A Community of Televised Avatars: Interactivities in virtual world television promoting and acknowledging participatory communities

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Abstract:
This article examines how users of the virtual world *Second Life* constructed virtual spaces to become sites of interactive television. This project involved interviews with virtual world television (VWTV) producers to understand how they described the nature of their productions. This analysis considers three types of interactivity: access, social, and content. The analysis of various television programs produced in *Second Life* reveals that such interactivities focus on the bottom-up and inside-out formation of communities that help to build and maintain the participatory culture that sustains *Second Life.* The analysis demonstrates the necessity of participatory design and user-generated content for the achievement of truly interactive television as well as the changes occurring around the culture of television. The study suggests that the focus on building more interactive traditional television should include a concurrent goal of promoting a participatory community for more than the corporate need to cultivate loyal consumers of their televised products.

Keywords: Virtual Worlds, Interactivity, Interactive Television, Second Life, Television, User-Generated Content, Participative Community

Interactive Traditional Television

Interactive television has meant many things to many people in the traditional television industry, and it has represented an end goal for television's potential almost since the medium first entered the domestic sphere. The 1953 CBS children's series *Winky Dink and You* represents one of the earliest examples of interactive television (Gawlinski, 2003), although only in a superficial sense. The show instructed children to hold plastic sheets up to their television screens during specific moments when the program would pause and encourage the young viewers to help Winky Dink in his adventures by drawing something on the sheet. While a gimmick, many viewers later recalled feeling actively involved in the show. By the late 1950s, television programming began to include telephone call-ins (Gawlinski, 2003), providing the lucky few callers who got through the show's gatekeepers with a sense of connection to the television producers. The 1970s saw the emergence of public access or community access television (Gawlinski, 2003; Kellner, 1992; Linder, 1999) that operated on the idea of encouraging non-professionals – people better suited to speak for their communities – to more actively participate in television production. However, such community outreach never produced the desired revolution in television production and consumption.

Instead, the hopes for interactive television became more dependent on technologies developed or appropriated to supplement traditional television and empower the audience, such as making the television set interactive (Stewart, 1999) or incorporating a host of interactive technologies, such as VCRs and the internet (Kim, 1999; Jensen & Toscan, 1999). In the 1970s, television producers began seriously experimenting with technologies designed to create interactive experiences with the introduction of videotext and teletext systems in some markets (Gawlinski, 2003; Kim, 1999; Stewart, 1999). Later, the rise of the VCR throughout the 1980s provided the viewer with more control over when to watch televised content. The internet's rise in the 1990s led to the first attempts at merging the TV set and the PC (Gawlinski, 2003); however, the convergence was ahead of its time for both the distribution infrastructure and the consumer's desires. More recent innovations in the digital technologies of television distribution may make Jensen and Toscan's (1999) "two-way TV" possible. As digital encoding of television compresses the signals, more data can be transmitted or broadcast over-the-air, cable, or broadband, allowing for the two-way exchange of signals needed for interactivity (Gawlinski, 2003). Other recent developments in the trajectory of developing or appropriating devices for interactive television purposes include digital broadcasting to HDTV, smart TV sets, and devices with streaming applications. Overall, the goal of these technologies appears to be the empowerment of the television audience to respond to television producers and have more control over television productions, at least in the sense of when and where they watch such programs.

In the modern era of digitization and convergence, true interactive television may finally arrive with the incorporation of internet-based platforms and practices. Current approaches arose in convergence culture as accommodating, responding to, and promoting

participation (Jenkins, 2006). These approaches included a move toward higher interactivity, which has had an overall impact on the culture that surrounds and constitutes television production and viewing. Traditional models of content delivery are predicated on transmission and passivity, whereas interactive models require activity, participation and dialogue. Interactivity reveals what is meant by convergence and the rise of participatory culture, as it fundamentally changes the relationships between producers, consumers and content. Concepts and technologies like video on demand, time-shifting, social television, and participatory culture all represent aspects of these challenges to traditional television, and all represent changes in the culture of television.

This current state of affairs calls into question the very idea of 'television' (see Bruns, 2008; Green, 2008; Meikle & Young, 2008; Tay & Turner, 2008; Wood, 2007). Among the various layers of activity and discourse that surround it, current television can, and perhaps should, be deconstructed into at least two primary components: the content it relays, or television-as-content, versus its function as a technical interface, or television-as-technology (van Dijk & de Vos, 2001; Wood, 2007). As the delivery system (e.g. television-as-technology) changes, there is the potential for the content (e.g. television-as-content) it delivers to change, which can impact how the content is engaged with, which then impacts the relationship between the producers and the consumers (Jenkins, 2006). For many in the modern age, the idea of watching television does not involve the use of a television set at all, an act that informs traditional conceptualizations of the medium. Instead, television content has become increasingly divorced from the technologies for which it was developed. As such, television-as-content is now frequently viewed as another aspect of the internet as internet-based streaming and mobile application distribution replace over-the-air and cable television. The interactive nature of these online television-as-technologies could then promote more interactive television-as-content.

However, the vast majority of these attempts at interactive television still come from national and multinational media corporations as they respond to the changes and challenges of an internet-based distribution system. This corporate-controlled interactive television focuses on developing and providing interactivity only along prescribed pathways for the purposes of co-opting such participation and creating loyal consumption (Jenkins, 2006; Guo & Chan-Olmsted, 2015). That is, as with other corporate uses of social media (see Quintas-Froufe & González-Neira, 2014), interactive television hailing from traditional television producers is more interested in how the promise of interactivity relates to marketing strategies intended to maintain their dominance in both television-as-technology and television-as-content. Research considering the use of social media for the purposes of social television viewing considers this type of interactivity from an advertising perspective, and even more complicated gameplay marketing strategies are less about altruistically giving fans what they want, and more about ensuring that those fans help the corporations in the long run (see Reinhard, 2011). Thus, from a media corporate perspective, interactive television is not about meeting audience needs but rather the needs of producers.

Of course, media corporations are not the only ones producing interactive media experiences. Increasingly, independent developers and amateurs utilize ever more affordable and user-friendly media production tools to distribute their own productions, with some rising to the level of challenging the products of the corporations. The proliferation of podcasts, webseries, and indie games, for example, offer challenges to the corporations, and become locations in which more interactive experiences could occur. Virtual worlds represent another technology that can be used to produce and distribute television content. At the same time, they represent a space of user-generated content through which people interact with one another to produce and experience television. In a sense, virtual worlds have become a new television-as-technology that allows users to develop more interactive television-as-content.

This paper explores the concept of television production in the virtual world *Second Life* to understand how this user-generated technology promotes interactivity in comparison to traditional television. The analysis considers how people use their avatars in the virtual world to create television programs by replicating traditional production techniques in their experiments with the production of interactive television. Thus, this paper explores how the programs of virtual world television (VWTV) represent the types of interactive television as seen in traditional television, and how these programs challenge the traditional conceptualization of television. In the end, the analysis demonstrates a shift in the audience's role and power in the production and consumption of television, as the medium of television incorporates more activity, user-generated content, and community focus from viewers as they become producers.

Virtual World Television

Virtual worlds are media products that attempt to replicate aspects of reality through digital (re)construction (Falvey, 2011), and their formation, population, promulgation, and presentation depend on the actions of people, producers, and users; that is, to some extent, all virtual worlds depend on user-generated content for their digital (re)constructions. Across virtual worlds, individuals have created places to produce television programming (Reinhard & Amsterdam, 2013). Virtual worlds can involve the activities of multiple users coordinating in real time to produce programming via processes similar to television production in the physical world, such as acting, sound recording, sound editing, video recording, and video editing. To be considered as television series, these productions must be: multi-part fictional or non-fictional productions, serial or episodic, filmed with or without a live studio audience, and represent a range of genres. In other words, virtual world television utilizes virtual world structures to design spaces and enact practices to produce texts identified as television programming. Thus, VWTV producers use a social medium to produce content within the provided structure rather than just distributing through it.

As a technology, the virtual world *Second Life* allows its audiences/users to become producers who employ this technology to create interactive television. Since its inception in

2003, *Second Life* has become a virtual space to explore a three-dimensional, interactive content experience, whether that content originated from ordinary individuals, artists, and designers or institutions of higher education, international corporations, research centers, religions, political campaigns and governments (Gottschalk, 2010; Messinger, et al., 2009). As a social medium and 3D virtual space, this virtual world specializes in community and social interaction (Gottschalk, 2010), while also allowing for identity exploration by combining detailed visual imaging and anonymity. As a television-as-technology, *Second Life* allows for user-generated production, distribution and exhibition of the users' creative visions as multiple avatars who inhabit the same production space to create, synchronously or asynchronously, audio and video that can be recognized as television-as-content (Reinhard & Amsterdam, 2013).

In the context of this study, some *Second Life* users produce television content for other users of the virtual world to engage with in ways similar to and different from how audiences engage with traditional television. The technological and sociocultural structures of *Second Life* allow these users to experiment with a television producer identity not afforded to them in the physical world (Reinhard & Amsterdam, 2013). This paper explores how these *Second Life* users turned television producers control when and where other users access VWTV; furthermore, they can engage in conversation within the live audience, and can influence the progression of the content through these conversations. These experimental productions demonstrate how the use of digital technology to produce and consume television aligns with the ideals of interactive television.

The VWTV Project

The project reported by the authors (2013) studied fifty-four television series produced in *Second Life*. Of these located series, twenty-three producers of thirty-nine series were interviewed, and are referred to in this article via their inworld – that is, their *Second Life* – identities. Using the producers' inworld names only allows for a level of anonymity to the general public. Producers were asked to discuss the following: what led them to enter *Second Life* and to create their series; what were their ideas of the series' design and the audience's role for the program; what challenges they encountered and what they learned from them; how they were helped and hindered during production; and their thoughts on how virtual world television compared to traditional television. The analysis for this paper focuses on their answers about the design of their series and the role of their audience as well as how they see VWTV relating to traditional TV.

Three VWTV series illustrate the primary differences in the content and style of these series (Reinhard & Amsterdam, 2013). As seen in **Figure 1**, *The 1st Question* is a quiz show in which every episode featured panelists answering questions about science and technology. The producers actively invited audience members to participate by providing their own answers and even voting on panelists' creativity during one recurring segment. To facilitate this relationship and role of the audience, a virtual television studio was built to resemble those found in the physical world.

Figure 1: Pooky Amsterdam's *The 1ˢᵗ Question*

A second example differs from *The 1st Question* in that it attempts to recreate a sports broadcast format. As seen in **Figure 2**, the series *Giant Snail Races*, produced by RacerX Gulwing, is part race and part obstacle course. In this show, *Second Life* users can participate as contestants that decorate their snail avatars to match an episode's specific theme; the contestants control the avatars around a race track/obstacle course as RacerX and his co-hosts narrate their progress.

Figure 2: RacerX Gulwing's *Giant Snail Races*

A third example replicates programming that would be recorded and edited prior to any audience involvement. In these genres, inhabitants participate either as featured guests or as hired or voluntary actors. As seen in **Figure 3**, Lucy Eberhart's *The Real Desperate Housewives of Beaver Ridge* is an example of a series filmed without any audience but with a cast comprised of *Second Life* users. The narrative follows various characters in the setting of Beaver Ridge, and has some distinctly comedic flair to its scripts, themes, and characterizations.

Reinhard and Amsterdam (2013) previously reported how VWTV allows for people to become positioned as 'producers' of television when they would normally only inhabit the position of 'audience' to television. That is, VWTV empowers people who have no

Figure 3: Lucy Eberhart's *The Real Desperate Housewives of Beaver Ridge*

connection to traditional television production to create their own television-as-content and thereby compete to have their voices heard. This type of empowerment has been seen across all social media platforms that involve and depend on user-generated content. Furthermore, it appears that this empowerment allows for more interactive capabilities between television producers and audiences than currently seen in traditional television. These types of interactivities are defined as access interactivity, social interactivity, and content interactivity in the following analysis to clearly delineate the audience empowerment potential for that type of interactivity.

VWTV as Interactive TV

Access interactivity can be defined as the ability to allow people to control their methods of consumption, or the whats, whens, wheres, and hows of consumption (Jensen, 2005). This type of interactivity concerns how the technology used for distributing and exhibiting television content provides the consumer with more control in accessing the content (Kim, 1999). Cesar and Chorianopoulos (2009) call this type of interactivity 'content-control' as it allows end-users more control over their selection and consumption processes. Interactive television providers working within traditional television systems have primarily focused on offering users control via time-switching or video on demand (van Dijk & de Vos, 2001), beginning with devices like VCRs. The ability to access television programming through online providers, from network websites to subscription services like Netflix or Hulu, are further examples of how access interactivity has been the primary focus of creating an interactive television experience. Increasingly, television-as-content providers utilize internet-based platforms as television-as-technology to enable the type of access interactivity that has been altering the economic models of traditional television for the past decade.

Within *Second Life,* VWTV agencies such as Treet TV and Metaverse TV served as both production houses and broadcast networks that act in ways similar to their traditional television analogs (Reinhard & Amsterdam, 2013). As production houses, they assisted *Second Life* users in utilizing the virtual world for television production; they enabled users

to become producers by providing access to the tools, skills, and personnel needed to produce television. This process was described by Claus Uriza, producer of *PopVox*:

> …when Treet TV put this live up on the web, for when these shows actually happened, it was just a live camera crew who were recording it, and then there were a post-production [sic], which were solely done by Treet TV.

The same production process was seen in the Metaverse TV productions, according to Phelan Corrimal, producer of *Inside the Avatar Studio*: 'Metaverse is doing a livestream at the time that we're taping. And then the final version does go through a post-production before it goes up on a permanent basis.' Additionally, as broadcasting agencies, they provided both *Second Life* users and internet users the ability to access content at a time, place, and pace of their choosing.

Whether or not a VWTV production utilized one of their agencies, the series included in this project all allowed their audience members some type of access interactivity synonymous with how traditional television utilizes the internet for television-as-content distribution and exhibition. Shows that were livestreamed (which is synonymous with live broadcasting) could be viewed either in the virtual world (or inworld) through special plug-ins or exhibition areas, or via online video sharing platforms (such as YouTube) or specialized website hosting. Even if a show was livestreamed, it was also recorded and archived for later viewing via the online platforms, as discussed by MarkTwain White, producer of *SailOn*:

> We had an audience show up for live. We had audiences in *Second Life* that would tune in on the *SailOn* on their home screens if they didn't come over [sic]. And, of course, after they're archived and they're there for people to watch later.

Traditional television producers routinely post episodes online, whether via a network's website or via a streaming service. Thus, both traditional television and VWTV have capitalized on the server databases and broadband infrastructure of the internet to provide consumers with more options for how and when they engage with television content. Similarities are also seen in how both have promoted the second type of interactivity.

Social interactivity can be defined as the ability for people to engage with other audience members during consumption of the series. This type has been alternatively called conversational and interpersonal interactivity (McMillan, 2002). Cesar and Chorianopoulos (2009) label it 'content sharing' as it focuses on synchronous or asynchronous communication with other users. Such social interaction has been done around television since the beginning, as people would gather in the same physical space to watch a program or discuss it afterwards. Sites such as YouTube offer a type of social interactivity, in that users can comment on the content and each other in a message board located in

conjunction with the video; however, such comments occur asynchronously and usually without any direct link to any particular point of the content.

While much of this social interactivity occurs asynchronously, online technologies allow for more synchronous communication. With the advent of social media and mobile communication, television providers have experimented with utilizing technologies to facilitate social interaction across dispersed geographic locations, creating 'virtual living rooms' through instant messaging, chatrooms, blogs, microblogs, and other online networks and communities. For the most part, this approach utilizes a 'second screen' as television viewers use smartphones, tablets, or laptops to engage in this social interaction. For example, television viewers will use the social network Twitter to 'talk' to one another while watching a television program 'live,' with hashtags to help organize their temporally and spatially disjointed conversations (Deller, 2011). Using social networks creates a backchannel for television programs, providing for social television and a co-viewing experience. Internet use is often described as a physically solitary experience (Poniewozick, 2009) while television viewing is typically considered a social activity (Chorianopoulous & Lekakos, 2008; Ryu & Wong, 2008; Williams, 1974; Wood, 2007). This social interaction feature is intended to reduce the feeling of watching television alone.

While traditional television relies on this second screen approach, VWTV series utilize the inworld feature of an integrated text chat to facilitate and encourage synchronous social interaction through the same screen as a program's content. Having an operational backchannel feature during a live show can also connect Web-based audiences to *Second Life* audiences, thereby allowing for more commenting and more social interaction. According to Malburns Writer, producer of *Crossworlds*:

> … there will be a lot of people who want to be there but can't get inworld for one reason or another but can get to us on the Web. And with that we have a chat room there, in text, means that they can talk about the show while it's happening.

Using the feature structured into the virtual world, VWTV producers provided their audiences with the ability to chat with one another while watching a live show, in a way that would not disrupt the production of the show as it would in traditional television studio audiences.

Beyer Sellers, producer of the series *Metanomics*, referred to this backchannel structure as a 'chatbridge.' As seen in **Figure 4**, at each of the locations in *Second Life* where the series exhibited, coded programs in the audience sections acted as microphones. If the audience member sat their avatar within a specified range to this microphone, then anything they typed in their chat field would automatically be included as part of the backchannel. Individuals who watched the livestream at the series' website could log-in and participate in the chatbridge. The host and the guests were also linked to the chatbridge to

Figure 4: Beyer Seller's *Metanomics*

participate in the conversation. The producers used this chatbridge to distribute information, announcements, and advertisements before, during, and after the show. Sellers said this backchannel created a "constructive cacophony" that enriched the viewing experience:

> …the idea of constructive cacophony is that you can have more than one channel going at once. …if you only have one channel, you're sort of forcing everyone to pay attention to the information that's conveyed at the time it's conveyed…and when it moves on, they have to move on.

This cacophony allowed for audience members to further explore the topics being discussed by the host and guests while still paying attention to what was being discussed. Thus, the cacophony was constructive as it could deepen the audience's understanding of the topics being discussed. According to Sellers, the cacophony was constructive in another way:

> Like if someone said something really good in chat, they would get it pasted to Skype so I'd be sure to see it and I could bring it up with the guest. But I'd also scan what was going on in chat so that often I would be saying "so I see so-and-so is reacting to what you just said, and what do you think of that?"

Thus, by engaging in this chatbridge, the audience's feedback could impact the live show as it progressed. This second benefit to the cacophony will be discussed in the final analysis section, as it highlights the audience members' ability to directly impact the content of the show.

Figure 5: Pooky Amsterdam's *The Dating Casino*

The ability to multitask and attend to a backchannel while watching a live show was considered by some of the producers as one of the benefits of attending a VWTV production, whether in *Second Life* or through its livestreaming to a website. The backchannel provided for a communal experience that enhanced the experience of watching the television program. For this reason, numerous VWTV productions utilized the text chat feature of *Second Life*, such as Pooky Amsterdam's *The Dating Casino*, as seen in **Figure 5**. Indeed, the ability to engage with fellow audience members without interfering with the show may be as important, or even more important, than being there for show's guests. According to Bevan Whitfield, who worked on several productions, such as *Metanomics*:

> Actually, sometimes I go to *Metanomics* and *Inside the Avatar Studio*, I spend more time checking out the audience and what they're having to say and being part of the audience, than I do listening to the conversation. … You can listen to like the true content of the interview whenever you want.

Indeed, the fact that *Second Life*, a three-dimensional, graphic social network, includes this text chat feature was one of the primary features that distinguished VWTV from less interactive undertakings, such as watching a video on YouTube or listening to a podcast. The ability to experience social presence and interaction with other audience members became a key feature of many VWTV productions. According to Phelen Corrimal, it helped differentiate VWTV from other media engagings:

> We can take advantage of all of the social networking aspects of what it is
> that we're playing with from the toolbox and be able to give people
> something that is just realistic enough that I think they might relate to it a
> little bit more than if you tried to do this as a podcast.

This ability to engage with your fellow audience members was another feature that some producers considered as a difference between VWTV and traditional television; even when there is a studio audience in traditional television, they are dissuaded from engaging with one another.

While second screen style social television allows for geographically dispersed audience members to engage with one another, it does not necessarily help those in the same viewing space, nor does it give the sense of attending a live show as these VWTV productions do. According to Lauren Weyland, producer of *Lauren Live*:

> But in *Second Life*, you can go to a show, you can be in a chat with somebody,
> you can at the same time be tweeting, looking at your Facebook, talking with
> somebody on Skype and God knows how many more frickin' things all at the
> same time. If you try to do that in live entertainment, first of all, they could
> throw you out of the place.

The producers seem to agree that audience members desire this type of social interactivity, as people like to be able to discuss what they are experiencing as they experience it. As Dousa Dragonash, producer of *Metaverse Live*, said: 'People are very interactive. They love to shout out – you know, in text – what they're thinking about what they're seeing...' Thus, a VWTV audience member could have both the pleasure of being at a live TV show while simultaneously enjoying the social interactivity commonly found in a shared physical (i.e. living room, bar, etc.) and a virtual space (e.g. second screen).

While traditional television's social interactivity also exhibits the understanding of this desire, it requires external and additional devices and software to the television set, whereas *Second Life* is structured with this feature as inherent to its nature. With social interactivity as central to the construction of the virtual world, this type of engagement with television becomes so possible that it was almost a given characteristic of the VWTV experience. Thus, while both VWTV and traditional television have been producing similar methods for access interactivity, they do differ in how they offer social interactivity. This difference becomes more prominent when considering the last of the three interactivities.

Content interactivity can be defined as the ability for audience members to impact the experience and/or progression of the content. Cesar and Chorianopoulos (2009) categorize this type of interactivity as 'content editing' because it concerns the provision of authorship and creative capabilities to end-users. Content interactivity occurs when the delivery technology for television programming allows users to have some influence over the progression and/or creation of the content, before, during, or after its production

(Cover, 2004; 2006; Ytreberg, 2009; Mcmillan, 2002). While not as prevalent as the previous two, some scholars have defined interactive television as requiring the content being made interactive (Jensen & Toscan, 1999; Richards, 2006; Ursu et al. 2008), either via a television set or via the internet (Stewart, 1999).

Traditional television producers have attempted to create interactive television content through specific formats and features, such as weather, sports, talk shows, game shows, and polling (Kim, 1999). While these earlier experiments attempted to provide more individualized content interactivity (Kim, 1999; van Dijk & de Vos, 2001), many were abandoned, either due to the technological requirements necessary to enact them or to being less concerned with making the content react in real time to consumers' input (Ursu et al. 2008). Some formats and features continue, to a lesser extent, or they appear more as gimmicks rather than as substantive additions. For example, reality competition shows such as *American Idol* request audience feedback to determine which contestants progress, but only at key points and rarely during live broadcasts; therefore, such productions only 'pay lip service' to interactivity (Cover, 2004; 2006).

Since the rise of digital games, with their increasingly complicated narratives, and the internet, with its inherent content interactivity, there has been growing interest in learning from these interactive media how to produce interactive television content (Ekman & Lankoski, 2004; Ursu et al 2008). Experiments have involved the use of databases containing pre-recorded, scripted video and audio files that would respond to the requests of viewers (Hales, Pellimen & Castrén 2006; Ursu et al 2008). In these examples, the content interactivity offered was not a one-to-one ratio: the progression of the television content, whether mediated in real-time by a computer or a human, was not reactive to each single user. Instead, the content responded to the aggregated audience.

These experiments with content interaction focused more on the distribution and exhibition of the content, and how the audience could participate at that point. Other experiments have sought to understand how the audience could impact the production of the content in real time. In Japan, Saito and Murayama (2010) developed ADlivTV (Audience-Driven LIVe TV system) as a prototype broadcasting system where the audience could impact the outcome of a live broadcast through their requests. Through a system of text chat and icon selection, the audience could send requests for the camera operator on what to record and transmit during the live broadcast. Yet, such experiments were prototypes with small to middle-scale audience sizes. Along with the research of Ursu et al (2008), there continue to be issues in making true content interactivity as the size of the audience increases. CBS tried such an experiment in January, 2013, with a special episode of *Hawaii Five-O*, but the content interactivity only involved selecting the ending for the episode through online voting via the CBS website and Twitter (Reinhard, 2013). Scalability appears to represent a barrier for traditional television to produce more advanced content interactivity.

However, the chatbridge or backchannel, a key feature of the virtual world *Second Life*, does appear to permit and promote more content interactivity, because it encourages

synchronous social interactivity. A number of VWTV productions employ the text chat feature to connect those in the audience with those on stage and behind the camera. As described by John Zhaoying, producer of *Smarter Tech*, backchannels allowed for a three-way conversation among the 'audience on the one hand, the interviewer and then the subject, or subjects, in the case of panels.' This three-way conversation required all parties to be multi-taskers, attending to not only what was said and shown but what was being typed. According Paisley Beebe, producer of *Tonight Live with Paisley Beebe*:

> The people who are up on stage could see what the audience was saying and could react to that. So occasionally I would say something in chat and then somebody would say, yeah, but what about this? And if I thought that was a great question, then I would say to my guest, the audience has just mentioned this…

This type of engagement was not necessarily desired by all audience members, given the amount of attention it required, but its existence allowed for those who desired it to participate at a level greater than either previous type of interactivity. Via this backchannel, the audience could experience content interactivity.

Figure 6: Pooky Amsterdam's *The 1st Question*

The utilization of the backchannel to foster audience feedback occurred in different genres of VWTV. As a talk show, *Metanomics* connected the audience, both inworld and online, with the show's producers and the episode's guests, and encouraged the audience to ask questions and make comments that could be brought into the episode's discussion. As seen

in **Figure 6**, the quiz show *The 1st Question* put its audience into direct contact with the contestants, who would implore the audience to help them find the right answer, and one segment of the show required the audience to vote for one of the contestants. According to producer Pooky Amsterdam:

> It means that everybody in the audience is texting away wildly and searching for stuff on Google and is fully engaged, and it's very exciting because the audience becomes a part of the show, through things that they're feeding back through the text chat.

Because the producers, host, and guests were all part of the chatbridge, there existed the possibility that any audience member could impact the course of the episode.

In addition, this conversation could help ensure that the episode's production ran smoothly, as the audience could inform the producers of any glitches or lag issues affecting the show's distribution and exhibition. In essence, the audience became de facto crew members, helping to ensure the successful production of each episode. Indeed, they could become actual crew members, as Saffia Windershins, producer of *Designing Worlds*, describes:

> Some of the camera people were actually picked up because they were chatting in the back chat when we set up our own, and when they discovered we needed camera people, they went and got themselves trained and joined us as camera people. Because they thought it was fun. They had fun with it.

On other shows, such as sport shows, performance shows, and drama series, *Second Life* gave users who might have only been audience members the chance to participate beyond suggesting questions: they could become integrated content providers. Saffia Windershins described how she encourages her audiences to engage in 'a kind of interactive game within the *Happy Hunting* program.' She explains:

> So we do things like, when the audience comes to the studio, we try and hide a gift somewhere in the studio so that they'll go and find it afterwards. We encourage them to get involved through the web – go and look at a website and we'll help you because of all the hunts we've discussed, so that they will then go out and do hunting.

The chatbridge feature, and the interaction between the producers and the audience, helped foster a sense of community that furthered the creativity of the productions (Reinhard & Amsterdam, 2013). However, *Second Life*'s restriction on the number of users (i.e. 100) who can access an area at the same time limited how many people could attend a

live production; according to RacerX Gulwing, avatars were often turned away from being in the *Giant Snail Races* because too many people arrived to participate.

As with the ability to have social interactivity, using this same technological feature to permit and promote a type of synchronous content interactivity was seen as one of the benefits of VWTV. Because the audience knew their participation in the backchannel could impact the live episode, they were more likely to watch a live show and engage in this text chatting. For some producers, such as Slim Warrior of *Amped Up!*, this helped to differentiate VWTV from other media offerings:

> We can all sit and watch TV and be very passive and have no involvement whatsoever, but for me it's an essential part of being able to talk with other people. That their fans have a chance to have some input, to be able to ask questions, to make points that they feel might be relevant and to allow that musician or that performer to respond, because at other times doing a show, they may not be able to do that. … Otherwise we might just as well close our eyes and listen to a podcast and have no involvement with it whatsoever.

While traditional television appears interested in fostering community and fan involvement, such involvement often happens asynchronously with the series' broadcasting, such as reality shows that encourage fan involvement after the program airs (see Godlewski & Perse, 2010). However, if more live broadcasts could integrate backchannels, then higher levels of social interactivity and content interactivity could result in the same genres as those seen in VWTV.

Of course, neither traditional television nor these VWTV programs created the type of synchronous content interactivity that would produce an individualized experience similar to playing digital games, with exceptions being racing as giant snails or answering questions on a quiz show. Overall, the user-generated nature of *Second Life* did allow anyone with the interest and dedication to become television producers; this ability can be seen as the ultimate form of content interactivity, where more people are able to interact with a television-as-technology to produce television-as-content. As television production increasingly goes online, then perhaps this type of content interactivity will become more common.

Conclusion

For the most part, VWTV remediates the access and social interactivities that have been added to traditional television over the past several decades. Given that VWTV exists entirely over the internet, and thus could be classified as internet-based television, the ability to permit access interactivity is expected. Additionally, many VWTV productions promote synchronous social interactivity through the text chat backchannel, thereby creating a form of social television that traditional television is experimenting with through the use of social media and mobile technologies. Furthermore, many productions remediate

traditional television genre formats that promote the duality of audience/participant. These programs tend to be live shows, replicating studio audience formats from traditional television that allow for questions from the audience or encourage the audience to play along.

Thus, VWTV remediates traditional content genres like talk shows or game shows where only those viewers chosen by the producers can have an impact. This interactivity is akin to Richards' (2006) discussion of processor interactivity, where the consumer is given the opportunity to contribute but only under prescribed conditions. In this way, many of these productions reflect the tension Cover (2004; 2006) describes as the problem content interactivity faces in overcoming the author-text-audience relationship. With VWTV, the lack of the one-to-one ratio can be seen as paying lip service to the desires of consumers to participate in the content.

The truest synchronous content interactivity occurs with the ability to enter the television production process as these *Second Life* users produce their own television programs. They are no longer simply positioned as an audience to television-as-content or television-as-technology; they are able to change their position to producer of television-as-content via a new form of television-as-technology (Reinhard & Amsterdam, 2013). In addition to being able to become producers, there is the duality of audience/crew, as those in the audience can assist in quality assurance of the production or even directly provide some aspect of the content, either behind-the-scenes or in front of the cameras. A person's dreams of being part of a television production, while perhaps not possible when considering traditional television, can be realized with VWTV. Virtual worlds, then, promote the construction of interactive television through the ability to allow anyone to become involved in television production.

Additionally, these productions include a strong emphasis on use of interactivities to foster the connections among *Second Life* users and thereby create, maintain and strengthen the inworld community. This focus on community was routinely mentioned in how producers described their shows, indicating how necessary the inworld community is for the production of these series (Reinhard & Amsterdam, 2013), and is now also seen in how they discuss social and content interactivities for bringing people together. Because these shows are made by non-industry individuals and are focused on bringing people together, the interactivities of VWTV appear similar to public access or community-access television (Gawlinski, 2003; Kellner, 1992; Linder, 1999). These VWTV series indicate a more grassroots or bottom-up and inside-out development of television for a specific community than traditional television for the faceless mass of consumers.

This focus on community may better align with the technological and sociocultural structures of *Second Life* than traditional television. As an open, user-generated virtual world (Gottschalk, 2010; Messinger et al, 2009), *Second Life* relies on communal activities for the creation and propagation of its content. In *Second Life*, the community of Linden Lab designers, the VWTV producers, and the VWTV audiences all interact with one another to co-produce *Second Life*; traditional television is not likewise co-produced. Initially concerned

with distribution over production (Williams, 1974), traditional television supplies content as the means by which to commodify the audience (Smythe, 1977). VWTV, made in user-generated virtual world, focuses on distribution and production simultaneously; its audience is central in its creation. The rise of convergent media practices may make such practices more common in traditional television, but perhaps only if audience participation is seen as beneficial to their financial bottom line. VWTV represents more of a 'public service' approach akin to state-sponsored television (Williams, 1974), focusing primarily on an interactive, communal experience over profit, and without the state-driven ideology of similar public service approaches. VWTV demonstrates how television did not have to become the capitalist-driven institution it has become around the globe; the different 'social decisions' and 'particular circumstances' (Williams, 1974) of VWTV demonstrates the potential for television, in general, and interactive television specifically.

In comparison to traditional television, interactive television in this virtual world is far more focused on community-building as its primary goal, and not as a necessary step for profit generation. The virtual world *Second Life* – a social medium whose existence is predicated on user-generated content – provides the producers interviewed in this study and their audiences a platform that allows them to produce a range of interactivities. Furthermore, all the interactivities further community-building of *Second Life* because of the bottom-up nature of collaborative user-generated content. Thus, the use of interactivities with these television programs exist not for the co-opting of fandom for marketing purposes, but for building and sustaining the fan communities of the series and thereby the propagation of the virtual world itself. VWTV appears to use traditional television structures and virtual world structures to provide interactive television for the benefit of the *Second Life* community, encouraging and empowering the participatory community that sustains the virtual world for non-profit reasons.

This focus on community in the development of interactive VWTV is not unique to this virtual world. Technically, all three types of interactivity discussed in this paper as constituting interactive television focus on building community. Access interactivity may fragment a mass audience based on divergent viewing practices, but, by promoting it, the television producer can bring such fragments under one umbrella, expanding and uniting an overall community of viewers. Social interactivity is about making interpersonal and parasocial connections, and bridging the gaps or blurring the boundaries between audiences and producers, celebrities and characters (see Guo & Olmsted, 2015; Segado-Boj, Grandío & Fernández-Gómez, 2015). Content interactivity provides perceived or even actual communal ownership of the production process and final product.

Thus, interactivity in television, whether traditional or virtual world, should consider focusing on building and maintaining community as the end result, and should be designed with such purpose from the beginning. Indeed, a true focus on community can benefit the television producers by encouraging sustained consumption (see Segado-Boj et al, 2015), and social media can usefully provide the spaces and tools to accomplish this goal. The community, however, should be acknowledged as having their own interests and agency,

and not just as methods by which a corporation can enhance its position in the marketplace. Doing so would suggest more fully embracing the participatory culture in which consumers have more equal power with producers, even if producers will always contain more control (Jenkins, 2006). Allowing communities to emerge organically, and to be an active part in them, without simply trying to sell to them or sell them to some other entity, would better approximate the type of bottom-up community building seen in VWTV series. Providing all three types of interactivities could also help foster the development of such communities as they 'buy-in' to the types of participation asked of them.

It must be acknowledged, however, that this conclusion about community and interactive television is based on the VWTV producers' perceptions of their series. Many of these producers are consumers of other producers' works, but they do not represent the entirety of the audience for these shows. Thus, how the audience of these series perceive the communal aspects of these interactivities is not known outside of anecdotal evidence from the producers. What this study does address is how the VWTV producers design their interactive programs to involve a participative community, and how they see community in relation to traditional television's view of the same. The study also indicates that research on traditional television should also consider the communal nature of these interactivities. If it is true that viewers are drawn to these interactivities because of their social nature (see Segado-Boj et al, 2015), then more should be done to understand how the viewers perceive, respond to, and actively work to build community around and through these interactivities, and how they see their attempt at community in relation to the profit-driven goals of television producers. Rather than just focusing on individual reactions to interactive television (see Godlewski & Perse, 2010; Guo & Chan-Olmsted, 2015), more work needs to be done on communal reactions, and their actions that encourage television producers to provide such interactivities.

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