

How to reconcile that flinch: Towards a critical analysis of documentary situations in 360° and VR environments

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Abstract:

In the context of aesthetic hybridizations between films, games and events, the documentary form is undergoing significant transformations resulting in a distinct relationship between content and audience. As one of the keywords, interactivity in its different modes (Gaudenzi 2013) and dimensions (Nash 2014) promises an opening of documentary artefacts to engage users (formerly known as viewers) actively in the process of negotiating individual experiences and perceptions of the world (cf. Aston and Gaudenzi 2012: 128). In this paper, I propose that interactive documentaries can be understood as *situations* aesthetically affording these negotiations in their own right. Due to their unique conditions of (inter-)action, 360° and Virtual Reality (VR) documentaries constitute a specific case in point that requires further examination. As 'spaces of possibility' (Salen and Zimmermann 2004), they are designed to create immersive situations that utilize performative elements to convey situated, multisensory, and embodied forms of knowledge. However, these digital environments are of an inherently ambiguous status just as their inhabitants' own corporeality and sense of self. In order to enable a critical assessment, this article introduces a theoretical framework for the analysis of documentary situations in current 360° and VR works and the ways they might *intervene* in our perception (Grau 2003: 13).

Keywords: interactive documentary, immersion, Virtual Reality, 360°

Introduction

Pop, pop pop pop... the bullets explode into the Chilean prisoners as I'm thrust into the line of fire. My body recoils, but I continue pushing forward until I'm

just inches from their fractured faces, frozen with terror. I can't hide. I'm helpless. The feeling is real, even though the scene I'm witnessing is not.¹

The way *The Verge* author Thomas Ricker describes his experience of Oscar Raby's Virtual Reality (VR) documentary *Assent* (2013) in this excerpt, illustrates the possibilities of creating powerful yet ambiguous situations with the help of current state of the art technology. Although Raby uses 3D modelling instead of photographic realism to re-create the mass execution witnessed by his father in the aftermath of the 1973 Chilean military coup, the experience 'feels real' to Ricker and so does his bodily reaction. After removing the head mounted display (HMD), many users of such works report feelings of disorientation and irritation: 'How do I reconcile that flinch, the physical memory of having been somewhere I actually wasn't?' asks Eric Haynes, for instance, in his reflection on Danfung Dennis' VR essay *Zero Point* (2014).²

What are the implications for documentary theory and practice when our body reacts to the mediated events as if we were there but are in fact not? Often, the relation between 360° and VR artefacts and their perceivers is designed specifically to evoke this aesthetic and sensory effect – the illusion of physical and emotional presence scholars of game studies, literature and art commonly refer to as immersion.³ In VR works, the resulting impression of involvement within the storyworld can be so strong that, in an extreme case, the viewer/performer⁴ might forget (even if only temporarily) the artificial nature of the depicted world. Accordingly, media theoretician Oliver Grau (2003) described VR systems as 'interventions in perception' because of the way they hermetically seal off their users and transport them into other worlds. In light of these physiological and psychological potentials, documentary makers, journalists and researchers increasingly adopt VR technology with the aim to achieve higher social impact by means of empathy and insight. In the process, they drive the blurring of lines between fictional and nonfictional conventions forward and, thereby, renew questions of documentary and its contested but long-standing link to truth and factuality. In an interview with Jess Linington, VR filmmaker Darren Emerson comments on 'the layers of truth' embedded in these ambiguous experiences:

There is the narrative truth of the story you present, in the case of *Witness 360: 7/7* it is Jacqui's story told in her own words; the physical truth of feeling like you are standing and looking around a real environment which is ultimately very powerful; but there is also the emotional truth of the exchange between the viewer and the film, which is enhanced by the physical and sensory isolation that is required to watch the work.⁵

What Emerson describes as 'truth' here could easily be replaced by the term 'illusion'. More importantly, however, we need to scrutinize the extent, circumstances and consequences of these physical and emotional interventions in a documentary project. As we can see from accounts as Ricker's, emerging technologies and practices provide new possibilities but they

also introduce an array of creative, conceptual and ethical challenges that need to be addressed critically.

One way to approach these issues is by re-examining the moment of reception (or interaction) with regard to documentary and its digital transformations. Following Bettina Frankham, '[t]his concern for the conditions of spectatorship isn't something new for documentary practice but in the numbness that can be produced by an emerging form or technology the conditions required for understanding are renegotiated' (2016: 37). Building on previously published work (cf. Weidle 2015) and the concept of virtual fictionality I conceived together with my colleague Kai Matuszkiewicz to describe and analyze world-making strategies in VR gaming,⁶ this paper contributes to the ongoing investigation of the changing configuration between audiences and documentary artefacts within the field of interactive documentary. In line with Kate Nash's multidimensional approach to interactivity (2014: 57-8), the following observations will draw close attention to the experiential dimension of virtually mediated worlds and link it to concepts underlining the potentiality of user activity borrowed from art, new media and game studies. However, the question remains to what extent performance-based VR experiences can become meaningful in the pursuit of a documentary agenda. Rather than offering a full analysis of a particular project, this paper will introduce the theoretical concept of *documentary situation*. As a possible framework for future empirical research, it supports the critical assessment of the conditions necessary for situated and experiential knowledge to emerge from combining performative and narrative elements in VR environments.

Documentary constellations in the digital age

'There is no such thing as documentary – whether the term designates a category of material, a genre, an approach, or a set of techniques' (Minh-ha 1990: 76). With these words, Vietnamese filmmaker Trinh T. Minh-ha commences her contribution to documentary theory and reviews its contested relationship with truth and factuality. Pointing to the conglomeration of forms, practices and traditions the term comprises, her statement also exemplifies the widespread habitus in documentary scholarship to question the constructed character of audiovisual mediation. Without a doubt, the filmmaker influences the action in front of the camera, let alone re-enactment techniques that are often necessary for the filmic production of social realities. The camera and its affordances,⁷ again, shape the filmmaker's perspective and his or her creative possibilities. Yet, the most obvious stage of selection and manipulation is possibly that of postproduction, in which the usage of montage, for instance, serves to compress time and construct an aesthetically pleasing and (often narratively) cohesive piece of work.

Still, one of the most consistent characteristics of defining documentary is in relation to fiction as a fixed point of differentiation. Although fiction and documentary are linked in complicated ways that cannot be discussed at length here, their binary coupling matters for the production and reproduction of documentary as a category of perception. Cultural anthropologist and filmmaker Thorolf Lipp (2012) captured the varieties of documentary

that have emerged from this distinction in his typology of historically developed features, styles and authenticating strategies. Situated in between the different, partly opposing, standards and conventions of academia, journalism and art (cf. Winston 1999) it is also the vast scope of contextual features – from the respective intentions and institutional infrastructures to the screening, distribution and audience response – that influences the perception of documentary as a distinct genre.

While these stylistic conventions are mutually interdependent of the respective notion and perception of reality, they are similarly relative to the socio-material conditions of the time. Looking back at the 1960s, for instance, the introduction of the hand-held camera was certainly instrumental in sparking the evolution of American Direct Cinema. Currently, the internet, smartphones, 360° cameras and VR systems are taking the form to another level. Given the emerging complexity of digital practices and media ecologies, the technological components of documentary diversify even further. Through the lens of software studies, Craig Hight pointed to the central role of applications and platforms that continuously perform tasks and are performed by their users at each stage in the cycle of an interactive documentary:

At some point in the development of their project, the designer and makers of interactive documentary strategically perform particular software tools in order to generate specific sets and hierarchies of affordances which constitute the work itself. These affordances in turn work to allow, foster and shape how users may themselves perform these works, presumably in the pursuit of a documentary experience [...] (2017: 86).

Thus, by informing and shaping creative choices, software-based tools make up an important aspect for envisioning and designing the conditions of engaging with content.

Interactivity as core element of i-Docs

Based on John Grierson's infamous definition of documentary as 'the creative treatment of actuality' (1933: 8), Christian Huck and Jens Kiefer describe the long noted double bind of the form outlined above in their pointed description: 'it is not like fiction *and* it is like fiction' (2007: 103, original emphasis).

On the one hand, *unlike* fiction, which deals with the virtual, that which *might be*, documentaries deal with the actual, that which *is* (here and now). On the other hand, *like* fiction, documentaries are a product of creative work, of selecting and arranging material in new ways (ibid.).

If we take this paradox as an essential ingredient of documentary, it is worth considering more closely the permeability between fiction and nonfiction, especially in terms of the ongoing hybridization of films, games and events. In his thoughts on 'documentary as

transitory genre', Heinz B. Heller already pointed to the new modes of experience that would emerge from such a blurring of generic boundaries:

This aesthetic procedure does not only place fiction on a realistic basis [...]; but relativizes and simultaneously reflects the boundaries of conventional documentary representation and, moreover, opens up often withheld and inaccessible experiential modes of the possible, the imaginable or simply the playful entertaining. Rather than documenting facts, we are now embarking on explorations of possible images and worlds that are embedded in reality. To release the imaginary and make it sensorily tangible and intuitively accessible through a deliberate interplay between perception and imagination – that is the horizon, in which the transitory of documentary becomes manifest (2001: 24).⁸

In the context of current debates on documentary and its digital transformations, Heller's concept of the transitory appears to be more topical than ever. Returning to the role of software tools, interactivity in its different modes (Gaudenzi 2013) and dimensions (Nash 2014) is widely regarded as the core element driving the form towards those new modes of experience. Nevertheless, it introduces another convoluted terminology to our discussion.⁹ For digital artefacts, the term primarily designates a system property that could *potentially* create a technically mediated interaction through feedback loops. Thus, interactivity brings the relationship between media artefacts and their users into focus – an aspect that has been applied broadly and variously to the documentary agenda as the opportunity for an increased user engagement. Following this train of thought, social realities would advance from an object of representation to that of negotiation, as Judith Aston and Sandra Gaudenzi have been stressing in their ongoing involvement with the structural and theoretical possibilities of interactive documentary:

[E]ach form of i-doc seems to negotiate reality far beyond Stella Bruzzi's vision of documentaries as 'performative acts whose truth comes into being only at the moment of filming' (2000:7) because the 'moment of truth' is now also placed into the actions and decisions of the user/participant. We see this way of thinking about i-docs as offering a tool as much for the co-creation of reality as for its representation (Aston and Gaudenzi 2012: 128).

If the relevant action now occurs *behind*, *in front of* and possibly even *within* the screen, the moment of reception is amplified once again as crucial for documentary, not only in terms of meaning-making but also of co-creation. However, the opportunity to decide where to click, look or upload content does not necessarily coincide with an increased engagement, sense of immersion or shared authorship. In fact, not enough empirical studies have been undertaken yet to confirm that these potentials are an actual (and observable) part of the

user experience. Accordingly, in her multidimensional approach to interactivity, Nash proposes an integrated analysis of the possible actions offered by a particular documentary project and the actual experience of its users, which I will return to at a later point.

For this discussion, it suffices to conceptualize interactive documentary, in light of its shifting notion and with Heller's idea of the transitory in mind, as constituting hybrid spaces that hold the potential for negotiating individual experience and perceptions of the world. The space of interaction that unfolds between viewer/performer and documentary artefacts is aesthetically and conceptually located on the edge. On the one hand, it merges film aesthetics with an experience-oriented focus characteristic for games, installations or theme parks. On the other, it blurs the line between fiction and nonfiction further. Utilizing real time 3D animations, the VR project *Notes on Blindness – Into Darkness* (2016) is clearly removed from aesthetic conventions of naturalism. On the contrary, *Zero Point* (2014) or *(T)Raumzwang* (2016) build on 360° camera technology to maintain the impression of an indexical relationship to physical environments and protagonists. Still, all of these examples operate on their own rules, strategies and infrastructures and thus appear as close to fictional worlds as they are to 'factual'. In this complex configuration, actions and perceptions play a central role for the potential effects of interactivity including a more immediate, evocative, personal and immersive experience. Yet, the negotiation of documentary knowledge is very much dependent on the conditions of interaction as well as the underlying principles and contextual parameters usually set by filmmakers, producers and funders in conjunction with the respective tools and discourses.

Feeling the event: Documentary situations in VR environments

If we redefine documentary as transitory space for negotiating perceptions of social realities, we will also need to shift our focus from representation to *performance*. Bringing together the notions of experience and embodied engagement, Bettina Frankham suggests moving beyond the evidential and investigating the aesthetic quality of interactive documentary in its own right:

In line with Ryszard Kluczinsky's (2010) observations about interactive art, interactive documentary is also a form that relies upon *the actions of users* to bring them into being. Rather than autonomous objects then, these works might be thought of as *events* that are not final until they engage a user (2016: 31, emphasis added).

In this sense, the question of performance becomes that of agency in a specific event. Looking at game studies, new media and installation art, it is not a new approach to turn from an investigation of the media artefact as a stand-alone towards an aesthetic consideration of the unfolding situation between artefact and user. Katie Salen and Eric Zimmerman, for instance, introduced the term 'space of possibility' to emphasize the key

aspect of potentiality in the design of game environments and the spectrum of possible actions they afford:

We call the space of future action implied by a game design the space of possibility. It is the space of all possible actions that might take place in a game, the space of all possible meanings which can emerge from a game design (2004: 67).

In VR documentary, the 'space of possibility' emerges in front of the person who is wearing the necessary gear. Via headset and earphones, s/he is placed into a world that is framed as nonfiction but, in fact, displays a curious tension between reality and virtuality. Aesthetically as well as functionally, these spaces often simulate our lived-in world but occasionally also overemphasize their artificiality. Similar to digital games, the space of VR documentaries contains a certain amount of potentiality and is usually dependent upon the actions of viewers/performers to unlock narrative events. Nevertheless, as the term already suggests, viewers/performers play a contradictory role. On the one hand, they are observers who witness something that is framed as documentary. On the other, they serve as catalysts that trigger narratives and, thus, become part of the event themselves.

Although we can identify a strong yet differently pronounced emphasis on the narrative dimension in current examples of VR documentary, only through *physical performance* can the mediated environment unfold its potentiality for action and meaning on different levels (from narrative to ludic and affective). Markku Eskelinen already suggested the dramatic or ludic mode of perception as central to the process of meaning-making in computer games, which he coined the 'gaming situation' (2001). Following Eskelinen and based on the notion of reality as negotiation process, I propose the term *documentary situation* to describe the potential forms of situated and experiential knowledge that might emerge from taking a performative part in events occurring in transitory VR spaces.¹⁰ Nevertheless, not only the space but also the corporeality of the viewer/performer is of an ambiguous status. Who is actually present where, when and why? In order to gain deeper insights into the relationship between VR documentaries and their perceivers, the following considerations will focus on the 'interventions in perception' (Grau 2003: 13) implemented by particular design choices and their relevance for the respective documentary situation.

Interventions in perception: a theoretical lens for the analysis of VR documentaries

As outlined above, documentary makers are increasingly testing the potential of digital audio-/visual mediation with regard to the sensory, tempo-spatial and event-like dimensions of interaction. For a critical assessment of the documentary situation, it is, thus, pertinent to interrogate the specific conditions and how they are perceived and experienced

by participants. According to Nash's multidimensional framework, user perspectives should be included in order to test empirically whether feelings of engagement are indeed stronger in interactive documentary than in film or television. Since it would be 'just as likely that the interactive experience – the need to click, decide or move – might detract from narrative engagement', she follows Oliver Quiring (2009: 902) and calls for an investigation of 'the extent to which the system is experienced as fast and responsive, the degree of presence, playfulness and connectedness to others' (2014: 57-8).

In terms of the technologically enabled possibilities, ego-perspective and 360°-view can have dramatic effects on the perceived relation to the documentary event. By wearing the HMD, it might appear as if the point of view of the camera merges with the gaze of the interacting person and positions her or him at the very center of the space. Based on her observations as an immersive journalist, Nonny de la Peña notes that the impression likely to emerge from this technological setting is that of being *present in* or *situated on* scene rather than *looking at* it: 'In fact, we have a *plastic presence* that allows for "injection moulding" into different spaces or different body forms. People can actually feel as if they have been transformed to another place or that they inhabit a different body' (2014: 314, original emphasis). While Oscar Raby's *Assent* (2013) uses head movements to unlock narrative events, other projects such as de la Peña's *Hunger in Los Angeles* (2012) or *Project Syria* (2014) rely on motion capture technology and real time computer graphics to enable full-body movements through an aurally and visually responsive environment. These examples illustrate the technological spectrum currently available but also indicate the scale of intensity for effects such as playfulness and presence to occur. In her account of experiencing *The Machine to Be Another's* 'Body Swap Experiment' (2014), *The Verge* author Aaron Souppouris for instance, describes this feeling of presence as 'transformative illusion', which builds on the combination of vision, audio and touch.¹¹ To some extent, then, feelings of presence or 'situatedness' might arise due to the specificities of the headset itself, which hermetically blocks the perception off from any external input. Moreover, these effects are stimulated by the design of the particular space, the actions it affords, its responsiveness of the system and the density of sensory stimuli provided.

Following Grau, we could assume, then, that VR immersion differs from intellectual stimulation or emotional transportation readers and viewers might experience in text- or film-based narratives (cf. Murray 1997: 97-125) because of the ways the system *intervenes* in our senses:

As image media can be described in terms of their *intervention in perception*, in terms of how they organize and structure perception and cognition, virtual immersive spaces must be classed as extreme variants of image media that, on account of their totality, offer a completely alternative reality. On the one hand, they give form to the "all-embracing" ambitions of the media-makers, and on the other, they offer the observers, particularly through their totality,

the option of fusing with the image medium, which affects sensory impressions and awareness (Grau 2003: 13, emphasis added).

In contrast to being a mere spectator present on scene, however, viewers/performers also have a certain amount of agency over the space by physically acting in and upon it. On a basic level, they might be able to access any aspect of the image while a linear narrative automatically drives the storyline forward. This is a common strategy in 360° films such as *Arte's Life to Come 360° - Through the Eyes of a Premature Baby* (2016) or BBC's *The Resistance of Honey* (2016). The first example aims at conveying the perspective of a premature infant on its journey through the hospital; the latter opens up the hut and hive of an urban beekeeper. Both of these examples strongly direct attention towards the narrative and only support a relatively limited amount of agency. Moreover, narrative and performative elements appear rather disconnected. In the case of taking the perspective of a premature infant, the viewer/performer is invited to experience the disorientation of a baby investigating the strange hospital environment. Yet, except for being positioned within an incubator, the ability of clear vision, sound and comprehension were not altered accordingly. A strategically more consistent implementation of performative and narrative elements can be found in the Guardian's *6x9* (2016), for instance, where blurred vision and unpleasant sounds are used to evoke the long-term effects of solitary confinement.

Although most of the current 360° and VR documentaries build on representational modes of showing and telling, the performative dimension appears to be of special importance for the enactment of spatial potentiality in terms of its aesthetic and affective qualities. *The Machine to be Another* (2014) or *My Lonesome Hologram* (2016) are examples that go beyond head movements and provide the option to participate with the help of the whole body. When performative elements, sensory stimuli and narrative events are as densely interconnected as they are in these works, they can spawn physiological and psychological responses that might, indeed, lead to feelings of presence or connectedness.¹² Returning to Souppouris and her body swap experience, she remarks that '[...] with the constant sensory bombardment, I had no time to think through which body was precisely doing what. Her [the other person's] voice [...] became my stream of consciousness'. What this 'sensory bombardment' encapsulates is a certain vulnerability inherent in this (often prior to the experience unforeseeable extent of) intervention that needs to be treated with care regarding its ethical implications.¹³ In a state of physical and emotional immersion, we can, thus, also observe one of the major challenges for a documentary usage of 360° and VR technology. While there has not been sufficient testing on VR's physical and psychological effects yet, Grau points out that the process of 'fusing with the image medium' is characterized by 'diminishing critical distance to what is shown and increasing emotional involvement in what is happening' (2003: 13). In the context of interactive documentary and its aim to create spaces of exchange, it certainly remains questionable, then, for what reasons, to what extent and under which circumstances VR's affective potentials are harnessed.

While feelings of presence or connectedness can emerge from strategically intervening in one's senses, the interacting body remains strangely absent. Although some VR documentaries feature digital manifestations of the viewer/performer in the form of avatars or other human bodies, the certainty about oneself sitting in or walking through an exhibition space persists. De la Peña describes this ambivalent sensation as 'duality of presence': 'participants know that they remain in the physical location where their body resides but they also feel at the exact same time as if they have been transported to the environment where the scene is unfolding' (2017: 209). Returning to the notion of VR immersion outlined above, we can think of this duality of presence as part of a documentary's strategic discourse: it can be deliberately amplified or concealed. In her consideration of hypertext and –media, literary scholar Hyun-Joo Yoo defines immersion as a spectrum central for measuring the intensity of interactivity (2007: 74-110). Alternating between activity and passivity, presence and absence, as well as the dis- and 'reappearance of the "machinery"' (Beattie 2008: 45), the use of 'gaps' between immersion and 'des-immersion' (Yoo 2007: 106-110) can create documentary situations, which invite participants to reflect about the narrated events and their ambiguous role within them. When Souppouris remarks, she had 'no time to think through which body was precisely doing what', she indicates a condition necessary for the immersive sensation to occur but also hints at the lack of time or passivity to think about what is actually happening to her and why. In *Assent*, not just Raby's use of polygons and digital glitches, which underlines the artificiality of the space, but also the gradual shift from a performative to a narrative emphasis foster contemplative moments as we learn from John Hodgson's account:

A disturbing and provocative aspect of this virtual reality experience was *the conflict between participation and passivity*. At the beginning [...] I felt master of the situation. But, as the story unfolded, I became aware that the scope of my participation was extremely limited. [...] Indeed, I could not change the events at all, beyond spending a longer time looking at the landscape than Oscar's father would have done on that traumatic day.¹⁴

On a contextual level, *Life to Come 360°* or *The Resistance of Honey* do not provide sufficient information on the performative possibilities and their relevance for the respective content. On the contrary, *The Gender Swap Experiment* is framed by briefings, concluding discussions and workshops, which allow for a critical reflection on the roles viewers/performers are supposed to play and their actual experience of it. Hence, it is also necessary to include the communicative framework into our analysis as constituting a core element of negotiation in virtually mediated documentary situations.

Conclusion

In the pursuit of social impact, documentary makers and journalists increasingly highlight VR's potentials as a tool for raising awareness and empathy. To isolate oneself sensorily and

physically in a virtual space surely creates powerful effects but to what extent this is supposed to enhance interpersonal understanding can also be met with skepticism. 360° and VR technology may assist us in creating spaces that appear more real than reality; spaces that allow us to make the impossible happen, to open up imaginary worlds and share subjective experiences. Following Grau and returning to Heller, we might think of the interaction with(in) the seeming seamlessness of these spaces as embarking on explorations 'to release the imaginary and make it sensorily tangible and intuitively accessible' (Heller 2001: 24) through a deliberate 'intervention in perception' (Grau 2003: 13). Projects including *The Machine to be Another* or *Assent* exemplify ways in which such an intervention could be used to evoke situations that impart implicit knowledge and increase empathy.

On a less positive note, however, immersion does not guarantee immediate access to other people's perceptions of the world. Thus, this paper has argued for a careful consideration of the conditions of interaction. Beyond interrogating the scope of actions afforded by the technology, the approach outlined above understands 360° and VR documentaries as 'spaces of possibility' (Salen and Zimmermann 2004) utilizing performative components to mediate situated, multisensory and embodied forms of knowledge. Central questions for the analysis of these spaces include: Which roles are viewers/performers supposed to play within the documentary framed event? How does the performative dimension work together with narrative elements and sensory stimuli to generate documentary situations? Is there a moment of contemplation through 'des-immersion' (Yoo 2007: 106-110) within or outside of the space that allows for a critical reflection on the experience? With the aid of these guiding questions, we can assess the conditions of interaction, the ways they are combined and made transparent in terms of their documentary capacity, and design suitable frameworks for empirical research.

Following current notions of documentary as processes of negotiating individual experiences and perceptions of the world, it is exactly this continuum of immersion and des-immersion, which allows practitioners and viewers/performers to co-create implicit forms of knowledge. 'In relation to the infinity of seemingly shapeless online spaces and senses of time', Frankham remarks:

The aesthetic quality of those spaces of activity is important. The depth of engagement is to some extent contingent on the subject matter but may also be considered a factor of whether the conditions of interactivity permit a moment of pause that can slow down the online experience. I'd like to contend that contemplative spaces and spaces of absorption permit the user to step outside of utilitarian demands to engage with a range of interactive pleasures that promote embodied and situated forms of knowledge (2016: 41-3).

As we have seen, documentary has always dealt with the actual as much as the virtual. What is new is the depth of engagement these immersive virtual spaces allow. In order to let them advance into more than an overwhelming experience of state of the art

technology, they need to be embedded within a coherent communicative situation that initiates a farther-reaching dialogue with participants. From this point of view, VR and 360° documentaries could be seen as another contribution towards the creative and meta-reflective treatment of actuality by employing audio-/visual media and its affective potentials. The epistemological interest specific to this practice, then, would entail negotiating multi-sensory and embodied forms of knowledge with the help of digital affordances.

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Interactive Documentaries:

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- Colinart, Arnaud and Amaury La Burthe *et al* 2016. *Notes on Blindness – Into Darkness*. UK, 20 min.
- de la Peña, Nonny 2012. *Hunger in Los Angeles*. United States.
- de la Peña, Nonny 2014. *Project Syria*. United States: USC School of Cinematic Arts and World Economic Forum *et al*.
- Dennis, Danfung 2014. *Zero Point*. United States.
- Hanke, Pascal 2016. *(T)Raumzwang*. Germany, 20 min.
- Louahem, Fouzi and Claudio Capanna 2016. *Life to Come 360° - Through the Eyes of a Premature Baby*. Belgien, Frankreich, Qatar, 9 Minuten.

- MacLean, Peter Boyd 2016. *The Resistance of Honey*. UK: BBC Research and Development.
- Panetta, Francesca and Lindsay Poulton 2016. *6x9: An Immersive Experience of Solitary Confinement*. UK: The Guardian.
- Raby, Oscar 2013. *Assent*. Melbourne: RMIT University.
- Wesemann, Nina and Daniel Hengst 2016. *My Lonesome Hologram*. Germany, 15 min.

Notes:

¹ <https://www.theverge.com/2014/12/4/7326017/i-love-the-oculus-rift-but-i-hate-video-games> [Accessed 16/06/2017].

² <http://www.sundance.org/blogs/news/finding-meaning-in-virtual-reality--a-closer-look-at-new-frontier> [Accessed 17/06/2017].

³ Cf. Ryan 2001.

⁴ In the following, I will refer to the audience of 360° and VR documentaries as viewers/performers to emphasize their double role within these digitally generated environments. While invited to physically interact with(in) the depicted world to varying degrees, these documentaries usually ask their participants to also watch an audio-/visually narrated storyline. As will be made clearer throughout the course of this argument, combining and balancing these different tasks can result in both, a productive and a disruptive tension.

⁵ <http://i-docs.org/2016/05/11/9083/> [Accessed 17/06/2017].

⁶ Kai Matuszkiewicz and I presented the concept of virtual fictionality in the context of the international workshop on 'Playing with Worlds/Worlds of Play' at the a.r.t.e.s. Graduate School for the Humanities Cologne in March 2016. On the basis of the VR shooter *Zero Latency* (since 2012), we highlighted, among other things, the importance of performative elements and their constitutive role for the worldliness of media artefacts that lie beyond the narrative paradigm.

⁷ On a technological level, the term designates the possible actions offered by a particular tool (cf. Norman 1998: 9; McGrenere and Ho 2000: 6). Brian Moeran has integrated this technological dimension into his concept of 'circuits of affordances' (2014: 35-59), which also encompasses social, economic, representational, temporal and spatial aspects informing creative practices.

⁸ Translated from the German original: 'Dieses ästhetische Verfahren stellt nicht nur Fiktionen auf eine realistische Basis [...]; vielmehr relativiert und reflektiert es zugleich die Grenzen konventioneller dokumentarischer Repräsentation und eröffnet ihr überdies ehemals oft vorenthaltende und verschlossene Erfahrungsmodi des Möglichen, des nur Vorstellbaren oder schlichtweg des spielerisch Unterhaltenden. Statt dokumentarischen Registrierens von Fakten werden nunmehr Erkundungen der in der Wirklichkeit eingelagerten und sie mitkonstituierenden Vorstellungsbilder und –welten unternommen; im bewußten Widerspiel von Wahrnehmungs- und Vorstellungsbildern das Imaginäre zu entbinden und sinnlich anschaulich erfahrbar zu machen – in diesem Horizont wird das Transitorische des Dokumentarischen manifest.'

⁹ For a comprehensive survey of the different analytical approaches in the context of communication studies cf. Bucy 2004 or Quiring and Schweiger 2006.

¹⁰ Huck and Kiefer also use the notion of situation to describe the communicative disposition of documentary in contrast to fiction. However, they restrict their analysis to the narrative dimension, which is determined by the film itself but also by a variety of contextual aspects (2007: 103).

¹¹ <https://www.theverge.com/2014/3/24/5526694/virtual-reality-made-me-believe-i-was-someone-else> [Accessed 17/06/2017].

¹² See for instance people's reactions to BeAnotherLab's Gender Swap Experiment: <https://www.youtube.com/watch?v=WCprfChibTE> [Accessed 16/06/2017]. As part of UNICEF's Innovation Unit, Christopher Fabian notes 'a lot of people have a very emotional reaction to [watching VR]. I can't even count the number of times someone has taken off the headset and the goggles are filled with tears' (<https://phi-centre.com/article/fr-empathy-sensory-stories-2016/>) [Accessed 16/06/2017].

¹³ Despite possible psychological damages, the voyeuristic tendency of becoming a witness is another central issue in VR documentary.

¹⁴ <http://johnhodgson.org/2014/10/25/virtual-reality/> [Accessed 16/06/2017].