

Cultures of Participation: Arts, Digital Media and Cultural Institutions

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Extract

Towards a participatory mode of overlapping realities

Independent VR art projects abound, yet I would like to devote more attention to artworks that both enact the meaningfully participative, critical and engaged modes of spectatorship in VR and disentangle its definition from the concept of immersion or make it deliberately problematic, uneasy or perceptibly superficial. Marc Lee and the team's (Antonio Kleber Zea Cobo, Florian Faion, Jesus Mufioz Morcillo) *10.000 moving cities — same but different* (2010—present) already seems paradoxical at first glance. The project was started as a net-based interactive installation, gradually incorporating VR (as well as AR and mobile app currently available for Android and iOS). With the use of HTC Vive HMD goggles, the user can explore the city upon selection of a location from a mapping interface. The cities graphically represented as generic, abstract and standardized — hint at the globalized character of today's metropolises. After the city is chosen, the user-generated content is retrieved in real time from several sources, including news and social media platforms such as YouTube, Flickr or Twitter. Along with the user walking around and flying through the cubes representing the city's buildings, the content is projected onto the buildings' facades, with accompanying respective urban soundscape played through headphones. Every time the city is requested for exploration its new representation is created out of the dynamically changing content of social media feeds, as the data circulating the internet is in constant flux.

Yet it is not the illusion of transparency that becomes the main point of focus. The experience consists of more than one layer of paradoxes — the virtual environment saturated with content harvested from social networks in real life constitutes just one of them. The textual ribbons of informative content from real communication networks, laid over the visual surface of documentary clips from the real city streets, subscribe to the strategy of "hypermediacy" (Bolter & Grusin 1999), which can be also understood as the medium's tendency driving its self-reflexivity, and which in turn leads to the user being more aware of the "technicity" of the medium. Interestingly enough, Bolter and Grusin (1999) connote VR as such with the logics of transparent immediacy.

Marc Lee's artwork is, nonetheless, about more than just a particular aesthetic juxtaposing the faculties of sensory and epistemic deception. The VR version of *10.000 cities — same but different* is grounded in a situation where

media technologies constitute networks or hybrids that can be expressed in physical, social, aesthetic, and economic terms. Introducing a new media technology does not mean simply inventing new hardware and software, but rather fashioning (or refashioning) such networks.

(Bolter & Grusin 1999, p. 17)

It is not only about conceiving the world in which the general fantasy mode of VR is invaded by communicative and informative scraps of the real world. The user's attention is in fact directed both at the exigencies of networked, data-based, algorithmically controlled communication, typical of the vast networks of today's digital culture and to the conditions of his/her own participation in those processes. At the same time, the agencies responsible for crafting such networks are, if not fully revealed, at least hinted at as repeated encounters indeed bring dissimilar results and different content from social media. In a way, the user is confronted with his / her own communicative practices in the vast networks. These practices are crafted by and based not only on data sets describing the content of communication, but also on metadata giving quite precise information on locative and temporal contexts of communication acts. Therefore a user is projected as one of agencies interwoven into the dense communicative universe, and the mode of reception is designed as reflexive rather than primarily immersive. Yet reality in this case is conceived of not as a correspondence to the outside world but rather as a function, to borrow Elsaesser's phrase, of a "total environment" of urban communication (Elsaesser 2014, p. 298). A number of real-time orders of systemic images are in this case layered one onto another: the "real-time" of the spatial calculation, or the computing of the movements of the user, is complemented with the "real-time" computational, automated harvest of data circulating in the networks and finally with the "real time" of social media feeds — with the increased chance of incongruences and miscalculations. Hence possible errors, undermining the ideology of VR's immersive transparency *even* further, are inscribed into the very ontological basis of the installation.

No wonder then that glitch aesthetics offers another fruitful strategy employed to demystify the conditions of VR as systemic image and also in terms of image production. It has been successfully explored by Scott Rettberg, who since 2010 has been producing horizontal panoramic photos and 360° panoramas for a future electronic literature project (work in progress). Rettberg has been sharing the images with his prospective audience as uploads to Google Photos, the photo-sharing service initiated by Google in 2015. Rettberg started collecting 360° panoramas created with an iPhone app, including images where, for example, a part of the human body is multiplied or disjointed from the rest of the body, or the movement of subjects in the streets becomes erroneously coded as the set of subsequent units, much like in Marey's chronophotography. The collection also consists of 204 photospheres, uploaded as content for Google Street View.

The effect is a direct consequence of the typical process of smartphone panoramic photography, where stitching the consecutive elements together is done automatically by the software. It has since been partially replaced by the photospheres produced by 360° cameras, following Ricoh Theta's camera launch in October 2013. Normally, such pictures would be deleted as failed attempts at capturing the sense of immersion in the surrounding environment. The phenomenon is, however, also illustrative of three types of aberrations present in the popular platform which have been identified as

1) The spatio-temporal situation of the image capture; 2) The accidental or purposeful movements of the human photographer; 3) Bugs or limitations in the hardware of software of the smartphone, local software, or cloud-based application used to create the image.

(Rettberg 2018, p. 17)

Here, too, it is particularly interesting that the bugs and limitations of the software and cloud-based services in the end reveal the systemic character of the 360° panoramas as simulations, as well as the operation of wider communicative networks, with different layers of real-time temporal orders mentioned before. Rettberg himself highlights the hybrid nature of his undertaking, based on the process of automated, software-based image production where the role of (human) photographer has also incorporated the exigencies and intricacies of the code, as performed by the application working with the cloud-based sets of data. As emphasized by the artist:

The process involved in producing each of these types of artifacts with a smartphone differs and in each case involves strange bodily interaction with the device, as well as complex algorithmic manipulation of the image by software, aspects of which are entirely beyond the control of the photographer.

(Rettberg 2018, p. 15)

What if foregrounded again is the systemic nature of 360° digital panorama, and hence the underlying mechanism of their production, normally hidden from view and/or occluded by the ideology of immersive reception. Based on the multiple feedback loops and countless instances of sophisticated calculations and data exchanges, the effect they produce is prone to unpredictability - or, as summarized by Rettberg, who likens the process to the behavior of poetry generators: "even as I capture them, I do not know what to expect of them until a stitching algorithm finishes assembling them" (Rettberg 2018, p. 16).

Rettberg's work in progress also hints at the possibility of reframing VR's participatory culture from yet another perspective, rarely acknowledged by the researchers of high-end virtual reality in its high-end tech and commercial incarnations: those of popular VR and quasi VR practices. It is worth remembering that the majority of consumer-generated VR content of today consists of various forms of photospheres and 360° panoramas, produced both as photographs with consumer grade smart-phones and as video with omnidirectional 360° cameras. They circulate

within the Google ecosystem of joint databases, creating one of the most potent and influential media platforms today, dominating the global internet. The experience has been described by Jill Walker Rettberg as one where "The photographer is invisible. The human must become like a machine to make a sphere.... We have become sensors for the machine" (cited in Rettberg JW, 2016). This is yet another way of interweaving human and non-human components in VR's participatory culture, where user-generated photospheres found on Google Maps Street View are one of the major genres. The example may provoke some controversies around whether (and to what extent) such content can be convincingly categorized as virtual reality, but considering it here is nevertheless in line with the already explained approach to employ VR as an umbrella term for a range of related forms: the photospheres and 360° panoramas can be seen as examples of virtual reality understood as a wider continuum of modes of representation and ways of engaging the audience.

Rettberg's work in progress is then symptomatic of

aesthetic responses to images that are produced as a result of machines observing and processing the world. The **overlapping realities** concerned are those of human intelligence and aesthetic sensibility with those of artificial intelligence and what might be understood as algorithmic and sometimes accidental aesthetics.

(Rettberg 2018, p. 12)

Scott Rettberg also developed another VR artwork which can be considered an example projecting the participating user beyond the immediacy of immersive reception. *Hearts and Minds: The Interrogations Project* was produced in 2014 in collaboration with Roderick Coover, Dania Tsoupikova, Mark Partridge, Mark Baratta, Lance Long and Arthur Nishimoto. It is a 3D narrative cinematic VR experience, originally conceived for CAVE 2 of the Electronic Visualization Laboratory at the University of Illinois in Chicago. It presents the stories of violent behavior and at the same time offers some insight into the post-traumatic trauma experienced by American soldiers - often very young and inexperienced - who were ordered to engage in torturing prisoners. The testimonies gathered by John Tsukuyama communicate the story of a difficult struggle of coming to terms with what happened during military service. According to Rettberg, the purpose of the project was "to promote the reasoned consideration of the problems generated by using torture as an interrogation tactic" (Rettberg 2019, p. 198).

Due to the highly sensitive nature of the subject of the artwork, the creators decided to employ actors reading the transcribed interviews rather than use the actual recordings. Such a Brechtian gesture further estranges the spectator from the content, yet it provides a required considerate and compassionate distance enabling better understanding of the complex psychological situation in the battlefield. Through combining the elements of visual art, documentary, hypertext and gamelike environments, the VR experience again proposes "a total environment" (Elsaesser 2014). The individual user interacts with selected objects within the virtual environment, which triggers the consecutive

narrative strands. Each time the next "chapter" in the story opens, the walls of a domestic space fall away and the scene transforms into an unspecified desert landscape where the story from the transcript is presented, denying the possibility of full immersion in either environment, and also symptomatic of the already mentioned effect of "hypermediacy", directing users' attention to the familiar interfaces and making them visible and perceptible objects of conscious and critical participation in the operation of the artwork. The installation is far from the primarily affective "empathy machine", also due to the fact that, as Anne Karhio emphasizes, the visual representation of space effectively produces the disjointed narrative layers that contribute to spectators being made "uncomfortably aware of the entertainment industry's commercial exploitation of armed conflicts" (Karhio 2017, p. 355). Both graphically and conceptually, *Hearts and Minds* is a conscious play with the mode of immersion - here seen as typical of both VR environment and gaming - juxtaposing "the operational with the representational" (Andersen & Pold 2018, loc. 549).