Utrecht University

Faculty of the Humanities

Degree program: pre-MA New Media & Digital Culture

Course: BA bachelor thesis: TV as 'new' medium

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Title: yellowBird as participatory video

Keywords: participatory, video, culture, interactivity, yellowBird

Month and Year: April 2011

Supervisor: K. van Es

See the world like never before (yellowBird, 2011b)

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Click and drag in all directions (yellowBird, 2011b)

1. Introduction

In February 2010 the Dutch newspaper *Het Financieel Dagblad* reported that a Dutch '3D image'-company partnered with Google's YouTube. The topic of the article was yellowBird (yB), an enterprise producing a rather unconventional type of online video. YB uses a typical video camera, similar to the cameras used to produce the still images for 'Google Street View'. However, different from StreetView's still images, yB offers "...a moveable 360° image in a spherical shape." (yellowBird, 2011b) The media technology used by yB presents itself as a new phenomenon and the challenge that presents itself is how to conceptualize this 'new' type of online video.

It is important to note that 'yellowBird' is the brand name of the enterprise and not the category label for this kind of video. The technology goes by different names, such as '360 degree video' and 'interactive video' (yellowBird, 2011b). These terms do not do justice to the technology, because 1. interactivity is a fuzzy concept which does not explain what this interactiveness means for the user experience, and 2. yB goes beyond 360 degrees of video. Therefore, this term literally falls short of accurately describing yB. The aim of this research is to advocate that *participatory video* is a more adequate term by which to understand the category of yB's video technology.

The research is both descriptive and comparative, where the research method is textual analysis enriched with elements of interface analysis. The object of the research is yB and where I address yB I refer to the 'showreel', which is a typical example of an online video by yB (yellowBird, 2011c). The research will provide insight into the concept participation as used in new media theory. First, I will introduce yB since this kind of video might be unfamiliar for some readers. Thereafter I will address the newness of yB by means of Huhtamo's article "Armchair Traveler on the Ford of Jordan: The Home, the Stereoscope and the Virtual Voyager" (1995).

I introduce the concept of 'formatted spaces of participation' proposed by Eggo Muller (2008) because it promotes awareness of the design, structure and affordance(s) of a (new) medium. In short, the way in which its space of participation is formatted. Such awareness is important because design has affordances which enables and even suggests certain kinds of participation, while at the same time it prohibits others. Another valuable contribution of Muller's theory is that it circumvents the often unfruitful dichotomies in texts about new media, usually described by the labels 'utopian' (positive) and 'dystopian' (negative) discourses.

In order to introduce the concept participation as used in new media theory I will zoom in on interactivity, participation and participatory culture, which is needed to understand the arguments for yB being called participatory video. Furthermore, I intend to employ the three domains of participation, as coined by Raessens (2006). These domains are interpretation, construction and reconfiguration. I develop arguments in favor of yB being called *participatory video*, providing that this term is more informative, and better addresses yB's medium specificity compared to 'interactive' and '360' video. In conclusion, I reflect on the arguments put forth and intend to have shown the need for, and value of, the concept *participatory video*.	

2. Introducing yellowBird

In this section yB is introduced and analyzed. With the slogan 'see the world like never before', yB presents itself as a new phenomenon. Such a position invites research, amongst others to determine how 'new' this technology actually is and if so, in what ways. I will elaborate upon this in a coming paragraph. First, an analysis is made of yB's hard- and software. Second, we zoom in on the relation between yB and the human desire for virtual traveling.

2.1 yB's hardware, software and user experience

As I put forward in the introduction, Google recently approved yB videos for YouTube, so yB's videos are now also accessible within this online video platform. The interest of such an influential player shows that yB has something to offer, something that at least differs from YouTube's 'traditional' video. But in what way? At the beginning of a video yB suggests to “Click and drag in all directions” (yellowBird, 2011c). Here, yB's online video differs from traditional, or conventional, video, where the person operating the camera also directs the eye of the camera that captures and records content. The user experience of yB is one of directing the eye of the camera in the desired direction, while placement and camera operation remains in the hands of yB's camera(wo)man. It is important to note that the user experience of directing the eye of the camera technically speaking does not take place. This is due to the nature of yB's hardware, the camera, which has more than one lens.

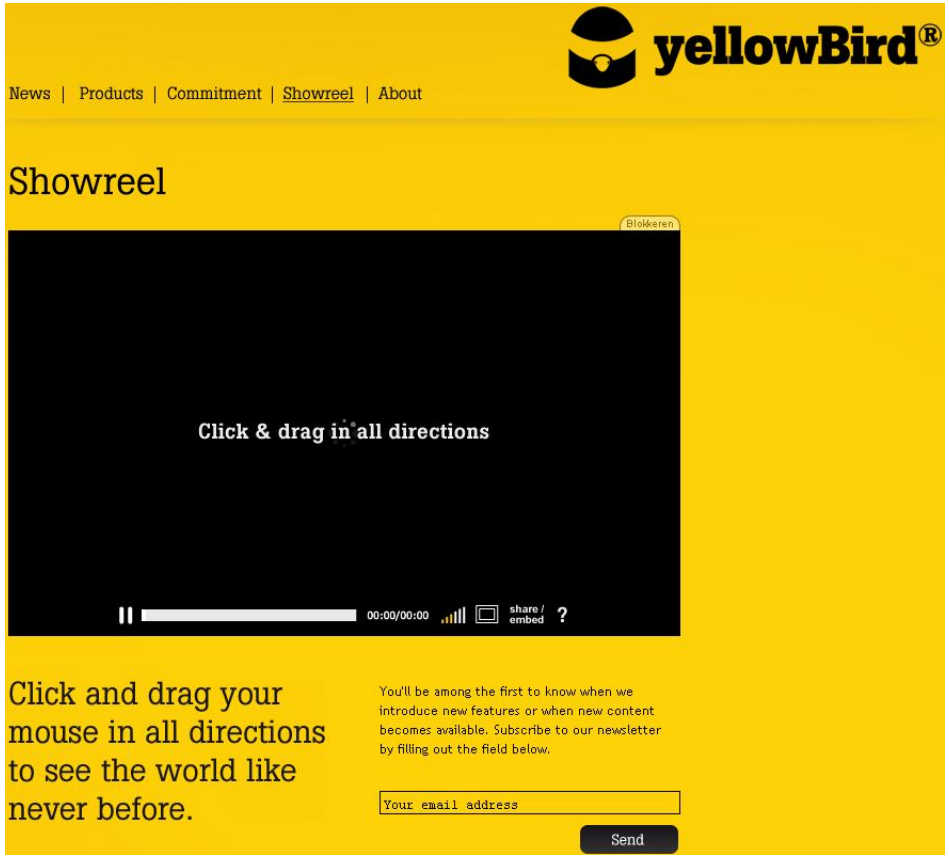

Figure 1. yB showreel video

The source of what makes yB's technology different is the camera that yB usues to record imagery. A conventional camera has one eye, while yB's PointGrey Ladybug2 camera has six eyes. The yB camera records footage from the multiple lenses simultaneously as well as continuously, resulting in six separate planes, or screens, which show the surroundings of the camera at a certain time interval. This results in content that could fill multiple screens at once, resulting in what I would call a material, environmental kind of immersion where multiple screens surround the user.

Figure 2. Video camera with one lens and yB's PointGrey Ladybug2 camera with six lenses

This description recalls a kind of video version of the 17th century panorama. The traditional still image panorama, such as Panorama Mesdag in The Hague, offered the viewer a winding and immersive 360 degree picture. However, yB goes beyond 360 degrees of video due to the lens 'on top' of the camera. Calling yB 360 degree video means not taking this sixth lens into account. The sixth lens is important since it is precisely this lens that makes yB more than 'just' panoramic, or 360 degree, video (see: Figure 3 & 4).

Figure 3. Seven still images

Figure 4. Five images 'stitched' together form a panorama

However, for economic as well as practical reasons (screen cost and limited room and desk space) the majority of people view internet content on one screen instead of six. Therefore, yB employs Flash software for its online video player, in order to model the imagery captured by the multiple lenses on a virtual spherical space (yellowBird, 2011b). In other words, the content is captured by the multiple lenses, which are in turn virtually stitched together and modeled on the inside of the virtual sphere. The result is what Lister et al. call navigational immersive interaction (2009, p. 22). The user is virtually located in the spherical space and experiences the video from a first-person

perspective, seeing what the camera operator saw at the time when the video was made. Here, users may select, or choose, the content from the six lenses and view the content on a single screen. The transition from one plane to the next is smooth, so the user does not notice where one plane ends and the next begins. Once again, yB's interface encourages the user to 'look around', when at the beginning of every video it shows the text “Click and drag in all directions” (yellowBird, 2011c).

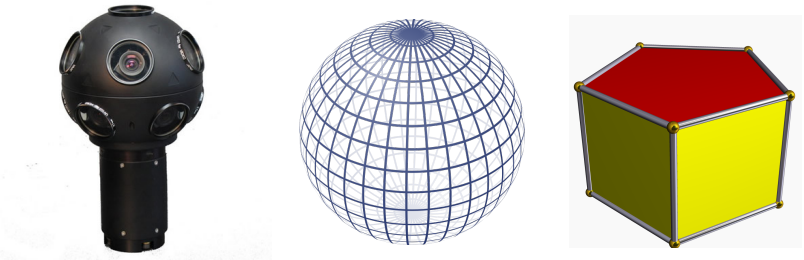

*Figure 5. T*he *Dodeca 2360 camera*, a sphere and a pentagonal prism

It is important to note that the PointGrey Ladybug2 camera does not capture the surroundings of the camera completely, since there is no lens located on the bottom of the camera. This is due to a very practical reason, namely the location of the camera support that occupies this space. In turn, upon playback it is not possible to 'fill' the sphere completely with content. Variations of this camera do exist, such as the Dodeca 2360, cameras such as these contain even more lenses in order to fill the virtual sphere as much as possible (see: Figure 5).

yB describes this model of the virtual space as a virtual sphere. However, I argue that in the current state of yB's camera, the space is more accurately described as a virtual pentagonal prism. This is because the imagery captured by the six lenses result in seven planes stitched together, where six planes contain recorded video content. When the user chooses to look at the 7th plane, this shows a still image with the yB logo instead of recorded video content (see: Figure 3).

Thus far the analysis has provided the reader with insight into what yB is. It is evident that yB literally has more to offer than 360 degrees of video. *Interactive video* is another common term by which yB describes its technology (yellowBird, 2011b). The pronoun 'interactive' signals that there is something special about yB, at least something that differentiates yB from 'non-interactive' video. Furthermore, yB presents itself as a revolutionary technology with the slogan “See the world like never before” (yellowBird, 2011c). We have seen that yB certainly is different, at least compared to traditional video. But how revolutionary is this technology?

2.2 The past, the present and the future: media archeology

In order to assess whether yB is innovative or actually not that new, it is valuable to 'dig deeper' in history in order to expose media technologies outside the realm of currently existing, mainstream media. The article "Armchair Traveler on the Ford of Jordan: The Home, the Stereoscope and the Virtual Voyager" (Huhtamo, 1995) takes such an archaeological media perspective where the author shows that the idea of "...producing a simulacrum of reality, using technology as a means of virtual travel is not new at all. " (1995). These technologies promise us:

> *"...[a] general panorama of the world. It introduces to us scenes known only from the imperfect relations of travelers. By our fireside we have the advantage of examining them, without being exposed to the fatigue, privation and risks of the daring and enterprising artists, who, for our gratification and instruction, have traversed lands and seas, crossed rivers and valleys, ascended rocks and mountains with their heavy and cumbrous photographic baggage."*
>
> (Huhtamo, 1995)

This may well be how we look at television, when we are virtually transported from one corner of the world to the next when we switch channels (Huhtamo, 1995). In the early times of broadcasting, advertising for television used travel metaphors, such as "...'the biggest window to the world', 'the answer to man's ageless yearning for eyes and ears to pierce the barrier of distance' […] An advertisement from 1944 even promised the TV viewer would become 'an Armchair Columbus on ten-thousand-and-one thrilling voyages of discovery!'" (Huhtamo, 1995).

Although many media applications appear novel, upon closer inspection we experience a sense of *déjà vu* (Huhtamo, 1995). In the 18th century the stereoscope, an optical device that allowed to viewer to see 'stereographs', or photos with relief', recalls the idea of the armchair traveller (Huhtamo, 1995). Already in 1859 physicist, essayist and stereo enthusiast Oliver Wendell Holmes described his stereoscopic travels:

> *"I stroll through Rhenish vineyards, I sit under Roman arches, I walk the streets of once buried cities, I look into the chasms of Alpine glaciers, and on the rush of wasteful cataracts. I pass, in a moment, from the banks of the Charles to the ford of Jordan, and leave my outward frame in the arm-chair at my table, while in spirit I am looking down upon Jerusalem from the Mount of Olives.*
>
> (Holmes, qtd. in Huhtamo, 1995)

In this brief archeology of virtual voyaging media, the panorama deserves special attention, since yB goes by the name of 360 degree video. It was noted earlier that yB goes beyond panoramic video, due to the eye on top of the camera. The word *panorama,* formed from the Greek πᾶν (all) and ὅραμα (sight), was coined by the painter Robert Barker to describe his paintings of Edinburgh. These paintings were shown on a cylindrical surface and viewed from the inside. The panorama immersed the viewer in a winding 360 degree panorama which gave the illusory impression of standing in a new environment. More recently, this travel metaphor is used by the Aspen Movie Map;

> *The Aspen Movie Map, realized by the Architectural Machine Group of the Massachusetts Institute of Technology in the late 1970's, was a new kind of vehicle: a combination of the video-disk and the computer allowed us to traverse an urban landscape, to look around, turn at the cross-roads, even peer into people's houses without actually 'being there'. ..the linearity of the filmed sequences was broken and the user was given the possibility of selecting one's own routes. The paradoxical experience of the presence-in-absence made possible by the project has been called by many names: 'surrogate travelling', 'virtual world voyaging', or 'movie mapping'."*
>
> (Huhtamo, 1995)

It is striking how close the 1970's Aspen Movie Map is to Google StreetView, launched in 2007. With StreetView the user can also "...traverse an urban landscape [...] ...look around, turn at the cross-roads... (Huhtamo, 1995). According to Huhtamo this is no coincidence, instead he argues that "...technological 'breakthroughs' emerge from pre-existing fabrics of cultural discourses, even if their creators may claim otherwise." (1995);

> *Producing a simulacrum of reality, using technology as a means for virtual travel, turning the spectator from a bystander into an active protagonist (an 'agent') and the ability to 'enter' the artificial environment are among the dreams and desires which underlie much of the development of the media culture. Their paradox is the fact that they have been invoked over and over again as unheard-of novelties, as proofs for technological change and progress.*
>
> (Huhtamo, 1995)

Huhtamo suggests the term *topoi* to describe these dreams, meaning "...commonplace motives 'floating' within cultural traditions and simultaneously forming their storehouses of discursive formulas" (1995).

Although yB is a new kind of (online) video, amongst others due to its camera, the idea of, and desire for, virtual travel certainly is not. YellowBird is the most recent incarnation of the virtual voyaging application, a dream becoming reality. Now I have introduced yB and analyzed how yB relates to media technologies of earlier times, we now turn to relevant academic theory that provides the ground on which to build the argument that yB is *participatory video*.	

3. Theoretical framework

In what follows I present an orientation in academic theory which is relevant in determining a more adequate conception of yB. First comes the concept of the formatted spaces of participation, where I also take into consideration the many binary oppositions in new media theory. I continue with interactivity as a defining characteristic of new media. Hereafter I turn to interaction, participation and participatory culture. To conclude, I discuss the three domains of participation and provide arguments for calling yB *participatory video*.

3.1 Formatted spaces of participation

Before delving deeper into participatory (media) culture, it is worth noting that many debates concerning new media fall subject to the trap of dichotomies. Unfortunately, it is not unusual to encounter two conflicting views on an issue; a positive, utopian one and a negative, or dystopian, view. The utopian view concerns user empowerment and users being active, where interactivity often is somehow connected to democracy and empowerment. The dystopian account puts stress on passive users and user victimization by digital media that afford an economic format that exploits users precisely through interactivity (Müller, 2008, p. 50). Since this research concerns terms, such as interactivity and user participation, whose interpretations have historically shown to be receptive to false dichotomies, it is important to be aware of this potential trap.

An utopian argument that is often taken for granted is that 'more' participation is somehow better, and that something like 'full' participation is an ideal we should strive for, independent of context. However, this idea(l) of 'full' participation 1. is hard to define and thus hard to reach in practice, and 2. will not always guarantee the 'best' result in differing contexts. Fung puts it this way: “There may indeed be contexts in which public empowerment is highly desirable, but there are certainly others in which a consultative role is more appropriate for members of the public than full 'citizen control'” (2006, p. 67). Furthermore, a constant problem that haunts participatory culture is “...the ultimately rather myopic idea that participation by many users somehow equals democracy.” (Schaefer, 2008, p. 75). Here, 'full' participation is falsely equated with democracy and democratic and social progress. Schaefer mentions four other “...frequent misunderstandings in the discourse on participation”:

a) thinking social progress is inherent to user participation
b) assuming that participation is only explicit, community-based, and primarily intrinsically motivated
c) neglecting the fact that participating in cultural production

does not mean participating in power structures or benefiting from generated revenues

d) neglecting how media practices in user participation are implemented into software design

(2008, p. 76)

Participation is distinct from democracy, let alone social and democratic progress. It may be a condition for certain forms of democracy, but we should not neither equal participation with democracy, nor argue that 'full' participation is desired in all situations. To continue with describing the correct starting conditions and 'setting the theoretical stage' for this research, Müller's concept of the "formatted spaces of participation" (2008) is inline with Schaefer's argument in reminding us of the political dimension of participation. Müller argues that participatory media "...institutionalize 'spaces of participation' and … [that] participation becomes 'formatted' within these spaces." (Müller, 2008, p. 52). Müller calls this process 'formatting' in reference to;

> *"...the adaptation of internationally circulating television programs, in which the format details how a program should be produced but at the same time allows producers to adapt it to the local culture. The term thus indicates a characteristic tension between the predefinition by conceptual structures and the redefinition by practices.*
>
> (2008, p. 52).

Muller explains his use of 'participation' "...as a concept to address the social, political and cultural characteristics of [...] 'spaces of participation'." (Müller, 2008, p. 52). With 'interaction', he refers to "...actual, physical acts ... between a television program's or website's interface and users..." (Müller, 2008, p. 52). Participation is political in itself, allowing for possible inequality between (the many) user-participant(s) and the few in the role of owner, designer or administrator. This is another reason to be wary of equating participation with democracy and social progress. Muller's central thesis is that;

> *"...practices are structured by pre-existing socially and ideologically defined spaces within which actions are performed. These actions may negotiate and transform the very conventions and limits of a given, in this case mediated, space; however, the social power to construct such spaces and to define the frameworks for action is not shared equally within a society. Particularly in the realm of media, the power to create frameworks of communication is not distributed democratically, but instead is controlled by a multinational industry, and in this regard digital media are no exception.*

(2008, p. 52)

I want to stress that an awareness of the formatted space, as template or frame, is important not to 'expose those powerful corporations!', since some structure is a necessary condition in the existence of participatory spaces. The argument is rather that we be aware of the way in which various powers structure the spaces of participation (Muller, 2008, p. 52). This is due to the fact that the form of these participatory spaces does, or does not, allow the participant(s) more self-determined forms of participation (Muller, 2008, p. 52). In other words;

... New media are not neutral ... they have what are called 'affordances', which define a loosely determined range of possibilities of use. Think of a menu in a restaurant; you can choose among many dishes, but your choices are not unlimited. The same goes for communication technologies, they open up all kinds of new ways to connect but not endlessly so. [...] They do not determine, but they surely set up broad guiding lines along which action can take place.

(De Vries, 2011)

Muller's concept of the formatted spaces of participation prompts us to ask what new media menu is available and what this menu offers us in choices available. By now I have nuanced the binary positions that haunt new media theory concerning interaction and participation. Furthermore, I have introduced Muller's formatted spaces of participation in order to promote awareness of the political dimension in the structuring of new media such as yB. Since yB goes by the name of 'interactive video', it is worth asking why yB employs this term and what this tells us, or rather does not tell us, about yB. Therefore, we now turn to the term interactivity.

3.2 Interactivity: a defining characteristic of new media

According to Lister et al., new media are defined by a number of key characteristics. These concepts are: digital, interactive, hypertext, virtual, networked and simulated (Lister et al., 2009, p. 13). From this pool of concepts, the instrumental meaning and practical applicability of the term 'interactivity' is controversial. On the instrumental level of meaning, interactivity "...signifies the users' (the individual members of the new media 'audience') ability to directly intervene in and change the images and texts that they access." (Lister et al., 2009, p. 22). It is commonly agreed upon that the concept requires a more specific definition for it to have an analytical purpose (Lister et al., 2009, p. 21). Interactivity is a slippery term that can carry a large range of meanings for different people as well as specific media (technologies). Furthermore, the term may carry a strong ideological connotation: "To declare a system

interactive is to endorse it with magic power." (Aarseth qtd. in Lister et al., 2009, p. 21).

Here, interactivity is perceived as one of the characteristics where new media deliver their value, compared to more traditional media (Lister et al., 2009, p. 21). The traditional media enable passive consumption, while new media are interactive. This interactiveness is apparently desired and valued, in short it is perceived as a 'good' property and it is positioned as the differentiated unique selling point of new media. However, although 1. the instrumental meaning of interactivity is abstract and fuzzy; and 2. the concept may carry an ideological charge, this does not discount the importance of the concept, for it remains a defining characteristic of new media. The challenge is to improve the practical and operational applicability of interactivity.

As was stated earlier, yB currently goes by the name of interactive video. YB allows the user to intervene in and change the images and texts, thus it is not wrong to call yB an interactive medium. However, calling yB interactive is not very informative. This is due to the tendency of interactivity to be an all-encompassing fuzzy concept, which does not tell much about what this interactivity means on the more practical level of user experience, i.e. how the user may intervene in, and change, the texts (she) accesses. To make matters worse, interactivity means different things to different people, and different new media are interactive in differing ways. This means that yB's interactivity merely contrasts it with traditional media such as television, where the viewer cannot intervene in and change the images. Interactivity is not a characteristic that can differentiate a new medium from other new media. It is inherent in all new media; all new media share this interactive characteristic. Claiming that a new medium is interactive is no more than stating the obvious, it effectively is a pleonasm. What is important is how a technology is interactive, what form(s) of interactivity a technology affords.

Describing yB as interactive video without explaining what this means is 1. not informative, and 2. it does not do justice to yB's technology. YB is in need for a conceptualization that 1. differentiates yB from traditional as well as new media; and 2. is informative in explaining what form of interactivity yB has to offer and thereby appropriately values yB's medium specific quality. The question is, "what is a more adequate conception of yB's video category?". Therefore, we now turn to the relations and differences between interaction and participation.

3.3 Interaction, participation and participatory culture

Till now I have shown that interactivity is a core concept of new media. Although an elaborate outline of the much-debated concept of

interactivity is outside the scope of this text, it is important to discuss the concept due to it being a conditional affordance concerning user participation in the formatted spaces of new media. I have shown that interactivity is a fuzzy concept. To make matters worse, many scholars employ interactivity, but only few offer theoretical and operational definitions of the concept. For this reason, Kiousis (2002) has carried out a meta-analysis of the concept interactivity. According to Kiousis:

> *"...interactivity is established by three factors: technological structure of the media used (e.g. speed, range, timing flexibility, and sensory complexity), characteristics of communication settings (e.g. third-order dependency and social presence), and individuals' perceptions (e.g. proximity, perceived speed, sensory activation, and telepresence). [...] Interactivity can be defined as the degree to which a communication technology can create a mediated environment in which participants can communicate (one-to-one, one-to-many, and many-to-many), both synchronously and asynchronously, and participate in reciprocal message exchanges (third-order dependency). With regard to human users, it additionally refers to their ability to perceive the experience as a simulation of interpersonal communication and increase their awareness of telepresence.*
>
> (2002, p. 379)

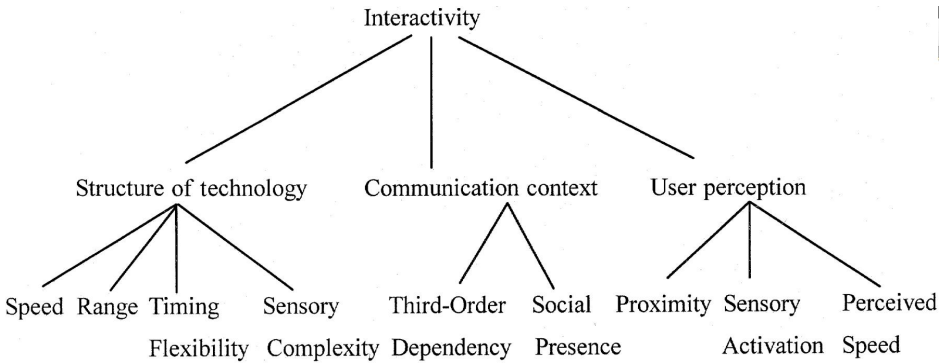

Figure 6. Operationalization of interactivity (Kiousis, 2002, p. 378)

Interactivity is important in relation to participation, since user participation via a medium depends on the condition of medium interactivity, where "The digital media text (e.g. website, game, social network) is an *environment* supporting a range of user activities that emerge within the perimeters of the software." (Lister et al., 2009, p. 25). This environment is what Muller calls the formatted space of participation, in this case yB. It is important to note that whatever form of interactivity a technology has to offer, it is formatted by its space of participation. This is worth noting since it nuances the claim that interactivity always empowers the user, whatever form interactivity takes.

The concepts interaction and participation are often mentioned in one

breath. In the article "Confronting the Challenges of Participatory Culture: Media Education for the 21st Century", Jenkins et al. define participatory culture as one:

> *1. With relatively low barriers to artistic expression and civic engagement*
> *2. With strong support for creating and sharing one's creations with others*
> *3. With some type of informal mentorship whereby what is known by the most experienced is passed along to novices*
> *4. Where members believe that their contributions matter*
> *5. Where members feel some degree of social connection with one another (at the least they care what other people think about what they have created).*
>
> (2006, p. 7)

Jenkins et al. are quick to add that "Not every member must contribute, but all must believe they are free to contribute when ready and that what they contribute will be appropriately valued." (2006, p. 7). The definition puts its focus more on people than technology, however in participatory culture 'sharing' works by means of interactive new media, which afford two-way, many to many communication. The definition puts creation (construction) and sociality (sharing) at the core of participatory culture, since there are "...low barriers to […] expression" with "...strong support for creating and sharing one's creations with others" and "...members feel some degree of social connection with one another" (Jenkins et al., 2006, p. 7). However, there is more to participatory culture than construction or creation, a point made by Raessens (2005). Raessens argues that the concept of participatory (media) culture is better suited to the task of understanding new media. This concept is more instructive than the relatively vague term of interactivity in new media theory (Raessens, 2005, p. 373).

3.4 From interaction to participation

Raessens systematically characterizes participatory media culture by means of the three domains of participation; interpretation, reconfiguration and construction (Raessens, 2005, p. 373). Although Raessens applies his domains to computer games, I argue that his three domains are applicable to more forms of new media, such as yB. I will now briefly introduce the three domains. Raessens uses the conceptual framework of the British tradition of cultural studies to situate the domain of interpretation. Here, cultural texts "...are viewed as open texts that different groups of viewer interpret differently, depending on social, cultural and other contexts..." (Raessens, 2005, p. 375)

For Raessens, construction is "...understood as the addition of new game elements. This can exist as modifying existing games, or as in making entirely new games. Construction can take many forms and may seem related to reconfiguration. However, Raessens explains that "You can really speak of construction when players work with game-mods or game patches, editing tools and source codes." (Raessens, 2005 p. 381). Here, the player adds elements to the system.

According to Raessens, reconfiguration consists of two categories. First, it "...exists in the exploration of the unknown, in the computer game represented worlds." (Raessens, 2005 p. 380). This recalls yB as a virtual voyaging application, which was discussed earlier. Second, reconfiguration is "...when a player in this process of exploration is invited to give form to these worlds in an active way by selecting one of the many pre-programmed possibilities in a computer game." (Raessens, 2005, p. 380). The player selects objects and actions from a fixed set, as opposed to construction which concerns adding new elements. Essentially, this concerns the political dimension of participation, where the designer controls the fixed and finite perimeters of Muller's formatted space of participation. The user has freedom in choosing and selecting options, but is limited to the formatted space offered by the designer, as is the case with yB.

By now I have discussed interaction and participation Furthermore, I have argued that participation is more instructive than interactivity in understanding the affordances of new media. We now arrive at the arguments why yB should be conceptualized as *participatory video*.

4. yB as participatory video

The fact that the user of yB explores the unknown recalls the idea of yB as a virtual voyaging application (Huhtamo, 1995). Furthermore, the exploring user participates in giving form to the world by selecting an option from the set of pre-programmed possibilities (Raessens, 2005, p. 380). The user is encouraged by yB's formatted space of participation to look around, thereby selecting content from the content pool captured by the six eyes of yB's camera. This pool effectively makes the perimeters of yB's software.

The user of yB's technology is continuously offered choices; in every second that passes (s)he may select content to view, picking something out of the total available content recorded by the six lenses of the camera. More specifically, the user is even *expected* to 'look around' continuously over the duration of the video. Therefore, yB fits in with reconfiguration in the three domains of participation discussed in the last paragraph. This also means that yB technology poses questions similar to

those surrounding hypertext, regarding the interpretation of the text. Essentially, the difficulty is "...how to evaluate or even conceptualize a 'text' that never reads the same way twice." (Lister et al., 2006, p. 23). I want to stress that I do not argue that yB itself is hypertext, I merely suggest that the problems in interpreting yB's text are similar to those resulting from hypertextual communication, where "...the user constructs for him or herself an individualized text made up from all the [available] segments of text which they call up through their navigation process." (Lister et al., 2006, p. 22).

This difficulty results from the fact that yB' user is limited to viewing one plane at a certain moment in time, as was explained in an earlier paragraph. The user would have to watch all available content systematically in order to view the total set of available content. In effect, this means that the user watches the video six times for its full duration. This is unlikely due to practical constraints such as user motivation and time available. Thus, although the makers of the video do determine the total 'range' (Kiousis, 2002, p. 378) of content available to the user, they do not know exactly what content the user will be see at what point in time. This is due to the fact that the user may literally change her perspective every second during the video. To conclude, every user sees a different video due to the fact that for every second in the video there are roughly six 'content options' available.

The participating user co-constructs the meaning of the video with the maker(s) of the video, here understood as the designer(s) who format the space of participation. Raessens recognizes this in his 'interpretation' domain of participation. Here, he mentions the role of the person on the receiving end in making meaning (Raessens, 2005 p. 375). According to Active Audience Theory (AAT) decoding a message results in one of three different readings called the oppositional, negotiated or dominant reading (Hall qtd. in Raessens, 2005, p. 375). Note that this concerns the interpretation of a communicated message and not participating in the process of making the message in the first place, which is what the user does by reconfiguring yB's content.

It is clear that getting the message across is difficult enough, even with traditional media holding linear, rigid texts. Here, someone may not receive the message or refrain from decoding it, but at least the text itself is relatively unambiguous. It is important to note that even this stable factor gets lost when the text turns into the more dynamic multi-linear hypertext commonly used in the participatory culture of the internet. The user participates with the maker of the video in making meaning by configuring the video in what is effectively an act of co-creation. In addition, this recognizes the political dimension of participation. Furthermore, yB's medium specificity is exactly this participatory quality

that lies at the heart of what differentiates yB from conventional video as well as other new media that may share the interactive quality. For these reasons, yB should be conceptualized as *participatory video.*	

5. Conclusion

The analysis has shown that the enterprise yB produces a rather unconventional kind of online video. This results from the type of camera that the enterprise uses; this camera has six lenses instead of traditional video cameras that have one lens. The enterprise yB states that it offers "...a moveable 360° image in a spherical shape." (yellowBird, 2011). With the slogan 'see the world like never before' yB presents itself as a new phenomenon. yB certainly is an innovative technology that differs markedly from traditional video. However, the desire to explore the world without the hassles of actual traveling is not new; it is a recurring dream, at least in Western culture. At this moment in time, yB is the most recent materialization of the virtual voyaging application, a dream becoming reality.

I have shown that yB's current labels are not accurate nor descriptive for yB's category. At this moment in time the technology goes by different names, such as '360 degree video' and 'interactive video' (yellowBird, 2011). The analysis has shown that these terms do not do justice to the technology. Due to the six lenses of the camera that records the content, yB goes beyond 360 degree video. Although yB is a new medium which interactivity is a key characteristic, calling yB interactive video is just stating the obvious, since all new media share interactivity as a key characteristic. Stating that yB is interactive video does not inform the reader concerning yB's form of interactivity that, amongst others, shapes the user experience. Thus, the challenge is how to conceptualize this type of online video.

I have introduced Muller's concept of 'formatted spaces of participation', because it is important to be aware of the design and structure of a (new) medium; the way in which its space of participation is formatted (2008). Such awareness is important because design affords, enables and even suggests certain kinds of participation, while it prohibits others. This highlights the political dimension of participation, which remains under the radar with the term interactivity. Another valuable contribution of Muller's article that it circumvents the often unfruitful dichotomies in texts about new media, usually described by on one hand the positive and empowering 'utopian' discourse and on the other the negative 'dystopian' discourses regarding user victimization.

The analysis has introduced the concept participation as used in new media theory. I follow Raessens who argues that it is more suitable to employ participation instead of interactivity. The argument is that interactivity is a fuzzy concept that means different things to different people. To make matters worse, new media are interactive in different ways. Therefore, the term is not very informative. Furthermore, it may

contain ideological connotations, where interactivity is the magic word that proves the unique selling point of new media with respect to traditional media. Therefore, I have introduced Raessens' three domains of participation, of which reconfiguration is one (Raessens, 2005, p. 373). Essentially, these are three broad categories that describe different forms of interactivity.

According to Raessens, reconfiguration "...exists in the exploration of the unknown..." and it is "...when a player in this process of exploration is invited to give form to these worlds in an active way by selecting one of the many pre-programmed possibilities..." (Raessens, 2005, p. 380). This notion of exploration and navigation recalls the idea of yB as a virtual voyaging application (Huhtamo, 1995). Furthermore, yB's formatted space of participation explicitly encourages the user to look around, thereby selecting content from the pre-programmed content pool. This highlights the political dimension of participation as in the relation between designer(s) and user(s). For these reasons, yB fits in the reconfiguration domain of participation and *participatory video* is the most suitable descriptor of yB.

5.1 Suggestions for further research

Now I have established the concept of participatory video, an interesting question related to the user experiences of yB and participatory culture in general comes to the fore. By making choices in the process of navigation, the user constructs an individualized text from the content pool of the database. It was stated earlier in this research that if the user would like to watch all content of a yB video, (s)he would have to systematically watch the video six times for its full duration. An interesting question is whether this might result in a kind of choice stress, or 'participative paranoia'. Is the user aware of, and comfortable with the idea that there always remains content to see which is not visible from the current perspective? Questions such as these invite further research into participatory culture.

6. Bibliography

De Vries, I. (2011). *#Egypt, social media and determinism.* Retrieved from: http://newmediastudies.nl/magazine/egypt-social-media-and-determinism

Fung, A. (2006). *Varieties of Participation in Complex Governance.* Public Administration Review, 66, pp. 66-75

Huhtamo, E. (1995). *Armchair Traveler on the Ford of Jordan: The Home, the Stereoscope and the Virtual Voyager.* Retrieved from: http://www.mediamatic.net/page/5910/en

Jenkins, H., Purushotma, R., Clinton, K., Weigel, M. and Robison A.J. (2006). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century.* Retrieved from: http://digitallearning.macfound.org/atf/cf/%7B7E45C7E0-A3E0-4B89-AC9C-E807E1B0AE4E%7D/JENKINS_WHITE_PAPER.PDF

Kiousis, S. (2002). *Interaction: a concept explication.* New Media & Society, Vol. 4 (3), p. 355-383. Retrieved from http://nms.sagepub.com/cgi/content/abstract/4/3/355

Lister, M., Dovey, J., Giddings, S., Grant, I. And Kelly, K. (2009) *New Media: A Critical Introduction.* Second edition. Routledge, MA

Müller, E. (2009). *Formatted spaces of participation.* In Van Den Boomen, M., Lammes, S., Lehmann, A.S., Raessens, J. and Schaefer, M.T. *Digital Material.* (pp. 49-63) Amsterdam University Press

Raessens, J. (2006). *Computer Games as Participatory Media Culture*. In Raessens, J. & Goldstein, J. H. (Eds.) *Handbook of computer game studies*. (pp. 373-388) Cambridge, Mass.: MIT Press.

Schaefer, M.T. (2008). *Bastard Culture! User participation and the extension of cultural industries.* Retrieved from: http://mtschaefer.net/media/uploads/docs/Schaefer_Bastard-Culture.pdf

yellowBird. (2011a). *Camera.* Retrieved from: http://www.yellowbirdsdonthavewingsbuttheyflytomakeyouexperiencea3dreality.com/products/technology/camera

yellowBird (2011b). *Corporate story.* Retrieved from: http://www.yellowbirdsdonthavewingsbuttheyflytomakeyouexperiencea3dreality.com/about/corporate_story

yellowBird (2011c). *Showreel.* Retrieved from:

http://www.yellowbirdsdonthavewingsbuttheyflytomakeyouexperiencea3dreality.com/showreel	