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# Augmented Focus Groups: On Leveraging the Peculiarities of Online Virtual Worlds when Conducting In-World Focus Groups

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## Abstract

Increasingly, academic researchers and practitioners have been using online 3D virtual worlds such as Second Life (SL) to conduct focus groups. When doing so, researchers and practitioners have copied and pasted as is, in this new environment, the qualitative methodologies commonly used in real-world focus groups. However, the relevance of using standard focus group methodologies within an online virtual environment has been neither tested, nor the focus of previous research. In addition, online virtual worlds may offer new methodological opportunities that, so far, have been left unexplored. To fill in this methodological gap, the authors have moderated various focus groups in Second Life. When doing so, they tested the limitations inherent to using real-world protocols in an online virtual environment. During the course of this project, it became clear that the usual focus group protocols should be adapted to the peculiar context, if one wants to fully leverage this new medium. As a result, new online qualitative methodologies (e.g., 3D collages) were developed and tested during this research project.

**Keywords:** Virtual worlds, Second life, Focus groups, Collages, Qualitative methodologies

## 1 Introduction

Over the past few years, online virtual worlds have attracted a growing number of users. One such virtual world, *Second Life*, is a platform that may offer a glimpse at what may become the 3D Internet of the future. *Second Life* has experienced some significant corporate presence, with companies such as Adidas, Coca-Cola, and IBM investing in virtual stores, headquarters, and meeting places *in-world* (i.e., in virtual places located in *Second Life*). The similarities between *in-world* and *real-world* activities are such that numerous businesses are using *Second Life* to unearth opportunities. One such opportunity is qualitative data collection, for instance via virtual focus groups. Conducting focus groups *in-world*, instead of in a physical setting, offers significant advantages in terms of both cost and time: in *Second Life*, compensations given to focus group participants rarely exceed U.S.\$15 per hour; and being able to connect online for a focus group cuts on travel expenses.

Even though there are some real upsides to doing research in *Second Life*, it is potentially problematic to assume that traditional focus group methodologies can be applied in the same fashion to a virtual world environment. However, in previous research *real-world* methodologies have been used in a virtual context without much consideration being given to the relevancy of such methodological borrowing [7], [12], [22], [23], [31], [33]. This shortcoming may be due to the fact that many have considered online virtual worlds as some kind of *parallel worlds*: some have even advised researchers to treat *Second Life*'s avatars as actual persons, with actual feelings, wants and needs [12]. Even the brand name *Second Life* is emblematic of the assumed similarities between the users' first life in the *real world*, and their avatar-mediated other life in a virtual world.

The purpose of this paper is to determine whether traditional focus group methodologies are valid research approaches in an online 3D environment; and if they are not, to offer new focus group protocols that may help leverage the true potentials of this new medium. The significance of this paper is twofold. Firstly, with the growing importance of online environments in general, and more particularly of virtual worlds, the topic of conducting focus groups in this type of medium is quite timely. Secondly, the value of this project stems from its innovative comparison between traditional qualitative techniques and others specially designed to fit the characteristics of virtual worlds.

The remainder of this article proceeds as follows: after a quick reminder of standard focus groups' purposes and methodologies, a presentation of online virtual worlds will ensue. It will be followed by a review of the types of focus groups that have previously been conducted in online virtual worlds. The methodology of the current project will then be introduced, and will include a thorough description of the protocols that were adopted by the authors when conducting *in-world* focus groups. Each description will be followed by an analysis of the data collected *in-world*. Finally, the discussion and conclusion section will focus on the potential advantages of the proposed new focus group methodologies.

## 2 Focus Groups: A Review

At the heart of most methodologies is a given research paradigm that guides a researcher's operationalization of his/her data collection, as well as how data will be interpreted and reported. The qualitative paradigm assumes that reality is subjective, and that researchers necessarily interact with that being researched [11]. As part of the qualitative paradigm, focus groups give purpose to evolving decisions in an inductive process [17]. For practitioners, focus groups can be a valuable marketing resource, allowing companies to understand how potential customers perceive their product or service. Traditionally, focus groups have been used as a feedback mechanism to assess perceptions, opinions, beliefs and attitudes towards certain products or services. Such feedback is collected through verbal exchanges, but also by observing the participants' nonverbal reactions and interactions (body language) with the new product or service, and with other participants.

The broad umbrella of *focus groups* includes the processes of two-way focus groups (in which a second group watches a first group answer the focus group questions, which may open up more subsequent discussions within the second group); dual-moderator focus groups (in which the presence of two moderators will ensure a more productive session, by making sure the discussion will not veer away from the main point); dueling-moderator focus groups (with two moderators playing devil's advocate with each other, to facilitate the generation of new ideas and of a true debate); respondent-moderator focus groups (in which subsequent participants take on the moderator role); and teleconference groups (focus groups taking place on the web) [21]. Focus groups suffer from some challenges, such as the *one-shot case study* criticism [24]. Their external validity has also been questioned [5]. Rushkoff [27] argues that focus groups are often useless because of the aim-to-please effect, citing examples of New Coke and Ford Focus. Even though they are not immune to criticism, focus groups can produce a run-on effect, as well as provide additional insights or new ideas [18] that could not be generated via other types of research methodologies. Focus groups also provide an environment where isolation is reduced and validation and disclosure are encouraged [32]. This, however, may not be true for teleconference groups, as teleconference participants are not able to read each other's body languages, which significantly limits social interactions.

Hollander [14] points to the social context conundrum that is often forgotten by researchers and the significant impact

that such social context can have on focus groups. For example, given that a gamut of reasons that exists to either value or discount focus groups as a useful methodology, the underlying question is whether or not participants share their *true* thoughts and beliefs in the discussions. Two critical concerns are those of problematic silence (not sharing relevant experiences) and problematic speech (shared opinions and information that do not represent underlying beliefs). Both problematic silence and problematic speech are factors potentially hindering the *true* thoughts of the participants and the quality of the data collected during a focus group.

### 3 Online Virtual Worlds: A Review

In this section, we will first present online virtual worlds, before reviewing the types of qualitative research projects that have been conducted in an online virtual world. The section will conclude with the three specific research questions that were formulated before the authors started their fieldwork.

#### 3.1 Online Virtual Worlds

3D virtual worlds are Massively Multiplayer Online Games (MMOG) replicating a three-dimensional space, in which the user is represented by a 3D avatar [7]. Users can navigate through virtual space via their avatars, and meet other in-world users whose avatars are exploring the same virtual space at the same time. Those virtual worlds are called *persistent*, because they remain in place even when a user disconnects from the software running the game on his/her computer (technically speaking, the virtual landscape that can be explored is stored on the service provider's servers). There are two categories of online virtual worlds: game-oriented virtual worlds, in which users are expected to follow some specific rules to climb in the game's hierarchy (e.g., World of Warcraft); and freeform virtual worlds, in which users do not have predetermined goals to take into consideration, and where they often can create 3D objects, avatar forms or virtual clothing of their choosing. Hence freeform games bear many similarities with economies that operate in the *real world* [10]. For example, in Second Life (Figure 1) there are many infrastructure support functions being offered that help stimulate creativity, innovation and entrepreneurship. Users of that virtual environment can design goods that can be sold within the 3D platform. Furthermore, physical medium and intellectual property rights are protected, and the money an individual or business makes (in a currency called the Linden dollar) can be exchanged for U.S. currency, at an exchange rate of approximately one U.S. dollar for 250 Linden Dollars [28].

In total, virtual economies produce in excess of \$6B annually [6] across the 300+ virtual worlds in existence. For this reason, it would be remiss to render these platforms a whim rather than transformational technologies [35]. Various businesses operating in *real-world* marketplaces have heralded virtual worlds as the newest channel for brand building [2], [22]. Some Fortune 500 employers resorted to Second Life to deal with the orientation, engagement and training of employees [1]. As an illustration, IBM has used this new medium extensively to organize in-world conferences, which allowed the company to foster collaboration between IBM employees from different countries at a fraction of the cost of *real-world* conferences [26]. Another Fortune 500 example is that of Proctor and Gamble, who has leveraged virtual platforms for product concept testing [7].



Figure 1: Screenshot of *Orientation Island* in second life

From an educational standpoint, over 170 accredited educational institutions are operating in Second Life [16]. Harvard and INSEAD, among other universities, have started a process of developing a virtual world for their students as a learning tool [8]. Other universities have used Second Life as a cost-effective simulation of the real

marketplace (e.g., asking business students to generate revenue through the in-world economy by leveraging *real-world* business theories and principles [34]). Making money is encouraged in Second Life, through entrepreneurship and new venture creation. There are 10,000 nascent entrepreneurs in Second Life, ranging in age from 16 to 65, spending on average between 5 and 35 hours per week online, and coming from various *real-world* professions, including homemakers, students, lawyers, doctors, accountants, academics, and architects [9].

Even though the popularity of Second Life has plateaued in recent years, the fact that its software, OpenSim, became open-source in 2007 has generated the creation of dozens of other online virtual worlds (e.g., OSGrid). However, assimilating into the virtual environment brings with it some challenges for the individual and the firm: like any new technology, it is not straightforward in application. As a result, companies like Mercedes, Dell and Nokia have struggled to maximize returns from this medium [2]. In addition, what makes this new environment rather complex to comprehend is the fact that different groups of users have developed their own in-world culture, and have different reasons for being involved, among which: education, entertainment, mere escape from the *real world*, or artistic/self-expressive reasons [2].

### 3.2 Qualitative Research in Virtual Worlds: A Review

In recent years, it has become common practice to conduct research in online virtual environments as if they were parallel worlds (e.g., [7], [12], [22], [23], [31], [33]). Hine notes that, if "contrary to previous doubts, effective qualitative research relationships can be forged online, it does not come without challenges or limitations" [13] p. 19. This is also true when the online context is in 3D. For any qualitative researcher striving to collect in-depth qualitative data in-world, a major methodological issue stems from the fact that the avatars' owners remain invisible. While some research questions can be answered within the virtual world through avatar-to-avatar interactions, others would require moving research relationships from an online to an offline context. However, few Second Life users are willing to disclose, while in-world, their other online and offline activities. Anthropologist Tom Boellstorff [3] had to face this very issue during his fieldwork in a virtual world: "my fundamental methodological concern was to conduct research entirely inside Second Life. However, I soon recognized [during the fieldwork] that, for many residents, 'entirely inside Second Life' included participation in a range of websites external to the Second Life program" [3] p. 198.

Despite those limitations, some researchers managed to successfully conduct research entirely in a virtual world. For instance, using Second Life, Moon and Kim [20] were able to extend and empirically validate the Technology Acceptance Model in an online 3D context. Guo and Barnes [10] also successfully conducted in-world focus groups with 24 participants, selected according to demographic and experiential characteristics. However, as acknowledged by the authors, more than focus groups per se, those were "group interviews (...) selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research" (p. 80). That is, the only qualitative data collected in those focus groups consisted in the mere verbal exchanges taking place between the participants and the moderators. In the same vein, Parmentier and Rolland [25] recognize that, in an online 3D context, "the absence of paraverbal dimensions (intonation and accentuation) and nonverbal dimensions (gestures, facial expressions, distance between speakers) can work against the researcher during the interview in terms of message interpretation. He or she has only the basis of the conversation's rhythm, emoticons, style changes and text content on which to carry out the interview" [25] p. 48. As a result, can those in-world focus groups still be called focus groups?

At the same time, the level of anonymity preserved in a virtual world context also has its advantages. For instance, Broitman [4] mentions, "an online 3D focus experience provides a natural setting, where consumers can speak with a greater degree of candor [than in a *real-world* context]; there is a greater visceral connection between people in virtual worlds than through other forms of interactive media such as the telephone or the 2D web." However, other researchers have found it difficult to stay on-topic in a virtual world environment where the 3D avatars can easily teleport themselves in and out of the focus group room [29]. On a more positive note, the same researchers' experience in Second Life led to the belief that 3D *community virtual chats*, as they call them, when compared with regular, 2D text exchanges, improve the participants' self-presentation, because the context in which the exchanges take place is visually much richer.

What is common to all the above-mentioned attempts at conducting qualitative research is Second Life is the fact that *real-world* focus group methodologies have just been copied and pasted into the new medium. The 3D platform has only been used as an ersatz of the *real world*, with no attempt ever made at capitalizing on the specificities of the new environment. To remedy this shortcoming, the main objective of the current project's fieldwork was to try to leverage the technical possibilities offered in Second Life.

To summarize what has just been said and offer a transition to the next section (presentation of the methodology and analysis of the focus groups conducted in Second Life), the three research questions that were formulated before the authors started their fieldwork were as follows:

RQ1: Are standard focus group protocols valid and reliable protocols to collect qualitative information in a virtual world such as Second Life?



RQ<sub>2</sub>: Is Second Life transparent enough to allow for fully meaningful interactions with participants (where *transparent* is defined as emotional, cognitive or behavioral isomorphism between the user behind his/her computer, and his/her in-world representation – i.e., his/her avatar)?

RQ<sub>3</sub>: Are all possibilities offered by this new medium being fully leveraged when one uses standard (*real-world*) focus group protocols to conduct focus groups in-world?

## 4 Methodology and Analysis

In this section, the authors will first describe the first fieldwork that was conducted for this projet. The presentation will be followed immediately by the analysis of that first phase. The second phase of the fieldwork, during which new focus groups methodologies were tested, will then be presented. This section will conclude with an analysis of Phase 2 of the fieldwork.

### 4.1 Fieldwork for Phase 1

Prior to conducting qualitative research in-world, the authors were well versed on *real-world* focus group methodologies (one of the authors is a former market research practitioner). In addition, both authors had acquired significant experience with virtual worlds (both of the authors had had an account in Second Life for more than two years). One of the authors owned a 65,000-square meter virtual island, on which he had created a business in-world, selling avatar shapes and various other items. One of the authors also participated in various marketing campaigns within this virtual world in the two years preceding the fieldwork, which allowed him to acquire a rather exhaustive knowledge of the medium.

The fieldwork took place in two different phases. During Phase 1, the authors strived to acquire knowledge on how focus groups were usually conducted in-world, then moderated their own focus groups using the methodologies adopted by all market research practitioners with a business presence in Second Life. During that first phase of the fieldwork, the authors worked closely with Repères, a market research company with a significant presence in-world. Repères shared its expertise and experience with the authors, especially during the recruitment phases. Also, the authors discussed with Repères' personnel their experience with in-world focus groups. The very first focus group of Phase 1 was conducted on Repères' virtual land in Second Life. Overall, five focus groups were conducted in Second Life during Phase 1, with a total of 31 participants. As they adopted the standard focus group methodologies for in-world focus groups, the authors chose to have a low number of participants for each of the focus groups (six or seven). The participants were recruited either directly by Repères itself, or by advertising the event one week in advance on Second Life's online *coming events* website. Efforts were made by the authors to adopt a strict protocol while conducting the in-world focus groups (e.g., consent forms were sent to the participants prior to each focus group; the participants were briefed on the researchers' *real-world* background; and a focus group guide was developed by the researchers prior to each session). To qualify as a participant, the owner of an avatar had to have an in-world experience of at least two months (this is public information, and can easily be accessed by checking the avatar's profile in Second Life). Most of the participants had been in Second Life for much longer than the required two months of tenure. All the participants were asked to provide, at the beginning of the focus groups, some basic demographic information (e.g., participant's *real-world* age, their avatar's in-world age, and the average number of hours they spent in Second Life in an average month).

Most individuals who have visited Second Life know that the learning curve is rather steep in this environment: knowing how to navigate in-world with one's avatar, learning how to juggle between text messages (appearing at the bottom of the screen... but sometimes for a very brief – too brief - moment if the system is not set up the right way) and instant messages, or acquiring the skills to take pictures from different angles during an event takes time. When, on the top of this, a strict protocol has to be respected (e.g., sending consent cards to all participants at the beginning of a focus group, then obtaining their consent in return and in an orderly fashion), the task quickly becomes challenging. In this regard, the first two focus groups that were conducted can be considered mere trials during which the authors learned a lot from both Repères and the first participants. As the quality of the data collected during these two first focus groups did not seem to be negatively affected by the learning curved experienced by the authors, those data were kept for the subsequent analysis. However, those two focus groups were atypical for two reasons: the very first one was significantly longer than average (due to the newness of the experience to the authors), and the second one was conducted, not via *text chat* (that is, with the exchanges taking place via texts typed by the participants on their keyboard and appearing at the bottom of the screen of the other parties), but rather via *voice chat* (that is, all the participants could hear via their PC's speakers what the other participants were saying in their PC's microphone). At first sight, the *voice chat* option was rather appealing, as it seemed to instill a more naturalistic (and straightforward) aspect into the focus groups. However the attempt was quickly abandoned, due to the limitations of the technology: setting up the sound level revealed to be challenging for most of the participants; and even when the participants were audible during the focus groups, the audio recording of the conversation was not always exploitable (sound level too low). With other respondents, the sound level was too high, resulting in a permanent echo that polluted both the atmosphere of the focus group and the quality of the collected data. As a result, for the subsequent focus groups the authors resorted to using exclusively the *text chat* option. Another, significant advantage of *text chats* is the fact that the ongoing conversation can be saved

automatically by the Second Life's software, resulting in automatic transcriptions of the exchange. Not only does this save some valuable time, but it also means that the authors can look at and comment on the transcript of a focus groups right after that focus group is over (instead of having to wait until a transcription is done to start analyzing the data). Given that the first two focus groups could be considered *trials*, three additional focus groups were conducted during Phase 1, in order to fully identify the limitations of standard focus group methodologies when applied to a virtual world environment.

Various topics were addressed during the focus groups of Phase 1. To facilitate the recruiting phase, all of the topics were related to Second Life, as most of Second Life users enjoy discussing a medium they have grown fond of. In contrast, some users (sometimes referred to as the *immersionists* [30]) particularly dislike seeing brought into their virtual world *real-world* topics. Hence the choice of the topics of discussion was aimed at minimizing any bias in the recruitment of the participants. The chosen topics covered a wide range of issues: the participants' motives for using Second Life; the importance given by the participants to their avatar's appearance in-world; the importance of keeping their *real-world* and in-world personae separate; the future they envisioned for this type of 3D technology; and their feelings toward the presence of corporations in Second Life. To thank them for their contribution, each of the participants received L\$2,000. Table 1 gives more details on the typology of the participants (for both Phase 1 of the fieldwork, and Phase 2, to be described in section 4.3).

Table 1: Typology of the participants to phase 1 and phase 2

Focus Group #	# of Participants	Main Topics Covered	Length of the Focus Group	Average Tenure in Second Life of the Participants	Real-World Ages of the Participants
1 of Phase 1	6	Main motives for using SL, multitasking, identities in SL, social life in SL	120 mns	2 yrs & 4 months	N/A
2 of Phase 1	6	Main motives for using SL and staying there, embodiment in SL	67 mns	N/A	N/A
3 of Phase 1	7	Main motives for using SL, identities in SL, transparency of the medium	78mns	10 months	22 to 48
4 of Phase 1	6	Immersion, break in presence, social life in SL, presence of real-world companies in SL	83 mns	1 yr & 11 months	19 to 33
5 of Phase 1	6	The future of virtual worlds	67 mns	1 yr & 7 months	20 to 54
1 of Phase 2	6	"Summarize [with objects] what Second Life is for you"	70 mns	3 yrs & 6 months	26 to 44
2 of Phase 2	7	"Build an object that summarizes what the company Apple means to you"	90 mns	4 yrs & 2 months	23 to 36

## 4.2 Analysis of Phase 1

For this analysis, the authors took advantage of Second Life's capacity to automatically log a text file of any ongoing conversation, taking place in world. As a result, it was possible for the authors to print, right after each focus group, a transcript of the exchanges that had just taken place. This allowed the authors to follow each focus group with a debriefing during which the main findings were identified and compared with the results of the previous focus groups. In itself, this capacity to gain immediate access to the collected data constitutes a significant advantage in Second Life, when compared with standard focus group protocols in the *real world* (for which a manual transcription of the data may take time). Beside those post-focus group debriefings, the collected data was later accessed at several other occasions, particularly prior to any subsequent focus group. The amount of information collected was analyzed one more time following the reviewers' first feedback on this paper, so that the first analysis could be enriched. In this regard, accessing the data after letting them *mature* for a few months was particularly useful: if having access to a transcript immediately after a focus group allowed the authors to identify findings while still in the momentum, reviewing the same transcript with a fresh-eyed view allowed them to better pinpoint specific patterns across all of the collected data.

If the motives for being in Second Life varied from one Participant to the next, most of them acknowledged the importance of the social aspect of Second Life. As mentioned in some of the following comments gathered across the five focus groups, some of the participants might not have understood, upon joining Second Life, the central role of sociality in this virtual world. However, it is quite often this very aspect of the medium that made them stay *there* in the long run:

Participant 1: At first I thought [Second Life] was quite lame and pretentious, but then I met a good friend in the hub area who showed me around and I discovered there interesting social facets.

Participant 2: I was looking for a place to build and in the process of discovering details [of SL] I was blindsided by the social aspect. I spent about a week after trying SL in a stupor... amazed by the possibilities.

Participant 3: I come here mainly for social interaction because I'm very shy in real life, so SL allows me to talk to other people without feeling the anxiety I do in real life. I've met a few people here that I consider very close friends.

Participant 4: I am here to meet people from all over the world (...) to learn languages better. Communicating is my passion.

Participant 5: I don't think SL is a game... for me it's an interface to the rest of the world.

Participant 6: [In SL] I love to meet people, open my horizon, and get knowledge, new ideas... these are all RL [real life] things, so to me there is not much difference between SL and RL.

For the past four years, many articles have announced the demise of Second Life. Despite of this, and the reality of Second Life's ongoing struggle to attract and retain new customers, the virtual world has managed to keep its concurrency (i.e., number of users logged in at a given time) rather stable. This might be explained by the rather addictive aspect of the medium. Once a user has been in Second Life for a few months (which was one of the prerequisites to participate in the focus groups), s/he is *hooked*, quite aware of this state of affair, and unapologetic about it. This augurs well for researchers willing to conduct longitudinal studies in the medium (e.g., use of panels). The following conversation, captured during one of the focus groups, is emblematic of the users' extreme adoption of the medium:

Moderator: How many hours do you spend in SL, on a weekly basis?

Participant 5: I spend in SL more time than in my RL lol ^^

Participant 7: How many hours are there in a whole week?

Participant 16: I spend over 30 hrs. Per week. God it's 1/4 of my day ahaha

Participant 5: I stay around 18 hrs per day lol.

Participant 4: 10 hours per day every day. Logging off is traumatic!

Participant 6: 5 to 10 hours for me :D

Participant 5: Well 16 hrs sometimes...

Participant 7: OK I remember now! I had to log off yesterday because of the maintenance service. Usually I never log off, even when I sleep in RL.

Moderator: That's interesting, [Participant 7]... Why do you keep your avatar "on" at night?

Participant 7: There are many reasons. One is that I keep my computer on anyway all the time, another [is that] I don't want to lose anything that happened there (instant messages or other notices).

Participant 4: Same thing here, my PC is always on... I also do my RL work on the PC with internet... I multitask all day.

Some users acknowledge (with a certain level of pride) a certain level of addiction to the medium. However, some others do not consider themselves more addicted to Second Life than to breathing, eating, or any other natural functions:

Participant 6: I got addicted to SL before... actually a lot of friends of mine had this issue. I stay in SL because I have friends and I can create.

Participant 7: You could just as well say I am addicted to my RL. The difference is I can't log off from RL, sadly enough.

Despite the previously mentioned technical advantages offered by a virtual world like Second Life, and the easiness with which researchers can identify in-world *captive customers* (i.e., SL users with significant tenure unlikely to abandon the medium in the foreseeable future), the data collected during Phase 1 of the fieldwork were somewhat disappointing. In his fieldwork notes, one of the authors summarized the situation as follows: "During our last focus group, did we get anything more than a scrambled text chat session? The avatars were standing around me with their AO [animation override] switched on, and the only reliable data we could collect from them was their text messages. This is a long shot from the focus groups I used to conduct in a brick-and-mortar environment." Indeed, body language could be observed in-world, but was only the result of animation overrides worn by the avatars (in Second Life, an override is a software allowing an avatar to take postures such as walking, sitting, or any other behaviors mimicking *real-world* body language). Even when one is aware of the superfluous aspect of the gestures observed in-world, unconsciously drawing a parallel between the avatars' body language and the body language we all observe and practice in the *real world* is unavoidable. Consequently, having an avatar yawn or stretch during a focus group is potentially more than an anecdotic event: it can introduce some significant noise in the data collected. In an attempt to remedy the shortcomings of the first focus group, the subsequent in-world focus group was voice-enabled, and the avatars were asked to turn off their animation overrides. This new approach, however, did not solve all the methodological limitations. In particular, if voice intonations (e.g., sighs, laughs) became part of the collected data, the absence of observable body language was frustrating (with the animation overrides turned off, the avatars just stood still around the moderator). Anybody who has ever conducted focus groups knows that verbal interactions do not capture the gestalt of this type of empirical work: in an in-depth focus group, participants will not only share verbal information: they will also share non-verbal cues such as postures.

Compounding the issue is the fact that Second Life users rarely want total transparency between the *real world* and their virtual world, for different reasons. To begin with, as mentioned by the following focus group participant, multi-tasking may become a challenge if there was an exact user-avatar isomorphism in Second Life:



Participant 8: Transparency would stop you from multi-tasking. You would only be able to "do SL" at any moment that you were logged into SL. Eating, drinking, talking to someone else in your room... all impossible if SL is transparent.

In addition, total transparency would remove the layer of anonymity many SL users are looking for, as explained by the following focus group participant:

Participant 6: I think people want control over the transparency from moment to moment. If it were permanently transparent, it would be like having a spy camera at your desk. No one really wants that, even if they think so (...) I doubt anyone would use it if it were available. When you drink your coffee or scratch or whatever, who wants that transmitted into SL?

Participant 7: I don't use voice because it's too "real-world".

Participant 5: And guys who want to hide to be a girl in SL can't do it [with the voice chat system]

Participant 6: Refusing transparency doesn't mean being dishonest, by the way. Sometimes it's better to filter out some details while communicating. Hence people will often choose email or phone when RL meeting is possible (...) Dislike of transparency in communication is the reason video-phones never took off.

Also, total transparency between the *real world* and the virtual one would remove the layer of fantasy that attracts many people to Second Life:

Participant 1: There would be something quite unromantic about throwing your every RL detail on the table...

Participant 2: I love the fact that I'm really good friends with people I can't say for sure I know what sex they are! I love it. I think SL is a good method of teaching others to look beyond looks-sex-race-etc.

More than transparency, most of the participants were looking for augmentation, in-world, of their *real-world* actions – as well as new ways to act on the world:

Participant 9: transparency is fine, but it would limit creativity and exploration. Other ways of communicating that only a virtual world can offer.

Participant 6: Here you are sort of a super-being. You can TP [teleport], morph, use telekinesis, fly, and so on. Not possible if SL becomes "transparent" as you'd say...

Participant 10: To me, SL is not about recreating the "real" world, but creating a new world using the same framework and going beyond it... which is what I think SL can do.

It should be added that the notion of *transparency* can be interpreted in different ways. When using this term, the moderators of the focus groups originally meant to refer to the exact replication in-world of actions taken in the *real world* (i.e., total isomorphism between *real-world* body gestures and the ones enacted in-world via an avatar). Such transparency, as previously mentioned, is not being sought by the participants we met. However, transparency of *emotions* does matter to the Second Life users we met:

Participant 11: I don't expect the avatar and the human [behind the computer] to be the same gender, but I expect genuine emotion.

Participant 12: It took me a few years myself before I took [Second Life] a little more seriously. I had to get emotionally hurt to see it for what it is: human beings interacting with each other.

Participant 6: A lot of things can be virtual, but emotions are not... I think some people, they are married in RL and married with another girl/guy in SL... that's also like cheating.

Hence, if in Second Life a focus group moderator cannot expect to accurately observe the type of body language s/he would observe if face-to-face with the participants, the emotions expressed remain genuine. What should be determined though is the most appropriate methodology to observe and capture those expressions of real emotion in a virtual medium such as Second Life (this point will be addressed shortly).

Another finding from Phase 1 is that, in this new medium, interactions do not only take place between avatars, but also between avatars and objects, as exemplified in the following transcript from one of the focus groups we moderated:

Moderator: Are there enough places for everybody?

Object 01: Couldn't find sound fanfare.

Object 02 whispers: Thanks! 1 votes so far today.

Object 01: Couldn't find sound fanfare.

Seat 03: [Participant 13], say '/1 Hide' to hide me, or '/1 Show' to make me show. Or just right-click and sit on me to use me.

Object 02 whispers: Thanks! 1 votes so far today.

Coffee whispers: Ahhh! Fresh hot coffee

Participant 13: hello [moderator's name]

In an in-world focus group, interactions do not only take place between avatars: they also involve a seat, a coffee mug, a voting machine, or an object playing music. This fact may seem mundane at first sight, however it does add a new layer to the sociality taking place within the medium. Interestingly, some Second Life users get so much used to interacting with in-world objects that, at times, they find themselves inadvertently attempting to use the same modes of interactions in their everyday life (in the *real world*), as discussed by the participants in one of the focus groups:

Participant 14: I am not sure everybody does it, but myself I often find myself walking "real-world" streets and think like "hmm I wonder how many prims [primitive objects used to build in SL] is that" or how much Linden dollars would cost a rental of that boat.

Participant 14: I'm serious.

Participant 15: LOL

Participant 15: yes, I always want to right-click on real objects and see who is the owner of the things!

Participant 7: In fact I often subconsciously compare RL stores to those in SL.

More than a different type of interaction, in-world, between objects and subjects, we could speak of a deeper integration between the latter and the former: even more than in the *real world*, in a virtual world like Second Life (where creating objects of all shapes is rather easy) built objects become an *extension of the self*; a way to express oneself:

Participant 5: SL is such a great thing... It's something that is like part of our body :p

Participant 7: What makes me stay in SL is the simple relation between your actions and the results: building, rezzing, deleting stuff. That's why it's so addictive.

Participant 16: SL is like a chat box in 3D where you can visualize your emotions and interactions with objects, because you've got this huge creative possibility... unlike any other regular "game".

Participant 17: There are many different ways to communicate in SL, not just text and voice but visual art medium, music, etc... People should use what best allows them to express their message.

Participant 18: Let's say you made something with your hands. This thing you made gained a bit of your own soul. Or many people could make one object such as a car. Then the car has a new soul being the combination of all its creators... the same goes in SL when you build stuff.

Of all the *objects* one will encounter in Second Life, the one dearest to most Second Life users is one's avatar... or rather avatars, as it is not uncommon for a user to possess many of them. Users do not only project their own, *real-world* personality into the medium: it is rather a two-way process, through which actions and interactions taking place in-world can also modify the user's *real-world* lifestyle. The expressive and introspective dimension of avatars is obvious in the comments made by the following participants:

Participant 7: My main reason for being in SL is that I wanted to see how my avatar would evolve, to see where my character would lead me... to see if it becomes a copy of [real-life] me, or something entirely new.

Participant 16: It's so amazing that you can be different "me's" in SL :p

Participant 19: Furries like me are people that really want to be humanoid animals, they cannot in RL, So they express it here. Then there are the infants: kids trapped in adult body. They can be kids in SL.

Participants V: When you think of it, my avatar matters more than my RL body, because my avatar can live much longer than my RL self. And it looks like what I want it to look like (no aging).

Participant 4: I wanted to start all over... I did know so many of the original SL people, owners, designers... and I had a broken love affair [in SL]. So I totally changed my appearance in SL. A new avatar means new friends... new opportunities... I only use my first avatar when I want to contact old friends.

With Phase 1, we were able to determine that Second Life possesses two characteristics important to anybody willing to moderate focus groups in-world. Firstly, it is a medium where one can easily identify users who have significant experience with the medium, and are unlikely to cease to use it in the medium to long term. When it became necessary to contact a few Second Life users more than a year after a focus group to which they had participated had been conducted, replies to the in-world instant messages we sent to those users reached us very quickly, confirming the fact that the persons we had interviewed were still active in the medium (this was particularly handy, as we had forgotten to ask, during two focus groups, the *real-world* age of the participants). Secondly, Second Life is an environment where the social life and interactions with other *residents* are of paramount importance to the users. As a result, the authors did not encounter any difficulty in their recruitment efforts: social interactions are sought by most Second Life users. It should be noticed though that all of the topics we addressed during Phase 1 were SL-related, which certainly increased the response rate we enjoyed for our focus group announcements. Perhaps more importantly, during Phase 1 the expressive nature of an online virtual world like Second Life became clearer: the medium cannot be considered a *parallel world* in which focus groups using standard protocols could be conducted with avatars: avatars are not *parallel people*, but rather expressive augmentations of *real* people acting behind their keyboard. More specifically, there is no gestural isomorphism between a Second Life user and his/her impersonation in-world (not to mention that such impersonation can be

multiple, as many users own more than one avatar shape). However, a certain level of *transparency* does exist: emotions and opinions expressed in-world are *real*, hence worth collecting through qualitative studies.

For an outsider, Second Life may seem like a fantasy world; however those using it see it more as a way to augment their actions than a merely imaginary land through which their true personality, likes and emotions would not percolate. However, the *percolation process*, so to speak, had not been studied. We learned in Phase 1 that the subject/object dichotomy of the *real world* cannot be transposed into a virtual world like Second Life: just as people express themselves by designing and customizing their avatars to reflect different sides of their personality (in ways they cannot with their *real-world* embodiment), they leverage the easiness with which a user can create and interact with in-world objects to put to the fore new sides of their personality. As a result, many participants reported owning dozens, if not hundreds, of objects in their in-world inventories (some acquired in exchange for L\$ in virtual stores, and many others obtained as *freebies* – free objects provided by either Second Life itself, or other SL residents willing to share their creations).

Going back to two of the three hypothesis made in the introductory section of this paper, we can, in this partial conclusion, venture to say that (1) standard focus group protocols are valid and reliable protocols to collect qualitative information in SL; (2) Second Life is not transparent enough to allow for fully meaningful interactions with the participants, if one implies with *transparent* a notion of mere behavioral isomorphism between the *real world* and Second Life. However, as most of the interviewed participants saw Second Life as an augmentation of their *real life*, expressive means enabled by the new medium might be leveraged to collect valuable qualitative data. This is precisely what the authors tried to put into practice during Phase 2 of the fieldwork, in an attempt to validate or nullify the third hypothesis made at the beginning of this paper: “All possibilities offered by this new medium [in terms of qualitative research] are fully leveraged”.

### 4.3 Fieldwork for Phase 2

Phase 2 of the fieldwork was conducted a few months after Phase 1 was analyzed. The main objective, during this second phase, was to test new focus groups methodologies – methodologies that would fully exploit the technical possibilities of Second Life. To define those possible new focus group methodologies, the authors leveraged both their acquired experience with the medium, and the analysis conducted after Phase 1. As previously mentioned, standard focus group methodologies can broadly be defined as a feedback mechanism to assess perceptions, opinions, beliefs and attitudes. Qualitative data is collected through both verbal exchanges and observation of nonverbal reactions/interactions. However, as previously mentioned, Phase 1 had shown the limitations of generating verbal exchanges in-world. It had also turned out that body language could not be accurately observed in Second Life (the users having limited control over their avatars' movements). Consequently, the authors resorted to leveraging, during Phase 2, expressive means identified during Phase 1 as peculiar to Second Life. Those means are as follows: (1) users' ability to quickly alter their in-world bodily representation (as both avatar shapes and clothing can be purchased in Second Life – and most users own more than one avatar shape); (2) users' ability to quickly create rather complex objects of all sizes and shapes (the users can control the objects' texture, and the objects' movements through user-friendly *scripts*); and (3) users' propensity to quickly acquire a large number of items in their Second Life's *inventory*. Resorting to the first identified means of expression was deemed impractical. Of course, we might have asked the participants of a focus group to shape a new avatar from scratch (before starting the focus group with a sentence such as “Please create an avatar that looks like the average [name of a company]'s customer”). However there seems to be some reluctance from many SL users at abandoning their precisely crafted virtual embodiment to *wear* an anonymous avatar: giving up one's in-world representation may create social uneasiness. As an illustration, one of the authors is a 3D caricaturist who used to sell its creations in-world and who, during two of the focus groups, offered several of his caricavatars as *freebies* to the participants. Many of them were thankful and quickly stored their new acquisitions in their inventory; however none of them tried to *wear* those caricavatars, preferring to keep their in-world bodily representation more in tune with the way they wished to be socially perceived during the focus groups. This does not come as a surprise, given the importance given to the avatar in the creation of new *me's* (as discussed in the analysis of Phase 1).

Consequently, it was decided that only the two other identified means (ability to create objects, and ability to acquire virtual items) would be leveraged when conducting focus groups in Phase 2. Both of the focus groups conducted during Phase 2 took place on a 4,000 square meter-wide platform (see figure 2). The first focus group included six participants, the second focus group seven. All the participants were recruited via Second Life's *coming events* website. To qualify for the first focus group, Second Life users had to own at least 500 objects in their in-world inventory, and have at least 12 months of in-world experience. To qualify for the second focus group, the users had to be able to create, link and put textures on virtual objects. They were also required to have at least 12 months of in-world experience (as can be seen in Table 1, the average tenure of the participants attending Phase 2's focus groups was significantly higher than the required 12 months).

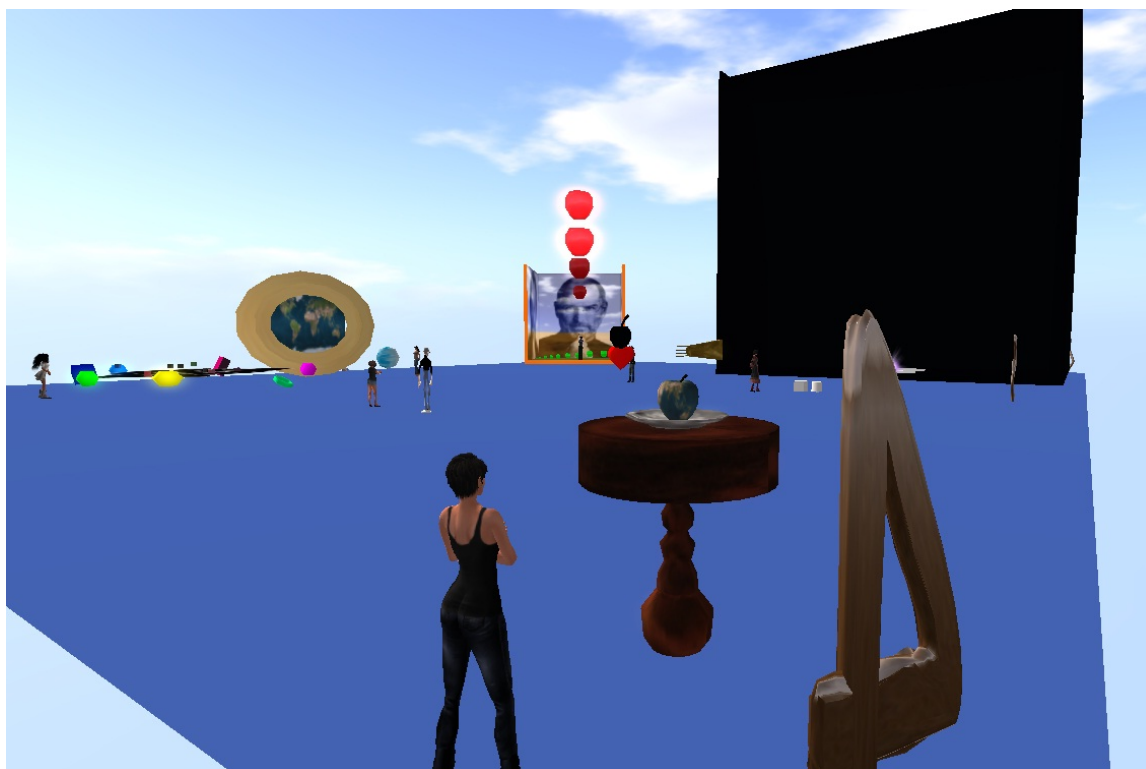


Figure 2: Platform on which phase 2 was conducted

The objective of the first focus group of Phase 2 was to test the ability to collect valuable qualitative data through the objects owned by the participants. After being quickly briefed on the purpose of the focus group, the participants were given the following instruction: "I would like you to SUMMARIZE WHAT SECOND LIFE IS FOR YOU, but not with words... instead, by selecting objects you have in your inventory that corresponds to what SL means to you. Each of you will have a little plot on this platform, so that you can drag-and-drop the objects you select from your in-world inventory." Each of the six participants were then assigned a different plot number, and were given twenty minutes to drag-and-drop, then arrange on their plot, the objects they had elected to choose in their inventory. Once the time allocated to this exercise (a sort of *3D collage*) had expired, all the participants were asked to regroup. The team then went from plot to plot, to interpret each of the six creations. In order to limit biases and elicit more conversations, those who had not created a specific set of objects were asked to comment on it first. Then the creator were asked to explain to the others the opinions and feelings s/he had tried to convey when displaying on his/her plot the various objects s/he had elected to drag-and-drop from his/her inventory. The entire focus group lasted 70 minutes.

The objective of the second focus group of Phase 2 was to test the ability to collect qualitative data via object creation: just like for the first focus group, each Participant was assigned to a plot, and asked to express one's opinions and feelings about a specific topic. However, this time the participants were asked to create an object from scratch. The exact instructions given to the seven participants read as follows: "I am going to ask you to build an object that symbolizes and summarizes what the company Apple means to you. You need to build that object; you can't just pick an existing one in your inventory. The object you will build can be as big or as small as you want, there are no limits (we have a big platform). I will give you 30 minutes to come up with your creation, a little bit more if need be. Once time's up, we all will go visit each plot, one after the other, so that we can comment on them, and hear from the creators what they meant to express with their creation." The entire focus group lasted close to 90 minutes. It should be noted that this last focus group was our first attempt at addressing a topic of discussion that was not SL-related. Given that most Second Life users are technology-literate, this did not impact negatively our recruitment efforts for the focus group. It remains to be seen if holding in-world focus groups addressing broader consumer behavior-related issues would lead, from the participants, to the same level of interest and engagement.

#### 4.4 Analysis of Phase 2

If the main objective of Phase 1 was to identify the flaws inherent to copying and pasting as is in a virtual world the standard, *real-world* focus group protocols, the main goal of Phase 2 was to test new methodologies. More specifically, during phase 2 a group of participants was asked to express their opinions and feelings by resorting to objects they already owned in their inventory; and another group of participants (during another focus group) was asked to create an object from scratch – an object that summarized and symbolized the participants' opinions and



The first benefit identified is that created objects (or objects dragged-and-dropped from inventories by the participants) help materialize in a virtual environment the participants' mental space. In the following example (see also figure 3), Participant 23 had dragged-and-dropped on the virtual platform a set of objects in which the other participants easily identified a chronological order – a sort of summarized autobiography of the creator in Second Life:

Participant 20: Oh nice summary, [Participant 23]!



Moderator: can the creator comment on what he meant to express?



Participant 29: The field with the blue sky in the background is where Apple began. The idea of Apple grew from a new (green) idea over time to the big mature (red) apple that it is today.

Participant 27: ahhhhhhh

Participant 29: And the apple's creator was Steve Jobs who had the vision (with the open field in the background) for the whole thing.

Moderator: and what about the sun at the top of it?

Participant 29: And it was a very bright idea - hence the sun dial at the top.

Participant 24: Oh and there's no top on the box. So it's a "blue sky".



Figure 4: Participant 29's creation

In the same vein, being able to give a *3D flesh* to his rather complex view on the different personae made possible in Second Life helped Participant 21 share with others his opinion on this topic (see figure 5):

Moderator: OK, so before [Participant 21] explains it all, who wants to try to interpret his work?

Participant 20: [Participant 21] spelled it out for us: SL is his place to connect with others and feel a sense of belonging!

Participant 30: All so connected, I love it.

Moderator: Why the big sign "NEEDED" above the people, [Participant 21]?

Participant 21: Well actually that's only above me, and it's big because [Second Life] is very important to me... but the main part is the thing behind me, with the stuff over the heads.

Participant 23: "Needed" is above it all as a reminder that we NEED to understand our multiplicity of identities.

Moderator: "Fake you" "conformist you" "real you", does it mean that we all are a little schizo in SL?

Participant 30: Very esoteric!

Participant 23: The mask you wear, the mask you conform with and the real you that rarely is pure...

Participant 21: OK, well "you" is you.... "real you", is a you that is the real you. The "inside you" the one no one sees. The other two are protection, and acceptance: "fake you" protects people getting close, or is used to break from your RL life. And "conformist you" is a way to follow others and make groups, following their rules, [getting] a feeling of acceptance.



Figure 5: Participant 21's creation

Another advantage of a richly scripted 3D medium like Second Life is that the participants can resort to not only visual, but also interactive means to express and share their opinions and feelings. In the following example (see also figure 6), Participant 28 created a musical object that required the other participants' active involvement to be fully understood (by walking on the display, the participants triggered various tones):

Participant 28: Please mute your stream, turn up sound effects and the main volume and put speakers on. Then walk on it one at a time.

Participant 24: The shapes are all encapsulated in darkness. Simple and immediately acute interaction design.

Participant 29: Nice clean tones! A simple, clean design that interacts with the world.

Participant 24: In a dark space so there is no ambiguity.

Participant 25: It means that Apple is fun. And interactive.

Participant 29: And depends on us all.

Moderator: [Participant 28], are we right in our interpretations?

Participant 28: I think they are all good views on Apple yes. I had one particular idea in mind, which is about perspective. Each of the outer circles gives you a different perspective on the center, the focus. They are all intervals which form a different feeling about the focus, they throw the focus into a different light, which is what I think is perhaps Apple's biggest achievement.

Participant 24: But it also banishes everything else OUT of the black box!

Participant 29: Apple products do not play well with non-Apple devices LOL



Figure 6: Participant 28's creation

When standard focus group protocols are used in Second Life, text-based chats often become hard to follow: contrary to a *real-world* focus group in which participants rarely speak simultaneously, in a text-based conversation the participants are often busy typing their answer while others' appear on the screen. This tends to break up the dynamics of the ongoing conversation. However, when the focus of the conversation is an object created by one of the participants, and when the other participants are explicitly asked to share their interpretation of that object, they tend to limit their exchange to a few words. The conversation becomes a guessing game, during which each participants strives to summarize one's interpretation in a few words. This can be observed in the following exchange (see also figure 7):

Moderator: alright, so who wants to comment on [Participant 31]'s creation, and what she meant to express about Apple? Then we will hear [Participant 31] after your comments.

Participant 29: I really like the globe on the Apple.

Participant 28: World dominance?

Participant 26: Apple eats everyone else.

Participant 24: It is ready to be sliced up and served on a platter.

Participant 26: On a pedestal even.

Participant 28: Environmental impact of technology?

Participant 24: Original sin?

Participant 29: It is global.

Moderator: [Participant 31], what do you think of the comments?

Participant 31: Close, very close, and interesting. For me, a recent Apple convert... Apple sorta puts the world on a platter. Ready to serve it up to everyone. Brings us all even closer than SL has.

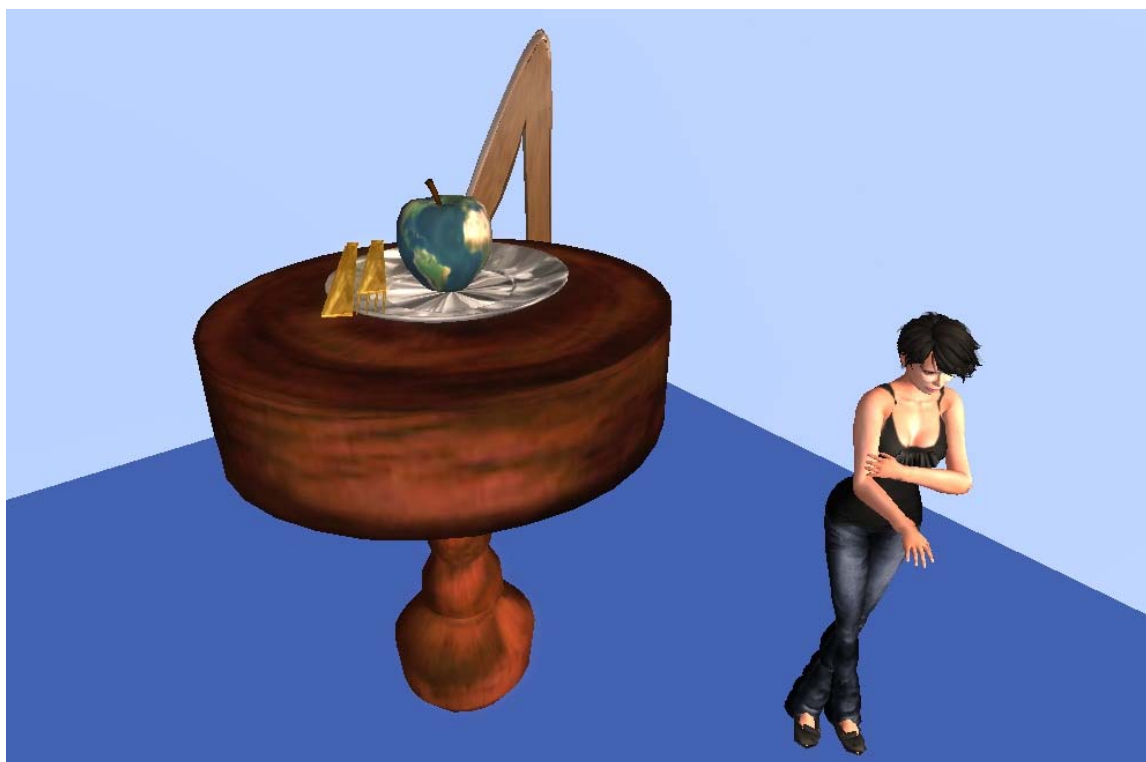


Figure 7: Participant 31's creation

As previously mentioned (during the analysis of Phase 1), one of the advantages of Second Life is that it preserves the anonymity of the participants. As a result, sensitive issues that might be hard to address face-to-face in the *real world* can be discussed more freely. However, some issues might be so sensitive that putting them into words can be challenging. Resorting to objects (created ones, or objects pulled from one's inventory) allows the participants to address sensitive issues in a less direct, in-your-face way. In the following example, Participant 32 was able to discuss the fact that *virtual sex* is an important part of his life without verbalizing it (this example is taken from the first focus group of Phase 2, in which the participants were asked to drag-and-drop on the platform objects that symbolized what Second Life meant to them):

Moderator: Let's see [Participant 32]'s plot now! So anybody wants to dare interpret this symbolization of SL?

Participant 20: A place to gather with friends. Its size and shape say secure, close and equal.

Moderator: I see that outside of the house, [Participant 32] also rezzed a sex toy collection. Anybody wants to dare an interpretation?

Participant 30: WHAT?

Participant 23: ~~ FAINTS ~~

Participant 20: Oh no... LOL

Likewise, Participant 22 might not have discussed as freely the importance to him of some of the relationships he developed in-world, if he had had to do it without a rich visual support (see figure 8):

Moderator: Let's go see [Participant 22]'s work. So who wants to give it a shot?

Participant 20: Friendship, love and contentment.

Participant 23: Look at [Participant 22]'s pictures...

Moderator: Who is Masch?

Participant 22: My little/big sister here in-world.

Participant 22: Wouldn't be anywhere near where I am today in SL without her. Masch is the person I met here when I was like 2 days old. She took me in, helped me figure things out, since the people that I came here with just kind of set me in and left me to the sharks, LOL

Participant 23: The lady with him is Mewlies.

Participant 22: Yup my baby Mewlies on my chest.

Participant 22: And then at least most of the family in the other.

Participant 20: Very sweet pic, [Participant 22].

Participant 21: One word for this: LOVE

Participant 32: That would do it.

Participant 22: friendship and family have always been things I've held in extremely high regard, whether online or RL. The one thing no one is allowed to do is mess with those that are important to me.





Figure 8: Participant 22's creation

Interestingly, when asked to pull from their inventory objects symbolizing what Second Life meant to them (during the first focus group of Phase 2), some participants did not resort to dragging-and-dropping on the platform, choosing instead to merely pick up in their inventory a script or animation override. In the following example, Participant 20 decided to wear a dancing script that best symbolized, from her point of view, what Second Life meant to her (see also figure 9):

Moderator: [Participant 20], any problem? I see that you haven't built anything yet.  
Participant 20: I'm keeping it simple ...no need to rez anything: doing my dance of joy, LOL



Figure 9: Participant 20's creation



## 5 Discussion and Conclusion

In this last section of the present article, the authors will extract the main results from the fieldwork that was conducted as part of this research endeavor. More specifically, the authors will suggest that new focus group methodologies be developed, so that proper qualitative research can be conducted in online virtual worlds. This section will end with a short review of the present research's limitations, and a call for further research in this area.

### 5.1 Discussion

This exploratory research was conducted in Second Life, to better understand whether virtual focus groups can be used to validly and reliably collect qualitative data. We started this endeavor with three research questions in mind: can standard focus group protocols be used to conduct focus groups in a virtual world like Second Life; are the qualitative researchers who have conducted focus groups in Second Life correct when they assume that the avatars representing their owners in-world can be treated as *real* participants (whose body language, opinions and emotions can be analyzed as they would be in a *real-world* focus group); and lastly, are there any new protocols to develop for virtual world focus groups that could leverage the technical possibilities offered by this new type of medium? The first focus groups conducted in-world (during Phase 1 of the fieldwork) led us to believe that, in this new medium, depth of the collected information is sacrificed when data is gathered using *real-world* focus group methodologies. Effectively, in-world focus groups conducted via standard, *real-world* focus group protocols are nothing more than an exercise in chatting. Using *real-world* focus group methodologies in-world may lead to ontological fallacies and invalid data: in a *real-world* focus group, participants engage in group-based interactions and expressions, with the main media for such exchanges being text (i.e., verbal exchange), but also the body (i.e., observable and interpretable participant body language). In contrast, in a virtual world the avatar's body is not a node for non-verbal exchanges, but rather a potential source of bias, as software called *animation overrides* are responsible for the observed avatar body movements. It remains true though that opinions and emotions observed in-world are not mere fantasies acted out by avatars that have no connections to their *owners* (i.e., the persons behind the keyboard): as mentioned by many participants, if embodiment is obviously virtual in an environment like Second Life, emotions remain *real*, and perhaps even more so than those expressed around a focus group table in the *real world*. Indeed, the anonymous aspect of Second Life (as the person behind the keyboard may chose not to disclose his/her real identity) allows for opinions and emotions (more particularly on sensitive topics) that would have been kept hidden in the *real world* to come to the fore. If this later point is good news, it does not seem to give a significant methodological advantage though to virtual focus groups, as 2D online chat rooms also allow qualitative researchers to conduct focus groups with anonymous participants.

However, Phase 2 of the fieldwork showed that some of the technical specificities of Second Life (e.g., rich object-avatar interactions/integrations) can be leveraged to conduct what we will call *augmented focus groups* (which validates our third research hypothesis): in a virtual world, the creation of an object in real time is a possibility, at no cost, and with few limitations on the nature (e.g., size, shape, texture) of the created object. Researchers and managers might want to use this new possibility to ask their in-world focus group participants to generate new, rich pieces of information: not mere verbal ones, but 3D, interactive ones. For instance, a moderator can ask the participants to create a virtual object representing their feelings toward a company, product or service being discussed. Alternatively, the moderator can ask the participants to choose in their in-world inventory a previously purchased object, or set of objects, representing their opinions and feelings.

We will address in the section following this one the empirical limitations of this project. The main potential limitation of this endeavor has to be addressed right here though (that is, before we discuss the significance of this research), and can be summarized in the following question: why should the reader (and all qualitative researchers for the matter) care about the findings of this study, given that it is very much Second Life-specific, at a time when even die-hard apostles of Second Life predict its demise [15]? Such question can be answered by trying to figure out the future of online virtual worlds. For the moment, no credible alternative to Second Life exists: all freeform virtual worlds using 3D are based on Second Life's open-source software, OpenSim. Consequently, the findings of the present study apply to all current freeform online virtual worlds using a 3D grid. The main caveat of the OpenSim software is that it throws some significant learning curve at anyone interested in the virtual experience: navigating in-world is not intuitive and requires a few hours of trials and errors. In addition, users cannot just log on the Internet and use a browser to access such virtual world: they have to download a software. Lastly, the use of such software requires the user to navigate in the virtual environment via a keyboard, which very much limits the level of behavioral transparency between the said user and its virtual incarnation. In the future, three different scenarios are possible. Firstly, virtual worlds may just die from their natural death: even though, as mentioned in the analysis of Phase 1, some users have become hardcore SL aficionados and would terribly miss this type of medium, the model may not end up being economically sound. Secondly, the *real world/virtual world* interface might improve significantly by borrowing from current technologies such as Wii, Kinect, or even body gloves. In such case, a much higher level of behavioral transparency between the two worlds will be achieved, at the expense of those users who wish to keep a certain level of opacity between their offline and online lives; as a greater degree of behavioral transparency would then be achieved, the findings of the present project might become obsolete. The authors tend to give preference to a third possible scenario: virtual worlds using a keyboard as their main interface will survive in the foreseeable future,

with or without the presence of Second Life. In fact, it is likely that Linden Lab's creation will gradually be replaced with standalone virtual worlds, all connected at will via a hypergrid: any internet user can already create, on one's computer (or even USB drive) a personal 3D world [19]. Being able to connect it seamlessly to other users' 3D grids is only a matter of time. If this third scenario does concretize, the findings of the present research will hold true.

## 5.2 Conclusion

The contribution of this paper consists in suggesting that, given the technology used for online virtual worlds in the foreseeable future, copying and pasting *real-world* protocols in-world leads to impoverished qualitative data collections. As the development of virtual worlds is generating new consumer behaviors, hence new needs and opportunities to qualitatively measure consumers' preferences, profiles and behaviors, questioning the appropriateness of copying and pasting standard focus group protocols into virtual-world environment seems quite relevant. Perhaps the main message to take away from this exploratory project is that we should stop trying to view in-world focus groups as similar to *real-world* focus groups. Different contexts and technical possibilities call for different methodologies: the invention of the telephone gave birth to telephone surveys. And the success of the Internet rapidly translated into the boom of internet-based market research. Likewise, online virtual worlds – and the unique range of experiences and interactions they offer – must generate new market research methodologies.

## 5.3 Limitations

As previously mentioned, this research project is exploratory and could be improved at the methodological level. More specifically, it might have been more appropriate to keep the very same topics of discussion for Phase 1 and for Phase 2. Different subjects of discussion were selected for Phase 2 because the authors needed, for Phase 2, topics that could be easily visualized and materialized and could justify putting together some object to represent those topics (by either picking a few in one's inventory, or by building one from scratch). In addition, all the topics covered related to either Second Life or the high-tech sector. This was done in order to facilitate the recruitment of the participants. It remains to be seen if, for instance, consumer-related topics could be successfully addressed and analyzed through the methodologies presented in Phase 2. As many of the participants to that phase spontaneously emailed the authors after their focus group to thank them for the *fun* they had had (and asked to be considered for any subsequent *3D collage* that might take place), the authors believe that the presented methodologies would actually bring more entertaining value to the focus group experience. It remains true though that some topics commonly covered in focus groups have very little representational value (e.g., how to ask participants to visualize then built an object representing their opinions of a new drink about to be put on the market? In such case, nothing can replace a good old face-to-face focus group in the *real world*, during which the new drink will be tested. The methodology presented in this paper seems more appropriate for brand image studies).

The typological representativeness of the participants is also one of the caveats of this project. The criteria used to recruit the participants were minimal. In addition (and this holds true for any internet-based focus group), the *real-world* age of the selected participants was hard, if not impossible, to check (especially for those focus groups that were conducted via text chat): it would have been possible for someone under the age of 18 to lie about his/her age to make sure s/he was going to be part of the discussion and get a few thousand Linden dollars for his/her participation. Another drawback of this fieldwork is the different profiles of the participants to Phase 1 and Phase 2: as participants to Phase 2 had to demonstrate some level of proficiency in object-building, or had to have a significant number of objects stored in their in-world inventory, the authors made sure that only Second Life users with at least 12 months of experience in-world would be selected for that second phase. This level of experience was not necessary to participate in Phase 1. Lastly, any focus group that requires a certain level of skill may lead to issues of homogeneity within that focus group. The authors did encounter this issue during the second focus group of Phase 2: when the different participants started building their object, one participant came to the conclusion that her peers were much more skilled than she was, and asked not be part of the focus group for fear of *looking dumb*. She was invited to stay and try to build whatever she could build, finally agreed, and was eventually (at the end of the exercise) praised by the other participants for her creation. Even though this was a rather ego-boosting experience for her, the fact remains that this type of focus group is a potentially challenging and intimidating experience for those who may not completely master Second Life's software and its numerous, rather complex object-building functions.

## 5.4 Suggestions for Further Research

As mentioned in the analysis of Phase 1, other possibilities exist to leverage the true potentials of 3D online technologies when conducting focus groups. More specifically, as most Second Life users also possess several outfits to dress their in-world avatar(s), the moderator of a focus group could ask the participants to choose in their virtual wardrobe, then wear at the focus group, the outfit that most accurately represents their feelings toward the topic of the discussion. Perhaps more interestingly, the in-world participants could be asked to build an avatar (shape, hair, clothing, etc.) fitting a specific profile (e.g., *build an avatar that represents for you the typical McDonald's customer*). Collecting this type of visual and vivid data in a *real-world* focus group is hardly possible (as participants cannot bring their wardrobe to a *real-world* focus group, or change the clothing they are wearing with a mouse click).

Lastly, to follow up on one of the previously mentioned limitations of the present project: it would also be of interest to test the proposed new protocols on topics that do not relate directly to Second Life or even to technology. Partnering with the marketing department of a *real-world* company might provide an effective way to test the new methodologies in a more realistic context.

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