues such as political uprising (18 Days in Egypt, 2015), urban shrinkage (Hollow, 2014) or energy futures (Journey to the end of Coal, 2008).

While i-Docs are rapidly gaining attention from media theorists (Aston & Gaudenzi, 2012; Dinmore, 2014; Favero, 2013; Gaudenzi, 2013; Nash, 2012) they have been almost entirely neglected in Geography. This is with the exception of the Stories of Change project who are creating a digital storytelling platform to foster public engagement with 'energy and community in the past, present and future' (Stories of Change, 2015). However, I propose that Geographical attention to i-Docs is pertinent. From their potential polyvocality to their participatory possibilities (Favero, 2013; Nash, 2014), the 'something else' in i-Docs offers much for Geographical investigation. Here, I address two key implications of i-Docs for Geography. Firstly, Geographers and allied thinkers have a longstanding interest in ways that space-time is articulated and reformulated through technologies of exhibition (Crary, 1990;

Della Dora, 2009; Clarke & Doel, 2005) and, more recently, through interactive and nonlinear media (Ash, 2009; Ash, 2012; Coleman, 2010; Dittmer, 2010; Dittmer, 2014). Positioned within a wider set of questions about the construction of geographical imaginaries, these can be understood as investigations specifically into imaginaries of spatiotemporality. I-Docs clearly merit attention within this lineage. As part of an emerging field of nonlinear factual media, including 'news games' and 'immersive journalism' (de la Pena, et al., 2010; Taylor, 2011), they beg consideration of how spatiotemporal imaginaries are being crafted around nonlinear logics and how those imaginaries then bring geographical subjects into view.

Secondly, nonlinear conceptions of space-time are vital to contemporary Geographical thought. Nonlinearity is fundamental to Deleuze's Philosophy, which has been so influential within Geography, where it entails an understanding of space-time as *creative*; continuously, immanently and qualitatively reformulated through the unpredictable and dynamic evolution of the systems which constitute it. This conception of space-time is central to many contemporary theoretical approaches including assemblage theory (Anderson & McFarlane, 2011; Bennett, 2005), vital materialism (Bennett, 2010), studies of turbulence (Cresswell & Martin, 2012) and the relational ontology key to Doreen Massey's important work (Massey, 2005). Given the centrality of nonlinearity to contemporary Geography, interrogating the nonlinear ways of seeing i-Docs produce should be of significant interest. In particular, if Geographers proclaim nonlinear ontologies to be politically consequential (Woodward, et al., 2010; Massey, 2005; Cresswell & Martin, 2012) i-Docs can enhance understanding of the politics of nonlinear *imaginaries* by focusing attention on the varied and localized ways that nonlinear spatiotemporal logics are crafted into politically significant ways of seeing. Geographers have often mobilized creative forms to investigate nonlinearity; from DeSilvey's experiments with nonlinear narrative (DeSilvey, 2007) to Dittmer's engagement with nonlinearity in comic books (Dittmer, 2010) or Hawkins and Straughan's investigations into

the open-ended assemblage of installation art (Hawkins & Straughan, 2014; Hawkins, 2010). If these creative forms have been fruitful for interrogating nonlinearity then i-Docs provide new fuel for these enquires.

Approaching i-Docs from these Geographical perspectives requires considering how they produce and mobilize nonlinear spatiotemporal imaginaries. Here, I undertake an experimental analysis of one web-based i-Doc, *Gaza Sderot*, to explore the construction and implications of its nonlinear imaginary. *Gaza Sderot* explores experiences of the Israeli-Palestine conflict and was produced by the leading Franco-German company Arte, in collaboration with teams from Palestine (Ramattan) and Israel (Alma Films, Trabelsi Productions &Sapir college). It follows the lives of six people from Gaza and six from Sderot (an Israeli town 3km from Gaza) filmed over ten weeks. Short clips were broadcast online daily between the 23rd of October and 26th of December 2008 and are now all available to view in the i-Doc. The i-Doc's stated aim is to offer 'personal, interactive and non-linear' access to the stories (Arte, 2008). In analysing *Gaza Sderot* I ask two key questions; firstly; how do the nonlinear features of its interface construct a nonlinear spatiotemporal imaginary and, secondly, what kind of perspective does that imaginary bring to bear on its subject.

To explore these questions I draw on models for addressing interactive media including Ash's theorisation of the interface (Ash, 2015), Wood's analysis of interactive digital media (Wood, 2007) and Nash's typology of interactivity in i-Docs (Nash, 2012). My approach also mobilizes Manuel DeLanda's excavation of Deleuze's ontology (DeLanda, 2002). I build on an emerging Deleuzian theorisation of i-Docs (Miles, 2014) by using DeLanda's exposition of Deleuze's nonlinearity to elucidate *Gaza Sderot's* spatiotemporal imaginaries. After introducing *Gaza Sderot* I explore three prominent aspects of its nonlinear imaginary and build a picture of the politicized sensitivities they engage.

Before embarking on this analysis it is important to emphasize that nonlinear logics do not necessarily undergird the same politics in all nonlinear imaginaries. While multiplicity and open-ended narratives may be common features of i-Docs they are not a necessary outcome of nonlinearity, which can be politicized in multiple ways and of which my analysis indicates just one. Indeed, *Gaza Sderot's* subject prompts a fitting reminder of the diverse politics of nonlinear imaginaries. As Weizman has discussed, the Israel Defence Forces explicitly incorporate Deleuzian 'principle[s] of nonlinearity' to advance a battle strategy which assumes an unpredictable order of events and sees the city as 'a flexible, almost liquid medium' (Weizman, 2011). That nonlinear logics can be deployed in this context makes pertinent the kind of analysis i-Docs allow; attention to nonlinear imaginaries which doesn't presume a particular politics but carefully examines their development and implications in specific contexts.

Gaza Sderot: analysing i-Doc interfaces

Gaza Sderot starts with a home page that gives information about the i-Doc and the process of its making. There are options to take a 'quick tour', to read 'about this program', or to visit the blog. However, users are unlikely to begin with these links, enticed as they are towards the large orange button encouraging them to 'watch the program'.

Fig. 1.

The words 'watch' and 'program' are potentially misleading for those unfamiliar with interactive documentary. The button, rather than beginning a film, leads to a new screen where two clips are displayed, separated by a dotted line. These clips introduce the themes of *Gaza Sderot* and, as in many other web-based i-Docs serve as a 'fairly cinematic opening section' (Nash, 2012, p. 202) which signals entry into the i-Doc as a delineated, immersive online space.

The introductory clips are presented within the 'time' view but, as evident from the tabs at the top of the screen, there are three other screen views through which to explore the i-Doc's contents, 'face', 'maps' or 'topics.'

Fig. 2.

Fig. 3.

Fig. 4.

Fig. 5.

The four options provide different ways to sort the same 80 clips. The order those clips are watched in is decided by the user's navigational choices. At the end of each clip the user is prompted to view another clip about the same character, see something happening meanwhile across the border, or watch a clip corresponding to a time before or after the clip just viewed. Users can also comment on each clip by following links to a discussion forum. The key constant across the four views is a dotted line that separates, yet also connects, the clips shot in Gaza and those from Sderot.

Fig. 6.

It has been argued that interfaces, 'like maps, compasses, and other instruments' are key 'ways in which geographical knowledge is constructed' (Ash, 2014) and certainly the capacities of *Gaza Sderot's* interface enable its nonlinear way of seeing. In exploring how the interface of *Gaza Sderot* constructs a nonlinear imaginary it is helpful to consider Wood's conceptualization of digital interfaces as a spatiotemporal architecture (Wood, 2007, p. 86). Wood stresses that digital interfaces are not static architectures neutrally containing media but better understood as a collection of *virtual* capacities that can be actualised in myriad ways through interaction (Wood, 2007) and transform the media they enable access to. Wood follows Deleuze in using the term 'virtual'. Virtual properties refer to a system's real but un-activated capacities; for example the capacity of a child to grow adult teeth or of an ice-cube to become liquid. These properties are no less real for not being currently actualised because they structure the behaviours of that system. In explaining the relationship between virtual and actual properties of interfaces Wood borrows another Deleuzian concept of the 'attractor'. Attractors are tendencies which influence which of a systems' virtual capacities become actualised (DeLanda, 2002, p. 35). Many systems, although their trajectories are not determined, follow similar patterns because they tend towards common attractors, such as a tendency towards equilibrium (DeLanda, 2002). However, when systems have multiple attractors they have a 'choice' between different destinies' (DeLanda, 2002, p. 35). Applying the concept of attractors to digital interfaces elucidates how their virtual architectures are continuously actualised and re-actualised through user interaction (Wood, 2007) and how user 'attention is distributed across a range of possibilities' (Coleman, 2010, p. 276). This is a valuable framework for *Gaza Sderot* where the i-Doc's plurality of attractors is foundational to its construction of nonlinear spatiotemporal imaginaries

Across the following sections I explore key elements of the nonlinear imaginary *Gaza Sderot* develops and the political perspectives that imaginary generates. Firstly, I address how spacetime in *Gaza Sderot* is shown to be made up of many lived presents; demonstrating the geography of the conflict as irreducibly multiple. Secondly, I suggest that the i-Doc also insists upon the potential of those multiple trajectories to reassemble in novel ways. Thirdly, I argue that, as well as demonstrating the multiplicity and openness of space-time, *Gaza Sderot* articulates the entrainment of these multiple trajectories, showing that they are held together in a powerful, albeit metastable, assemblage; fixed in the conflict's uneasy space-time. The most striking feature of Gaza Sderot is its insistence on multiplicity. As this section explores, its interface develops an imaginary of space-time as constituted through the assemblage of multiple trajectories. Given that *Gaza Sderot* is about conflicts over territory, its 'map' view is an important place to start in addressing its politicized nonlinear imaginary. The map view displays the i-Doc's clips positioned on an aerial view of Gaza and Sderot and labelled with captions such as 'ambulance drivers HQ' or 'new apartment of Daniel's sister'. It's possible to zoom or move the map to explore the clips. Clicking on a clip makes it start to play; transforming the static terrain into a dynamic spatiotemporal fabric. Massey has conceptualised space as 'a simultaneity of stories so far' because it is 'always in the process of being made', constructed through the interrelations of manifold practices (Massey, 2005, p. 9). In Gaza Sderot, the videos embedded in the map evoke a comparable conception of a spacetime, demonstrating that the terrain is continuously constructed through the actions of the characters. Furthermore, rather than displaying 'objective' place names, the clips are labelled colloquially. Tags like 'polling place' or 'Ahmed Quaffah's Party' correspond to the ways spaces are used by people while official place names have been removed. This nomenclature suggests that space-time is not a pre-given container that actions occur within, but created through the multiple, embodied practices of Gaza and Sderot's inhabitants.

Fig. 7

The face view, which takes a biographical perspective on the i-Doc's video material, reiterates this sense of space-time's multiplicity. Viewing the i-Doc by 'faces' reveals the full spread of characters the i-Doc follows. Hovering over any clip illuminates it, serving as an attractor to encourage its selection. However, when watched, the clip doesn't go full screen. It widens to facilitate viewing, but remains in place among the others which, while not illuminated, remain

visible as competing attractors. In light of the i-Doc's stated purpose, to show the parallel lives of Gaza and Sderot, the co-presence of the unactualized clips alongside that being watched signifies that the life of person currently engaged with is only one of the many, simultaneous trajectories that assemble to make up the conflict's space-time.

Fig. 8.

As DeLanda explores (2002), nonlinear space-time is constituted through an assemblage of multiple spatiotemporal trajectories. Within nonlinear ontologies there is no *singular*, objective scale for measuring movement, rather space-time is constructed immanently through the relative cycles of individuals. DeLanda explains that all individuals have their own 'present' depending on their speed of operation. A 'present' moment to me might include many which are already past for an insect, alert to briefer temporal scales, and my entire life can pass without significant changes in what is 'present' for a mountain range. It is the culmination of these differently scaled cycles which assemble to produce space-time. If we read *Gaza Sderot* against DeLanda's description we can see that the lived times of the characters are nested together, quite literally on the screen, so that the i-Doc's total space-time is constituted through the co-presence of these trajectories. For example, the Israeli boxer Andre is preoccupied with training cycles whereas Madeha, in Gaza, is a farmer for whom agricultural and export cycles structure the present. Through these individuals' differing rhythms different 'presents' from bodily to climatic, are synthesised, making the i-Doc an assemblage of multiple spatiotemporalities.

The insistent multiplicity of space-time in *Gaza Sderot* suggests that the conflict cannot be understood through any singular narrative. However, it also demonstrates how those multiple narratives are strained and encumbered by their involvement in the assemblage of the conflict. For example, Andre has to quit boxing because his training is disturbed by bomb alerts and

Madeha is distressed by interruptions which make her business precarious. These disruptions are mirrored by the i-Doc's architecture where although there is the option to follow one person's story competing attractors disrupt that biographical trajectory. If, for example, you are watching a clip about Andre it ends with an option to see more clips about him but also to watch something happening simultaneously across the border. These competing attractors deny the characters the primacy of their own narratives, demonstrating the burden of being one of the multiple trajectories enmeshed in the conflict's geography.

Openness and interactivity

Of course destabilizations of chronological narrative are essential to *Gaza Sderot's* nonlinear method of constructing meaning. In Deleuze's Bergsonian conception of temporality all moments are in a sense contemporaneous (Deleuze, 1988) as the past is contracted into the present through the co-existence of the virtual with the actual. This co-presence allows for productive interactions between chronologically disparate events because the past persists in the present to be actualized in new ways. In *Gaza Sderot* the clips, initially filmed in sequence, are contracted into the i-Doc where they become contemporaneous. As in a Bergsonian duration the interactions of these non-sequential clips can then generate new qualities. As this section explores, this allows open ended narrativizations of the i-Doc's material; so that *Gaza Sderot*'s comment facility adds to the i-Doc's openness and, importantly, means that openness derives not just from nonlinear sequence but also from connections to "outside" of the i-Doc. Geographers have explored how the immersion of a viewer's body into installation art work can foreground the always incomplete process of material re-assemblage (Hawkins, 2010;

Hawkins & Straughan, 2014). In including user generated contents, i-Docs, similarly draw attention to the permeability of form and its relationship to the dynamism of space-time.

The multiple available pathways through the i-Doc are, as we've seen, foregrounded in *Gaza Sderot* by the four screen views which are always visible as competing attractors. *Gaza Sderot* 'continues to display its virtuality even once the system has settled into one of its alternative stable states; because the other alternatives are there all the time, coexisting with the one that happens to be actualized' (DeLanda, 2002, p. 75). The links at the end of clips also foreground the multiple pathways available, suggesting biographical routes through the i-Doc as well as options to move backwards or forwards in time.

What is important about the multiple routes through the footage is that these allow for more than several orderings of the same information. They enable qualitatively new ideas to be produced. This is achieved partly by the four screen views which encourage different perspectives on the clips. For example, to watch a clip in 'face' view is to approach it as a personal story, whereas to access the same clip through the 'topic' view is to take it as exemplary of a wider concern. What a clip 'means' is also effected by the route through which it is arrived at. For example, one clip is about a Moroccan wedding taking place in Sderot. The first time I watched this clip it was through the face view; following the story of Simi Zubib whose daughter is the bride. I had just watched a clip about Simi's son Haim who has downs syndrome. Haim seems a happy teenager but Simi expresses her sadness that he won't be a soldier like his brothers. With this clip fresh in my mind, watching Simi's daughter getting married enhanced my understanding of Simi's complex feelings about Haim's future. However, I also encountered this clip through the topic view and, this time, read the comments to see how others had responded. Rather than mentioning Simi's children, these comments focus on the ceremony's importance as an event held by Jewish Moroccans in Israel. One comment, for example, reads 'it's up to Jewish Moroccans to establish peace in this country,

they must be positive and denounce such racist acts of the Zionists¹' (Arte, 2008, my translation). This time, in light of the comments, the clip activated the political issues embedded in the celebration and I didn't even notice Haim dancing with his family, let alone wonder about his future.

What this contrast emphasises is that the different pathways users take through the i-Doc have their own productive capacities; activating qualities another route might not reveal. The i-Doc's multiple attractors mean that the same clip is often discovered through a different route. The clips' significances are therefore constantly evolving as new encounters between materials are staged. Coleman has described how the interactive potentials of dieting websites evoke the potentials of the body itself (Coleman, 2010). In the same vein, the sensitivity *Gaza Sderot* constructs towards multiple potential narrativizations of its footage arguably generate hope for the conflict; suggesting that new possibilities are found in the retelling of stories.

Entrainment: the line

Yet if *Gaza Sderot* depicts a multiple space-time that is productive of new possibilities, it also draws attention to inertia; specifically by emphasizing how multiple trajectories are held in stubborn configurations. The manifold spatiotemporal trajectories that compose the i-Doc are synchronised to function in unison. As DeLanda describes, trajectories can become 'entrained', influencing each other's rhythm and development (DeLanda, 2002). For example, the hibernation cycles of animals are entrained with cycles of plant growth, while sleep cycles of humans are entrained with the oscillations of day and night. This 'phenomenon of entrainment

¹ 'c'est aux juifs marocains d'instaurer la paix dans ce pays, ils doivent être positifs et doivent dénoncer ces actes rassistes [sic] des sionistes...'

allows many independent sequences of oscillations to act in unison, to become in effect a single parallel process' (DeLanda, 2002, p. 115).

However, if entrainment allows various cycles to act in unison, then in *Gaza Sderot* this is not a happy union but a mutual suffering through which characters are constrained and constricted by the conflict linking their lived presents together. The most important aspect of an entrainment is the 'intensity' of the interconnection between the trajectories of individuals, as this determines how easily cycles can become unsynchronized and form alternative relations. Assemblages formed through entrainment are metastable, meaning shocks could cause systems to become unsynchronized or provoke changes to their trajectories. However, in *Gaza Sderot* the intensity of the conflict holds the lives of the characters in a union which is seemingly impossible to escape.

The intense force of the conflict is evoked in *Gaza Sderot* by the line down the screen which separates Gaza from Sderot. In all four screen views the line stubbornly delineates territory and in the map, face and topic views it has no interactive capacities, suggesting an unquestionable geographical division. A primary requirement of interactive interfaces is that contingency be rendered visible (Ash, 2010, p. 662) so users understand the choices on offer. Here, though, the *lack* of contingency when it comes to the line is equally important to interaction. While the i-Doc offers multiple attractors the line can never be escaped; it is an attractor so strong that all content within the i-Doc is bound by its organisational force. The line indicates the paramount influence of the conflict in structuring the lived presents of the characters. Nash writes of *Gaza Sderot* that 'the interface serves as a metaphor for the geographical space, its proximity and arbitrary division' (Nash, 2012, p. 205). The line is essential to this metaphor; it shows how conflict can take hold over life; pulling trajectories into uneasy proximity and restructuring space-time around its quasi-gravitational centre.

The line is also the primary attractor governing user behaviour and interpretation. To interact with the interface at all is to 'choose a side' by picking a clip from either side of the line. O'Flynn argues that in *Gaza Sderot* the interface entails that as users 'choose one video clip from one community' they also 'subordinate the other community'; deciding to whom to give 'voice and agency' and who, conversely, to render silent (O'Flynn, 2016). Indeed, when watching a clip from Gaza, the word 'Sderot' at the top of the screen becomes blurry and vice versa as if the user is literally losing focus on that side of the story. Although it is often assumed than nonlinear ontologies entail a malleable space-time, *Gaza Sderot's* interface draws attention to the significance of entrainment as a fixative force. Although its nonlinear trajectories suggest the possibility of change, the line denies this potential, instead implicating users in reproducing the conflict's divisions.

Conclusions

In exploring the nonlinear imaginary *Gaza Sderot* develops I have demonstrated how sensitivity to multiplicity, openness and entrainment is crafted through the i-Doc's interface. I have examined how those sensitivities bring the conflict into focus and argued that their primary effect is to draw attention to its entraining force in a multiple and potentially open space-time. My analysis demonstrates a method of exploring the spatiotemporal imaginaries that specific i-Docs construct; an endeavour which is crucial as new nonlinear medium reformulate ways of seeing.

My reading of *Gaza Sderot* also provokes questions which, as i-Docs become an established medium and focus of enquiry, Geographers are well placed to explore. Evidentially, attention is needed to how far i-Docs can be productive within the issues they depict. Do such stylised forms of interactivity merely aestheticize crisis and intervention or can participation in and

through documentary (Nash, 2014) offer real possibilities for change? And, among tensions between choice and design and between user and producer in i-Docs, how much leeway is there actually for radical destabilisations of narrative and representation? Furthermore, as well as approaching i-Docs as a specific technology of spectatorship there is scope to consider them within enquiries into the internet's forms of cultural expression (Manovich, 1999) or the influence of code over the 'form, function and meaning of space' (Kitchin & Dodge, 2005, p. 171). Equally, the way that *Gaza Sderot* charts space-time prompts consideration of how i-Docs intersect with broader questions about the construction of geographical knowledge in an era of digital interactivity.

While this paper has focused on analysing i-Docs I want to briefly suggest that methodological work with i-Docs could be valuable within Geography too. If creative methods enable different kinds of thinking to take place (Hawkins, 2015) then i-Docs could help Geographers to think 'nonlinearly'. Photography, film and sound have all been used to explore nonlinear elements of space-time (Massey, 2008; O'Callaghan, 2012; Gallagher, 2015) and i-Docs could add much to these creative experimentations, offering rich potential for exploring simultaneity, multiplicity, agency and transformation. Creating an i-Doc entails making tangible the constituent elements of nonlinear imaginaries and thinking through the force those imaginaries have in particular geographical contexts; a mode of attention highly valuable to Geography. I-Docs also have obvious potential for fostering impact beyond academia. They are easy to distribute online and can articulate geographical issues, including complex ideas around nonlinearity in accessible ways. Furthermore, their capacity for user-generated content holds exciting potentials for public engagement with geographical topics.

As stated earlier, i-Docs are already inspiring methodologies for the Stories of Change project which aims to open up new possibilities for thinking about energy. I am also experimenting with interactive documentary as part of a study of pop-up culture in London. Here, interactive documentary is helping me to think through the nonlinear imaginaries of urban space-time that pop-up culture itself creates as well as to explore the relationship of that imaginary to urban precarity. These early experiments gesture towards the vast potentials of i-Docs as a Geographical method.

In concluding, I would argue that further geographical engagement with interactive documentary is pertinent. I-Docs constitute a rich field of enquiry for Geographers interested in the reformulations of regimes of vision as well as in nonlinearity and the political perspectives it engenders in contemporary imaginaries. In this paper I have demonstrated an analytical approach to how nonlinear imaginaries are crafted in i-Docs; a pursuit which is crucial as nonlinearity becomes central to contemporary ways of seeing.

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References

18 Days in Egypt, 2015. *18 Days in Egypt*. [Online] Available at: <u>http://beta.18daysinegypt.com/</u> [Accessed 19 06 2015].

Anderson, B. & McFarlane, C., 2011. Assemblage and Geography. Area, 43(2), pp. 124-127.

Arte, 2008. *GazaSderot*. [Online] Available at: <u>http://gaza-sderot.arte.tv/en/about/</u> [Accessed 16 06 2015].

Ash, J., 2009. Emerging spatialities of the screen: video games and the recongifuration of spatial awareness. *Environment and Planning A*, Volume 41, pp. 2105-2124.

Ash, J., 2010. Architectures of affect: anticipating and manipulating the event in processes of videogame design and testing. *Environment and Planning D: Society and Space*, Volume 28, pp. 653-671.

Ash, J., 2012. Technology, technicity, and emerging practices of temporal sensitivity in videogames. *Environment and Planning A*, Volume 44, pp. 187-203.

Ash, J., 2014. Video Games. In: P. C. Adams, J. Craine & J. Dittmer, eds. *The Ashgate Research Companion to Media Geography*. Farnham, Burlington: Ashgate, pp. 117-137.

Ash, J., 2015. *The Interface Envelope, Gaming Technology, Power*. New York, London, New Delhi, Sydney: Bloomsbury Academic.

Aston, J. & Gaudenzi, S., 2012. Interactive documentary: setting the field. *Studies in Documentary Film*, 6(2), pp. 125-139.

Bennett, J., 2005. The Agency of Assemblages and the North American Blackout. *Public Culture*, 17(3), pp. 445-65.

Bennett, J., 2010. Vibrant Matter. Durham: Duke University Press.

Clarke, D. B. & Doel, M. A., 2005. Engineering space and time: moving picture and motionless trips. *Journal of Historical Geography*, Volume 31, pp. 41-60.

Coleman, R., 2010. Dieting Temporalities. *Time & Society*, 19(2), pp. 265-285.

Crary, J., 1990. *Techniques of the Observer*. London, England, Cambridge, Massachusetts: MIT Press.

Cresswell, T. & Martin, C., 2012. On Turbulence: Entanglements of Disorder and Order on a Devon Beach. *Journal of Economic and Social Geography*, 103(5), pp. 516-229.

de la Pena, N. et al., 2010. Immersive Journalism: Immersive Virtual Reality for First-Person Experience of News. *Presence*, 19(4), pp. 291-301.

DeLanda, M., 2002. *Intensive Science and Virtual Philosophy*. London, New York: Bloomsbury .

Deleuze, G., 1988. Bergsonism. New York: Zone Books.

Della Dora, V., 2009. Travelling Landscape-objects. *Progress in Human Geography*, 33(3), pp. 334-354.

DeSilvey, C., 2007. Art and archive: memory-work on a Montana homestead. *Journal of Historical Geography*, Volume 33, pp. 878-900.

Dinmore, S., 2014. The real online: database documentary and knowledge space. *Journal of Media Practice*, 15(2), pp. 123-132.

Dittmer, J., 2010. Comic book visualities: a methodology manifesto on geography, montage and narration. *Transactions of the Institute of British Geographers*, 35(2), pp. 222-236.

Dittmer, J., 2014. Narrating urban assemblages - Chris Ware and Building Stories. *Social and Cultural Geography*, 15(5), pp. 477-503.

Favero, P., 2013. Getting our hands dirty (again): Interactive documentaries and the meaning of images in the digital age. *Journal of Material Culture*, 18(3), pp. 259-277.

Gallagher, M., 2015. Sounding ruins: reflections on the production of an 'audio drift'. *Cultural Geographies*, 22(3), pp. 467-485.

Gaudenzi, S., 2013. *The Living Documentary: from representing reality to co-creating reality in digital interacctive documentary Doctoral Thesis.* [Online] Available at: <u>http://research.gold.ac.uk/7997/</u> [Accessed 19 06 2015].

Hawkins, H., 2010. 'The argument of the eye'? The cultural geographies of installation art. *Cultural Geographies*, 17(3), pp. 321-340.

Hawkins, H., 2015. Creative geographic methods: knowing, representing, intervening. On composing place and page. *Cultural Geographies*, 22(2), pp. 247-268.

Hawkins, H. & Straughan, E. R., 2014. Nano-art, dynamic matter and the sight/sound of touch. *Geoforum*, Volume 51, pp. 130-139.

Hollow. 2014. [Film] Directed by Elaine McMillion-Sheldon. s.l.: s.n.

Journey to the end of Coal, 2008. *Journey to the end of Coal*. [Online] Available at: <u>http://www.honkytonk.fr/index.php/webdoc/</u> [Accessed 14 10 2015].

Kitchin, R. & Dodge, M., 2005. Code and the Transduction of Space. *Annals of the Association of American Geographers*, 95(1), pp. 162-180.

Manovich, L., 1999. Database as Symbolic Form. *The International Journal of Research into New Media Technologies*, 5(2), pp. 80-99.

Massey, D., 2005. For Space. London: Sage.

Massey, D., 2008. *The Future of Landscape*. [Online] Available at: <u>https://thefutureoflandscape.wordpress.com/landscapespacepolitics-an-essay/</u> [Accessed 03 12 2015].

Miles, A., 2014. Interactive Documentary and Affective Ecologies. In: K. Nash, C. Hight & C. Summerhayes, eds. *New Documentary Ecologies: Emerging Platforms, Practices and Discourses*. New York: Palgrave Macmillan, pp. 67-83.

Nash, K., 2012. Modes of Interactivity: analysing the webdoc. *Media, Culture & Society*, 34(2), pp. 195-210.

Nash, K., 2014. What is interactivity for? The social dimension of web-documetnary participation. *Continuum*, 28(3), pp. 383-395.

O'Callaghan, C., 2012. Lightness and weight: (re)reading urban potentialities through photographs. *Area*, Volume 44, pp. 200-207.

O'Flynn, S., 2016. Designed Experiences in Interactive Documentary. In: D. Marcus & S. Kara, eds. *Contemporary Documentary*. New York: Routleldge.

Stories of Change, 2015. *Stories of Change*. [Online] Available at: <u>http://www.open.ac.uk/researchcentres/osrc/research/projects/stories-of-change-exploring-energy-and-community-in-the-past-present-and-future</u> [Accessed 01 10 2015].

Taylor, C., 2011. Resistant Gaming and Resignifying the Border. *Journal of Latin American Cultural Studies*, 20(3), pp. 303-321.

Weizman, E., 2011. *Sholetteseminars.com*. [Online] Available at: <u>http://www.sholetteseminars.com/wp-</u> <u>content/uploads/2011/08/Israeli.MilitaryPostStruct.pdf</u> [Accessed 19 11 2015].

Wood, A., 2007. Digital Encounters. Abingdon, New York: Routledge .

Woodward, K., Jones III, J. P. & Marston, S. A., 2010. Of eagles and flies: orientations toward the site. *Area*, 42(3), pp. 271-280.