Chapter 3

# Posthuman Literacies?
## Technologies and Hybrid Identities in Higher Education

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## ABSTRACT

*Social media and mobile technologies have introduced new means of networking, particularly in affluent post-industrial societies. However, the centrality of communication to these technologies is not always acknowledged. Drawing on the perspective of New Literacy Studies (e.g. Barton 2001), this chapter examines digital media from the point of view of meaning making, discussing the complex ways in which multimodal semiotic resources are used in creating and maintaining digital identities. It argues that the use of these resources engages the subject in hybridity across digital, analogue, and embodied practice. The notion of "posthuman literacies" is proposed, drawing on Haraway's notion of the cyborg (1991) and Hayles' examinations of the posthuman (1999, 2006), examining meaning making in a context where the boundaries between analogue and digital, "human" and "machine" are disrupted, blurred, and ideologically freighted. It concludes with a discussion of how this analysis might apply to the context of higher education.*

## INTRODUCTION

Discourses surrounding new digital technologies are often dominated by notions of technological advance and innovation. In 'developed' countries in particular, this can be seen in popular under- standings of mobile networked devices and social media. These technologies have enabled new possibilities for self-expression and communication across a range of contexts and purposes, such as in social networking, where participants construct distributed identities across a range of platforms.

However, the centrality of communication and self representation to many of these new digital technologies is not always acknowledged. From the standpoint of New Literacy Studies (e.g. Barton 2001), communication within digital contexts should be seen not only as a technological means by which to relay information, but as a complex set of social practices in which identities are not only expressed, but also created in a reflexive relationship between communicative practice and the subject. This chapter will examine digital media from the point of view of language and meaning making, and will discuss the complex ways in which multimodal semiotic resources are mobilised in creating and maintaining digital identities. In doing so, it will refer to a range of technologies present in the higher education setting, covering educational software, and technologies used more widely in professional settings and social media.

However, crucially, these should be seen as constitutive of identities in wider social practice, leading to hybridity and mixing across digital, analogue and embodied practice. It will propose the notion of 'posthuman literacies'– drawing on Donna Haraway's cyborg (1991) and Katherine Hayles' (1999, 2006) analyses of the posthuman - to examine practices of meaning making in a context where the boundaries between analogue and digital, 'human' and 'machine' are ambiguous and highly problematic. It will then go on to discuss the implications of this analysis in the context of higher education, where digital media are widely used in 'elearning', but are also used by students via a range of practices which are seen as marginal or transgressive. The chapter will examine the implications of this analysis for staff and student identity apparent in both established and emergent practices in higher education. It will suggest that, although environments feature 'affordances' which may predispose users to certain type of practices and ontologies, participant agency and the multiple, partial nature of engagement in

digital literacies mean that practices and identities /subjectivities are highly complex, hybridised and multivoiced. The implications for student identities will be discussed.

## MEANING-MAKING AND LITERACIES IN THE DIGITAL UNIVERSITY

The field of literacy studies has responded to the shift towards digital practices, with a recognition and exploration of the increasingly multimodal and visual nature of meaning making practices in 'the digital age' (Kress 2003). A literacies perspective has also been brought to bear more specifically on 'elearning' in the university (Goodfellow & Lea 2007), in a much-needed analysis recognising the textual and socially-situated nature of engagement with digital technologies in higher education. Crucially, technologies are recognised in this conception not as 'tools', but as sites of social practice. Studies have also investigated the uses of Web 2.0 digital technologies in pedagogies focused on literacies in school classroom practice (e.g. Carrington & Robinson 2009). The notion of literacies has also been employed in the analysis of virtual worlds and gaming, requiring what Steinkueler has called a 'constellation of literacy practices' (2007: 297).

This has provided a long-overdue perspective on engagement with digital technologies as a set of socially-situated textual and cultural practices, moving us away from the rather sterile, technically-focused discourse which has tended to dominate 'elearning'. In doing so, this work has also served to direct attention to student/staff identiies as those of embodied and situated social actors. The next section of this chapter will draw attention to the notion of *hybridity* and blurring between the digital and analogue, suggesting a 'posthuman' reading of particularly controversial

educational phenomena may shed light on how this complex field of social practice constitutes identities within contemporary higher education.

## DIGITAL MEDIA, THE UNIVERSITY AND TWO "FLASHPOINTS"

The implications of these profound shifts in cultural practice are far-reaching, and are also strongly instantiated in higher education. This can be seen in the widespread use of VLEs in universities, and more recently the use of Web 2.0 technologies in teaching and learning. However, the pervasive influence of digital media can also be observed in the prototypically 'face-to-face' environments of the academy, and arguably an examination of contemporary social and educational practices in some sites of production which are not generally viewed 'digital' can reveal a complex picture. This chapter will focus on two examples which may be seen as 'flashpoints' – areas of troubled, controversial or even transgressive practice in higher education settings. These relate to the notion of digital identities in different ways, in the first example relating to identities in terms of student day-to-day use of mobile networked devices as part of communicative practice, the second in terms of how student present themselves via academic writing, and the phenomenon of 'plagiarism'.

The lecture theatre as a space is often cited as the quintessential site of 'traditional' educational practice – and as such is often positioned by proponents of innovation as retrograde, hierarchical and highly-controlled. However, rather than being a bastion of 'traditional' educational practices, increasingly lectures are permeated by the practices of digital media, both officially and unofficially, as the lecture - an event which has in the past primarily demanded a combination of spoken discourse, listening and handwritten literacies - is now increasingly interwoven with digital practices and texts. For example, PowerPoint slides and other links to online resources are routinely posted on the VLE in advance of the lecture. This arguably alters the temporal status of the lecture and nature of the exchange, bringing the clear and bounded 'eventness' of a face-to-face classroom encounter into radical doubt (Gourlay 2012). The practices involved also become increasingly intertextual, as the lecturer refers to PowerPoint slides shown not only synchronously with the talk, but also made available in advance in a digital format via the VLE. This also changes the nature and reference points of the spoken communication as the students may also have printed these in advance or may have downloaded them on to laptops to view in class. Additionally, students may choose to record lectures, further complicating their roles as listeners present in the room. The lecture theatre now also typically includes a large screen in central position, onto which the slides or other images are projected; arguably the screen is now the central focus for the students, as opposed to the lecturer. This interleaving of the VLE, online resources and face-to-face practices in 'blended learning' has arguably not simply combined the digital and the analogue in a complex sequence – it has also fundamentally changed the nature of the lecture as a site of cultural and educational practice, and consequently the nature of the identities and subject positions enacted within it. The lecture no longer stands as a clearly defined temporal event situated clearly in embodied verbal and print literate practice, but instead has become hybridised – part digital, part analogue (Gourlay 2012).

This picture is further complicated by the fact that increasingly during the lecture, students may be using laptops and other mobile networked devices not only to write notes, but also to send texts, access social networking or microblogging sites, or engage in any online activity they choose. The participants are physically co-present, but are not 'present' only in the room – they may also be distributed as subjects across a range of networks and sites simultaneously. It is noteworthy that

student use of mobile networked devices in class is seen as troublesome or transgressive in some contexts, provoking disapproval or disquiet from some lecturers. The legitimacy of their use seems to be ambiguous, questionable and a flashpoint for anxieties surrounding distraction and loss of discipline or control in the lecture theatre. Responses to their use tend to either collapse into moral panic, or seek to enrol the devices for educational purposes (e.g. Pachler, Bachmair & Cook 2009) Identities are implicated in this, as the expected practices and also status of the student shifts along with their access and use of technologies during the lecture. The presence and active use of these devices appears to destabilise the context and change the nature of the encounter.

A second troubled area of higher educational practice and identities may also be examined in these terms. The phenomenon of student 'plagiarism' has become a cause for great concern in recent years, as large numbers of students are found to be including text and ideas from published work without appropriately acknowledging the sources in their written assignments. This is a complex issue involving a range of factors, but has tended to lead to a 'moral panic' (Clegg & Flint 2006) and a linking of the phenomenon with fears that higher educational standards are in decline, or that today's students are cynical and dishonest. However, from a literacies perspective, the phenomenon may be seen as arising to a large degree from confusion and a lack of explicit and scaffolded guidance regarding the conventions of academic writing. The issue of plagiarism is further complicated by the fact that students are expected to conduct much of their reading and desk research in a digital environment, using online journals and other sources of information, in additional to print textbooks. The materials for their module may also be primarily in a digital format. Internet research yields thousands of sources, as opposed to the relatively small number of approved print sources used by students in the

pre-digital university. As a result, the relationship between the source material and the author has been fundamentally altered. The range of sources which can be drawn upon is almost infinitely large, complex and varied in terms of format - and in terms of reputational value – which the novice may not be well-placed to discern. Students then seek to build arguments or display knowledge drawing from a field of cultural production which is not only enormous, but is also radically distributed, fragmented, and multivoiced.

From this kaleidoscope of texts, voices and images, they are still expected to produce what must effectively masquerade as an analogue text, conforming to the conventions of print literacies as the student seeks to render a cacophony of online textual voices into the impression of a text written by a stable and singular author. In this case - as in the case of laptops in lectures – at the heart of a transgressive and troubled area of practice and identity we find a blurring of sites of analogue and digital meaning-making practice. As in the previous case, a 'flashpoint' has erupted where a practice which is 'officially' still posited as essentially analogue has in fact become blurred and hybridised, where digital practices and texts have become completely interwoven and indistinguishable. Again, this has implications for student identities as expressed in writing. As the next section will argue, this has not only led to a shift in literacy practices, but it has also to a fundamental and related shift in staff and student identities.

## THE POSTHUMAN UNIVERSITY?

If we accept the linguistically mediated nature of digital practice, and the distributed, hybridised nature of contemporary social practice as it is played out in the academy as exemplified above, then a further theoretical strand of work in cultural studies may also help us to understand these contexts more fully. This section will outline the

main points of the concept of 'posthumanism', and will argue that it may provide potential theoretical purchase in studies of identity and social practice in higher education.

The notion of posthumanism is often associated with Haraway, in particular her (1991) 'cyborg manifesto', through which she introduces the metaphor of the cyborg as a challenge to essentialism in the feminism of the time, but also as a wider metaphor for the hybrid, blurred nature of identities in general. Haraway's cyborg challenges boundaries and ways of organising the world and categorising human and nonhuman subjects, such as the categories of human and animal, organism and machine, physical and non-physical (Bell 2007). Haraway argues that post-war developments in science and technology have ruptured these taken-for-granted divisions, resulting in fractured identities. This notion of the hybrid of human and machine, and the resultant hybrid identity, is of utility in this analysis. The prototypical notion of the 'cyborg' perhaps involves hybrid materiality – involving such non-biological features such as implants. However, if we argue that our subjectivities are also constituted by our discursive practices, then these new forms of communicative practices in the academy could also be seen as indicative of a cyborg ontology.

Hayles (1999) also explores the notion of the posthuman in her analysis of the history of cybernetics. In doing so, she explores the notion of *embodied virtuality*, contesting the notion that the mind is somehow separable from embodiment. As she puts it, 'In the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals' (2009: 3). Hayles seeks throughout this work to challenge the notion that information and embodiment can be meaningfully separated, and in doing so provides a subtle critique of the notion of the posthuman.

Hayles emphasises that '...it is important to recognise that the construction of the posthuman does not require the subject to be a literal cyborg... the defining characteristics involve the construction of subjectivity, not the presence of nonbiological components' (1999:4). This notion of the posthuman residing in social and cultural practices and identities is of particular relevance to the argument of this chapter. She defines *virtuality,* '...the cultural perception that material objects are interpenetrated by information patterns' (1999: 13/14). Her goal is to understand virtuality while retaining a focus on the importance of embodied process. The next section will attempt to apply Hayles' notion of the posthuman to the contexts of higher education practices and identities described above.

## POSTHUMAN LITERACIES?

As we have seen, work on literacies and multimodality have sought to examine engagement with digital texts and practices in education in ways which foreground historical and contextually specific sites of cultural production, practices which are also constitutive of subjectivities/identities. Posthuman theory also seems to offer us a theoretical lens with which to examine some of these complex sites of practice in terms of hybridity and blurring of boundaries between the analogue and the digital. This section will revisit the two 'flashpoint' examples given earlier, subjecting them to a posthuman reading.

The ubiquity of networked worked devices in the university setting, if viewed in terms of Hayles' definition of *virtuality*, produces a setting which is both virtual and embodied. The binary is blurred in this context between face-to-face and online engagement, as the context increasingly allows more simultaneous engagement with networks of communities and sources of information beyond

the physical walls of the university. The porous nature of these textual/multimodal practices across these boundaries complicate any attempt to draw a clear binary in term of digital and analogue practices and identities, also blurring notions of presence and copresence, which are neither wholly analogue nor digital. This blurred posthuman student seems to instantiate Hayles's notion of *embodied virtuality*. The result in terms of identities for participants is arguably greater hybridity, a cyborg ontology (Gourlay 2012).

The second example of troubled practice and identity was student 'plagiarism'. Applying Hayles's concept of *embodied virtuality* may also give us some purchase here, helping us to see the student essay as an essentially liminal text arising from a combination of the student as individual, embodied author entirely enmeshed in a multivoiced, fragmented complex of digital texts and practices. The notion of the stable and singular author is further undermined - and must be all the more vigorously shored up by regimes of surveillance at university level, and morality discourses in the media. In terms of identity, in this conception once again the student may be seen as occupying what might be termed a cyborg ontology. In the case of networked devices in class, the student is in an ambiguous position in terms of the established norms of acceptable behaviour. In the case of plagiarism, the cyborg nature of student identity may contribute towards placing the student in a transgressive position in relation to university regulations, written for an analogue age.

## CONCLUSION

This chapter has focused on the impact of the increased prevalence of digital texts, devices and practices in higher education, tracing how these have introduced a wider variety of resources for meaning-making to the day-to-day practices of the university. Taking a literacies approach, it summarised how this perspective has helped to refocus research and commentary away from the notion of educational technologies as 'tools', and towards an emphasis on the textual and socially-situated nature of digital practices in higher education. This perspective brings with it the related recognition of literacy practices as constitutive of identities, as opposed to a set of 'skills'.

The chapter proposed that troubled areas of practice in higher education may reveal a further set of complex issues surrounding practices and identities in relation to digital technologies. In order to illustrate this, it examined two phenomena which currently generate anxiety and debate in the sector. The first 'flashpoint' was the increased use by students of mobile networked devices in the face-to-face lecture theatre. It was argued that this, combined with the strongly enmeshed digital/ analogue nature of these encounters due to VLE use and data projectors, has led to a hybrid site of cultural production which is neither wholly digital nor analogue. The second troublesome area of practice referred to was student 'plagiarism', focusing particularly on novice writers - who may be unsure of writing conventions - 'cutting and pasting' from digital sources without attribution in written assignments. It was argued that this may also be seen as stemming partly from a hybridised site of cultural practice, where the teaching, research and reading technologies supporting essay writing are largely digital, wide-ranging and multivoiced in terms of sources; the end-product text is still expected to conform to the conventions of an analogue, print literacies text.

In an attempt to gain some theoretical purchase on these hybridised areas of educational practice and identity, some key aspects of posthuman theory were summarised and then applied to these two contexts. It was argued that Hayles' notion of *embodied virtuality* may be a useful heuristic in seeking to understand the complex subject positions generated by the hybrid digital/analogue

lecture theatre. This concept was also proposed as of potential utility in the analysis of the identity of the student essay writer, who sits in an indeterminate space between digital and analogue meaning-making practices and the associated norms and subject positions required. In this reading then, these troubled areas of practice and subjectivity in the academy may interpreted as resulting (at least in part) from tensions around the essential cyborg nature of the contemporary university and the subject positions arising within in it.

In higher education research literature on digital practices, the idea of hybrid identities has received more attention in contexts which are more obviously innovative and wholly online, such as educational practices in virtual worlds such as Second Life. Bayne (2008) has explored examples taken from a Masters level programme in Online Education, arguing that these environments provide a space for what she terms 'uncanny pedagogies' (2010). However, as this chapter has suggested, the concept of the uncanny, the hybrid – even the cyborg – may also be discerned across the wider university, including at the heart of practices in the face-to-face, material campus which are normally regarded as 'traditional' and non-digital – in practices such as lecturing and essay-writing. This posthuman analysis of higher education demands new forms of pedagogic practice and support for a new set of literacy practices which recognise and embrace the hybrid nature of the university, rather than attempting to police student practices and maintain the illusion of a pre-digital age, or to collapse into an overly techno-rationalist model of 'e-learning' which loses sight of the students and staff as complex, socially-situated embodied subjects.

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## KEY TERMS AND DEFINITIONS

**Academic Literacies:** This term is particularly associated with the work of Brian Street and Mary Lea. It describes a perspective towards academic reading and writing which views these as elements of broader social practice and identity work, as opposed to cognitive transferable skills. It often appears in the plural to emphasise the complex and plural nature of these social practices.

**Cyborg:** A term originally coined in post-war cybernetics to refer to a being composed of a mixture of biological and mechanical components. Subsequently used as a metaphorical figure in the work of Donna Haraway to explore and challenge cultural categories.

**Digital Literacies:** This term is used here to refer to the same sense of communication as social practice, in this case using digital technologies.

**Hybridity:** A term describing a state of being mixed, or of mixed origin, or blended.

**Liminality:** A term originating in early 20th century social anthropology describing the state of being in transition from one state to another, on a threshold.

**Multimodality:** This term is particularly associated in education with the work of Gunther Kress, and refers to communicative practices which draw on multiple modes of representation: e.g. textual, visual and auditory.

**Posthumanism:** A complex set of theoretical positions which seek to question the assumptions of humanism, in particular the central position afforded to the human as a clear and separate category in our understandings of nature and culture.