Virtuality, veracity and values: Exploring between virtual and real worlds using the 3V model

Simon Atkinson and Kevin Burden
University of Hull, United Kingdom

With the emergence and popularity of online social networking technologies (Web 2.0) students are exploring new concepts of self, identity and community both in real and virtual spaces. New theories are necessary to develop social policy responses, including those of educational systems and institutions, to the consequences of these new conceptualisations. We present an original theoretical model, the 3V model, to assist in the interpretation of existing theory, illustrated through an exploration of higher education students' concept of identity in the interface between the 'real' and 'virtual' worlds. We wish to explore whether the theoretical and methodological instruments available within the broader Social Sciences are adequate to examine emerging notions of identity. Our emergent theoretical model outlines a set of complex assumptions concerning the concept of the "real-virtual" interface; it presents an internal structure to this realm and provides a framework for further empirical study.

Keywords: social networking, Web 2.0, value orientation, culture

Introduction

We began our enquiry by exploring the apparently simple question as to whether internet use, specifically of Online Social Networking Tools (OSNT), currently popularly termed Web 2.0 and including such applications as Myspace, Bebo, Facebook or Flickr, changes the social practices, behaviours and socio-cultural expectations of their users. We ask this question as educators in an institution that embraces the concept of lifelong learning and provides tertiary level programmes for Early Years (Kindergarten) practitioners through to professional development programmes for mature practitioners in Higher Education. The concept of 'digital literacy' has become a frequent point of professional debate. We believe the lack of awareness across the educational sectors within a single national state's education system of the impact on learners of varying levels of e-literacy suggests that the real impact of technology adoption on learner performance, expectations and behaviour is poorly understood. Universities seeking to provide flexible and effective access to digital support for learning must understand how patterns of user engagement are changing and what the consequences of this change might be.

We have a wider philosophical concern which is that the internet, as a phenomenon, is not yet being regarded in a suitably holistic way. It remains unusual to see genuinely interdisciplinary teams undertaking a critical analysis of the phenomena of the internet. This is understandable, since the task would appear truly gargantuan. None the less there is, we believe, a need to reassess our approach and to provide colleagues from all social science disciplines with a conceptual framework that allows them to invest their specialist traditions, investigative models and theoretical approaches. We aim to present a model, the 3V model, to support this emerging conceptual framework.

Building across the social sciences

The theoretical constructs that underlie our work are extremely diverse, from Political Science's interest in power and representation, Elitism and Pluralism, through to Computer Science's interest in Actor-Network Theory. We have considered and explored Georg Simmel's notion of 'stranger' (Simmel, 1949), and of Alfred Schütz's exposition of 'intersubjectivity' in the field of phenomenology, the notion that shared cognition is essential in the formulation of ideas, notably in the process of meaning-making (Schütz, 1967). We have been particularly influenced by the tradition of Cultural Historical Activity Theory and more latterly the concept of "knotworking" developed in the work of the Scandanavian Activity Theory movement, specifically development of a hypothesis on co-configuration expansive learning (Engestrom *et al.*, 1999). We have also drawn on the work of Communications and Media Studies from Innis' space-time considerations (Innis, 1951) to Michael Cole and Jan Derry's assertion that we are the technology we apply (Cole & Derry, 2005).

In this short paper we lack the scope to review much of this theoretical context adequately, however, we will identify current work with respect to 'loose web' theory which identifies the inter-related technologies that make up the internet and, whilst acknowledging the difficulties of conceptualising the web as a whole, suggests that the sum total of communication produced through these associated means can be identified and its internal and external impacts studied. Cultural Production Thesis seeks to explore the difference in scale of individual engagement with the means of cultural production between the twentieth century's television and radio mass media participation, essentially a passive activity, and the mass cultural participation of the internet (Burnett & Marshall, 2003). Early forms of the Cultural Production Thesis, which predate the onset of mass blogging and the majority of OSNT, still fail however to recognise the quantum leap from participation in mass internet communications to the mass cultural production of content.

The expectation that the web can, and will, impact on society is part of the technological determinist approach. This approach has developed in the disciplines of computer science in both cybernetics and artificial intelligence and helps to define the internet as a living organism or an evolutionary system. Equally there is valuable insight in the fields of linguistics and discourse theory as well as an already significant body of research relating to the macro and micro-economics of the internet and to its associated politics, issues of copyright and censorship.

The tool makes the person

There is undoubtedly a shift in the conceptualisation of space and time in communications, and in the individual as producer of communication, with the rise of social networking technology. Given the extremely diverse discipline framework in which we seek to place our enquiries we are extremely conscious of the need to acknowledge the degree to which terminology varies markedly between disciplines and languages.

Both technology and intelligence are contested and divergently applied terms across the social sciences. Technology conjures up images of the range of C&IT technology, electronic and digital computers, ITC, communications, as well as cars, planes and physical constructions of all kinds. This view of technology is also that described by Neisser (Neisser, 1976) and others as 'academic intelligence'. Michael Cole argues this is an inadequate conceptualisation of technology and intelligence, arguing that not only are the two indivisible but that technology needs to be broadened to not only include the tools commonly defined as technology, but also the context of deployment in their social context (Cole & Derry, 2005). This rich vein of research theory in the tradition of the Cultural-Historical Activity Theorists suggests that technology is then social milieu as well as 'tools'. This is a step beyond the territory of the 'Social construction of technology' with its roots in the work of Bruno Latour, which posits that technology is not so much a determinate of human action, but that rather, human actions serve to shape technology. Cole suggests that technologies should therefore be envisaged as forms of 'tool-mediated social practice'. This develops Piaget's notion that intelligence is the process of adaptation to the conditions of life.

Concepts of identity and meaning making

We wish to explore whether existing theoretical and methodological instruments available within the broader Social Sciences are adequate to examine emerging notions of identity in the context of OSNT. The internet offers something potentially new for the study of cultural values, a space which is in one respect truly universal, not bound by time or geographic location. Whilst still dominated by the medium of English language (an opportunity for future research), this globally accessible space offers an exciting context in which to explore value change. We posit that actors in the virtual space of Facebook (www.Facebook.com) or Second Life (www.secondlife.com), adopt different cultural values from those they would assume in the real world, that the technology through which new generations (irrespective of age) are learning to mediate social practices is changing the underlying value constructs of their users. The proposed '3V' model seeks to describe the set of complex assumptions concerning the concept of the 'real-virtual' interface; it presents an internal structure to this realm and provides a framework for further empirical study. The 3V model aims to identify the nature, position and impact trajectory of technology on social relations on three axis, the first V is Virtuality, the second V is Veracity and the third V is Values.

Virtuality

The concept of space is one crucial element in our model which we describe in terms of Virtuality. The degree to which one is 'present' in the spaces one occupies form key elements of an individual's identity.

The relationship between spaces and personal behaviour was explored by Georg Simmel (1858 – 1918), a pioneer of the 'social structure', who suggested that there were significant differences between life patterns of urban and rural people, that the pedestrian pace and long-term physical association with place in rural contexts allowed the development of deeper connections than was possible in urban settings, but encouraged a narrow and conformist tendency in social thought which stifled originality and personal expression. Urban life, in contrast, was one of the indifferent stranger, oblivious to each other's patterns of behaviour, allowing individual expression but encouraging a dispassionate attitude to the overwhelming amount of activity that surrounds one, sometimes leading to isolation. Simmel idealises the nature of Man's sociability as natural and free of constraint, as creating social realities through the accumulation of individual interactions. This has particular relevance to our understanding of OSNT ability to create networks of peers (Simmel, 1949).

This has interesting relationships with the work of the political economist H.A. Innes on the Centre and Periphery in communications theory and the idea that space and time are directly related to the patterns of communications within specific traditions. Innes sought to develop a grand theory of history that sought to explore culture's relationships to space and time. His thesis was that less technological, non broadcast means of communication, typified by oral cultures, placed their emphasis on the relationship with time, the preservation of knowledge and the perpetuation of close traditional relationships. More technologically sophisticated broadcast based forms encouraged an emphasis on spatial reach, and considerably less on time related concepts (Innis, 1951).

Taken together, Simmel and Innes, in different fields, languages and contexts, describe a pattern of cultural development in which stable physical, peripheral and 'narrowband' communication amongst the familiar, contrasts with the urbanised, technologically sophisticated 'broader-casting' to 'strangers'. However, within the environment of social networking tools such as *MySpace* or *Facebook*, there is precisely a blend of these two domains. Innes's question that the relative stability of a culture is dependent upon the balance and proportion of their media is one with obvious implications for the study of the Internet.

Veracity

Our work on veracity builds on the work of cyberculture theorists such as Nakamura in exploring individual's sense of personal identity development (Nakamura, 2002). We will be concerned in the 3V model with the concept of veracity in so far as it supports the development, both of the individual and collective. Semiotic analysis drawing on textual and historical analysis has explored the formations of meaning from the webs diverse sources. Whilst the printed text has established conventions, of peer-review, and authoritative publishing houses, the value of the world-wide web as a source of information remains highly contested, not least amongst academics. We are not directly concerned with the factual accuracy of individual elements of information placed on the web, although this is indeed of significance as new patterns of interpretation, assignment of authority and new concepts of credibility and authorship emerge. Rather we are interested in the ability of the individual to suspend their externally imposed boundaries of space, time, gender, ethnicity, age and social status and to express themselves independently of the real-world.

Marshall McLuhan proffered the notion of the 'global village' (McLuhan, 1965) before the advent of the personal computer. This concept captures succinctly the contradictions of a spatially diverse 'territory' without boundaries with visions of idle gossip over the white picket fence. Levinson, which a fuller expansion of McLuhan's concepts updated for the advent of the Internet suggests that not only was McLuhan correct in his assertion that the communications technologies of his time had become extensions of the human sense, but that new emerging technologies have developed into a virtual nervous system for humankind (Levinson, 1999). Mass communications research into shifting perceptions of truthfulness and reality as experienced by the individual is vital to a proper understanding of the Internet but also, we suggest, as to what it now means to be an individual.

Values

The concept of Values, perhaps the most contested, is the third element in our model. There has been considerable interest in the development of instruments to measure cultural values, notably with a view to establishing commonalities across geographically dispersed peoples as well as sub-groups within single political states. Most of these instruments have been focussed on apriori cases of defined 'cultures', whereas we are interested in newly emerging cultures and are seeking to measure changes in cultural value systems which are often poorly understood.

Whilst we use the term 'values', we intend to apply it to the broader concept of 'cultural values', and in doing so must acknowledge that there is disagreement as to both the definition and usefulness of the term and concept of culture. In the English language, the term 'culture' and 'cultivation' were until the 19th Century largely coterminous and the development of the well cultivated individual as a 'well-cultured' one naturally gave rise to the notion of the well-cultured group, the civilised as opposed to the barbarian, the cultured and the uncultured. As the term developed to capture the inter-generational shared practices of all social groupings, it acknowledged that all societies, even, and perhaps particularly the colonised, had a culture of sorts defined by differences. The values thus associated with these cultures were also consequently defined by differences. The Internet era presents an interesting challenge to the assumptions, and vocabulary, of 'differences' in cultural values. Heterogeneity and homogeneity are no longer easily assessed with reference to spatial boundaries and the range of formative experiences to which individuals are experienced, and which informs their sense of self and other, is growing at a phenomenal rate.

The 3V model

Models applied to the learning context directly, such as the 4-E model cited by Collis (Collis & Moonen, 2001), provide an insight into how one may measure the effectiveness and likelihood of adoption of a technology. It does not however assist in the understanding of what impact the adoption of such technology might have on users in the immediate and longer term. Existing models acknowledge the importance of the broad range of environmental factors, but do not illustrate how the environment might be most directly affected.

In the model illustrated below we have created a three dimensional space for theorising the impact of existing and emerging social networking tools. We propose that tools can usefully be evaluated in terms of these three dimensions, Virtuality, Veracity and Values, along a continuum of 'virtual-real', 'trustworthy-uncertain', 'stable-unformed' respectively. We suggest that, like the Activity Theorists, the emergence of new forms of social mediation is the result of 'rupture', or 'disruption', and we should therefore look to assess the degree to which a social networking tool defies, contradicts or alters existing patterns of interaction.

We have already indicated that even within one language, namely English, the terminology varies between academic disciplines when describing similar or equivalent concepts. The continuums described here, are therefore mutable, and this is likely to be an area of further refinement.

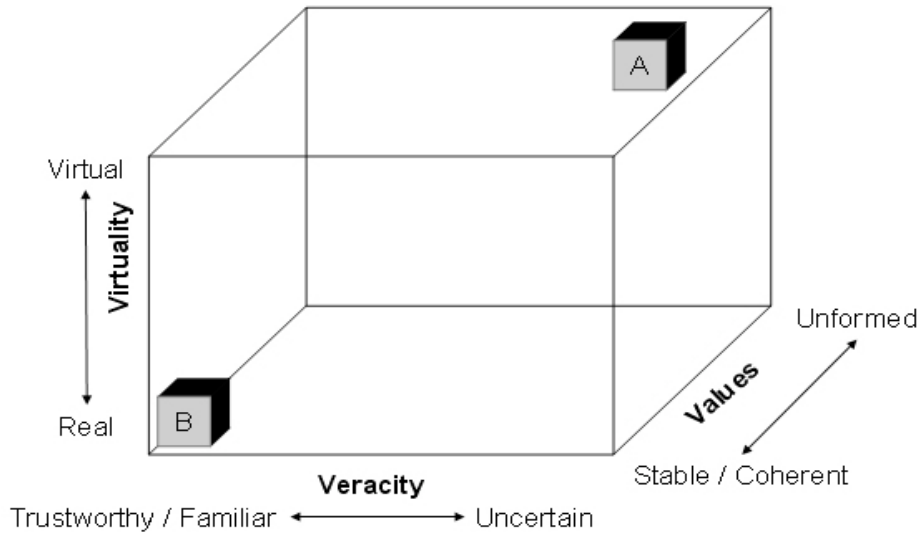

Figure 1: 3V model

In the model above we might suggest that the OSNT, represented by 'A', is an avatar engagement in *Second Life*, where the degree of Virtuality is nearly total (although less so arguably than text based fantasy), where the Veracity of representations cannot be guaranteed as there is little or no opportunity to verify the truthfulness of representations made, and where the Value systems are too new, given the recency of the technology, to be known. By contrast 'B' might be used to suggest the position of a face-to-face encounter in the classroom.

Exploring the values dimension of the VOM-3V model

We believe that many existing instruments and theoretical approaches will prove compatible with this research model and are eager to develop and adapt a range of data gathering means to populate and refine the 3V model. Initially we are proposing to adapt one well established anthropological instrument for identifying generalised value differences within contemporary cultural settings, the Kluckhohn - Strodtbeck Value Orientation Preference Model (Kluckhohn & Strodtbeck, 1961), and are applying it to both real-world and virtual-world personas within a single sample.

The origins of the Value Orientation Preference Model (VOM) are in the work of the Harvard Values Project in the United States in the 1940s and 1950s in which a team of anthropologists believed there was predictive potential in an instrument which could distinguish cultures based on their responses to five common human concerns. The five elements have been challenged and refined, however, the original model still has merit. The VOM suggested there were three possible responses to each of the five contexts presented and that the ranking of these fifteen elements could define the 'character' of a given culture. These responses were described as 'value orientations'. A brief summary of these dimensions is detailed in the table below. For a clear exposition of the original VOM see Kohl (Kohls, 1981) and Russo (Russo, 2000).

Table 1: Five common human concerns and three possible responses

Concerns/ orientations	**Possible responses**		
Human Nature	Evil	Mixed	Good
Man-Nature Relationship	Subordinate to Nature	Harmony with Nature	Dominant over Nature
Time Sense	Past orientation	Present focussed	Future focussed
Activity	Being	Being-in-becoming	Achievement ("Doing")
Social Relations	Hierarchical	Collateral	Individual

Whilst there is recognition that each culture will express all three possible responses at some time, a pattern of intra-cultural stability is theorised. Diversity within any given culture is acknowledged and acculturation is also anticipated. The VOM has been applied, and found to be useful in a wide range of disciplines where an interest in 'value orientation' persists, including in higher education with language students (Ortuno, 1991) and those in dentistry (Marino & Stuart, 2005).

Kluckhohn - Strodtbeck themselves were clear that they did not see the model as complete and that further requirements were encouraged. We have sought to review the VOM in the light of the 3V model and intend applying the spatial dimension as suggested by Michael Hills (Hills, 2002) and others. The concept of spatial responsibility as being an individual or collective endeavour has obvious application in considering values in OSNT.

Table 1: Space as an additional dimension

Concerns/ orientations	**Possible responses**		
To whom does 'space' belong?	Individuals	Families or Groups	Everybody

Hills suggests dimensions relating to work, gender and state-individual relationships and in subsequent iterations we will seek to clarify dimensions to explore value responses to Veracity and Virtuality.
The essential methodological instrument of the VOM is a survey, consisting of approximately 16 situations based around the basic five dimensions, sometimes more, with associated questions. Originally designed in a story/response format to aid those with differing levels of written comprehension, the instrument can be read, or listened to, and has therefore proved effective with both non-literate and literate respondents. The tool can be applied to provide a research-focussed analysis of cultural differences, or as a developmental awareness-building tool to formulate social policy.

Conclusions

In our current research we will apply a modified VOM to online groups and ask them to complete the survey instrument 'within' their virtual space. We will then develop real world control groups to explore whether individuals carry their value orientations with them from their immersive virtual world experiences into their real world experience, or whether they undertake a personal acculturation of the

virtual world based on their real world core values. We expect the results of these enquiries to illustrate the complexities of examining the inter-section between the 'real' and 'virtual' experiences of today's Higher Education students.

We are anxious to see the results of these pilot studies in the Autumn of 2007 and recognise that their statistical value will be limited. It is our hope that other researchers will see value in applying their research models, and the VOM-3V model, to cohorts and assumed communities in a similar fashion. A significant number of parallel studies will reveal whether there are distinct cultural value traits, shifting patterns of behaviour and attitude, within the OSNT worlds.

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Simon Atkinson, Learning & Teaching Support Unit, University of Hull, Hull HU6 7RX
email: s.p.atkinson@hull.ac.uk
Kevin Burden, Institute for Learning, University of Hull, Hull HU6 7RX
email: k.j.burden@hull.ac.uk

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