Chapter 5
Literally Virtual: The Reality of the Online Teacher

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Teachers new—and not so new—to online teaching inevitably relate their experiences to those from the physical classroom, drawing on an existing repertoire of pedagogical practices. In creating comparisons, they are likely to invoke the idea of the real course, or what happens in the real world. We still hear teachers and students talking about taught versions of courses versus online versions, as though the latter were not taught. We have also heard people observe that there are problems with online courses because teachers do not have the visual cues available in the real one and might not even know whether their students are who they claim to be. This kind of deficit statement immediately positions anything happening online as naturally inferior to the real-world classroom, implying also that such problems of relatedness do not arise in the face-to-face situation. There seems to be a default assumption in some literature that online learning is an isolated (and possibly isolating) experience for students. This may stem from frequently-cited studies suggesting that Internet use can lead to loneliness and depression (Kraut, Patterson, Lundmark, Kiesler, & Mukopadhyay, 1998) revisited and reassessed subsequently in Kraut et al. (2002).

Such a negative view of the virtual does not accord with our own experiences and attitudes to online courses, either as teachers or students. We are more persuaded by the view that the nature of the Internet is primarily social and driven by the need to communicate rather than provide content (Joinson, 2003). However, we have been involved in online courses for some years. We do understand the concerns: we even

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have some recorded evidence of our own initial resistance to newer forms of practice that we have eventually adopted for daily use. For some teachers, though, there are deeper problems in accepting that technology has had an impact on education as well as other aspects of their lives. The associated thinking about the real and the virtual has intrigued us.

The problem may be partly attributable to terminology. The notion of *networked learning* may be more generative for thinking about practice than, for example, *online learning*. Networked learning goes beyond an emphasis on the technology and embodies connections among learners, tutors, community and resources (Goodyear, Banks, Hodgson, & McConnell, 2004)—as long as this is the definition that is associated with the term. There is an even further move from the technology emphasis in the idea of *connectivism* perhaps (Siemens, 2005); however, this has yet to catch on for teachers who have just come to terms with online courses or virtual learning environments (VLEs). For many teachers the meaning and implications of networked learning are likely to be just as difficult and limited as online learning, at least when they first encounter it. While we use the term here to support our explorations of why teachers think that online may not be the real thing, we acknowledge that networked learning is itself a threshold concept to many of our colleagues—that is, a portal to a new kind of understanding (Boon & Sinclair, 2011, p. 275).

The study here uses collaborative or community autoethnography (Ellis, Adams, & Bochner, 2011, p. 279), though we did not set out to think of it in such terms. We focus on higher education students and their teachers—a group to which we both belong in complex ways. We draw on biographical writing generated by both of us, online text-based conversations, and also on a recorded and transcribed conversation between us. These data and reflections were collected for a variety of purposes—and not originally for this exercise—but we feel that they provide some insights into our shared and emergent perspective on the virtual and the real. We unfold in this Introduction what we have been trying to do and why, who we are, and how we have gone about our study. In the process, we do expose some theoretical influences, especially to do with the nature of memory and experience, as well as dialogue and critical theory in relation to networked learning.

We have often discussed the idea that the virtual seems to be regarded by some university colleagues as inferior, and we thought it could be useful to explore the origins of this notion as well as its implications. Our deliberations began in 2009 at a time when one of us (Christine) was a student on the *MSc in E-learning* at the *University of Edinburgh* and was taught by the other (Hamish). Because of our topic here, we are deliberately bringing to the surface the teaching component of this relationship, contrary to a current tendency of commentators to self-consciously speak about learning and teaching and to downplay the role of the teacher. We write, then, in the spirit of those who seek to resist such a tendency (for example, Bayne, 2014; Biesta, 2013).

It might be argued that we did not form a typical teacher–student dyad (if indeed there is such a relationship). We are the same age and we share some biographical

background in educational development. We did not know each other before the course began, though we did have a few friends and colleagues in common. We share roots in the north east of Scotland, where the word 'learn' refers to *both* the act of learning and the act of teaching, a conjunction that may be apparent in our dialogues! We also share some ideals about the importance of teacher–student dialogue. In other words, as one reviewer of an early draft of this chapter astutely observed, our findings may be more related to our own characteristics than to any effects that might be attributed to networked learning as opposed to the traditional classroom. While conceding that this might be so—in the sense that lack of generalisability would be the case in any selected teacher–student dyad—we do feel that our networked relationship has afforded increased opportunities for rich and protracted conversations, making collaborative autoethnography an appropriate label for what we have been doing. We are now conveniently in a position to revisit these conversations, along with some others, both to provide content (and consider the processes) for our argument that online teaching is real and important, and that the notion of networked learning does not supplant teaching, even though it does support our analysis here. Content and process thus merge in our account of our views on why people may see the online as inferior and why we reject this view.

We are now colleagues on that same programme (the *MSc in E-learning* recently renamed *MSc in Digital Education*) and we both value our dialogues with our students as well as our *blended memory* (Fawns, 2012) of our own previous tutor–student interactions. Blended memory draws on external sources (such as writing, discussion, digital resources) as well as biological internal memory. Fawns uses the term blended memory to point out that, although we have always depended on external memory, the rapid changes brought about by the digital may be creating new types of memory bias (Fawns, 2012). We are using Fawns' term here to highlight the positive aspects of blended memory which Fawns also takes pains to draw out; however, his warning that over-reliance on new ways of sharing memories may lead to not forgetting, distortion or distraction is also relevant to our thesis here. In particular, we are persuaded (and thereby slightly constrained) by his statement "Constructing our memories to suit our identity and view of the world allows us to forget those experiences that hinder our evolution as people" (Fawns, 2012). If we retain too many (digital) reminders of those experiences, we may risk stuckness: forgetting is sometimes a bonus (Mayer-Schonberber, 2009; Schacter, 2001).

Blended memory, though, is particularly useful for capturing a process before it has turned into fossilised behaviour (Vygotsky, 1978, pp. 63–64), or become inaccessible to view. Blended memory is thus valuable for research. We have records of dialogues in an audio recording, from online discussion forums and from a course-related student blog. The dialogues are part of our method here, but are also relevant for our findings, and especially our interpretation of what it means to be a scholar in networked learning environments. Our blended memory is able to draw on the records of the experiencing self (Kahneman, 2011) from the time. This is especially important because our relationship has changed from tutor/student to colleague/

colleague. It is the tutor/student relationship as experienced at the time that we specifically want to recall for the current study. We have discovered that without these records our remembering selves would re-interpret the way we came to understand our current positions. This adds yet another dimension to our exploration of the real and the virtual.

However, in looking back from our new position as colleagues, we do realise that our enactment of teacher/student does not seem to be marked out as fundamentally different from the relationship that we now enjoy. The roles are indeed different, but the elements of the engagement where we are co-creators of understanding have remained largely unchanged. This is not, of course, the way that all student/tutor relationships develop—but our experience does suggest that this is possible and we both aspire to it with our current students. Co-creation of understanding is both fundamental to our claim that the virtual experience is not axiomatically inferior and to suggesting ways forward for others who are engaging with online communications. It also resonates with the values of networked learning (Hodgson, McConnell, & Dirckinck-Holmfeld, 2012, p. 295).

What we have just described might merit the label *subversive epistemology* used by another author in this volume (Rose, this volume). She was also a reviewer of earlier drafts of this chapter and her dialogue with us has augmented our co-creation of understanding about teaching online. We see this as a valuable additional voice in our dialogue, which has forced us to articulate further our understanding of both Fawns' (2012) term blended memory and our use of Vygotsky's notion of a fossilised process. We reproduce her annotation on the word fossilised below (with her permission):

> This seems like a good term for your concept list. Do I have this right? It seems there are some data that are fossilised (audio recordings, online discussions, and student blogs) and then other data that are not yet fossilised (your experiences and memories of those experiences). Are you saying that when you engage in a dialogue to create a blended memory and tape the dialogue, you are then 'fossilising' the blended memory? If so, that is an awesome process. I would emphasise your blending memory for this study as part of the autoethnographic methodology.

After discussing this together extensively (and visiting associated ideas from a variety of authors) we consider what we are doing is a form of *crystallisation* rather than fossilisation. Vygotsky (1978) was talking about automated or mechanised cognitive processes, or psychological behaviour, which are now difficult to access. We want to capture the processes *before* that happens—and the metaphor in cognitive

crystallisation helps us to think about the way teachers are constantly examining ideas in a fluid state. By manifesting cognition through real-world artefacts such as written and recorded dialogue, the cognition becomes communication. The result still goes into the world independent of our intentions as authors, but it animates and activates other communications, whether they are face-to-face, online or in another artefact such as the chapter of a book. We are crystallising understanding as a way of working with it further. We are very grateful to Lydia Rose for her support in making us aware of this. The analysis here, then, draws on dialogues between ourselves, and with our students, in conjunction with literature exploring aspects of real and virtual practices and identity. Our engagement with this literature and desire to add to it are also manifestations of the dialogic nature of educational research and of education itself, which is arguably increasingly prevalent in the digital age (Wegerif, 2013). When we look at dialogues, we seek sections that illustrate the potential for "interanimating relationships with new contexts" (Bakhtin, 1981, pp. 345–346)—as exemplified in our discussion of fossilisation/ crystallisation above.

We have sought both to explain and to counter the negative assumptions associated with the virtual, and have found that we are subsequently able to revisit the role of a teacher in a way that yields constructive implications for both online and classroom practices. For example, we shall illustrate later that helping students to deal with unfamiliar spaces involves leaving some room for them to do some necessary work in familiarising themselves with these spaces. This applies whether the spaces are conceptual, physical, online/virtual or a combination of these.

Each of the three sections of our findings from this collaborative and autoethnographic inquiry begins with an illustrative extract from a dialogue—our cognitive crystallisation. This then provides the basis for our further review and interpretation on meanings of reality and virtuality, their permeation of each other and the implications for teaching and teachers.

Existence, Reality and Virtuality

The extract below is taken from a recorded spoken dialogue undertaken when Christine was a student of Hamish's. This is from fairly early on in an hour-long dialogue that formed part of her dissertation work. The dialogue illustrates how Hamish helped Christine to see an explanation for a phenomenon she had observed: that some people want to replicate traditional activities online and produce online versions of courses. The dialogue also helped Hamish to see the significance of a particular piece of research, thus providing a good example of collaborative meaning-making. In addition, it provides a concept—existence bias—that we could reuse with confidence several times later in the dialogue and subsequently.

Hamish: I came across something just yesterday actually, a paper in *The Journal of Personality and Social Psychology*. And the title of the paper was *The Existence Bias*, which I thought was an interesting title! And so I had a look at it and basically what they were saying was, "There is evidence that people value things because of their mere existence". That is something which *is*, is better than something which *might be* …

Christine: Ah

Hamish: … and it's valued more. So which immediately has an impact on how we experience the new. And the existence bias would suggest that the new experience is always inferior to the extant. So I think that's what we're up against all the time. So, for example, online distance learning is inferior to face-to-face. That's axiomatic for many people. And I mean …

Christine: It's certainly not my experience!

Hamish: … I mean it's not our espoused position in any sense, but you come across it time and time again.

Christine: Yes, but I do think it's different.

Hamish: Yes, but I suppose I'm making a slightly separate point here. Yes I think it's different, I think it's different in interesting ways. But for people who haven't encountered it, it will be, as I say, axiomatically inferior. And starting with that assumption you then begin to catalogue the ways in which it is inferior. You don't examine whether, you catalogue *how*. And I think that's what one is up against all the time.

Our collaborative meaning-making provided our starting point for further exploration on this topic. It is not difficult to think of examples that might be catalogued by people who have not encountered or engaged in online teaching: absence of visual cues, lack of immediacy and (physical) presence, inability for students to participate in certain types of activity, questions about who is actually doing the work. All of these might lead to a view of the online version as an approximation to the real one, but with deficits: aspects of the course that do not exist.

The authors of the journal article referred to in our dialogue (Eidelman, Crandall, & Pattershall, 2009) demonstrate through a range of studies across different kinds of practice that an existing state is evaluated more highly than an alternative. They claim that a heuristic for dealing with something new is to consider it inferior. This has implications for online courses:

- Until an online course exists, it is not likely to be highly regarded. Thus a planned online course will not be valued. This would, of course, also be true of other planned but not yet existing courses.
- If an online course is regarded as an online version of an existing course, the fact that certain aspects of that course cannot exist means that it is inevitable that the version has deficits and is therefore inferior

- Lack of direct experience of the additional affordances that networked learning does offer will give differential access to insights about the ways in which it is deficient—that is, if the deficiencies are remedied, the detractor is probably unable to recognise this.

Along with other cognitive biases (Kahneman & Slovic, 1982)—for example, confirmation bias, self-serving bias—the existence bias has perhaps performed a useful evolutionary function in drawing us to the tried and tested, but may be hindering us in the context of rapid technological advance by anchoring us in the past. In this sense, it provides an example of something our blended memory (Fawns, 2012) prevents us from forgetting. Moreover, in a subsequent paper (Eidelman, Pattershall, & Crandall, 2010), the authors show that the longer something has existed the more favoured it is likely to be, even though their participants were not aware that longevity was affecting their positive judgement. It follows that a heuristic for dealing with something with a long existence is to consider it as likely to be superior to something more recent, leading to a possible bias towards longevity. The ability to stand the test of the time has both an intuitive appeal to the layperson, and the phenomenon has a well-established scientific basis for psychologists and theorists who posit a deep evolutionary advantage in a tendency towards a fear of the new and unknown.

Eidelman et al. (2009) acknowledge potential opposite effects may emerge from distaste for what seems to be out of date, or from a preference for novelty, but they cite studies showing that the evaluation of novelty is enhanced when it is combined with conditions that promote familiarity, comfort and security. There are several terms associated with this tendency in education. For example, the expression *provisional stabilities* is used (Saunders, Charlier, & Bonamy, 2005) to suggest the useful transitional work that evaluation can do in a time of change. *Transitional objects* (Cousin, 2005) could include forms of VLE that carry over symbolic meanings (such as files and folders) from the more familiar learning environment until we are more accustomed to VLEs. There is frequent evidence of the use of metaphors which allow people to carry practices from one environment to another, for example online discussion. Such metaphors help us convey understanding, but risk tethering us to an old understanding, rather than fully emancipating the new affordances.

There may then be a tension between the advantages of promoting an online course as a version of an existing one to provide some familiarity, and the fact that it is inevitably seen as a deficit version of the long-established real course because of the lack of existence of certain characteristics.

The theory of existence bias may offer some explanation for why a real course is preferred, but the situation is complex. Reality can also be harsh and negative. When people say, "Welcome to the real world", they are not invoking familiarity, comfort and security—but rather the opposite. The desert of the real (Baudrillard, 1984; Žižek, 2002 and many others) is bleak as well as illusory and paradoxical. There are many cultural references to the superior person's preference for reality at all costs: from Plato's allegory of the cave (*The Republic*) through to popular films such as

The Truman Show (1998) and *The Matrix* (1999). The nature of reality in such examples is revealed through a contrast with an alternative form of reality, which might be caused by restricted or distorted perception as in Plato's allegory—or deliberately constructed or simulated as in dystopian films. Even if the real turns out to be bleaker and less comfortable than the simulation, it is still more favoured. And that stands as something close to a moral principle. For example, the character (Cypher) in *The Matrix* who chooses the simulated over the real is clearly presented as weak and corrupt.

But reality as a concept is also starting to change. The story in *The Truman Show* depicts an extreme version of reality television, where the protagonist's entire life is captured on camera and shown to the world, manipulated to maximise advertising revenue. It is one of the ironies of "reality TV" that what is presented as reality has been constructed, manipulated and edited by the producers of the programme. The word reality is thus being used to suggest a relationship with something that actually exists, but is then stretched to such an extent that many people see reality TV as not real at all—and *The Truman Show* has helped to reinforce this. There is an added complication: there is now an acknowledged psychotic condition associated with the movie in which sufferers experience the delusional belief that they are actually being filmed as part of a reality TV show (Gold & Gold, 2012).

Simulated reality, as seen in *The Matrix*, is reminiscent of the philosopher Descartes' postulation of an evil genius or malicious demon: "all external things are merely the delusions of dreams which he has devised to ensnare my judgement" (Descartes, 1986) Descartes' *Meditations on First Philosophy* was written in 1641, further evidence that questions about reality have antecedents that long predate the digital age. However, the latter has created a need to find new terminology that accounts for differing representations or states of reality.

Examples of expressions relating to reality that have emerged in recent years are shown in Table 5.1. We begin with virtual reality—an expression attributed to Jaron Lanier referring to the development of headsets and datagloves in the 1980s that provide total immersion for an individual. This was described by Howard Rheingold, for example, with great enthusiasm and expectation in the early 1990s (Rheingold, 1991). Younger readers may use the term more broadly, and we note some recent developments. Rheingold himself moved rapidly in his thinking to more social interpretations of the virtual: the virtual community (Rheingold, 1993 & 2003).

The different requirements for technology to support forms of reality have led some writers to suggest that there should be a reality–virtuality continuum (Milgram, Takemura, Utsumi, & Kishino, 1994), with mixed reality having various forms between the extremes of a real environment and a virtual environment. See also the chapter by Pak and Newton in this volume.

This exploration of reality may seem to take us a long way from the idea of the real course, but it has been useful to consider the ways in which we contrast what happens online with what happens offline. In addition, the associations and contrasts with the virtual may be part of the alienating factor for those coming later to technology use in education. As in reality TV becoming a new form of entertainment, the use of the

Table 5.1 Different versions of reality

Form of reality	Definition	Exemplified in …
Virtual reality	A computer-based environment where physical presence is simulated—often visually but sometimes using equipment that allows full immersion	Many scientific, military, therapeutic and training applications
		Individual immersion is often associated with body suits and was a pervasive idea in the early 1990s
		VR was a central theme in the film *The Lawnmower Man* (1992)
	A distinction has been drawn between individual immersion and consensual hallucination (Gibson, 1984). The term has also been used more generally	Visual displays allowing consensual hallucination can be seen in virtual worlds such as *World of Warcraft* or *Second Life*
		The recent acquisition of the Oculus Rift headset by Facebook has been taken to suggest that virtual reality will not be about gaming so much as to provide the next stage in the development of social networking, reminiscent of the *metaverse* in Neil Stephenson's book *Snow Crash* (1993)
Artificial reality	A term coined by Myron Krueger 1983) to describe unencumbered immersive environments, emphasising space. The term has also been used more generally	VIDEOPLACE—a lab developed by Krueger in from the 1970s combining video and computer technology, and now on permanent display at the University of Connecticut. The technology tends to be associated with artworks
Constructed reality	Usually refers to TV programmes that mix real people and situations with constructed storylines	Various reality shows, such as the UK show *I'm a celebrity—get me out of here*
Simulated reality	A world that is simulated (nowadays usually using technology) but where its participants are likely to believe that it is real	The reality for human beings in the film *The Matrix* (1999)
Alternate reality	1. Synonym for parallel universe	Alternate reality games (ARGS) e.g. *The Beast*, a game designed to promote the Steven Spielberg film: *A.I.: Artificial Intelligence* in 2001
	2. The real world as a platform for interactive storytelling	A mantra in *The Beast* and other ARGS is "This is not a game" (Szulborski, 2005)
Augmented reality	The integration of a virtual scene into the real world, providing the possibility of adding information	Google glass—a wearable computer in the form of spectacle frames containing a head-mounted display that displays information and responds to commands (Wikipedia, 2013)
		Augmented reality can also be activated through scanning bar codes and other triggers, as in the following example:
		I'm a poem, scan me
		http://www.littledropsofpoetry.com/2012/10/04/im-a-poem-scan-me/
		Reproduced with permission from Lee Frankel-Goldwater

real is possibly becoming a means to acceptance of new forms of educational practice. An early adopter of online environments, Howard Rheingold, comments:

> The phrase 'in real life' pops up so often in virtual communities that regulars abbreviate it to IRL (Rheingold, 1993).

By feeling the need to abbreviate the expression, the regulars in virtual communities at the time contributed to reinforcing the contrast between the virtual world and the real world. It was not long after this, though, that Sherry Turkle reported the observation, "RL is just one more window" (1995), an alienating idea for many readers but one that simultaneously managed to reinforce the distinction and start to blur it.

Sometimes the contrast is made through reference to flesh and blood bodies and laws of physics. Thus a real (world) course takes place where bodies are co-present in the same physical space. When the word virtual is used frequently, there is another reinforcement of the contrast: for example, in educational contexts, Virtual Learning Environment, virtual world, virtual university and virtual community. Elements from the real are thereby metaphorically taken into the virtual.

The word *virtual* has been subtly shifting its connotation and especially its application. Frequently it is seen as an antonym to *real*—but some writers (Deleuze & Parnet, 2007; Evans, 2000) prefer to contrast it to *actual*. Even then, contrast may be the wrong word—the virtual and actual turn out to be difficult to separate: "Actualization belongs to the virtual" (Deleuze & Parnet, 2007, p. 149). Evans' use of the Internet to bracket off the actual world reveals that "voices have a 'virtual' as well as an 'actual' dimension" (Evans, 2008, p. 6). Using actual as opposed to real as the antonym brings out the notion of the *potential* or *capacity* of the virtual, an idea inherent in the etymology of the word and indeed carried forward into its newer applications. We shall return to these ideas in the next section.

In relation to technology, the changing application of the word is helpfully summarised in a usage note in an online dictionary

> When *virtual* was first introduced in the computational sense, it applied to things simulated by the computer, like *virtual memory*—that is, memory that is not actually built into the processor. Over time, though, the adjective has been applied to things that really exist and are created or carried on by means of computers. (Houghton-Mifflin, 2009)

If the word virtual includes things that really exist, this may supersede the existence bias for those who understand this. For others, it may be doing some intermediary work by creating a transitional object (Cousin, 2005) as in the idea of a VLE and its comforting associations with an earlier academic world. The shifting perspectives of virtuality and reality are suggesting that they are going to be more difficult to separate in the future. Howard Rheingold makes it clear from the start that his virtual communities have been colonising his real life (Rheingold, 1993). As our sense of what counts as actual and real broadens to include virtual aspects, then there will less of a need to talk about online versions. The virtual is starting to permeate the real and vice versa—and there are real courses, born digital, which may demonstrate that this can be done successfully. We use students from one of our own courses to explore this further.

The Virtual Permeating the Real

We asked students on the introductory course of our fully online *MSc in Digital Education* what virtual means to them. We posted the following question on their *Moodle* site, during a section of their course when they were considering different kinds of online space for education.

> *The word 'virtual' used to be contrasted with 'real' or 'actual', but now its meaning seems to be shifting. But is there still a sense that some people still see the virtual as an inferior version of what's real? What do you think?*
>
> The answers we received suggest that the students also see the virtual as permeating the real, but there are some nuanced responses.
>
> • The actual and virtual are certainly intermingling more and I think many things that may once have been seen as virtual are now just normal every day things. … I remember when my parents would separate out my 'real' friends from my 'virtual online' friends. As if the basis of friendship was being in the same physical space. You don't tend to hear that as much anymore.
> Thomas
>
> • Been thinking about this, searching for a different feeling but I just can't. I really do think I feel 'me' wherever I am. … Just dipped into *Second Life*. [The virtual world they would be using the following week.] That felt very different and on reflection maybe it did feel more 'virtual'. … So familiarity may be the differentiator for me, not online and offline.
> Andrew
>
> • Moving 'Sidney' through *Second Life* still feels as unreal as driving a wobbly golf cart so she does not feel like a virtual 'me'.
> Beverley

What used to be virtual for Thomas has now just become the norm. Andrew suddenly recognises that something unfamiliar might seem to be virtual, a stance that we connect with both the existence bias and the actualisation potential of the virtual. Beverley would expect a virtual self to have a form associated in some way with a more conventional reality. All three students indicate that identity is something they think about with respect to the virtual: there is something about their own identity that is preserved or represented online; there are questions about different forms of self.

The fact that the relationship between the virtual and the real raises questions about identity may contribute to the continued stigmatisation (by some) of the virtual in higher education. Stories in the press about teaching in *Second Life* are

presented in conjunction with journalists' comments on various forms of identity experimentation in virtual environments, tapping into fears of the uncanny (Bayne, 2008) and of the loss of real connection (Turkle, 2011). Yet there is a parallel strand of positive responses from the opportunity to experiment with online identity or identities (Turkle, 1995): some people claim to find the real me or true self (as opposed to actual self) online (Bargh, McKenna, & Fitzsimons, 2002), because of the lack of some of the constraints of the physical social sphere. Far from being just some kind of replacement for the real world, the Internet provides an important opportunity to support people to cope with their social phobias (Amichai-Hamburger, Weinapel, & Fox, 2002). The virtual has often been used by those who are physically disabled or constrained in some way, and who feel that the online releases them from this physical constraint, that they see to be not what is fundamental about them (Winder, 2008). Virtual environments, then, may present augmentations and novel opportunities as well as replications. In such a case, it is the real or, more accurately, the actual that has deficits. With respect to identity, the virtual taps into a different kind of reality, and this would be true for all three of our students.

Recognising that the virtual is another form of reality and should be considered in its relationship to the actual opens up a more philosophical understanding of the terms. This is notably the domain of the critical theorist Gilles Deleuze (1925–1995) and his distinctions have been taken up to challenge problematic conceptions of the virtual and the real classroom (see, for example, Drohan, 2013). For Deleuze, education is always steeped in the virtual—based on an apprenticeship in the signs used by the teacher. The implication of accepting a Deleuzian view of virtuality in education is that a teacher says "do with me" not "do as I do" (Bogue, 2013, p. 27; Deleuze, 1994). This feels a particularly appropriate philosophy for networked learning; yet it does depend on being clear that virtual does not simply mean using technology and resisting an impoverished view of the relationship between the two.

Our students' slightly differing observations on identity online suggest that it will be necessary to be cautious about any assumptions we might make about a whole cohort's response to the idea of the virtual. Studies already mentioned in this chapter claim that the impact of the Internet will be different for different personality types (Amichai-Hamburger et al., 2002; Kraut et al., 2002). Interestingly, the former predicts better outcomes for introverts and the latter worse. While it is beyond the scope of this chapter to explore this paradox, it is useful to note that both papers make the point that the virtual will be experienced differently by everyone, much as the real is. Thus the corollary of RL being just one more window is that the virtual is just one more reality.

Evans (2000) takes advantage of the ambiguities and flexibilities around the word virtual to propose that the Internet acts as an *epoché*—a term used by phenomenologists to mean a placing within brackets of our day-to-day beliefs about the world. The disruptive influence of a new way of looking at things—making the familiar strange and even uncomfortable (Kaomea, 2003)—allows us to gain access to some

otherwise hidden aspects of our lives. Citing Rheingold's (1993) view of the Internet as a virtual community, based on written linguistic exchanges, Evans claims:

> the Internet puts into relief what is also true of the actual world—that we exist as participants in a dialogue (Evans, 2000, p. 4).

Voice is an important concept for Evans with respect to the Internet. When our bodies are not present, our identity is established through a voice in dialogue—or our *identities* are established through voices (Spector, 2007). Evans points to the use of the term avatar to refer to an individual voice coming from a single source. Although an avatar is anchored to a real-world identity through an account, what is most important about it online is usually the content of messages associated with it. This establishes the avatar's identity in relationship to the other voices in the context. When Evans was writing, that was particularly through text—and while avatars may now more be multimodal in their expression, there remains a strong sense of establishing identity online through the content of messages. The difficulties that some students experience with seeing the image-based avatar as representative of their identity, means that there can be some associated problems of finding or using a voice (as in the case of Beverley above), but do not mean that no voice will emerge at all.

And key to the voice is the content, meaning and function of the message articulated by it: this is what establishes individual identity on the Internet. There is simultaneously a virtual dimension to the identity and an actual articulation (associated with an account or specific person). This may even be an anxious student, concerned about her *Second Life* identity. "It is a source that cannot be separated from what it produces, a voice that would disappear without its articulations" (Evans, 2000, p. 4). In this sense, though he does not make the connection himself, Evans' view echoes that of Deleuze when he says: "Every actual surrounds itself with a cloud of virtual images" (Deleuze & Parnet, 2007, p. 148). When Evans returns to the real world—removing the brackets of the epoché—he says we can recognise that we "are also voices with both a virtual and actual dimension", because we are dialogical beings, addressing or responding to other beings (even when just thinking on our own).

Another way of thinking about this can be seen in a famous text from pre-Internet days, *The Presentation of Self in Everyday Life* (Goffman, 1990/1959).

> For if the individual's activity is to become significant to others, he must mobilize his activity so that it will express *during the interaction* what he wishes to convey (Goffman, 1990, p. 40, emphasis in original).

Avatars and other representations of online identity frequently evoke Goffman's perspective on performance in everyday life and what may be going on backstage (or virtually) as well as at the front during the interaction (or actually).

Evan's point about the virtual permeating the real is echoed by a virtual ethnographer, Tom Boellstorff: "virtual worlds show us how, under our very noses, our 'real' lives have been 'virtual' all along" (Boellstorff, 2008, p. 4–5), though Boellstorff uses the prism of culture as mediating our experience of life where Evans uses our dialogical nature. We are not following up the similarities and differences of these

mediating factors here: rather we are highlighting another way of "(c)onstructing our memories to suit our identity and view of the world" (Fawns, 2012, p. 137) already featured in our discussion on blended memory. Our students' differential experiences of the virtual interact with the way they experience the actual. In some cases, the digital traces and anchors in the actual world may render a new construction difficult.

Like Evans, we see an opportunity in the idea of the virtual to look again at interactions "without the real world distractions that usually accompany and obscure them" (Evans, 2000, p. 4). While he applied the epoché to revealing what underpins democracy, we are attempting to apply it to the practice of teaching—looking at networked interactions between teachers and students when they are not in a physical setting.

Teachers and Students in (Online) Dialogue

Students on the *MSc in Digital Education* tend to have professional roles relating to teaching, training or in the supporting or resourcing of learners, and are encouraged to reflect on this as well as their student experiences in the blogs they maintain. The following is an extract from Christine's blog during the course *An Introduction to Digital Game-based Learning*. It is followed by a comment from Hamish.

Conclusion of blog post (Christine)
Now that I'm struggling through strange environments myself again, I am conscious of the need for persistence that will not happen if we make things too easy. It's another of my tensions—if it's so impossible that people can't get in, then that's not right, but if it's overscaffolded so that each stage is clear then that's not right either. We need to find ways to be welcoming and challenging simultaneously (which this current course does very well!)

Comment (Hamish)
I was interested in these comments about 'persistence'. I take your point about 'over helping'. But there is a real dilemma here. Helping input has to be optimal—too much, and not too little—and timed at just the right point. Too much too soon, and the learner is deprived of a learning opportunity. Too little too late, and disillusionment and loss of trust result. Complicated by the fact that different people have to be handled differently, depending on personality, current circumstances and the learning content.

This is another 'probing' thing perhaps [a reference to Gee (2003), discussed below]. That the tutor has to insert probes into the situation, to try to determine some of these unknown parameters. What might these probes be? How do they relate to the substantive content of the course material?

The above exchange prompted several more musings in later entries about the probing that a teacher might do, though in fact Gee (2003) was referring to a learner's act of probing the world. Both of us recognised (and continue to recognise) this learning principle as a teaching one too. Crucially, we also recognise it as something that *applies equally in face-to-face classrooms*. It can be seen in: a teacher's (non-trivial) questioning; prompts that generate discussion; setting of appropriate problems, especially ill-structured ones (Savin-Baden, 2002) and any other activities that move the student on to a higher stage of conceptual understanding with the specific domain.

We have selected the above extract for both its form and its content. It provides another illustration of the use of a shared concept (probing) derived from reading that becomes a point of reference for later blog entries and further discussion. Its theme of the complexity of what an online teacher has to do is the topic for our final discussion here. We shall argue that, though their work may involve additions to their repertoire, the new (and not-so-new) online teacher is still engaged in the "orchestrated immersion of the learner in multiple, complex, authentic experience" (Caine & Caine, 1994). We say still engaged because this idea is also something that *applies equally in face-to-face classrooms*.

In the dialogues between teachers and students shown in this chapter, there is already evidence of the teacher inserting probes into the situation and also being engaged in some orchestration of experience—even when the dialogue has been instigated by the student. We shall return to the notion of orchestration in our discussion section: what we mean by the expression is that the teacher has deliberately created or exploited experiences likely to stimulate student inquiry and understanding. The dialogue is in any case an aspect of the context established by the teacher(s) and their colleagues—a wider dialogue in which the teacher's and student's individual voices have their virtual and actual dimensions.

The content of the dialogue above, from the student blog and tutor comments, captures a dilemma faced by teachers of both face-to-face and online students. Hamish and another colleague have written about the same dilemma elsewhere (Macleod & Ross, 2011):

> The online tutor is required to be so explicit and so prepared to have the first word that he or she may forget to leave spaces for the necessary work of the learner in constructing his or her understanding of the material (Macleod & Ross, 2011, p. 22).

This quotation does highlight one of the differences faced by the online teacher: because of the lack of visual cues, there needs to be a mental walk-through of what experiences have to be put in place to ensure that the students (who, as we have seen, all respond differently to the environment) are able to engage appropriately. There is a need to be explicit because of the environment: however, the fact that there is less need to do this in advance in a face-to-face classroom should not rule it out as useful there too. (We both have anecdotes about unfortunate experiences from our classroom teaching days that illustrate the value of being appropriately explicit.)

Here we want to highlight the distinction between technology used for information and technology used for communication (Joinson, 2003). While the former is indeed

important, we are keen that it does not overemphasise the information dissemination aspect of a teacher's role at the expense of the communicative function. What is most important in the quote from Macleod and Ross is that a teacher should allow "spaces for the necessary work of the learner". Responding to the potential deficit of the lack of visual cues can provide an extra clarity in the information element of the online course. The real danger emerges—in both the online and face-to-face course—if helpful clarification displaces the essential function of leaving spaces for learner activity.

The spaces for the necessary work of the learner are, of course, not just determined by the teacher but also by the capacity of the learner to recognise their needs to work in these spaces and also to recognise what actually has to be done. A teacher can help by acknowledging and alerting students to different learning needs, but ultimately the students will be doing something themselves in those networked spaces. (We prefer to think about variable learning needs rather than labelling students with a learning style.) In a one-to-one dialogue online, the spaces and actions within them may be more visible to the experienced teacher, though this is open to question.

Leaving spaces for the student is a difficult teacher-based action to define—it is an example of not-doing rather than doing. In dialogue terms, it relates to silence rather than utterances—and indeed knowing when to be silent is an important use of voice and communication, and again there are differences in networked spaces. But leaving the student to do the work may seem to be in keeping with a current trend to see the role of the teacher as a facilitator (e.g. Jolliffe, Ritter & Stevens, 2001). Like Macleod and Ross (2011), we would like to challenge this rhetoric because of its spurious attempts to create an equal relationship between teachers and students, despite the power differential that arises, not least, from the teacher's role in assessment and other institutional conditions. As Brown and Duguid observed of the university over a decade ago:

> In complex institutional ways, it warrants its faculty, its courses, and its degree for the learner (Brown & Duguid, 2002, p. 216).

Faculty/teachers warranted this way—and themselves charged with warranting students—are doing more than facilitating learning. By virtue of their institutional role, they are engaged in the presentation and management and accreditation of certain kinds of educational experience, and that applies equally in networked learning spaces.

It might be argued that students should be able to find and manage their own relevant experience. Facilitation as a principal role of the teacher goes alongside the idea of the student as an empowered autonomous self-regulated learner (Nicol, 2009) which has been a parallel development with the rise in online learning. It is an idea that has considerable appeal, and we are not against the aspiration behind it. Yet, as the example of dialogue illustrating this section indicates, a great deal of judgement is required to avoid the too much/too soon versus too little/too late extremes of intervention and facilitation. For students engaged in their first exposure to a concept, they are by definition not in a position to make that judgement. And if they have never been exposed to a particular concept, they may not even be aware that it is appropriate to consider it. Furthermore, some concepts are so inherently troublesome (Perkins, 2006) that very few novices could be expected to grasp them

without expert support. This construction of the teaching role is again reminiscent of Deleuze's philosophical use of the virtual to highlight the role of the teacher who "as emitter of signs does not provide apprentices with answers, but guides them in the art of discovering problems" (Bogue, 2013).

But students should certainly be encouraged to engage with new experiences, whether initially selected by themselves or their teachers. In Gee's terms, cited in the dialogue above, they need to go through the probe, hypothesise, reprobe, rethink cycle (Gee, 2003, p. 90) with respect to those experiences. Gee's work on what we can learn from video games claims that the skills in reflective practice required by experts in professions are mirrored in engagement in a good video game and can be self-taught. In this case, the video game provides the experience, and a player who can progress in a videogame through persistence and self-teaching does not need a teacher. An analogy might be drawn with higher education courses: the course is the experience and students can work through it at their own pace.

We have indeed heard colleagues and (more likely) outsiders say that if everything is available online, the teacher may be redundant. Should teachers then be worried about their future? Gee's observations on appreciative systems suggest that a world without professionals (such as teachers) is a long way off. The expression *appreciative systems* refers to the combination of affective and cognitive dimensions of a practice. For a player of a computer game, it is the results, rewards and good feelings about success that count, perhaps in relation to others who are playing the same game. The uncertainty about the arrival of the reward is an additional element that strengthens this good feeling. For people in professional contexts, it is more complex:

> … they must form the sorts of goals, desires, feelings, and values that 'insiders' in that domain recognize as the sorts members of that domain (the affinity group associated with that domain) typically have (Gee, 2003, p. 97).

For students aspiring to become part of an affinity group, the probing reflective practice will need to incorporate knowledge of such appreciative systems—and they will only be able to achieve this through dialogue. Their teachers will need to use the probing principle both with respect to the affinity group and to their cohort of students. And they will also only be able to achieve this through dialogue.

We know from studies of experts' knowledge and social practices in situated learning (Brown & Duguid, 2002; Eraut, 2000; Lave & Wenger, 1991) that learning is a social process. What is getting overlooked is that teaching is too. A completely student-centred approach to networked learning, while laudable, risks neglecting or omitting essential consideration of a teacher's necessary repertoire for the twenty-first century.

The Teacher as Orchestrator of Experiences

So far, we have identified an overarching need for dialogue, especially in relation to probing the students' learning and the domain itself. We have recognised that sometimes a teacher has to be silent, to leave space for students to do their own work. But students' own work has to be meaningful both to themselves *and* to the context in

which the learning is taking place. It has to incorporate relevant experiences of which the students may not yet be aware or sufficiently knowledgeable. It is up to teachers to orchestrate students' experience to allow students to process it actively, in a way that has personal relevance and meaning for them (Caine & Caine, 1994).

The idea of experiential learning has been around for some time (Dewey, 1938; Kolb, 1984; Lewin, 1942/1951) and seems to fit with the constructivist and collaborative forms of learning in social contexts said to be particularly associated with digital technologies (Selwyn, 2011). Caine and Caine (1994), however, claim that "all learning is experiential": learning from experience is not simply one among many options. But experience itself does not necessarily result in learning, which is why it has to be managed. In its information-delivery mode, the Internet affords an overwhelming range of content for multiple experiences; the Internet's social and communication function is what is needed for proper orchestration of those experiences.

An engaging teacher—whether in a classroom, online or in a blended approach—will initiate the learning experience, establish its tone and maintain a felt presence throughout even if they leave the actual or virtual room for part of the time. This sense of presence will be maintained during asynchronous and synchronous meetings and will remain even between synchronous sessions. It will be helpful therefore to consider both the features of the orchestrated experience and the characteristics of the effective orchestrator.

Writers who use the expression orchestration in relation to teaching do not necessarily agree on what that might mean. For Caine and Caine (1994), experiences should be immersive, and they use videogames as an analogy, resonating with the ideas of Malone (1981a, 1981b) and Gee (2003). Selwyn (2011) on the other hand, challenges this idea arguing that there is a case for stepping away from the authentic experience and outlining the major concepts involved in it—reinstating the notion of direct instruction, but in a context of taking a critical approach to those actual experiences including the use of digital technologies themselves. It may be the case that Selwyn does not see orchestration as teaching but as something else (indeed, he seems here to be regarding teaching as mainly instruction):

> As well as benefitting from the experience of being taught by a teacher, it could also be argued that learners benefit greatly from the teacher orchestration and co-ordination of technology-based education (Selwyn, 2011, p. 134).

This is perhaps another example of ambiguity over what counts as teaching in the digital age. In a book entitled *The Experience Designer*, Alger (2002) uses the concept of narrative as being at the nucleus of learning, a theme that has been extensively developed in the work of Roger Schank (1990, 2002). This arguably provides an alternative way of thinking that would accommodate both the fully immersive and the more blended experience plus direct instruction. Narrative is seen as providing stability in a changing environment in both public and private spheres. Alger suggests thinking of the Internet as a story, with a setting, plot (interactivity), characters, episodes, props, goals and consequences (Alger, 2002, p. 28). Despite the emphasis

on stability, Alger is arguing for a disconnection from previous forms of education, because they "emanate from curriculum as information design, instruction as information delivery" (Alger, 2002, p. 6).

Using Alger's arguments to revisit the idea of the online as the real course with deficits, one possible explanation of the view is that it is formed through viewing the online as a form of information delivery. Because there is a great deal of information online, this is an understandable perspective. It can also result in inexperienced teachers thinking that putting a course online means posting information into a VLE. (And this may be what the students seem to be calling for too—lecture notes online.) There is a strong contrast when the ideas of narrative, communication and interactivity come into play—and effective teachers will realise that they draw on such narratives in creating their own students' experiences, whether in classrooms or online. Our resistance to the view of the online as merely information delivery also underpins our preference for the term *networked learning* over online courses.

Different modes will present different teachable moments and networking opportunities and thus we should be careful not to look for an exact correlation between online and classroom-based opportunities for creativity. A digital environment affords the opportunity to return to online posts and get more out of them in the light of new insights; once the discussion in a classroom tutorial is over, it can be hard to recapture the moment. The physical classroom may provide a stage to a performing teacher: the talking head in an online lecture capture may not work in the same way as the dynamic (or front as Goffman (1990) put it) has changed. Both of these may be forms of performance, but they are not the only forms available to the teacher. Nor are the forms from the physical classroom and traditional representations of teaching the only ones that teachers should consider.

The metaphor of narrative is reminiscent of Goffman's (1990) one of performance, already mentioned in the section above: The Virtual Permeating the Real. In both cases, there is a recognition that an individual's activity—whether teacher or student—is part of a socialised and idealised way of interacting within a particular context, drawing on the skills of the performer in exemplifying a set of accepted values. Alger draws on three of our key themes here (reality, teachers, performance) when he says: "The real *teachers* in our world are the people that provide authentic examples of human ingenuity" (Alger, 2002, p. 121, emphasis in original).

Both Caine and Caine (1994) and Selwyn (2011) refer to orchestration as a mix of artistic judgement and practical or scientific skill. These are mirrored in what Alger (2002) refers to as creative and critical vitality—thinking styles and events. Events and performances will be formed from experiences, narratives, stories and dialogues; thinking styles will need critical and creative skills. We turn now to the qualities of teachers and how these might be augmented through digital technology and social networks.

In an earlier cited work, Macleod and Ross (2011) use the metaphors of jester, fool and trickster to explore how well their characteristics might fit with the ambiguous new roles of online tutors. These performance metaphors yielded useful

insights. Their conclusions also fit with the idea of orchestrating experience, and so we repeat them here:

> … our view is that online tutors should:
>
> – be willing to be the focus of critical attention, and to make themselves impossible to ignore in noisy online spaces;
> – support students to question and challenge authority (theirs and others'), but be aware of their own positions of power in doing so;
> – model 'secure not-knowing' and enjoyment of ambiguity;
> – find ways to provide a felt presence;
> – allow students to untangle complexity for themselves, in their own context;
> – be playful and use humour without making students a target (Macleod and Ross (2011, p. 25).

Interestingly, this parallel between jester and academic has also been noted by one of the editors of the current volume who has used it to good effect to explore the role of academics and the nature of the academic community in a networked society (Jandrić, 2013). We take great delight in such synchronicities. Another such is that the bulleted list above seems to fit a description of Deleuze's classroom-based teaching style! (Bogue, 2013)

Conclusion

The view that an online course is an inferior version of a real one should cause us to look not only at what is necessary to ensure the success of online courses, but also at what we think teaching and learning are about anyway. For us, the process of making teaching (the familiar) strange (Kaomea, 2003) has reinforced the social and dialogical nature of teaching. It has also brought out the constant interplay of the virtual and the actual in education as in other aspects of our lives—and problems associated with the pervasive binary of virtual and real. We have indicated that we prefer the term "networked learning" over those that privilege learning as information-gathering and teaching as information-dissemination, but we also want to ensure that use of this expression does not undermine the idea of teaching. We have argued that it is useful to support a more philosophical understanding of the virtual in relation to teaching, particularly to bring out the role of the teacher a creator of experiences and source of relevant signs in a complex world.

Although the moves towards encouraging students to persist, explore and interact with the material do not mean the end of the teacher, their parallel development with online and networked opportunities for learning has been fortuitous. We have seen technology being used as a Trojan horse to bring in more innovative, and student-led forms of educational engagement. Thus an initial emphasis on *information technology* eventually cedes to one on *communication technology*, and the main loss is of a now-discredited instructionist model of education. There is a frequently used saying, variously attributed: 'Anyone who can be replaced by a computer deserves to be'. We are making the case here that good teachers do not come into this category; elements of their practice might, however, which could possibly (ideally) even

free up some time to attend to how they might use technology for effective teaching especially in a dialogical sense. Those teachers who feel that what they do could all be done by a computer should be supported in going beyond this position and reviewing what being a teacher really means.

Dialogues with students ideally will allow them to be in control of their own learning but with teachers still supporting them in becoming part of an affinity group, engaged in appropriate narratives and exposed to relevant experiences. The roles of teachers and students have sometimes blurred during our analysis, and of course we have ourselves brought both these perspectives to the study. We are still forming our own narratives in a rapidly changing world, sometimes simultaneously with our students. We conclude that though we want to emphasise the teacher's role in digital environments, it may be appropriate to think about students as junior colleagues in inquiry (if they are willing to espouse this role; some may not be, though we think we should encourage it). Online teachers are not involved in unreal or inferior practices: we are doing complex communicative work in networked teaching and learning.

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