

Changelings and shape shifters? Identity play and pedagogical positioning of staff in immersive virtual worlds

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This paper presents a study that used narrative inquiry to explore staff experiences of learning and teaching in immersive worlds. The findings introduced issues relating to identity play, the relationship between pedagogy and play and the ways in which learning, play and fun were managed (or not). At the same time there was a sense of imposed or created values systems that introduced questions and challenges about what learning became or meant in these spaces. The issues identified by this small scale study may offer some purchase on concerns which appear to be emerging with the digitisation of our lives.

Keywords: immersive virtual worlds; identity pedagogy; narrative inquiry

Introduction

Although issues of embodiment and identity are often raised in relation to teaching in immersive worlds, to date there is a relatively small body of research that has explored debates in this area. This paper presents a study that used narrative inquiry to explore staff experiences of learning and teaching in immersive worlds. The findings indicate there were issues of identity play in terms of representation and ambient presence, but also about the relationship between pedagogy and play and the ways in which learning, play and fun were managed (or not). At the same time there was a sense of imposed or created values systems that introduced questions and challenges about what learning became or meant in these spaces. The paper suggests that the issues that emerged in this small scale study may offer some purchase on concerns that need to be considered in more depth for the future.

Background

There has been growth in the research into students' experiences of virtual learning environments, discussion forums and perspectives in terms of students' experiences and how online learning has been implemented (for example Sharpe et al. 2005; Creanor et al. 2006; Conole et al. 2006). Research by Bayne (2005) studied ways in which students and teachers experienced their identities online, and how these related to their embodied 'real life' identities. A common perspective amongst students emerged in which online modes of identity formation were viewed negatively, primarily as the true self being deceitfully threatened by the online being. Bayne's research concluded that tutors' use of the online space to (re)construct themselves as authority figures was far less problematic and far less a cause of anxiety than the identity narratives provided by students.

There is an increasing interest in the use of immersive worlds for learning. One of the reasons for such interest appears to be a recognition that for students in workplace or

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competency-led courses, learning through case-based scenarios is a means of acquiring knowledge and developing decision-making and problem-solving skills (Scalese et al. 2008; Bergin and Fors 2003; Conradi et al. 2009; Savin-Baden 2007). Virtual world learning also seems to offer opportunities to move away from scaffolding learning in higher education since immersive learning spaces such as *Second Life* (SL) are universal, not bounded by time or geography, and in particular adopt different learning values from other learning spaces (Olsen et al. 2004; Malaby 2006). Further, authors such as Turkle imply certain troublesomeness about identity, arguing it is the 'computer culture that has contributed to thinking about identity as multiplicity' (Turkle 1996, 178–80). Yet more recently Turkle (2005) suggests that computers are not merely objects that make our lives more efficient, but are subjects that are intimately and ultimately linked to our social and emotional lives. The result then is that computers change not only what we do, but how we think about ourselves and the world. Such suggestions would seem to be exemplified in perspectives on and studies into virtual reality and immersion (for example Moody et al. in press; Žizek 2005; Hayles 1999). However, what also seems to be apparent is that spaces such as IVWs bring to the fore changes about ways in which identities are constructed and deconstructed in relation to avatar positioning in such spaces. For example, a recent study by Dean et al. (2009) examined the extent to which avatar respondents related to particular characteristics of the avatar interviewers. They suggest that users of immersive virtual worlds (IVWs) may adjust their identity to match that of their avatars. Yet there are also studies that seem to suggest the emergence of 'left behind identities' in IVWs is occurring (see Warburton 2008), which would also seem to be an issue emerging in the data presented below. Some recent examples of this include films from popular culture such as *X-Men* and *The Matrix*. Certainly Žizek (1999), in his deconstruction of *The Matrix* suggests the possibility that the deletion of our digital identities could turn us into 'non-persons' – but perhaps a more accurate idea would be one of becoming changelings, rather than deletions.

Although largely seen as a legendary creature left behind instead of a human child, the changeling has also been used to demonstrate different forms of 'left-behind' identities. Possibly the most well known example is the changeling boy in *A midsummer night's dream* over whom Oberon and Titania fight (Shakespeare 1590), who exists at the borderlands of human and fairy kind. The play itself explores issues at the margins of where power and rules change and often breakdown. Perhaps SL identities, like the changeling boy in the play, are seen as insubstantial components of learning in higher education, but are at the same time sources of conflict and locations of indeterminacy for those who teach in the borderlands. Or is it the case that SL identities as spoken of by staff here are only partially related to the idea of the changeling, and that what we are dealing with instead is identity tourism, identity expansion and identity multiplication?

Although there may be many cases of identity play in both real and immersive worlds, perhaps what is more apparent is the way in which identities rather than roles are changing. A recent study by Ducheneaut (2009) examined avatar personalisation in *Maple Story*, *World of Warcraft* and *Second Life*. The findings, he argues, indicate a focus on common avatar features such as hair and experimentation with digital bodies. However, unlike studies such as Hemmi et al. (2009) and Bayne (2005), respondents saw avatar identity as an idealised version of their own personality. Yet the issue of identity expansion and extension is something that seems to be emerging with the digitisation of our lives, not just with issues such as identity theft, but the increasing recognition that it is not just role change we are dealing with. Participants in this study struggled with issues of identity, play and pedagogy in relation not only to role adoption and change, but the opportunities teaching in SL provided for masking and unmasking different identity components. Yet SL identities would seem to stretch beyond issues of agency into arenas where agency is compromised or marginalised. For example, universities are living with

immersive panoptical spaces alongside the ritual spaces of course approval events and graduation ceremonies. Such juxtaposition seems to bring to the fore identity play as a liminal and troublesome exploration of identity. Thus the opportunity to ‘play away’ results in a kind of disturbed belonging and yet this is juxtaposed with the sense as an academic of the need for ‘responsible knowledge’ (Haraway 1991). Yet the difficulties of understanding the shifts and changes of identity in the context of teaching in IVWs and their impact that these are having on staff roles has not, as yet been explored in-depth – although studies by authors such as Warburton (2008), and Carr and Oliver (2009) would seem to be moving in that direction. This study began with a focus on exploring staff experiences of teaching and sought to uncover shifts in role perception and change as a result of working in new digital spaces.

Methodology

A narrative inquiry was undertaken into staff and students’ experiences of virtual worlds. From this, identity issues emerged as being central to all participants’ experiences. This issue is the focus for this paper. Narrative inquiry was used since stories are a means of understanding experience as lived and told, through both research and literature (Clandinin and Connelly 1994). It tends to be positioned within a constructivist stance with reflexivity, interpretivism and representation being primary features of the approach. However, such an approach is not unproblematic in immersive virtual worlds, particularly in relation to issues of representation (for further discussion on research methods in IVWs see Savin-Baden et al. in press). This is not surprising, because to debate the issue of representation would usually draw into question the very processes with which the voices of participants are believed to be captured and presented in a study on immersive virtual worlds. It is suggested here that such opinions are, in turn, strongly influenced by views that are held about the nature of truth(s). Denzin suggests the writing of narratives poses particular complexities because of the presence of four paired terms in any social text:

- (a) ‘the ‘real’ and its representation in the text,
- (b) the text and the author,
- (c) lived experience and its textual representations, and
- (d) the subject and his or her intentional meanings. (Denzin 1989, 5)

The assumption that follows is that ‘there is a world out there (the real) that can be captured by a “knowing” author through the careful transcription (and analysis) of field materials (interviews, notes, etc)’. Yet:

Language and speech do not mirror experience: They create experience and in the process of creation constantly transform and defer that which is being described. The meanings of a subject’s statements are, therefore, always in motion. (Denzin 1989, 5)

Thus narrative inquiry must go beyond the notion of just telling stories and so the methods used were designed to reflect a research stance that was often troublesome and untidy. Instead issues such as story, plot, character and focalisation can serve as constructs for organising ‘texts’ (see Colyar and Holley in press).

Methods

Data collection

An initial review was undertaken of existing data available, via databases and ESDS Qualidata. Data were collected through semi-structured interviews face-to-face, by telephone and in-world

with 10 staff and 10 students (student data are presented elsewhere; see Savin-Baden and Tombs 2010) and analysed interpretively through analysis of transcripts to examine the subtext of data. Data were collected from both pre- and post-1992 universities and from undergraduate and postgraduate courses in the areas of art and design, philosophy, education, life-long learning and computer science.

Ethics

Ethical approval was sought from the relevant university ethics committees. Data collected were confidential. All names used throughout were fictitious to preserve the identity of participants. However, it should be acknowledged that the individuals concerned might recognize some excerpts within the text used to illuminate the interpretation of data. Further, little personal detail is provided here to protect the identities of those involved in the study.

Trustworthiness, honesties and informed consent

In the context of a study such as this, a shift was needed away from validity or trustworthiness, and the assumption that it is possible to find shared truths and clear themes and categories. The influence of postmodern thinking on the construction of truth in this project was informed by my reading of the futility of attempts to achieve 'stable', 'valid' and thus generalisable findings. According to Rosenau (1992), skeptical postmodernists draw their inspiration from continental European philosophies and are concerned with 'the post-modernism of despair, the postmodernism that speaks of the immediacy of death, the demise of the subject, the end of the author, the impossibility of truth, the abrogation of the Order of Representation' (15). Knowledge constructions that necessarily involve the exclusion of experiences that fall outside 'norm' behaviour, in order to ensure generalisability, do not in my opinion contribute the types of understanding that are required to understand complex phenomena. Instead 'honesties' was adopted – a category that allowed for the acknowledgement that trust and truths are fragile. Honesty allowed for recognition of not only the cyclical nature of 'truths' but also that informed consent is not unproblematic (see Macfarlane 2010; Duncan and Watson 2010). Nonetheless, participants were asked to sign and did provide informed consent statements.

Findings

The findings illustrate a strong sense of play – in terms of playing with identity, pedagogy and play itself. Issues also emerged about the way staff imposed values on the learning space or became frustrated by the way in which colleagues imposed real-life values on IVWs. Yet there was also evidence of new and imaginative visions of future possibilities and uses for IVWs. The findings presented here therefore include:

- Identity play.
- Pedagogy and play.
- Imposed values.
- Envisioned futures.

Identity play

Identity play is defined here as playing with avatar identity in ways that were seen as fun and sometimes trite. For example, for some staff there was a certain trite-ness about playing with identity, characterised by changing clothes and hair styles, wearing unusual objects and outfits.

Much of this was undertaken because it was *possible* to do so. In the more recent immersive worlds such as SL, identities are not limited to games or to one's individual character in a game. The wide range of choices available in SL in terms of the creation of an avatar often confounds participants. The confusions emerge through choices of representation, for example, whether to ensure the avatar looks 'more like us,' since this may create a great sense of comfort and decrease dis-ease; or not, since it forces us to confront how we see ourselves and how we want others to see us. However, the location of one's avatar in spaces such as SL poses particular complexities, in particular understandings of selfhood. Whilst authors such as Buber (1964) would seem to centre on a perception of selfhood that is static, there remain questions to be answered about the extent to which identity shifts, as well as role shifts, are more likely to occur in some environments than others. Hall has argued:

... identity does *not* signal that stable core of the self, unfolding from beginning to end through all the vicissitudes of history without change... Nor – if we translate this essentialising conception to the stage of cultural identity – is it that collective or true self hiding inside the many other, more superficial or artificially imposed 'selves'... identities are never unified, and in late modern times, increasingly fragmented; never singular, but multiply constructed across different... discourses, practices and positions. (Hall 1996, 3–4)

Thus, it is argued here that what is needed instead is not a static view of self but a liquid view – a sense of multiple identities that shift and change with time. Perhaps then Gee's work on video gaming offers some sense not only of the multiplicity of identities involved in online learning, but also the possibilities for relationships between some of them.

One of the difficulties related to games-based learning would seem to be that of identity. Gee (2004, 112–3) developed a theory of identity, based on experience of videogaming. However, Gee's conception of the virtual self here is located in gaming and the character within the games, and his notion of identity here seems to equate with 'role' rather than identity *per se*. Further, he has argued that identities are projected identities, but this introduces interesting psychoanalytic difficulties. Projections are usually unwanted feelings that we invariably choose not to own. We therefore believe that someone else is thinking/feeling them instead, such as anger or judgement (see Jung 1977). Avatars in SL seem, in general, to capture wanted elements, or the chosen components of our identities that we wish to present to/in the world. For example Iain, a lecturer who worked in a pre-1992 university and had taught postgraduate courses in education for many years, chose to play not only with his avatar body but also to position himself differently in terms of name:

There's a whole lot of interesting things about identity and you know, how we present ourselves in the world so in *Second Life* you can dress as you wish, you can appear as whatever species you wish, whatever gender you wish and so on. So for example I consciously chose a *Second Life* avatar name that I thought was relatively androgynous in that I wanted to be able to be male or female without there being any remark at that and I'm conscious that students who encounter me in-world will declare that they will respond differently depending on whether I'm presenting male or female. QED, sort of, that people have learned something about the way in which we react to people, on the basis of assumptions that we make about their dress and gender and their race and so on.

Part of Iain's decision was about introducing questions of identity to students in the context of learning on a distance MSc. Yet there was something of identity tourism about his decision – he chose to shift and change gender in order to expand or extend his identity repertoire. Such a decision raises questions about honesty and deceit in such spaces. Early work by Bayne (2005) explored this, but more recently Hemmi et al. (2009) raised the difficulty of 'honesty' in such spaces, suggesting that alternative contractions of identity were possibly seen by some as morally wrong. This was a query also noted by Lizzy, new to teaching in SL, who sometimes seemed to find it at odds with working at university with largely lecture-based programmes.

However, for her, teaching on a masters' programme introduced questions about who students were, particularly since she had largely assumed that the people who would be on the university island would necessarily be students from her own university. She remarked:

I had one student this semester who was talking about *Second Life* saying that the avatar he's created is based on his Goth punk self he used to be in his twenties and he's now in his forties and he's wondering if that's then some sort of deceit because it's although it's was who he was, it's not who he is. So that's interesting. There's less worry I think about interacting with people who they don't know about. And it's sort of an assumption, it's a really interesting assumption actually, that anyone who's on our island is probably you know a Gimmer¹ student and probably part of our programme.

Yet such positioning did not seem to be unproblematic and prompted questions and a sense of strangeness about the loosening of social and virtual identities and relationships. However, concerns were also raised about real life (RL) and avatar identities and the mention that seemed to be played out at the juxtaposition of these identities. Fran, a learning technologist who had been responsible for developing and setting up the use of SL at her university, explained:

When you're surrounded by strangers or someone puts a box on your head and won't take it off, how do you actually feel?... a lot of people say, I don't feel anything for my avatar, I don't care what happens to them. Well actually I think you would if you fell off a cliff and into the sea and started drowning in *Second Life* and couldn't get out and you had that feeling. Because people have said, feedback shows that it is this kind of feeling of 'oh my god I am drowning here', and a real kind of fear and issue or it's dark and nobody's around, it's kind of scary, it's kind of creepy. So there are real life emotions, it's creepy for you but your avatar is in there...

The course on which Fran taught comprised mainly mature students who had chosen it because it was at a particular university with staff experienced in this area. Yet she found that in the process of trying out new identities and exploring identity repertoires, questions seem to arise about the impact of these identities on physical, embodied or place-based identities.

Pedagogy and play

The strong link between pedagogy and play that appeared to emerge in immersive world spaces seemed to enable an exploration of the ways in which past, current and future identities were present and embodied and multiply interacting with each other in these spaces. Issues were raised by staff about learning, play and fun and how we also play in and through our identities in virtual spaces. The themes that emerged here were:

- Playing to learn.
- Learning through immersion.

Playing to learn

Although staff spoke of a strong cross over between real world and virtual world identities, there was also a sense of play being a serious component of learning. For example, Iain argued:

If you're role-playing in *Second Life*, your real life identity can look on at that role-play. You're participating but you are also at a distance, so the two identities that are inhabiting that role-play situation are explicit. There's you as the student learning, and there's you as the appraiser being criticised for something or other, and you can hold those two together. If you're, you can be them, be both of those at the same time and one can look at the other. If you are playing a role for real as it were, across a table, you have got to throw yourself into that role.

For Iain the presence of 'an other' in the form of an avatar seemed to make identity collision less problematic. The ability to hold two identities in play simultaneously seemed to offer a different sense of role play in SL than was possible in real life. Ken taught at a post-1992

university and was teaching undergraduate students in art and design. He was less concerned with a sense of the seriousness of play and more focussed on the value immersive spaces offered in the use of fun for learning:

The idea that *Second Life* is a game for me is a positive; I think there are lots of educationalists who really don't like the idea of it being called a game because that in some way they think diminishes the educational potential of it. But, the teaching I do, is all based around games, that's all I do, that's what I teach, that's how I teach, you learn by playing. You learn by doing something and I see no harm in there being an enjoyable, playful aspect to something... you can teach people in a way that is much more playful, that is much more open and to an extent you learn without necessarily realising you're learning something.

His argument was that education needed to be more playful, particularly in the face of an increasingly performative higher education culture. Yet he sensed criticism and derision from colleagues about making learning fun, despite the seriousness of learning through play he believed in. However, Ken's stance mirrors earlier work, such as that of Rieber (1996) who argued for the notion of 'serious play'. Serious play is characterised as an intense learning experience, involves considerable energy and commitment and is believed to be important for the development of high order thinking, commitment and engagement. However, one of the issues that emerged across the data was the importance of not just serious play and playfulness but also immersion.

Learning through immersion

Hämäläinen et al. (2006) have suggested that there has been little research into collaborative learning games, and although there is growth in the use of serious games in higher education, research in this area remains relatively sparse (see de Freitas 2006). However, one of the increasing areas of interest raised by staff in this study was that of immersion and the impact of immersion on learning. Ken, who worked in theatre studies, offered an example:

There was a really interesting island I went to on *Second Life* that's just come online called Macbeth and it's a whole island that is themed around the play Macbeth but in a very indirect playful way. You get sort of teleported to different areas, you can get, there are sound files playing in the background at various times, it's windy and it's rainy and it very much sets the scene for it. You can go to different places within it, there's one nice place which is like murky heath type bit where your avatar is, the animations taken over for you and you're just left to watch your avatar going around with a knife killing people. It's a really nice thing and there is a note card with it, well how does that make you feel, that loss of control of your avatar here. There's another one where you go into this blank white room and your head disappears so you're wandering around headless like some sort of ghost! There's some really nice ideas in there that sort of challenge oh, what am I thinking, how am I thinking, why am I doing this?

The use of immersion of this sort is often difficult to simulate or 'conjure-up' in higher education, except through performance or performance art; see for example Stellarc (2009), who suggests 'with teleoperation systems, it is possible to project human presence and perform physical actions in remote and extraterrestrial locations'. Yet such immersion, as Ken noted, can have a powerful influence on learning and offers spaces where interruptions of commonly held norms can occur. Yet immersion, even on a small scale can be disarming: both Iain and Fran discussed the anxieties that occurred for them and for colleagues when difficulties occurred with their avatars, such as feeling in danger, out of control or falling in water.

Imposed values

Throughout the study there seemed to be mixed views about the different value systems that emerged when using IVWS. For example, some staff were troubled about the control – or lack

of it – they had over students, for others the implicit and imposed values of the virtual world were of concern. The main issues staff spoke of were:

- Teacher values.
- In-world values.

Teacher imposed values

Recent work by Hemmi et al. (2009) found that in new social media repurposed for higher education there was a tendency by staff to ‘reign in’ the processes and impact of such media. There was also evidence of this in this study: some staff tended to control and manage learning and interaction in immersive worlds in ways that were at first glance a means of supporting students. This is exemplified through the way staff managed entry into the IVW, the way spaces and objects were created and managed and the way learning was organised. Marc, like Ken, worked in a post-1992 university in art and design, but his stance was different from that of Ken. For example, Marc ‘looked after’ students and their expectations and anxiety by creating avatars for them:

What we’ve been able to do in our inductions is to give every student an individual island so there’s no other avatars around to cause anxiety, it’s just their avatar. They don’t have to sign up and choose a name and get into that whole kind of identity thing as well which again can cause quite a lot of anxiety early on, so they’ve just got a default avatar with a default name and what we’ve been able to do is just get them to think about the virtual world just as a creation tool initially.

Lizzy also referred to ‘looking after students’ and likened a SL tutorial to taking ‘kids on a school trip’, arguing that the new learning space meant a different kind of staff responsibility which in this case meant ‘holding students’ hands’. Yet there were also staff such as Liam, a lecturer who worked in pre-1992 university teaching computing, where the use of SL had been received with mixed views. He argued against the way staff put limits not only on learning but also by the imposition of real world values on immersive spaces:

I think we limit our thinking when we put a building on the ground. We don’t need it. People building chairs for people to sit on during virtual lectures, is almost, for me an insanity. It’s not as if the avatar gets tired. What’s the purpose of having a virtual chair? So I think people need to broaden their thinking about what is possible, think the impossible and implement it. Rather than being restricted by what you see around you on a daily basis. There’s not enough creativity.

Yet for Marc there was a tension between freedom and control whereby his teacher and real-world values seemed to cast a shadow over learning possibilities. His dichotomy about how to manage a values conflict between the informality of SL and his belief that as teacher he needed to be in control, was resolved by his stance that he believed in fact he did need to retain real-world control of the class room:

Sometimes you want to have a little bit of control over the things at least initially, just to establish the right sort of tone for learning. And then to be able to send students out on little quests on the mainland and so on. But it feels a little bit like the way that *Second Life* in particular is set up, it does tend to kind of grab your students quite quickly and sort of pull them away from you. And perhaps it’s difficult to keep them focussed on the particular type of learning that you’re trying to get them to do in there. So that lack of control I think is difficult. If there’s some way where it could be configured a little bit more suitably for education then definitely that would improve matters.

There was a sense that teaching boundaries and practices were on the one hand on the move and, on the other, needed to be controlled. Perhaps the value confusion and conflict spoken of by staff reflected their different pedagogical stances: that is the way in which staff saw themselves as teachers in particular educational environments. Pedagogical stances change in

relation to other issues in people's lives, such as opting for a 'safer' way of teaching when struggles elsewhere demand energy or resolution, or desiring greater challenge and change in teaching when other aspects of life are mundane (Savin-Baden 2000). However, staff also raised issues about the impact of the immersive world on teaching in other ways.

In-world imposed values

The way in which digital spaces are created for staff by commercial organisations has largely resulted in linear learning spaces, spaces contrived by particular university practices. Thus the learning design, learning space and opportunities for knowledge management occludes not only ways of seeing where information is located, but how and where learning is expected to take place. As Bayne has argued:

If the spatial organisation and visibility of the screen both represents and *creates* a value system and an ontology, what social and pedagogical practices does the VLE interface reflect, inform and inscribe? What meaning does it produce? What version of pedagogy does it 'make visible' and what alternatives does it blind us to? (Bayne 2008, 396, original emphasis)

Furthermore, there has been relatively little consideration of agency in 3D worlds and the author/avatar as the primary informing relation/opposition. Yet agency in-world is devolved in very novel ways, such as particular activities or functions that can be scripted to make avatars respond in particular ways, which challenge us to extend the simple author/avatar relation to a broader consideration of agency as it is reconstituted by the multiple relations between author/avatar/world. For example, staff spoke of the way in which IVWs themselves ascribed and inscribed particular value systems, as Lizzy explained:

I find one of the issues with it is there is a big difference between the kind of the philosophical idea you get in *Second Life* about you can be anything and do anything, and the way the environment actually scripts your behaviours, so you can only sit in a chair, I couldn't sit in a chair like this. I have to sit in a chair like this, which isn't my style, and I couldn't do something like nod.

Ascribed performance, visibility and behaviours in SL includes bodily shape, movement, clothes, appearance and lack of or prescribed gestures. The bodily markers that are used to present ourselves in life, clothes, ethnicity, gender and speech may be re-presented (differently) in SL but they also indicate choices about how we wish to be seen or the ways in which we might like to feel differently. Furthermore, authors such as Seymour (2001) have suggested that although the physical body is invisible, meanings, mannerisms, behaviours and unstated assumptions are clearly visible in online communication. Staff remarked on the ways in which IVWs closed off particular ways of creating and operating; for example Fran raised concerns about the values imposed through different virtual worlds:

That's one of the advantages of *Second Life*, compared to *There*. *There* is very restrictive and if you want to change even your t-shirt colour you have to pay. So we all end up, the guys all end up looking the same and the girls look the same and *Second Life* is advantaged, there's a library of stuff, and I could give you a wardrobe for free. We're a lot more in control of the situation for allowing you to change your appearance or at least guiding you on how to change your appearance.

Thus there was a sense that different IVWs imposed and created different value systems. Yet there was also a sense that: 'Not only do we play, but we are often played with – by others, by systems of which we are elements and by the sheer unpredictability, uncertainty and complexity of life' (Kane 2005, 50); in this case the virtual world itself. Although at one level SL ascribed behaviours and *There* imposed appearance restriction, some staff valued the freedom and creativity of SL spaces, whilst others were sometimes wrong footed by the lack of control they had over students and their learning in IVWs.

Envisioned futures

Staff stances toward future possibilities and uses of immersive worlds often seemed to relate to creating and increasing in ambient presence – the sense that someone is there even if not co-located physically, in order to increase the idea of co-presence. It was not entirely clear as to whether this related to a need to create different kinds of presence and embodied spaces, in the sense of re-embodiment an empty (avatar) container, or whether it was a shift towards a need to improve immersion and create stronger links between immersion, emotion and learning. For example, staff spoke of interest in:

- Haptics: the use of technology that creates a sense of touch such as vibration or movement in order to enhance visual engagement, in the IVWs. Staff spoke of wanting to gain response feedback through gloves and using retinal projection so that the relationship between real-life and IVWs became streamlined or even liminal in nature.
- Simulation and deconstruction: as Liam suggested, ‘for things like physics, being able to take apart atoms and look around them and see how if you grab two out of the sky and slam them together, what’s the effect of that, what energies are released, and being able to provide more of a, more immersion but crossover’.
- Motion capture: using sensors on clothing in order to link real-world movement with in-world movement for activities such as in-world performance and theatre.
- Merging real life and IVWs so that there was little transition between the two, in similar ways that are used by the current Wii technology.
- Using photorealism in order to use one’s real-life face on one’s avatar.
- Using voice and own name/identity so that the interaction between real-life and avatar identity was closer.

Discussion

The position and presence of avatars in SL seem, in general, to capture wanted elements, or the chosen components of our identities that staff wished to present to/in the world. Thus in immersive worlds it would seem that the identities presented are more likely to be the functional or ideal sides rather than the ‘unwanted’ sides. The realisation that one is playing with one’s identities prompted both questions and realisations for staff that identities are troublesome and uncertain. Therefore in the process of trying out new identities, questions arose about the impact of these identities on our physical, embodied or place-based identities such as the extent to which in-world identities impact on or prompt reformulations of other identities in other ‘worlds’. Does this then make us changelings and shape shifters? In order to discuss this further perhaps delineating some of the concepts further would begin to answer such questions. Table 1 begins this task.

Therefore what we appear to be seeing is that staff in this study used identity multiplication to explore identities in SL. However, there also seemed to be a sense of them being changelings, for example, staff questioned the extent to which in-world identities spilled over into work or home identities and impacted on or prompted reformulations of other identities in other worlds. Certainly Sinclair refers to this sense of having a left behind identity in relation to her disquiet about the relationship between her real-life and SL identity (Savin-Baden and Sinclair in press). Yet playing at the borders of identity seemed to be an attempt to disrupt the mind/body polarity by focussing on a resituated and often repositioned body. For most people it is rare that they would adopt a different persona beyond the particular world they are in (*Second Life, World of Warcraft*) and then transfer it to the real world and continue to live as their avatar, although it may occasionally happen with someone in an

Table 1. Identities in flux.

	Characteristics	Purpose or function	Relationship with other 'identities'	Example
Identity tourism	Wholehearted appropriation of another identity	Playing away from other more responsible identities	Different and invariably subversive, often pernicious	Changing racial or sexual identity for deceitful purposes
Identity expansion	Several, but often the same voices in a wide range of spaces, a kind of expanded voice	To increase profile and voice across digital spaces	Similar, copied and stretched	The use of multiple blogs and websites
Identity multiplication	Different identities in diverse spaces	Identity exploration in different spaces and contexts	Different from one another but with a sense of coherence relating to real-life identities	Creating avatars in different virtual worlds and games
Changelings	Residual identity which has a sense of being a left behind identity	A denial of current other identities or a mirroring of real life identities due to ambivalence about it	Either dislocated from other identities or strongly copied	Avatars that are used transgressively or are used as copies of other stronger identities
Shapeshifters	A transformation into a different form and persona	This is unclear but usually a choice related to solving a difficulty of some kind	Usually the same, it is the form that is usually different	Shift to another form such as animagi in Harry Potter, or characters in the film X-Men

extreme delusional state. The study of delusions raises conceptual questions about intentionality, and about the relationship between intentionality, rationality and self-knowledge. However, most studies in this field until recently have sought to understand cognitive processes perceived to create delusions (Marshall and Halligan 1996; Langdon and Coltheart 2000). Thus the adoption of a different persona would be possible when people are in periods of acute distress or in states where it is increasingly difficult for them to discriminate between fact and reality. Although this would be an unusual event, such a collision would be possible when lives, roles and identities are embedded in a way that creates the collision. Furthermore, there is increasing interest in delusions on the internet. For example, Bell et al. have reported examples of the influence of cultural innovations on delusion formation, although, as they suggest 'there has been some debate as to whether such innovations simply affect surface content, or whether they have more substantial clinical or psychopathological implications' (Bell et al. 2005, 4). Thus since most people spend their lives with multiple identities and multiply interacting, a collision would be a parallel of what happens when we wear the wrong identity in the wrong place. This only really becomes a problem when behaviour is attached through – something observable – that challenges a cultural norm in either the lived real environment or alternative world environment. However, what is perhaps more of an issue here is identity tourism, a metaphor developed by Nakamura (2000) to portray identity appropriation in cyberspace. The advantage of such appropriation enables the possibility of playing with different identities without encountering the risk associated with racial difference in real life. Yet:

One of the dangers of identity tourism is that it takes this restriction across the axes of race/class in the 'real world' to an even more subtle and complex degree by reducing non-white identity positions to part of a costume or masquerade to be used by curious vacationers in cyberspace. (Nakamura 2000)

Nevertheless, identity tourism (and its associated difficulties) would also seem to apply to changing gender and appearance in IVWs, since identity tourism of whatever sort appears to offer opportunities to 'play away' from other identities. Yet we travel through cyberspace putting on and taking off identities willy-nilly as we cross fluctuating boundaries and bounce between our virtual and real life worlds. The consequence it would seem is the exteriorisation, expansion and multiplication of our identities, which bring with them (no doubt) danger zones associated with racial and hegemonic practices.

Conclusion

The complexity of using immersive worlds as sites of resistance against objectification and surveillance is both interesting and problematic. For example, while some staff in immersive worlds seek to normalise spaces such as SL through reproducing current classroom builds and practices, others appear to have become changelings and shape shifters. However, what such spaces do offer is an opportunity to re-examine pedagogical stances, teacher and teaching practices and explore what it means to work and learn at the boundaries of identity and reality. Yet the way space is inhabited in SL is also becoming an issue, since to play with identities in pernicious ways introduces questions about the ways in which honesty, safety and ethics are lived out in such mutable spaces. As Žižek has argued:

The mystification operative in the perverse 'just gaming' of cyberspace is thus double: not only are the games we are playing in it more serious than we tend to assume... but the opposite also holds, i.e., the much celebrated playing with multiple, shifting personas (freely constructed identities) tends to obfuscate (and thus falsely liberate us from) the constraints of social space in which our existence is caught. (Žižek 1998)

Notes

- I. Fictitious university name.

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