Abstract
This paper presents the author's entry into a virtual world, Second Life, to conduct a case study on 'presence in virtual worlds'. The object of study is not the IT platform that might provide opportunities for presence, nor the human actors that might experience presence, but what happens when they come together to create an event of presence. The paper relates how this object of study is approached, and produced, through a series of methods. Methods such as participant observation, interviews, reading of blogs and web texts are understood as mediations. The paper traces how these mediations create specific visibilities, gather appearances together and how they may lead to interest, surprise and new insights into virtual worlds as an emergent, distributed phenomenon. In conclusion, the paper proposes a set of analytical strategies that may improve our understanding of how virtual worlds and their related characteristics continually emerge through a range of differing sites, practices and concerns.

Keywords
virtual worlds; presence; emergence; assemblage; imaginaire

Understanding a virtual world

Second Life was launched by Linden Lab in 2003 as an open platform that provides a set of tools and spaces where users can develop their own avatars, objects and surroundings. The official Linden Lab site, maps.secondlife.com, provides Cartesian overviews of Second Life
as a place built up around land, sky, ocean, day and night and gravity. In order to create an account and enter this world as a user, one must represent oneself as an avatar. Avatars can be designed by users and may take any shape or form and may be encoded with a range of characteristics. Creating one's avatar as well as other objects in Second Life is done through purchase of features from other users or through the use of a three-dimensional modeling tool that allows a resident to build virtual objects. This can be combined with a Linden Scripting Language to add functionality to objects. (Edwards 2006; Boellstorff, 2008)

Unlike many other virtual worlds, Second Life is not a game. All activities in Second Life are facilitated and maintained by users, and no concrete rules exist on how people should behave. Primary objectives of users can differ and shift. Regular users of Second Life, for example, engage in various social activities: education, design interests and/or coding, artistic performing, political practice, commercial interests, religion, role play, or sexual practice. Due to the range of possible activities, Second Life is made up of many heterogeneous micro communities. In-world activity spills out into a range of other media practices, such as an abundance of webblogs connected to specific Second Life communities, topics and commercial activities. Additionally, movies filmed in Second Life proliferate on YouTube, and more recently, Second Life seems to be gaining the attention of professional cinema production (Frølunde, 2011).

These various user activities are carried out by ‘a user’ through an avatar in virtual space; the virtual home, workspace or, for example, nightclub in Second Life. And simultaneously, these activities unfold in front of (or through) a computer screen in the user's home or perhaps work setting. As such presence in virtual worlds is distributed, socially and technically assembled, and something that seems to emerge and appear in specific situations, perhaps disappearing again in the next. This object of study, 'presence in virtual worlds', is explored in this paper.

The paper relates how this object of study is approached, and produced, through a series of methods. Methods such as participant observation, interviews, reading of blogs and web texts are understood as mediations. The paper traces how these mediations create specific visibilities, gather appearances together and how they may lead to interest, surprise and new insights into virtual worlds as an emergent, distributed phenomenon. In conclusion, the paper proposes a set of analytical strategies that may improve our understanding of how virtual worlds and their related characteristics continually emerge through a range of differing sites, practices and concerns.
Presence

The interest in presence grew out of an initial surprise in my meeting with the field of virtual worlds. At a first glance virtual worlds might be characterized by absence or distance between human actors linked by technology and internet protocols. Most often the people involved as 'users' of virtual worlds are distributed geographically as well as across time differences. They are often working in front of a screen alone at home or work. Yet presence, the correlate of absence, speaks with a particularly strong resonance to virtual worlds. Virtual worlds such as Second Life are often described in terms of a place and space in which the individual user has a sense of presence (Schroeder, 2006). In the following I will outline how the concept of presence has been developed in the research literature to describe the essence of experiences in virtual environments.¹ I have divided the literature into three approaches to presence: presence as immediacy, presence as sociality, and presence as fantasy.

This section serves to exemplify how the object of study has been conditioned into existence beforehand by existing research traditions already concerned with the notions of presence, immersion, virtuality and reality. Along with my own initial interest in presence as phenomenon, the literature thus takes part in constituting and confirming presence as a viable starting point of analysis when conducting research on virtual worlds.

Presence as immediacy

Much of the scientific and the practitioner oriented research is concerned with defining and measuring presence as well as optimizing technologies and designs that can create user experiences that are more natural, immediate, direct and real. Gumbrecht (2004) describes presence as a spatial relationship to the world and its objects - the present is what is tangible to bodies. This is a material, corporeal process and Gumbrecht (2004) discusses the possibilities for creating presence through new media special effects. Linked to developments in virtual reality, an array of studies also approach presence as a "mental state making users feel, act, and react as they would in a real-world setting"(Whitton, 2003, p.46), thus making "presence" the personal, psychological response to technology induced sensory immersion due to technological advances in graphical realism, sound, smell, data-gloves, head mounted display, helmet, motion trackers and other extended possibilities for interaction (ibid). Observations of presence as immediacy seek to measure how present a user feels in a virtual environment. Physiological

¹ The paper deals only with literature on virtual worlds. For an extensive discussion of presence in relation to media in general see Bracken and Skalski (2009).
responses (e.g. stress, relation, heartrate, skin reactions) have, for example, been studied as measurable indicators of presence. This notion takes a one-way transmitter approach and presence becomes an effect of technology where the user is the somewhat passive perceiver or receiver. Solomon describes this as a realism-based conception of presence (Solomon, 2002).

**Presence as sociality**

Another strand of literature based in anthropology and sociology moves away from evaluating different technological design's immersion capabilities and towards the notion of presence as sociality, sociability or social engagement. Part of the success of virtual worlds is ascribed to this social engagement. The very concept of sociability (Simmel & Hughes, 2007) has for example been applied to improve our understanding of virtual worlds (Ducheneaut et al., 2007). Likewise, Taylor (2009) emphasizes the shared experience, the collaborative nature of most virtual world activities and the reward of being socialized into a community, acquiring a position and reputation. In this literature the avatar has been explored as an important way of seeing oneself, as well as being seen, thus adding to the personal and social experience of presence (Boellstorff, 2008; Pearce, 2011). This literature is much less concerned with how the sense of presence may be created though technological refinements making the user experience as ‘realistic’ as possible but looks to sociality as mobilizing the shared experience of being there.

**Presence as fantasy and imagination**

The last strand of literature grows out of the science fiction genre and literature studies. Here the imagination of the reader/user, the ability to engage in a personal or shared fantasy, is what transports the user into the sense of being there (Jacobson, 2001; Schneider, 2004). Seegert (2009), for example, explores how presence is generated in interactive fiction through both verbal signifiers and the user's own actions. In this sense, presence is performed through the user's engagement and actions: "a reader (of interactive fiction) can, through imagination, conjure up worlds potentially as vivid and as body affecting as the visual and aural effects presented through a multimedia entertainment system" (Seegert, 2009, p.25). This approach again shifts the notion of presence from something produced through graphic realism, sound and sensory effects, to something that can be created and enhanced through the imagination of the individual. The links are close between this box of literature and that above since fantasy can be inhabited by a group, a "consensual hallucination" as coined by Gibson (Gibson, 1984, see also Pearce, 2011).
Table 1: The table below summarizes the three approaches to presence in the academic literature.

<table>
<thead>
<tr>
<th>Approach to presence</th>
<th>Focus and characteristics</th>
<th>Realm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediacy</td>
<td>&quot;I am there, see, feel, sense it&quot;</td>
<td>Technical/material/bodily</td>
</tr>
<tr>
<td>Sociality</td>
<td>&quot;Community, sharing, being seen&quot;</td>
<td>Social</td>
</tr>
<tr>
<td>Fantasy</td>
<td>&quot;My imagination transports me there&quot;</td>
<td>Individual/personal</td>
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In these three approaches presence is constituted in the technical/material realm (immediacy), the social realm (sociality) or the individual/personal realm (fantasy). To do the literature justice, it is important to note that approaches also cut across these realms in various ways. Niches of research, for example, explore virtual worlds as socio-technical assemblages (Taylor, 2009), embodied gameplay (Bayliss, 2007) or presence as 'material imagination' (Doyle 2011) where the materiality and physicality of the act of imagining is emphasized. Yet, as an overall view this literature provides a number of possible paths as to how presence can be studied, found and understood.

Existing research takes part, methodologically, in constituting presence as an interesting and viable object of study. The object of study has also been shaped by my own initial experiences in my own discovery of virtual worlds, my own fascination with the underlying complex technical infrastructure and the set of highly laborious and distributed practices that maintain it. The following section illustrates the next steps in my study of presence, establishing a case study.

**Constructing a case study of presence in virtual worlds**

Applying a case study approach follows Flyvbjerg's (2006) view of knowledge as always historically located and context-dependent. He argues for understanding good research in terms of a learning process best done through concrete experiences, a continued proximity to the studied reality and via feedback from those under study (Flyvbjerg 2006, p.223). But what is a case study and how can it serve to establish new knowledge about presence in virtual worlds? In a revision of existing "misunderstandings" of the single case study Flyvberg (2006) asserts that concrete, context-dependent knowledge is more valuable than the a search for universals. He suggests that generalization is overvalued as a source of scientific development, whereas “the force of example” is underestimated.

It is correct that summarizing case studies is often difficult, especially as concerns case process. It is less correct as regards case outcomes. The problems in summarizing case studies, however, are due more often to the
This quote seems highly relevant to the empirical study of virtual world practices. How can the researcher access a distributed virtual/real phenomenon empirically? How can the researcher summarize a set of complex practices unfolding both online - in a virtual space - and in a set of globally distributed homes and offices in a neat, coherent scientific text?

As underscored by Flyvbjerg (2006), case studies and the force of example can serve as a good path for creating new scientific insights into such complexity. In many case studies, the field site and object of study is considered to precede the empirical investigation. However, when investigating the design and use of emergent and distributed technologies in networked organizations locating and delineating exactly where the case study begins and where it stops is not a simple matter. The social and technological practices in question are emergent, designed, and used across distributed locations. As such they pose challenges when it comes to pinpointing exactly what and where the good case or object of research is to be found. Presence in virtual worlds such as Second Life seems to "happen" as simultaneous occurrences in a broad range of design and use sites that may be more or less connected.

Such challenges of complexity have been approached as issues that require the development of new and better research tools, for example, with the use of log file analysis (Williams, 2005). Challenges of distribution are viewed from this perspective as technical difficulties that may be tackled by means of advancing the methods and techniques for data production. Other options involve using video cameras inworld and outworld (Jensen, forthcoming), perhaps combined with screen tracking and screen capture technologies that allow the researcher to record mouse movements on many screens at once (Murray et al, 2009). However, in such strategies it seems that one kind of complexity is substituted for another. With one problem 'solved', a new one arises, such as how to sort and visualize the mounds of unmanageable data produced by way of such methods. This paper suggests that all methods can be understood as creating particular translations, particular (and perhaps technologically mediated) ways of seeing and analyzing the subject matter. In drawing on STS insights, there is not one high place from which we can look down upon and overview that which we study no matter what methods we apply (see Haraway, 1991). Instead particular methods mediate the object of study, make it visible for science in particular ways (Latour, 2005).
For the study presented in this paper, mundane methods of interviewing, participant observation, and document analysis have been applied to construct a case study. Rather than providing a total overview or mapping out general patterns, a juxtaposition of sites and situations dives into selected moments and explores in detail the specific arrangements and situations in which presence appears and unfolds. Such a strategy can bring out differences, connections, and disconnections between the practices and thereby produces data material for thinking about presence in novel ways.

Pop Art Lab

The next section presents the case in question, a Second Life media center, Pop Art Lab (PAL). The media center opened in September 2008, with the mission of "exploring how to present and promote new music in 3D environments" (website source). Since then PAL has developed into a virtual 'lab' comprised of: four listening booths for previewing newly released music recordings while socializing with other listeners, a central dance floor hosting parties and events, a lower clubbing level, and a stage set where musicians are interviewed and conduct live music performances. PAL is founded by a devoted Second Lifer Claus Uriza and developed by his team. The notion of presence was at a first glance pivotal to PAL as its visitors share listening spaces and concert experiences with other visitors in real time. The concept and design are built around the idea that people are there, hear music while they see, share and experience it with others. The single case was thus selected based on an expectation that this was an exemplary site where presence might "appear" and thus be accessible for the researcher.

The empirical study was carried out from October 2009 to June 2010. Methods included participant observation ("hanging out" and event participation), real life observations, semi-structured interviews, conducted offline and online, as well as analysis of related webblogs. Interviews have been carried out by the author and by co-researcher Ates Gürsimsek.

Analysis and writing has been carried out continually throughout the research process. The data material was continuously coded openly (Emerson et al., 1995). This coding consisted of writing themes, notes, and memos of interest in the margin of interviews (on paper and in Word) as well as keeping notes in separate documents. The coding drew on both theoretical concepts and concepts from the field, continually shifting between the empirical material, literature, and discussions with fellow researchers. Based on the open coding, themes and story lines were developed around material where presence appeared or emerged. The method of analysis has thus been an oscillation movement between condensing the data material through
writing summaries, listing out themes, and finding story lines on the one hand, while at the same time expanding the material through an interpretive analysis of selected excerpts in relation to one or more particular themes of interest. Analysis drafts have, along the way, been shared with the main informants from PAL and with fellow researchers in the research project.

Again, these various practical steps are understood as mediating steps that bring presence into view for scientific inquiry. The methods for both data production and analysis create particular appearances of presence. Presenting the material as appearances of presence is thus proposed as an ‘analytical trick’ that foregrounds empirically the very practices, events, and situations in which the objects of inquiry is handled, made, and re-made. The approach is drawn from actor-network theory and the methodological strategy of taking relationships and networks that constitute objects and subjects as the focus of inquiry (Law 2002; Mol 2003; Latour 2005). Their work forms part of a wider STS group of researchers who are theoretically concerned with shifting social science away from dealing only with social structures, communicative layers, symbols, and meaning, and with moving sociological theorizing into the physical realm of material objects, nature, bodies. These aims entail new ways of thinking about relations of the social and the material as ‘mutually constituted’ and not belonging to different ontological domains.

Below, examples from the case study are presented in two sections. In the first section selected interview and conversation excerpts illustrate the ways in which notions of presence circulate, how they are taken up and used among some of the actors involved in PAL. The second part of the paper applies a different level of analysis, that of the situation. The second analysis section thus focuses on a concert event and how presence in this situation is a collective socio-material achievement. The two sections thus exemplify two slightly different methodological approaches and the results they can produce.

**Interview appearances of presence in the Pop Art Lab**

Claus, the founder of PAL, describes the early days and his first visions for PAL. The founder’s real life work consists of cataloging and creating metadata on new music releases for a Danish national cross-library institution. Starting this project he was backed by the company in which he was employed allowing access to the music and economic support for the initial purchase of the Second Life space in which the music environment was to be built. The initial design was conducted collaboratively by a team of friends and volunteers and opened in September 2008.
The PAL concept was to take the best albums, CDs released, to try to find a way to present all this music in a 3D, virtual environment, instead of just normal text material, so people can experience it differently… We subdivided the land into four rooms you can enter, each playing a different CD and genre. The rooms have couches and sitting animations where people can hang out and chat with each other. (Founder Claus)

The founder emphasizes the aim of creating a different experience than that of, for example, Internet radio and music websites, music accompanied by text, or still images. This new music experience is organized in virtual space through the design of four virtual rooms the visitor can enter and move between with their avatar. Furthermore, people can hang out together, sit or dance with the various sitting animations designed into the rooms while communicating through the Second Life chat facility or using voice. As presented by Claus, it seems that the very vision and design was organized around notions of presence similar to I had earlier found in the literature. For Claus, the compelling aspect of presenting music in a 3D space is the capability to listen while being there, immersed in a space shared together with others. The founder's vision thus mobilizes both the immediacy and the sociality approach to presence. It seems the same ideas about presence found in the academic literature also circulate among those living and acting in Second Life. Ideas about presence seem to be applied as a resource for retrospectively explaining and making sense of the Second Life project the user Claus has been involved in.

During spring 2010 the sim was redesigned entirely to create a new look, new spaces and possibilities for the music lab. The head designer, Emily, explains this work and the idea behind the design.

We are three designers and Claus - and the overall idea behind this design is that people could come here, bring friends, listen to music while chatting, that they could come again and again for new music. You need to have seats because a vast majority of people like to sit, you need to give them many opportunities to dance, sit, stand, walk, fly, teleport, they can watch the sea, visit the place, discover the artwork, find new places within the sim, go to the club, etc. (Designer Emily)

The designer explains that people like to sit or do something while hanging out at PAL and how this has oriented the design of the space and animations. She finds it important to give
people opportunities to do something while in PAL. In this space the music listeners and concert audience must also be able to perform themselves in relation to each other, stage themselves through their avatars and the things their avatar are able to do and be recognized as doing at the show. This resonates with the sociality approach to presence. In PAL people can explore and share experiences of a beautiful ocean scenes, virtual artworks, music listening and dancing together. This draws on the sociality approach to presence, and interestingly, this notion of presence actually orients the designers' coordinated choices and actions in redesigning and refining the lab in 2010. The last excerpt is a blog post from a visitor and blogger of virtual worlds, Cyberloom.

*Pop Art Lab* can be described as an immersive, 3D radio station. You can see which dome plays what, go in and find out the name of the artist and the title of the track. PAL provides a glimpse of the future for listening to music on the Internet; we will immerse ourselves in the sound and listening will potentially become a more interactive visually immersive experience. Our avatars will walk around inside internet radios, changing the music streams by where they choose to walk just as we can in PAL. (Visitor Cyberloom)

This visitor sees *Pop Art Lab* as a glimpse of the future, where one is immersed in sound and listening that transforms to become something one can interact with through, for example, movement in space. He draws a parallel to walking around inside an Internet radio. Being immersed in sound and interacting through movements resonates the immediacy elements of the presence as well as aspects of fantasy as the very experience of PAL is characterized as a glimpse of the future that one can step into together with other avatars.

These examples foreground presence as an important element of how the PAL team (the founder, visitor and the designers) envision a virtual music lab. In these interview events, presence can be understood as a shared vision that joins together these actors and enables their cooperation. It serves as a resource for initiating the PAL project, for visiting and returning to the lab, and for redesigning it in specific ways. In this PAL case study, ideas about presence express various justifications and expectations related to acting, designing and travelling in *Second Life*. 
Presence as a technical imaginaire

With this analysis, new visibilities and new questions about the object of study are created: Perhaps presence should not only be understood as a characteristic of virtual worlds (what it is), but also as a shared dream about the future (what it might become)?

In the book *The Internet Imaginaire*, Flichy puts forth an analytical approach understands takes utopias, ideologies, and representational frames as the integral part of the development of any technical system (Flichy, 2007). Flichy stresses how specific "imaginaires" of new technologies enable users and designers to coordinate their actions. According to Flichy, all technological activity is situated in one or more imaginaires. The actors involved in a technological project mobilize a particular framing that enables them to perceive and understand the phenomenon they witness and to organize their own actions accordingly. Similar to Star and Griesemeier's (1989) boundary object, a technical imaginaire has to be rigid enough to maintain some coherence between actors as well as being flexible enough to take into account specific projects of the various actors. Imaginaires are rather understood as produced and used by the actors engaged in daily activities and as the resources that actors mobilize when necessary (Flichy, 2007).

In PAL, the actors’ own framing of PAL through presence both justifies and orients their actions. The vision and expectations of presence seem to be one of the elements upon which the voluntary team project is based. It enables those involved in PAL to construct an identity around what they are doing and serves as a framework for coordinating actions and directions. Different forms of presence are mobilized in turn (immediacy, sociality, fantasy), yet the overall vision of presence cuts across and is shared by the founder, the visitor, and the designer. This first analysis of the PAL thus enables a new view of presence as a discursive imaginaire (Flichy, 2007) produced and used by the various actors involved in the PAL project. This view compliments existing literature, reviewed earlier in this paper, in proposing that presence not only can be analyzed as a characteristic of virtual worlds, but might also be understood as something that productively participates in creation of virtual worlds. In the appearances presented and connected here, my object of study seems to be productive and can perhaps be ascribed agency?

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2 Here, the differences and contradictions within these approaches to presence have been glossed over. Further work might go into these differences and how they are dealt with by the actors involved. For the purposes of this analysis presence is foregrounded as the prevalent frame of representation. Second Life, and virtual worlds more generally, are situated in additional imaginaires that call for exploration.
Appearance of presence in the Pop Art Lab concert event

But back to the situations in which presence can be experienced in a more bodily or material way. The following section illustrates another way in which presence appears, not only in the justifications and expectations attached to the PAL project, but in a very practical and material sense. The second empirical section of this paper analyzes the concert event, a second case study finding of how and where presence appears.

The concert event usually starts with an interview with the performing artist conducted by two members of the PAL team. Meanwhile the audience is seated around the stage in a TV-studio type set-up. Thereafter the musicians move to the stage, the music begins and the dance floor opens for the audience. The musician MommaLuv SkyTower is on stage performing, backed by her band and dancers, and below on the dance floor, a couple move closely back and forth to the music. A regular at the PAL concerts explains:

I love hearing a good artist, dancing and you’re maybe 30 people chatting together. When you are there you are sharing the experience with others, like you really are hanging out together. You get a lot more sensory input than if you are only looking at a little text box while listening. Someone will do some clapping animations, they can shout things out while dancing or ask the artist to play a specific song, perhaps something weird will fly across the room and every one laughs. You are spread across the globe and have this shared experience of being there together. It’s just really powerful. (Visitor Pete)

Here again, presence is part of the experience of this person participating as audience in the concert. The concert can be seen as a concentrated and orchestrated moment of presence and the following looks into the highly distributed set-up behind this experience. Presence is not necessarily experienced when entering Second Life at random. My own first visits seemed taut by frustrations about how to orient myself, buy hair, turn off dancing avatar animations once off the dance floor, or, how to conduct conversation in SL lingo, more than any experience of presence, in either of the senses immediacy, sociality or fantasy. Presence is thus not available for anyone, anywhere. The following looks into a complex of elements that are assembled, aligned and ‘working’ in sync to create a moment of live performance, audience participation and presence for a PAL visitor such as Pete.
The first characteristic I highlight here is that of PAL performance being both live and recorded. This creates a trace and accumulating archive one can go back and view afterwards - where presence can be said to linger, and overtime add to the establishing of a community and a history. Pete knows many of the other people/avatars at the PAL concert and the experience is underscored by a set of previous concerts and events. Claus explains, the shift from a media center to making music TV.

Shortly after opening the music lab, I (the founder Claus) was contacted by the producer of Treet.tv, one of the biggest tv stations in SL, asking if he wanted to make music TV in Second Life. This started the Pop Vox music series featured as a regular show in Treet.tv's selection and web-archive. The concerts are live, based on the real time performances of musicians with the audience and they are at the same time recorded by Treet.tv, streamed live to screens at other locations in Second Life and to Treet.tv's web-site. (Founder Claus)

The fact that the concerts are both streamed externally and recorded for future viewing expands the scope of participants and stages the event in a broader setting of distant and future viewer-participants. The recording also provides the possibility of creating a trace, a historical archive of shows one can view retrospectively. According to Claus, the fact that the music performances have been filmed and distributed has been an important factor in the development and popularity of PAL - and consequently for actualizing events in which presence can appear. Presence it seems is emergent and distributed in time. Next we will see how presence also is distributed in geographically and across people and technologies.

Assembling presence - keeping it together, making it happen

A lot of work goes into preparing and executing these shows, and the technologies involved are numerous. Extensive advertising for these show goes out beforehand from the Second Life TV station and the PAL website as well as facebook, twitter and affiliated blogs. In planning a show, a set of globally based individuals are brought together real time - the founder's house in Copenhagen, the Treet.tv filming and editing studio in Melbourne, a music studio in Boston, and a global audience, most of whom are situated in their own home settings. At these locations the screens flick between Second Life, the chat space and sound regulating pop up screens. All the participants engaged in interviewing, performing, hosting or helping are connected through chat sites and one single Skype conference connection, streamed back into Second Life and to the Web from the Treet.tv site in Australia. From here the recording from
within Second Life and real time editing also takes place. Often coordination may be done on parallel instant messaging in SL, additional Skype lines, email and phone text messaging. Work has often gone into preparing the stage, the props, and the avatar’s outfits and animations beforehand. And during the show one or more persons will also be controlling more advanced animation through software developed for this specifically (also known as avateering).

The fact that these concerts actually do occur and can be experienced as "powerful", as in the audience quotation above, must be seen as a distributed and collective socio-technical achievement. The moment of presence, the experience of the audience, is carefully prepared, arranged, and tinkered into sync in order to be available for experience. The founder himself imposes a theatre metaphor to describe the set-up.

It's like the local drama club and doing theatre. And I can do that kind of thing, here, from my comfy couch with people from all over the world. This screen is my little aquarium from which it all opens up. (Founder Claus)

Unpacking some of the preparations, complications and efforts involved illustrates how presence is not only about 'the user being present', but also about how the team behind PAL put extensive work into actualizing presence. They not only mobilize presence in their descriptions, vision and expectations for PAL, but they realize it through extensive efforts.

All these people are usually online 30-60 minutes before the show starts to check the equipment and sound connections, show content and trouble shoot any difficulties that arise. Often new people are involved, which makes it difficult to establish fixed routines. The shifting staff include both volunteers for whom this work is leisure and others who are paid to perform this work, i.e. semi-professions attempting to make a living through their Second Life activities. The level of commitment thus varies greatly. Claus explains that, on the one hand, experience makes it difficult to depend on volunteers, while at the same time it is their participation, enthusiasm, and the shared sense of responsibility that also drives the project and events forward.

The founder Claus stated this in the following way: "It is always really stressful up till a show starts because something always goes wrong." The many technologies involved in this set-up do not work in and of themselves but depend upon adjustments, adaptations and continuous tinkering (Møl et.al., 2010). The preparation and execution of a show is characterized by troubleshooting, breakdowns and work-arounds. Sometimes the Internet connection of an important location/avatar goes down, Skype might "act up" and contacts do not show up as they
should, sometimes applications or entire laptops freeze and block a persons participation and, perhaps crucial, contribution. The Second Life application itself, due to the maintenance work performed on the Linden Lab servers, also frequently gives uneven and abbreviated experiences of not being able to see other avatars and objects, animations going gaining their own life, or not being able to teleport or move to a desired location. In spite of the continuous flow of hurdles, "there are always possibilities to fall back on" as Claus explains. Only one show has actually been cancelled in the history of PAL. Lastly, the geographical distribution and time-differences add to this set up of shifting, yet continuous flow of complications. For example, a person involved may not be able to be contacted the time agreed and those waiting on the other end are in the dark as to whether this person has slept through the alarm (it might be still be the middle of the night in Australia) or whether there is a technical issue with the person’s connection.

In sum these practices - practices that create presence - can be characterized by very few routines and heterogeneity. There is very little explanation of "how we usually do it" and much more ad hoc, here and now connecting and problem solving. They shift between a range of coordinating mechanisms (Schmidt and Simone, 1996) such as email, skype, and a central chat site. A range of very diverse technologies, people, locations are thus in play. Lastly, there seems to be no center or overall control. Even decision-making about for example "what to do next" in a critical situation is negotiated ad hoc between the people available.

Presence as fluctuating assemblage

The concept of assemblage denotes the coming together of various technological features, applications, platforms, infrastructures, people and competencies, routines and experience, visions, desires - in short heterogeneous and disparate entities that are brought into relations, or assemblages. Derrida (1978) applies the term assemblage to understand the production of meaning (of tests) as a neverending combination of elements and practices that are continually reshuffled together to produce new effects. The term assemblage her is an endless weaving together, an interlacing of many different elements (of texts, but also of people, objects, resources) that form different temporary collage constellations of meaning. The notion of assemblage has also been used analytically in exploring the relationship between technology and practice, as in the work of Suchman, Trigg and Blomberg (2002). These authors explore how a new digital work system (for an engineering bridge project work) is designed through ongoing practices of assembly, demonstration and performance. Assembly refers to the continual linking up of a technological prototype to contingent local circumstances. "Like any technology, the prototype does not work on its own, but as part of a dynamic assemblage of
interests, fantasies and practical actions, out of which new socio-material arrangements evolve." (Suchman et.al., 2002, p.175) Lastly the concept is often used in studies inspired by actor-network theory as a conception that better designates the continual flow of translations than networks (Deleuze and Guattari, 1987; Latour 2005; Law 2002). The concept conveys the impossibility of making a clear distinction between signs and objects, the discursive and the material. Assemblage is a way of looking at sociotechnical phenomenon such as virtual worlds, as a collage collection, a jumbling together of technological parts and pieces, artefacts, people, competencies, ideas, visions and so forth. The concept works to describe how the bringing together of such heterogeneous elements produce particular effects.

The concept of assemblage helps understand some of the flux and transience of presence. The PAL practices, in which presence is envisioned, also involve the painstaking efforts to create it. Through extensive and time-consuming technological preparations and tinkering, presence is made available for the concert audience to experience. Likewise the audience must be conditioned into place, have a certain amount of experience with both the technology and the community, in order to 'take on' presence. Presence is tinkered into place through the alignment of an extensive assemblage of people and technologies. Parts of this assemblage are only loosely connected and aligned. The assemblage is also in flux as elements can be added, substituted when necessary.

This view compliments existing literature in proposing that presence not only can be analyzed as a characteristic of virtual worlds, but might also be understood as something that is assembled in practice, in specific moments and places. It cannot be attributed to the technology (immediacy), to the social realm (sociability), nor the individual experience (fantasy), but seems to require the coming together of elements from all of these realms.

Conclusion

Other studies of virtual worlds such as *EverQuest* (Taylor 2009) and *Habbo Hotel* (Johnson et.al., 2010) have similarly pointed towards understanding virtual worlds in these terms of emergence. Taylor (2009) describes the very artifact Everquest as something which character can not be settled in advance, but better be understood as continually changing and evolving through the practices of designers, legal and marketing departments, a wide range of differing players as well as the materialities involved. Johnson et. al. (2010) likewise present a longitudinal and multi-sited approach to the study of *Habbo Hotel*. This work focuses on how many different actors mingle in continually constructing and constituting a virtual world and its
infrastructure. Their work also stresses the need for studying both development and use practices, being on "both ends" of the complex user-producer relationship (Johnson et al., 2010, p.47). In a study of Second Life, Malaby and Burke (2009) also highlights the need for understanding process, contingency and open-endedness when studying emergent phenomenon such as virtual worlds.

Following these authors this paper has looked to one aspect of virtual worlds, presence, and how it comes into being both through the material/digital, through the social, and through the imaginative. The object of study is not the IT platform that might provide opportunities for presence, nor the human actors that might experience presence, but what happens when they come together to create events of presence. Following Giddings, the event is a coming together of a media-cultural practice, human subjects, and a set of technologies (Giddings, 2009, p.149). In this way the paper has suggested that the very object of study is perhaps better understood as an event than as an object.

The paper has analyzed, firstly, the appearances of presence in interviews and, secondly, the appearance of presence in a concert situation. In this paper the concepts of event, imaginary and assemblage provide a new perspective from which to comprehend the ongoing process through which presence comes into being. The concepts are proposed as descriptive tools and sensitizing mechanisms in contrast to definitive concepts (Blumer, 1954). A sensitizing concept does not have a precise specification and does not allow us to move directly to and from an instance and its relevant content. Blumer (1954) advocates how sensitizing concepts provide us with a general sense of reference and guidance in approaching empirical situations: "Whereas definitive concepts provide prescriptions of that to see, sensitizing concepts mere suggest directions along which to look... they rest on a general sense of what is relevant"(p 7)

The concept of imaginaire seek to sensitize the task of understanding presence as an object closely linked to an imaginary and desireable future - "what is" is inseparable from the dream of "what will be". The concept of assemblage seeks to sensitize the task of understanding presence as an emergent effect. Presence may better be understood as an effect of virtual world practices than as a characteristic of the technology, the community of the individual imagination. The assemblage of elements from all of these realms creates presence, as an effect, that appears in one situation and may disappear in the next.
Sensitizing research to emergence, process and flux

In conclusion, this paper puts forth a set of analytical strategies. The principles are proposed as an analytical resource for sensitizing research to the situated practices and events of which virtual worlds are part and parcel. The approach suggested refrains from starting with a fixed definition of the object of study (e.g. presence in virtual worlds), but instead starts with practices, situations, and events in which the object of study appears, asking openly what occurs and what emerges. (Here, the literature can be thought of as a site or practice in which the object also appears.)

This implies:

- Always understanding emergent phenomena through the specific settings, situations, and relations in which phenomena such as virtual worlds or presence are made to work and brought into being
- Applying and developing analytical concepts that may sensitize research to the imaginary, the future (and the past) as part of the present
- Applying and developing concepts that may sensitize research to the distributed and assembled
- Paying special attention to materiality and continual redistributions of agencies

These analytical strategies are suggested to be particularly fruitful when studying a phenomenon that can only really be addressed by bringing together the many heterogeneous participants and parts involved. The strategies highlight the way in which presence, as well as virtual worlds as phenomenon, continually comes into being as an emergent effect of a set of more or less related practices.

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