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Second Life and Academia – Reframing the Debate between Supporters and Critics

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Abstract

The introduction of new ICTs in education is usually discussed in terms of the many benefits new technologies offer, or of the negative impact they might have on the lives of their users. Focussing on the introduction of the 3D online world "Second Life" into higher education, this article shows how such discourses lead to an impasse between the advocates and the critics of new ICTs in education. To break the impasse, and to understand the impact of Second Life, or other ICTs, on education, requires a far more differentiated approach than the discourses around Second Life have shown so far. Based on the experiences of the author in creating a virtual campus for the Hong Kong Polytechnic University in Second Life, the article advocates a shift in focus from the discussion of powerful ICTs and their impact on largely passive users, to the study of active individuals, and the ways in which they integrate new ICTs into their pre-existing social and technological practices.

1. Introduction

Discourses on the use of Information and Communication Technologies (ICTs) tend to emphasise either the many benefits new technologies offer, or the negative impact they have on the lives of users of these new ICTs. Within these discourses it is a new form of ICT that produces results – both positive and negative, while the ICT users are described as passive recipients of these results (see e.g. Zhou, 2009; Ma, Li, & Pow, 2011).

Using one subset of such discourses, i.e. the introduction of the 3D online world, Second Life, into university education, this article will show how such discourses have led to an impasse at the Hong Kong (HK) Polytechnic University between those who advocate the use of Second Life in education, and those who are against it. It will be demonstrated that the impasse is a result of a difference in the framing of the debate, and that both sides agree on the passivity of the individual user and the existence of a strong impact caused by the introduction of a new form of ICT. The difference in the framing of the debate has resulted in 'dogged hostility' between the two sides (Fearn, 2010) and the continuing publication of new studies proving the potential of Second Life for use in higher education settings (see e.g. Gregory, 2011; Houser *et* al., 2011; Barker, 2012; Pita, & Pedro, 2012; Rapanotti, Minocha, Barroca, Boulos, & Morse, 2012), which – as will be shown later – still do not address the doubts of those who are arguing against the use of this virtual world in universities..

This paper is the result of the author's experiences as the leader of a project team that was tasked with the creation of a virtual campus in Second Life for the HK Polytechnic University between 2008 and 2011 (An overview of the project and more details about the project can be found at http://coresl.edc.polyu.edu.hk/). The author taught groups of students in Second Life four times a week for 6 semesters during this time (see Herold, 2009; 2010 for detailed discussions of using Second Life in the classroom), and held frequent workshops for students and staff interested in using Second Life in their own teaching and learning. The project was highly successful, and introduced over 4000 students and staff to the virtual platform. During its final year, over 15 university units used sessions in Second Life to support educational activities with more than 1500 students making use of Second Life facilities in their teaching and learning. Second Life was used to support courses in the departments of Computing, Applied Social Sciences, English, as well as in the Schools of Hotel and Tourism Management, of Design, and of Nursing. Students used Second Life to take part in tutorials, virtual field trips, simulated internships, design practices, role play, etc. and were assessed in many different ways on their performance in and critical reflection on the virtual world.

The author, as the project team leader, and a technical support team gathered user feedback from both staff and students at the beginning, during, and at the end of each group's use of the virtual facilities created by the team. The data used in this article is based on the personal notes and recollections of the author (a trained anthropologist), as well as numerous feedback questionnaires, interviews, observations, critical reflections (from student assignments), screenshots, videos, etc. collected between 2008 and 2011 as required by the university for an evaluation of the project (see Table 1). This article is intended as a consolidation of these experiences, and an attempt to draw lessons from the project and its embedding within the university, while individual staff have reflected on their own experiences in a number of conference presentations and academic articles (see Appendix).

University Unit	Number of students 2008-2011	Subjects taught with Second Life components
Alumni Affairs	Virtual museum for Alumni meeting	
Department of Applied Social Sciences	400	3
Department of Computing	750	5
Department of English	350	3
Institute of Textiles and Clothing	150	2
School of Design	350	2
School of Hotel and Tourism Management	1,600	11
School of Nursing	400	2
University Library	Virtual library connected to offline library, various virtual exhibitions	
Project Team	50 workshops for staff and students	

Table 1: SL Usage at the HK Polytechnic University 2008-2011

Throughout the duration of the project, the author had to mediate between ardent or fanatic supporters of Second Life whose goal it was to 'convert' the whole university to the use of Second Life, and critics within the university's administration worried about its cost-effectiveness. Ultimately, the project failed to convince the university's administration of the usefulness of Second Life in Higher Education, and the project ended in July 2011. The differences in the framing of the debate, which this article wants to discuss, can already be noticed in the following three quotes. A staff member enthusiastically reported his experiences in Second Life after teaching a course in the virtual world (a), while the university administration killed the project as being only a useful research project to test virtual teaching, but not a tool for 'regular classroom teaching' (b), although the final verdict of the funding committee stated that the Second Life project had had the widest reach of any of the funded projects at the university (c).

a. Second Life provides an opportunity to use simulation in a safe environment to enhance experiential learning, allowing individuals to practice skills, try new ideas, and learn from their mistakes. The ability to prepare for similar real-world experiences by using Second Life as a tool for simulation has unlimited potential.

b. Your project is an excellent one from the 'research in teaching method' perspective. But it (…) will take quite a bit more work before it can be applied to our regular classroom teaching. We have other projects which can impact our teaching much more immediately and they therefore received higher priority for funding.

c.   The number of subjects, staff and students who have been involved in the project is indeed impressive. The extent of this project has the widest reach of any of our funded projects with the involvement of a total of over 4000 students and staff.

The article will begin by describing the discourse around the introduction of Second Life, more generally in the literature on Second Life, while also offering a critique of them from the perspective of the author's experiences at the HK Polytechnic University, before illustrating that both proponents and opponents of Second Life within the university are framing their two sets of discourse, in a way that assumes the existence of inherent effects of technology, while ignoring (both teaching staff and) students by casting them in the role of mere recipients of the posited benefits or drawbacks of any new technology introduced. Using arguments developed by Brian Street (1984; 1987; 1990; 1993), Robert Entman (1989; 1993; 2007), and Teun van Dijk (2001; 2006), the author will argue that neither of the two discourses is really addressing the other, nor are they reflecting the actual teaching and learning practices of teaching staff and students, who are largely absent in the debate.

The article will conclude with the challenge that humans don't live in a society of networked computers, nor are students (or their instructors) passive recipients of the power of ICTs. Instead, they are social actors who integrate new ICTs into their pre-existing webs of social commitments, and closer studies of their receptions, adaptations, and uses of Second Life or other forms of new ICTs are long overdue – even if it means that academics will have to engage critically with their own practices.

2.   Second Life is a Great Teaching Tool...

Second Life has become popular in educational institutions during the last 5 years and many articles have been written about its widespread use, and the different uses it has been put to by educators (such as, Grassian, Trueman, & Clemson, 2007; Jennings, & Collins, 2007; Atkinson, 2008; Salmon, 2009; Spence, 2009; Jauregi, Canto, de Graaff, Koenraad, & Moonen, 2011; Rudra, Jaeger, Aitken, Chang, & Helgheim, 2011). Second Life has also been cited as being highly useful, for example, as an environment for workplace simulations (JSMillerRN, 2009; Lee & Berge, 2011; Richardson, Hazzard, Challman, Morgenstein, & Brueckner, 2011).

Salmon (2009) argues for the use of Second Life in learning, and notes that Second Life as "the complex marriage of the technological application with the challenging pedagogical drivers that results in appropriate support and learning design" (p. 535f). According to her, not only is this new form of ICT a well-designed piece of technology, but also provides "pedagogical drivers" that will produce good teaching and learning. Twining (2009), talking about Second Life, came to the conclusion "that virtual worlds seemed to be a good vehicle for providing people with 'lived experiences' of radically different models of education" (p. 512). Second Life is portrayed as being more than merely a virtual world with some potential. Instead, the introduction of this ICT provides "radically different models of education" (ibid.) which will result in better teaching and learning environments, which will in turn lead to better learning by the students who use it.

Academic studies of Second Life emphasise its potential for new educational approaches, as well as the impetus it provides for the development of new educational techniques and learning designs (Warburton, 2009; Wheeler, 2009) and celebrate the widespread use of Second Life within educational institutions, e.g. in the UK (Kirriemuir, 2010). Second Life offers an entire virtual world, in which the only limit is the creativity of the user (see e.g. Childress & Braswell, 2006; Herrington, Reeves, & Oliver, 2007; Zhu, Wang, & Jia, 2007), and it is easy to design an environment for any educational use required, from virtual libraries to walks through virtual bodies, or physics simulations (e.g. Liu, 2006; Kamel Boulos, Hetherington, & Wheeler, 2007; Kay, & FitzGerald, 2009; Kemp, 2008).

In the case of the HK Polytechnic University, this general euphoria among academic and support staff, as well as the existence of a large number of complex simulations in educational areas within Second Life led to a very enthusiastic rush into the virtual world to try out its possibilities. Three islands were rented, and numerous buildings were created to simulate different types of hotels and to copy the redbrick university buildings of the real university campus. Plans were made to use these facilities on a number of undergraduate courses, and a university orientation area was built and offered as an optional add-on to the School of Hotel and Tourism Management's (SHTM) programme for new university students. When the author volunteered to become the first to teach on the virtual islands, a floating island was created above the virtual campus to accommodate the needs of the specific class taught.

The programmers and designers involved in the creation of the virtual spaces were very happy with Second Life and the possibilities it offered them, while educational support staff were eager to put into practice some of their ideas on better teaching and learning environments. The motivation for all these activities mentioned in many of the early project meetings attended by the author in his institution was that Second Life represented an ideal setting to try out new educational designs and ideas due to the relatively low costs of developing new teaching and learning spaces. Once all the spaces were prepared, students could then easily be invited into the virtual campus, and make use of the facilities – something that often reminded the author of the Kevin Costner movie *Field of Dreams*, in which the main character turns one of his fields into a baseball arena, because he keeps hearing the words "if you build it, they will come". As the project team found out, though, students were in no rush to take up the opportunities on offer in the pre-planned, pre-built facilities, but had to be forced to use areas purpose-built for their courses with the threat of graded assessments for virtual activities, while most of the pre-built designs remained empty and were eventually deleted.

One major attraction of Second Life for educators is that "the SL platform is completely free of a publisher-imposed narrative" (Kemp, & Livingstone, 2006, p. 13). Unlike a computer game, Second Life does not have goals that users have to reach or tasks they have to perform in order to progress. Instead, individual users are free to design their own environments using built-in design tools, and the only limit is the imagination of the designers.

Within the HK Polytechnic University's virtual spaces, the freedom to create almost anything imaginable led to a similar copying of real life in the virtual world. The university's red-brick buildings were built, and initially included many doors that needed opening, and even elevators to use between floors, all of which made the movement of avatars more rather than less complicated. Throughout the development and almost constant re-design of the island spaces created by the university, a clear pattern emerged: Initially, each new educator wishing to use Second Life in their teaching and learning insisted on extremely detailed builds for their areas, which had to be simplified, and simplified again, once students were invited (or often forced) to use the virtual spaces, as the students were unable efficiently to utilise the spaces created for them.

As a result of the way in which Second Life works on an individual user's computer, each feature of a virtual build creates an additional demand on the bandwidth and the computing power available on the user's machine – even if these features are supposedly out-of-sight behind a wall. For the project team this meant a never-ending fight with individual designers, educational support staff, and teaching staff to simplify builds, and to restrict their creative urges to necessary features. In most cases, these battles were only won after the first few unsuccessful sessions with increasingly less interested students. Several teaching staff abandoned Second Life not because their ideas for teaching did not work, or because the virtual world was detrimental to their teaching, but because the complexity of the

educational designs they worked with led to severe lagging on student computers, which resulted in their refusal further to participate in virtual educational activities.

Bransford and Gawel (2006, p. 6) state very strongly that Second Life provides more than a background for educational activities, though. According to their arguments, it has a definite positive impact on teaching and learning. It provides a "sense of sharing (…) as if we all went somewhere new (…) and needed one another's help to survive and thrive." Second Life makes possible "interactive learning experiences that would be hard to duplicate in real life" and "can allow true collaboration which makes all of us better." De Lucia, Francese, Passero, and Tortora concur, and claim that "a virtual campus on SL can increase peer to peer interaction, group work and communication" (2009, p. 221). According to their study, the benefits Second Life offers far outweigh those provided by the regular internet, as the 3D environments available in Second Life "induce a strong presence sensation. (…) Most of the users have a sensation to be part of the virtual environment" (p. 222).

At the HK Polytechnic University, the students using the university's campus for educational activities never expressed that they felt they were part of the virtual environment, at most they commented that Second Life felt like an old 3D game. A common complaint was that the graphics were not good enough, and the lack of microphones and speakers on the computers provided on campus restricted most of them to the use of the in-world chat for communicating with other avatars. Although most of the students appeared to like chatting in-world, participated eagerly in chat-based discussions during undergraduate tutorials, and expressed their liking in course evaluation surveys, the chatting reminded them of using a chat client such as MSN Messenger, but did not evoke feelings of presence inside a virtual world. According to their feedback, students were always aware that Second Life was 'just' another computer programme, which they had to use to meet the requirements of their courses.

According to much of the literature, Second Life provides academics with great new ways in which to reach "digital natives" (Prensky, 2001a; 2001b; 2005), a concept that continues to survive (see e.g. Palfrey, & Gasser, 2008; Tilvawala, Myers, & Sundaram, 2011; Watson, & Pecchioni, 2011) despite widespread doubts about its usefulness (e.g. Hannah, 2010; Jones, Ramanau, Cross, & Healing, 2010; Thomas, 2011). Students do not have to adapt to the requirements of a classroom, but instead the classroom is adapted to meet their needs. They do not have to leave their highly interactive, ICT-filled world to enter teaching and learning spaces. Instead, teaching and learning is transformed into an ICT-based activity that allows students to connect with their learning in familiar ways. Furthermore, the inherent qualities of Second Life are supposed to promote teaching and learning, thus demonstrating that the virtual environment is highly desirable as a platform for educational programmes (see e.g. Richardson, Hazzard, Challman, Morgenstein, & Brueckner, 2011; Beaumont, Savin-Baden, Conradi, & Poulton, 2012).

In the experience of educators at the HK Polytechnic University, students did not find Second Life familiar. Out of the more than 4000 students who used the virtual world for educational activities over the past few years, less than one percent had even heard of Second Life, before encountering it in the class room. Many of the students found it difficult to navigate in Second Life, complained about the emptiness of the virtual world, and stated that the people they did find were often rude or not interested in communicating with them. Almost all of the students abandoned Second Life as soon as their last class in the virtual world ended. Second Life was not seen as a part of their interactive, ICT-filled lives, but rather as an enormous space with some interesting designs, largely devoid of life.

The posited inherent qualities of Second Life are the driving factors of its educational impact as far as much of the literature, and many educational support staff are concerned. Individual reactions to

and experiences with the virtual environment seem secondary within this discourse on the merits of Second Life for education, and the problems encountered by the university's project team are not addressed in the literature. Educational benefits, as presented in the articles discussed here, do not depend on the actual interactions between educational users of Second Life, but rather on the quality of educational designs that make use of the affordances the virtual environment provides.

3.   … or is it all just a waste of time?

On the other side of the divide are many who regard Second Life and many of the other emerging new ICT tools with scepticism. The virtual environment is seen as a "one of those curious internet phenomena" for those with "more time on their hands than they know what to do with" (Wray, 2006, October 16).

The general attitude of administrative and management staff, as well as among students at the HK Polytechnic University towards Second Life has been very negative. The educational value of such an online game has repeatedly been questioned, and all the people involved with the project have had to continuously defend Second Life and their usage of it. Even students who admitted to the value of educational sessions in the virtual environment in surveys, still employed the term "game" to refer to it. A large percentage of every report or announcement and of the time for every invitational talk, seminar, workshop, and so forth has had to be used to prove the educational value of Second Life with usage statistics, and with photos of impressive virtual builds, or large numbers of student avatars engaged in educational activities. In this manner, the first part of every session organised by the project team turned into an apologia specifically designed for university administrators, before attempting to engage the educators present with new educational ideas – thus also making it easy for each group to ignore the part directed at the other group.

Liu (2006) pointed out that many academics regard Second Life as a game and therefore "not suitable for educational use" (p. 7), which is particularly true in Asia (Herold, 2009). Problems with the reliability of the servers or the need frequently to upgrade the client software have caused IT managers to complain about or lobby against Second Life, as "Second Life is not ready for serious business" (p. 8). The steep learning curve for new users and the lack of appropriate support systems in-world mean that Second Life use has to be supported extensively (Herold, 2009, p. 12; see also Terdiman, 2010, February 26), before it can have a positive impact on teaching and learning (Herold, 2010). The high hardware requirements of the client software are also frequently and over the years consistently cited as a problem, given the relatively cheap equipment used in most educational institutions (e.g. Kemp, & Livingstone, 2006; Liu, 2006; Eaton, Guerra, Corliss, & Jarmon, 2011; Beaumont, Savin-Baden, Conradi, & Poulton, 2012).

For the project team at the HK Polytechnic University, using Second Life in tutorials, with around 20 students accessing it concurrently from one of the university's computer labs, meant weekly fights with the IT Services department to increase the bandwidth assigned to the lab used, and to ensure that tutorial classes were assigned to labs in which the computers had powerful graphics cards installed. Additionally, it meant that the project had to switch to third-party client software to enter Second Life, as the university's IT policies were not flexible enough to keep up with the often mandatory updates required by Linden Lab for their official client. In particular during the first two terms that Second Life was used in classes, the virtual world was often not accessible in the computer labs due to technical problems, and teaching staff had to be prepared to suddenly switch to offline teaching, if Second Life stopped working during their tutorials.

Faced with such difficulties, many administrators and managers of educational institutions are reluctant to commit to Second Life as a teaching and learning environment, particularly in times when educational budgets are being cut and when much of the media is criticising the virtual world (see below). In 2006, media created hype around Second Life, and is partly responsible for the "rush to be part of the 'new new thing'" (Associated Press, 2006, October 10). Second Life wasn't seen as entirely perfect, but its flaws were perceived to be minor as compared to how wonderful it seemed to be!

In Hong Kong, as well as in Asia generally, Second Life use at university level was unheard of when the project started, and as a result, the project team managed to obtain funding for Second Life activities by promising to set up the first virtual campus in Asia, which appealed to the university's management. This level of support disappeared very soon after the official opening of the virtual campus by the university president, though, when Second Life turned into just another educational technology competing for diminishing resources, especially, as other institutions were not following our innovation. Moreover, the attention Second Life received in the media worldwide, set it apart from other educational tools, and opened it up to greater scrutiny than e.g. Blackboard, Moodle, and so forth have had to deal with.

During the past few years, the assessment of Second Life in the media changed for the worse, and today academic decision-makers wishing to find out more about the new learning environment proposed by their teaching staff will encounter very bleak stories about Second Life. Instead of being praised for the possibilities it offers, Second Life is now often criticised because its openness allows users to abuse the environment to the detriment of other users. For universities who have a duty to protect their students, this creates difficulties.

In the media, Second Life is described as a violent and dangerous place, in which a large number of users abuse their knowledge of the virtual environment to harm others, to the extent that "harassment and assault are frequent infractions in virtual environs, including those frequented by students and professors." (Bugeja, 2010, February 25 – see also Agence France Presse, 2007, February 24) According to the media, the abuses are so widespread, that Second Life and some of its users have come under investigation by the authorities, e.g. police in Brussels investigated a case of virtual rape (Lynn, 2007, May 5), the FBI was looking at illegal gambling in the virtual world (Reuters, 2007, April 4), and the US congress investigated users for tax evasion on profits from the virtual world (Marsden, 2006, November 22).

Conducting educational activities in an environment branded dangerous by the media, is often too much of a risk for educational administrators and institutions who worry more about the public 'face' of the university than about academic publications. Particularly worrying are negative articles in influential and education-focused papers like The Chronicle of Higher Education in the USA, or Times Higher Education in the UK (e.g. Barreca, 2010; Newman, 2010; Young, 2010).

Beyond the worries about the safety of Second Life, there are also increasing concerns about its longevity. Educational budgets are tight, and institutions do not want to waste money on an environment that might not last for much longer, as it is "dying a slow painful death due to disinterest" (Bugeja, 2010, February 25). Universities in particular are more interested in discovering the next big thing, rather than getting involved with outdated technology.

> Three years on, and the hype has been extinguished. Second Life has seen its status as the web wonderchild supplanted by Facebook and Twitter. The newspapers have forgotten about it, the Reuters correspondent has long since cleared his virtual desk, and you can walk confidently around tech trade

shows without a ponytailed "Web 2.0 Consultant" offering to put your company on the Second Life map for the price of a company car. (Collins, 2010, January 4)

With many journalists, Second Life has gained the reputation of being largely empty (Goel, 2007, August 2), as "more than 85 percent of the avatars created have been abandoned" and "there isn't much to do" (Rose, 2007, July 24). Second Life is being portrayed as passé and outdated, and university administrators have started to believe the stories telling them that it is time for universities to move on to new educational tools that employ up-to-date gadgetry to augment rather than virtualise reality (e.g. Reeve, 2012).

The future of Second Life use at the HK Polytechnic University is fairly uncertain in this context, as the project developing and supporting the virtual campus has not been renewed, although the project team managed to extend the rental of the university's islands in Second Life until the summer of 2013. Despite its demonstrable affordances, and the numbers of students who have engaged in educational activities using the virtual facilities and spaces provided, Second Life is regarded as outdated. The lack of support (and interest) of Linden Lab for (and in) educational users, a price hike for the rental of virtual property in January 2011, the high computing requirements coupled with bad graphics and performance, as well as the emergence of other, newer educational tools contribute to an increasing lack of enthusiasm for Second Life among teaching staff. For the future, educators are looking for something newer than a virtual world launched in 2003, without links to Facebook or Twitter, and inaccessible from a smartphone or tablet computer, which is beginning to look less and less cost-effective, and increasingly fraught with dangers.

There are many other choices for educators besides Second Life. Even if one ignores the currently hyped-up Facebook and Twitter, there are many other 3D-online worlds competing with Second Life and offering alternatives that often look more attractive. According to KZero Worldswide and their most recent report into virtual worlds (2011), Second Life with its 30 million users and an average user age of 36 years might not be an ideal place for educational activities. Other worlds are larger, and may be more age-appropriate for students. The virtual environments offered by IMVU with currently 60 million users, or Dofus with 50 million user accounts all have an average user age of around 22 years. Second Life seems closer to the age of academic staff, but for students, a 'younger' environment might be preferable.

This has certainly been the experience at the HK Polytechnic University, where the most enthusiastic users of the virtual world are among the academic and support staff. By contrast, in surveys after each course utilising the virtual campus, students have overwhelmingly described Second Life as "boring", "empty", "a world where nothing happens", and so forth – even if they admitted to its usefulness in teaching and learning. In meetings with other Second Life users, chat logs often showed that students asked them whether they were students as well, who had been told by their lecturers, teachers, and so forth to use the virtual world. After the end of their virtual sessions, almost all of the students stopped entering Second Life, an observation shared by several educators from around the world on the Second Life Educators mailing list SLED over the past few years (Linden Lab, 2012). Second Life was (and is) just not attractive enough for most of our students.

Despite the educational possibilities praised by teaching staff, it is often not easy to convince educational institutions to move into a virtual environment like Second Life. The problem lies in the lack of perceived educational uses for the virtual world, in a negative cost-benefit analysis, and increasingly in the presumed negative impact of a new form of ICT on susceptible students. The assumption is that the encounter of students with Second Life, or indeed any form of ICT, will have specific unavoidable consequences, regardless of how the environment is used or deployed within the

educational setting, e.g. an increase in cases of internet addiction among students in Hong Kong. Praise for the effectiveness of Second Life as a teaching and learning environment by academics wishing to utilise it, end up strengthening the critics' case. If a virtual world has a strong impact on student learning, then the negative contents of the environment will exert just as strong an influence on students, who in turn will have to be protected from such dangerous exposure.

4. Academia and the use of new ICTs – a matter of framing?

Ironically, both sides in the debate agree in their lack of concern for the integration of Second Life into existing educational structures, while focussing more on discourses about the polarity of its impact on students. Both the critics and the supporters of Second Life are convinced that its use in education will have a measurable effect on the students. They disagree on the nature of this impact, with the supporters arguing that Second Life would benefit the students' education and boost their achievements, while the critics seem convinced that any contact with Second Life will bring the students into contact with less than acceptable contents and promote less than acceptable behaviour.

What seems missing from many of the accounts is descriptions of how Second Life, or any other Multiple Users Virtual Environment (MUVE), is supposed to be integrated into the day-to-day teaching within an educational institution (Herold, 2010).

> I suggest that detailed anthropological engagement with the cultures of 3-D MUVEs is a vital step on the road to understanding how learning takes place (or might take place) in new worlds like Second Life. (Bell, 2009, p. 515)

Students (and academic staff) are not synonymous with the avatars they employ in Second Life, and most of their lives are lived outside of the virtual environment, just as most of their learning and teaching happens offline. Their engagement with Second Life does not happen in a vacuum, without input from their experiences or their offline lives, and the exact modalities of this engagement need to be looked at in much more detail than has happened so far. When students and staff 'enter' a virtual world, they are not leaving the offline environment they are in, nor do they 'become' their avatars. Their virtual experiences are framed and affected by the demands of course curricula and assessment requirements that leave little room for 'playful' learning experiences.

> We still need to think about how 3-D MUVEs are engaged within the context of participants' everyday lives, online and off. (…) If learning is to be successfully embedded in 3-D MUVEs, a greater understanding of the concomitant embedding of virtual worlds in participants' everyday lives is a vital first step. (Bell, 2009, p. 517)

In the 1980s and 90s, Brian Street argued that "technology (…) is a cultural form, a social product whose shape and influence depend upon prior (…) factors" (1984, 96). For him, technology "is thus more a matter of personal identity, knowledge and power than of functional skills" (1990, 2), and it is crucial for the researcher to investigate "its real significance for social groups" (1987, 49). Even though the technology Brian Street was discussing is literacy, his insights seem applicable to the use of online virtual worlds in teaching, as well. Individual people, e.g. students, teaching staff, and so forth are using virtual worlds based on their pre-conceptions. Their identities, the social setting of their introduction, and so forth they are not exchangeable dummies to be molded by an all-powerful technology.

Throughout his writings, Brian Street argued that literacy practices are an expression of an underlying "ideology" (1984, 96-101; 1990, 4-11 and 1993, 7-10), i.e. they are shaped by the sum total of pre-conceived notions people have about literacy. In a similar manner, the pre-conceptions of both supporters and critics of virtual worlds in education are shaping their use, without or at times in spite of actual experiences with the virtual worlds by students and teaching staff. As shown above, supporters of Second Life are excited about the possibilities offered by Second Life, while accounts of actual teaching and learning experiences are rare. Critics of Second Life, as at the HK Polytechnic University, point to "universally known" bad effects of "the Internet" in general, and the published ill effects of Second Life in particular, but often ignore, or soon forget the documented benefits of the virtual world for university students on courses held on the virtual campus.

Robert Entman argued repeatedly that the mass media were framing public discourse, before it even happened, and thus often pre-determined the outcome of debates on contentious issues through their stipulation of permissible topics of discussion (e.g. Entman, 1989; 1993; 2007). In the same way it can be said that the framing of virtual education as the outcome of technological effects on students appears to pre-determine the evaluation of its performance depending on preconceived notions about the polarity of its impact. To use Teun van Dijk's terminology, both supporters as well as critics of Second Life have created ideological context models (van Dijk, 2001, 24) that encase debates on Second Life in ideological squares (van Dijk, 2006, 374), which make it acceptable to ignore both students and teaching staff in discussions of virtual worlds in education.

Educators are excited about the possibilities offered by the virtual environment and often eager to experiment and to try out new ways of presenting and communicating information and knowledge. They are pushing educational boundaries, and challenging themselves with continuous explorations of new environments, so as to improve educational outcomes. On the opposing side, critics of virtual environments are worried about the negative effect of some of the questionable contents of virtual worlds on the students and about falling behind in the university's engagement with technology when compared to other universities. The actual use of Second Life or of similar virtual environments in the classroom becomes a mere application of the development of new educational tools or educational guidelines limiting their use, while the educational innovator and the sceptic are already moving on to newer environments. The end-users of the virtual environment, both staff and students, are supposed to "just use it" according to established guidelines, but are rarely consulted when a new educational tool or environment is chosen.

Kroker (2001, p. 6) called this form of treatment of end-users of technological tools the transformation of users from "possessive individuals" into "possessed individuals", as the end-users cannot be said to ever fully possess the environment they are supposed to employ in their teaching and learning. Instead the virtual environment is designed by the supporters of Second Life and their experimental tools, as well as defined by the protective guidelines of its critics among e.g. university administrators, usually – as at the HK Polytechnic University – before the first student, or the first educator enters the virtual space. The potential uses of virtual spaces are set down in e.g. funding applications that also include usage guidelines to protect students and teaching staff, and only after the proposals have been accepted, and clear criteria for success have been formulated, is the virtual environment made available to the users according to the rules established between the two groups. The focus is on controlling and maximising the cost-effectiveness, and the positive impact the virtual environment will have on the educational setting, and not on empowering users better to achieve what they are aiming for (Akiyoshi and Ono, 2008, p. 292).

Academic staff and students are supposed to submit themselves to the experience of the new virtual environment as envisioned by the supporters, and to "accommodate (… themselves) to the requirements of new technologies" (Postman, 1993, p. 70). Instead of virtual environments designed for specific educational settings and the individuals in them, the end-users of new technological tools, e.g. students and staff, are expected to adapt to the new environment and its requirements (Ling, 2008, p. 336). Individuals using the virtual environment in their teaching and learning thus become subservient to the dictates of the chosen, designed, and fenced-in educational ICT. At the HK Polytechnic University (and many other universities as the studies cited above demonstrate), neither student, nor staff feedback have been relevant to the decisions to start using Second Life, or to stop using it. These were 'policy' and 'business' decisions, not educational ones, similar to many other decisions about 'facilities' for universities, e.g. choice of email provider, Learning Management System, equipment of teaching rooms, computing equipment, etc.

Dinello put it even stronger by pointing out that this attitude towards new forms of ICTs de-humanises the world, "as emerging technologies shift the balance of power between human and machine" (Dinello, 2005, p. 5). The focus of the debates in education seems to have become the educational tools that can be provided through the use of specific ICTs, e.g. Second Life, while the actual usage is almost incidental, and users employing the tools differently are "wrong" rather than "creative" (Goggin and Newell, 2007, p. 159; see also the criticism of such attitudes in Rutsky, 1999, p. 2; and Cassidy, 1998, p. IX). A re-think of this evaluation seems highly necessary.

The framing of education as the mere application of educational know-how and the development of ever better educational tools, and its resultant discussion of the positive and negative effects of specific tools and technologies is de-humanising and disrespectful towards both students and teaching staff who are individuals. They should be empowered to possess the educational activities they engage in, rather than being possessed by them, e.g. through their increased involvement in choices about educational technologies at universities, or through a research focus on the suitability of ICTs to meet both educational, as well as 'political' or 'potentiality' targets. The introduction of new forms of ICTs into the lives of individuals, e.g. the introduction of Second Life into an educational setting, do not follow easily predictable patterns, nor can they be undertaken without their situation-specific challenges, or the consideration of the availability of competing new forms of ICTs (Abrahamson, 1991, p. 609). Individual users, such as students and teaching staff, are social actors, interacting with each other within the framework created by their institution. New ICTs do not impact isolated individuals within such settings, but disrupt and change the entire complex social web that is an educational institution (Wilding, 2009).

A re-framing of the debate on virtual worlds in education appears long overdue to allow it to break free from the prevailing ideological square to engage with the actual experiences of educators and educated. Only such a change in focus would allow for an investigation of Second Life's "real significance" (Street, 1987, p. 49) in and to specific instances of education, which might actually benefit projects such as the one at the HK Polytechnic University, instead of merely contributing to the vast literature on new educational ICTs.

5. Concluding Remarks

To understand the impact of Second Life, or other ICTs, on education, requires a far more differentiated approach than the discourses around Second Life have shown so far. Assumptions about the definite impact of Second Life on all users in all settings which are made by both critics and supporters as the above discussion has shown are not helpful, and they are even less helpful as

evaluative tools for research into the introduction of new ICTs into society, even when limited to the introduction of Second Life into an institute of higher education in Hong Kong. A proper understanding of and the emergence of a critical framework around the processes surrounding such an introduction requires the "systematic research of complex, highly contextualized ICT use (…), rather than encouraging the study of isolated aspects of ICT use in decontextualized settings" (Lamb and Kling, 2003, p. 219) because

> social actors are not primarily users of ICTs. They often have conflicting and ambiguous requirements about the activities they perform, and the socially legitimate ways in which to perform their work as attorneys, biotechnology research teams, inspectors, plant representatives, real estate brokers, pension fund investors, students, or teachers. (Lamb and Kling, 2003: p. 218)

Many of the studies mentioned earlier in this article (and others) provide examples of courses or training programmes that have successfully been run in educational institutions, corporations, etc. However, there is a dearth of studies that look at the embedding of virtual world use in actual Higher Education practice. In order to frame research based on actual practices in higher education, different questions should be addressed: How do lecturers use and feel about using Second Life to teach their courses? How quantifiable are the Second Life parts of their courses, that is, do they provide measurable benefits? How does their Second Life usage affect their academic careers? How do they feel about spending time and energy on Second Life teaching (and student support), while being pressured to publish 'proper' research papers in their own subject areas (or do they end up specialising in 'educational research')?

How do educational units, for example, courses, classes, tutorials, etc. in Second Life compare to offline units in the views of students? Do students see Second Life as a help, a hindrance, or just 'one more requirement' to 'succeed' in their degree programmes at university? Why do relatively few students return to Second Life after their courses end? Would students prefer a more 'age-appropriate' virtual world instead of Second Life (KZero Worldswide, 2011)? How useful is having had an exposure to Second Life to students looking for jobs after graduation?

The introduction of new ICTs into educational settings should be driven by an educational agenda in an attempt to improve specific teaching and learning environments so as to maximise existing educational outcomes, rather than inventing new ones, or responding to posited student preferences. True student-centred learning can only happen, if ICT tools are chosen based on the requirements of students. Educational development as an expression of the creativity of educational designers, and the introduction of educational tools based on pre-conceptions of their impact upon students, represent a curious mixture of supposedly 21st century tools with educational attitudes of the 1950s.

Second Life or other educational ICTs should not be employed because they are new and exciting, or because they provide new outlets for the creativity of educational designers. Educators should plan their educational delivery with a student-centred focus, and if within this framework an educational ICT can support the achievement of clearly defined educational goals, then it should be carefully embedded into the context of the educational programme. If not, then educational designers should advise teaching staff against trying out the newest educational ICT just to keep students interested, or to serve as a testing ground for the development of new educational gadgetry.

Allowing supporters and critics of educational technologies to frame the issue in terms of the definite impact of the introduction of a new educational technology only serves to denigrate students and teaching staff, and their individual experiences of teaching and learning. To put it differently, a good

teacher can teach even if restricted to chalk and a blackboard, but a bad teacher won't turn into an outstanding educator through the use of technology. How and why a particular teacher is good, or how and why specific students can learn better in specific educational settings, might be a more appropriate focus of educational debates than the posited, but unsubstantiated effects of a new, theoretically derived educational technology on passive recipients.

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APPENDIX

Articles and Papers by Project Team Members

Publications

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