Technology and Community: The Changing Face of Identity

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Abstract

This article examines notions of self in cyber-communities, through a cross-disciplinary dialectic on digital embodiment. The article is based on conversations between a literary study on cyborg-feminist and science fiction theory and auto-ethnographic research data from the virtual world Entropia Universe. The conversation explores digital embodiment by asking the questions, "Am I cyborg?" and, "Why should I care?" The discussion draws on Haraway's notions of cyborg embodiment and Brey, Idhe, and Merleau-Ponty's works on relational embodiment to provide a theoretical exploration of selfhood in a liminal community of symbionts, cyborgs, and avatars.

This article examines notions of self in cyber-communities through a cross-disciplinary dialectic on digital embodiment. The article is based on conversations between a literary study on cyborg-feminist and science fiction theory and ethnographic research data from the virtual world *Entropia Universe*. The discussion draws on Haraway's (1985/1981; 1995) notions of cyborg embodiment in order to explore how the digital self, in the form of an avatar, contributes to political and social notions of identity and community in virtual space. The article begins by examining definitions of cyborgs, avatars, and virtual worlds, and then it proceeds with a discussion on how science fiction has influenced understandings of cyberspace. This discussion is followed by the formulation of a theory of digital embodiment which draws on both Haraway's (1985/1981) notion of cyborg embodiment and Merleau-Ponty 's (1962) notion of embodied relations. The article concludes by discussing the implications of digital embodiment for notions of gendered identity and understandings of community in virtual space.

The Cyborg

The cyborg is simultaneously an exciting and disturbing visible sign of the progressive developments in computer technology, as it makes problematic the distinct opposition between human and machine. Similarly, the distinction between the real and the virtual has become a significant area of investigation, and the cyborg figure plays an integral role in reshaping identity and community in the increasing interface between human and machine in a technological world. The cyborg motif signifies the social and cultural transition from an organic, industrial paradigm to a polymorphous, information system, a shift from humanism to post-humanism.

Definitions of what a cyborg ‘is’ can be contentious and numerous; however, in its most basic sense, a cyborg is an amalgam of organic and machine. As Chris Hables Gray (2001) argues, **“***Cyborg* is as specific, as general, as powerful, and as useless a term as *tool* or *machine*”(19). In its broadest sense, the idea of the cyborg extends down to the micro level of artificial life

and nanotechnology and up to the realm of the global, where Gaia (the living biosphere) itself has been called a cyborg (Haraway, 1995: xvii).

The term 'cyborg' was further employed by Donna Haraway (1985/1991) as a metaphor for investigating the constructed nature of gendered identity. Haraway (1985/1991) defines the cyborg as a merging of "machine and organism," but also "a creature of social reality as well as a creature of fiction" (149). A cyborg exists when two kinds of boundaries are simultaneously problematic: the first being that between animals (or other organisms) and humans, and the second being that between self-controlled, self-governing machines (automatons) and organisms, especially humans (models of autonomy). The cyborg is the figure born of the interface between automatons and autonomy.' (Haraway, 1989: 139). Haraway (1985/1991) poses the cyborg as Other to the humanist idea of the "ordinary human," constructing identity as a fluid, changing and continuous subject, opposing the humanist subject and decentring predominant myths of western culture that pivot around dualisms. Contemporary internet and computing technologies, particularly virtual worlds, have enabled a form of cyborg identity to be played out in digital space.

Virtual Worlds and Avatars

Virtual worlds are persistent digital environments, enabled through internet technologies, where multiple human subjects interact in real time. These worlds can be either graphical or text-based, but all provide users with a sense of geography and presence. For the purpose of this article, the term will be used to refer to graphical virtual worlds: worlds with a three-dimensional, computer-generated environment, such as the online game world *Entropia Universe*. Within these worlds, digital communities are formed as people interact with each other and the virtual environment using avatars.

Avatars are digital representations of self. The term avatar can be applied to both representations of AI and representations of humans (Stair, Reynolds, & Reynolds, 2010: 479). The term cyborg has traditionally been applied to technologically augmented physical bodies, whereas an avatar is a virtual representation of the body which acts and exists purely in digital space. However, an avatar is in fact a form of cyborg because the self is fragmented and reconstituted through the technological augmentation of the physical body. This then raises questions about how this form of cyborg embodiment affects notions of identity, self and community in cyberspace.

Digital Communities and Science Fiction

Digital communities in virtual worlds exist at the juncture of reality and fiction, where real interactions occur between real humans in a fictitious space via technologically constructed representations of self. The notion of digital communities was first formulated within science fiction (SF) literature and Haraway (1985/1991: 201) refers specifically to SF in discussing and developing the feminist version of the cyborg because it makes problematic the distinction between reality and fiction. Furthermore in popular culture, particularly in SF, the cyborg motif explores notions of identity and subjectivity, emphasising fluidity and diffused boundaries. We can therefore look to SF in order to understand past visions and the contemporary realities of life in digital space.

Veronica Hollinger (2002) asserts that in a postmodern society the correlation between SF and cultural identity is escalating; SF is reciprocally a genre and a discursive discipline:

"science fiction is both symptomatic of this cultural disruption and an expression of our desire to situate and give shape to the moment" (3). Often, SF creates and explores the concept of human interfacing with machines. Pat Cadigan's *Synners* (1991), Neal Stephenson's *Snow Crash* (1992) and William Gibson's *Neuromancer* (1984) all explore the relation between real and virtual and consequently challenge and investigate notions of identity, community, and subjectivity. These novels envision future worlds where the existence of virtual realities enables the diffusion of self and the formation of communities which transgress the boundaries of physical space.

Notions of virtual realities in SF coincided with the development of networked computing technologies, which eventually resulted in commercial internet service providers and the emergence of the public internet in 1993. SF provided burgeoning digital communities with the terminology and conceptual imagination that helped crystallise notions of cyberspace as a socially and politically meaningful domain of human interaction (Pesce, 1999). The normalisation of interactions via the internet is now resulting in the incorporation of these technologies into our sense of self and "our devices ... increasingly feel like extensions of our mind" (Turkle, 2008: 6). As we learn to perceive *through* these technologies, rather than focusing on the technologies themselves, our cyborg identity becomes implicit. Within virtual worlds, the implicit incorporation of the avatar body into the user's sense of identity means that the user enters into spatial and embodied relations with both the virtual environment and the community which exists within it; as Turkle comments, "when we step through the screen into virtual communities, we reconstruct our identities on the other side of the looking glass" (1995: 178).

Digital Embodiment and Gendered Identity

Avatars are integral to users' experiences and performances of self in virtual worlds (Taylor, 1999: 474). Within many digital communities, the creation of an avatar is the user's first task and the only means by which they can engage with the world. The creation of an avatar body requires the user to make explicit choices about their gender, race, appearance, and sometimes species. The avatar therefore becomes a central object around which the performance of identity is structured and a signifier of real and virtual world affiliations, bringing the plurality of self to the fore (Taylor, 2002: 53). This plurality of self "is exemplified in the way people talk about their avatars; users "fluctuate in their use of third - and first-person language to describe their experience" (Taylor, 2002: 57), also sometimes addressing the avatar-user combination as 'we' (Morgan, 2011: 125).

As a social object and means of individuation the avatar body, like the physical body, is subject to interpretation by others (Taylor, 2002: 56). Real-world social constructs, in particular notions of gender, are often incorporated into virtual worlds via the tools which users are given to create their digital bodies. Within *Entropia Universe*, for example, users must choose between conventionally male and female bodies when creating their avatars. However, users can intentionally choose to subvert the gender binarisms written into programming through gender switching (i.e. when a female player creates a male avatar or vice versa) and the creation of androgynous looking avatars. This potential for subversion does not completely eradicate dominant heterogeneous notions of gender and sexualised bodies. However, players do tend to be mindful of the inherent ambiguity of the avatar body; a fact which generally renders sexualised readings of the avatar body problematic.

Androgyny and the potential for gender switching forces users to question the assumptions by which they attribute a particular gendered identity to an other online. Thus, digital identity is cyborg identity, a state of flux, indicative of a continuous blurring of the boundaries between male and female and the real and the virtual self. Avatars and graphical virtual worlds also re-create notions of self and subjectivity by enabling users to experience a limited, yet very real sense of embodiment in digital space.

Digital embodiment can be explained using Brey's (2000) expansion of Ihde's and Merleau-Ponty's respective notions of relational embodiment. Both Ihde and Merleau-Ponty argue that objects can be divided into "objects of perception" and "objects through which the world is perceived" (Brey, 2000: 1). Objects such as tables and trees are "objects of perception," whereas glasses and hearing-aids are "objects through which the world is perceived" (Brey, 2000: 1). Don Ihde called the relations between humans and these objects (through perception) embodied relations because over time they become incorporated into our body schema (Cited in Brey, 2000: 1).

The body schema is "an *unconscious* body map, which enables us to program and monitor the execution of actions with the different body parts" (Gallese, 2005: 24). The body schema is not rigid. Artefacts such as glasses or prostheses can be incorporated into the body schema by "altering its potentialities for action" (Brey, 2000: 7). If this is the case, the digital body (like prostheses) can be incorporated into the body schema. Our body schemas also facilitate an embodied experience of space by enabling us to judge where parts of our bodies are in relation to each other and the world round us, enabling us to experience the body as a "space of situation" (Merleau-Ponty, 1962: 115). This subconscious awareness of our body in space can be augmented "by the acquisition of new possibilities for movement" (Brey, 2000: 6). Within virtual worlds, the avatar body simultaneously exemplifies the incorporation of technology into the body schema and facilitates a spatially embodied experience of digital space. Interactions with the technologies through which the avatar body is created become implicit because perception of the virtual environment *through* these technologies requires the user to enter into embodied relations with them. The avatar body therefore becomes part of the user's body schema, enabling them to orientate and experience their digital body in relation to the virtual environment around them.

The phenomenology of digital embodiment and users' spatial experiences of virtual worlds can be explained using Merleau-Ponty's (1962) conception of the body as a space of situation (115) and notion of relational embodiment (165). From the perspective of gender, however, Merleau-Ponty fails to acknowledge that women have always been constituted by a hegemonic society that posits women as 'objects' to be gazed upon and acted upon, as opposed to autonomous embodied subjects. In relation to community, the avatar body becomes socially meaningful through its interpretation by others and "identity based oppression online becomes possible (and perhaps inevitable) when visual perceptions are informed by the same sets of objectifying ideologies that inform [objectification] offline" (Nakamura, 2002: 34). Despite the inherent ambiguity of the feminine in virtual space, constructions and readings of avatar bodies are often influenced by the same objectifying ideologies as readings of female bodies in the real-world. Images of the semi-naked, gun toting femme fatale are prolific within the gaming industry and the female avatar (when controlled by a male user) could potentially become the ultimate "object" of voyeuristic desire, consumption, and control (Kennedy, 2002). However, this form of gender switching "disrupts the relationship between spectator and spectacle" (Kennedy, 2002) because the object of the spectators' gaze is simultaneously an aspect of their selves. The potential for

gender switching also destabilises the objectification of the digital body of the other because the practice itself is indicative of the inherent ambiguity of gender online.

In *Cybersexualities*, Anne Balsamo (1999) claims we must find images of the cyborg that destabilise the rigid oppositions that dominant ideologies delineate and so strive to celebrate the flux and flow of identity which the cyborg can suggest: "The high-tech image of the cyborg reminds us to question the assumed naturalness of the body and its function as a marker of difference" (151). The avatar body provides one such image. The plurality of self, gender ambiguity and experience of digital embodiment, enabled in virtual space, destabilises the binarisms of self and other, male and female, and nature and technology. The existence of virtual worlds also blurs the boundaries between reality and fiction by enabling existence and the formation of social relations in a fictitious space.

The physical interaction performed by the player in a virtual world incorporates an embodied player as a constitutive part of the narrative and subverts the concept of a whole unified self, intrinsic in Enlightenment ontology. Haraway (1985/1991: 180) asks why our bodies should end with our skin and claims that "cyborgs might consider more seriously the partial, fluid, sometimes aspect of sex and sexual embodiment." Cyborgs then problematise distinctions between real and virtual, mind and body, organism and machine. Thus, "Bodies are maps of power and identity. Cyborgs are no exception…It means both building and destroying machines, identities, categories, relationships, space stories" (Haraway, 1991/1985: 181). When considering digital embodiment, it is important to consider alternative views of the body that redirect notions of embodiment away from the limitations placed upon them according to conventional ideologies of race and gender. By destabilising conventional binaries, cyborg embodiment in the form of an avatar provides new ways of thinking about self and body which enable us to challenge dualist notions of the separation of body and mind.

Postmodern feminism problematises a clear distinction between mind and body by exploring and developing concepts of the body as a text. Rather than being ahistorical and natural, feminists posit the body as a sign dependant on meanings and significations instilled by cultural circumstances. In this direction, the post-human body promises new possibilities for pleasure and subversion, and the stratagem of postmodern subjectivity can transgress mind/body division, gender dichotomies, Oedipal fiction, authoritarian textual processes and patriarchal constraints imposed on the body. Allucquere Rosanna Stone (1999) looks at how virtual embodiment may count positively in a politics of technology and embodiment. She notes that enthusiasts of cyberspace want to celebrate leaving the body behind and exploring virtual worlds, but she argues that the real body must be incorporated into the exchange between real and virtual. "Remembering – discovering – that bodies and communities constitute each other surely suggests a set of questions and debates for the burgeoning virtual electronic community" (Stone, 1999: 94). Judith Butler (1990) argues that identity, rather than being fixed and natural, is a performance often based around dominant (read white male) constructs of identity and community; identity is put on. Thus, Stone (1999) argues that "… to enter cyberspace is to physically *put on* cyberspace. To become the cyborg, to put on the seductive and dangerous cybernetic space like a garment, is to put on the *female*. Thus, cyberspace both *dis*embodies . . . and *re*-embodies in the polychrome, hyper-surfaced cyborg character of the console cowboy" (91). The subversive image of the cyborg, embodied within virtual communities in the form of avatars, therefore raises questions about how digital identities are influencing notions of community in cyberspace.

Virtual Communities

Virtual communities, like the virtual self, exist on the threshold of reality and fiction, at the liminal juncture of the real and the virtual. The existence of virtual communities therefore makes explicit the manner in which technologies can be used to challenge the assumed naturalness of conventional binarisms. In 1993, Howard Rheingold defined virtual communities as "social aggregations that emerge from the [Internet] when enough people carry on ... public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (5). The creation of graphical virtual worlds in the mid-late 1990s facilitated the emergence of a spatial and embodied experience of virtual space and, as such, virtual community relations became embodied relations. Virtual worlds are subjective spaces where bodies are assigned meanings through programming, social interaction, and real-world ideologies. However, they also provide a means of challenging conventional notions of gender and bodies by providing possibilities for gender switching, identity play, and digital embodiment. Online communities also challenge conventional notions of intimacy.

People often assume that intimate relationships are built on knowledge of someone's 'real-self' and that the 'real-self' is somehow conceptually and experientially distinct from the representations people create in virtual space. Relationships which exist purely online are then considered less intimate or 'real' than relationships based on physical interaction, and the internet is falsely accused of alienating people from their real-world communities (Hampton & Wellman, 2003: 180). Yet, accounts of digital interaction from *Entropia Universe* suggest that the player's anonymous avatar is not perceived as a representation of a stranger but accepted on their own terms as a person with which intimate engagement is possible. The digital community is, therefore, perceived as a community of members and not as a community of representations. The setting is fictitious, but the relationships formed within it are real.

The privileging of the real over the virtual is based on the misconception that the internet exists as a separate social system (Wellman, 2004: 27). However, online communities and their members do not exist in a contextual vacuum. They are embedded in particular social, economic, political, and cultural contexts (Teli, Pisanu & Hakken, 2007) as well as being socio-cultural contexts in their own right (Boellstorff, 2008: 231). Existing cultural ideologies are played out, exaggerated and challenged within digital communities, and "so long as we persist in opposing so-called virtual communities to the face-to-face communities of the mythical opposite extreme, we miss the ways in which real communities of practice employ a whole ecology of media as they think together about the matters that concern them" (Agre, 1999: 4). For example, digital communities make the social and cultural process around which notions of gender are structured transparent by rendering conventional gendered readings of the body problematic. To assume a conceptual separation is to deny ourselves the opportunity to see these processes in action. "An online/offline conceptual dichotomy . . . is also counter to the direction taken within recent anthropology, which acknowledges the multiple identities and negotiated roles individuals have within different sociopolitical and cultural contexts" (Wilson & Peterson, 2002: 445). People are often members of multiple online and real-life communities, which overlap and draw discursively and socially on each other and the physical world (Wilson & Peterson, 2002: 455). The notion of the cyborg helps us deconstruct false dichotomies, and when applied to virtual communities this means addressing assumptions that the real and the virtual are separate

domains, that a unified self exists, and that communities are discrete and bounded social entities.

Conclusions

The real and the virtual are becoming progressively interdependent. Over the past two decades, the internet has emerged as a socially influential sphere of cultural, political and economic action and interaction. Communications via cyberspace are now a day to day occurrence for millions of people throughout the world, and contemporary societies are becoming increasingly reliant on these technologies in order to function. The virtual worlds envisioned in SF during the late 1980s and early 1990s are now often a reality and cyberspace theorists must attempt to understand how these technologies are influencing our social worlds. The image of the cyborg, embodied in the form of avatar, can help us understand the self and conceptions of community in cyberspace by drawing attention to ways in which we construct the 'realities' of race, gender, self, and other in both our physical and virtual worlds. Digital embodiment enables us to question the assumed naturalness of the body, the physical world, and the gendered self, whereas digital communities raise questions about the nature of human intimacy and counter notions of boundedness in relation to community membership. The discourse around notions of cyborg embodiment is a continuous dialogue as new technologies are developed. Debates about the nature and influences of these technologies are ongoing. However, one thing is certain; "There's life, Jim, but not as we know it."

WORKS CITED

Agre, Philip E. (1999). Life after Cyberspace. *EASST Review*, 18.2: 3-5.

Balsamo, Anne. (1999). Reading Cyborgs Writing Feminism. In Jenny Wolmak (Ed.), *Cybersexualities: A Reader on Feminist Theory, Cyborgs and Cyberspace.* Edinburgh: Edinburgh University Press, 145-56.

Boellstorff, Tom. (2008). *Coming of Age in Second Life: An Anthropologist Explores the Virtual Human*. Princeton, N.J.: Princeton University Press.

Brey, Philip. (2000). Technology and Embodiment in Ihde and Merleau-Ponty. In Carl Mitcham (Ed.), *Metaphysics, Epistemology, and Technology*. (Research in Philosophy and Technology Series). 19.C (2000): 1-14.

Butler, Judith. (1990). *Gender trouble: Feminism and the subversion of identity*. NewYork; Routledge.

Cadigan, Pat. (1991). *Synners*. New York: Bantam.

Gallese, Vittorio. (2005). Embodied Simulation: From Neurons to Phenomenal Experience. *Phenomenology and the Cognitive Sciences,* 4 (2005): 23-48.

Gibson, William. (1984). *Neuromancer*. New York: Ace.

Gray, Chris Hables, Steven Mentor and Heidi J. Figueroa-Sarriera. (1995). Cyborgology:

Constructing the Knowledge of Cybernetic Organisms. In Chris Hables-Gray (Ed.), *The Cyborg Handbook*. New York: Routledge, 1-14.

Gray, Chris Hables. (2001). *Cyborg Citizen*. New York: Routledge.

Hampton, Keith and Barry Wellman. (2003). Neighboring in Netville: How the Internet Supports Community and Social Capital in a Wired Suburb. *City & Community*, 2.4: 277-311.

Haraway, Donna J. (2003). Cyborgs to Companion Species: Reconfiguring Kinship in Technoscience. *The Haraway Reader*. New York: Routledge, 295-320.

--- A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century. In her (1991) *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge, 149-81.

--- Cyborgs and Symbionts: Living Together in the New World Order. In Chris Hables Gray (Ed.). (1995). *The Cyborg Handbook*. New York: Routledge, xi-xx.

--- (1989) *Primate Visions: Gender, Race, and Nature in the World of Modern Science*. New York: Routledge.

Hollinger, Veronica. (2002). Introduction: Edging into the Future. In Veronica Hollinger & Joan Gordon (Eds.). (2002). *Edging into the Future: Science Fiction and Contemporary Cultural Transformation.* Philadephia: University of Pennsylvania Press, 1-11.

Kennedy, Helen. W. (2002). Lara Croft: Feminist Icon or Cyberbimbo? On the Limits of Textual Analysis. *The International Journal of Computer Game Research.* 2.2. http://www.gamestudies.org/0202/kennedy/

Merleau-Ponty, Maurice. (1962). *Phenomenology of Perception*. London: Routledge & Kegan Paul.

Morgan, Rhian. (2011). Ethnography on the Cyberian Frontier. LiNQ 38: 117-30.

Nakamura, Lisa. (2002). *Cyber-Types: Race, Ethnicity, and Identity on the Internet*. New York: Routledge.

Pesce, Mark. (1999). Magic Mirror: The Novel as a Software Development Platform. Media In Transition, Comparative Media Studies Program, MIT, 1999.

Rheingold, Howard. (1993). *The Virtual Community: Homesteading on the Electronic Frontier*. Reading, MA.: Addison-Wesley Publishing Group.

Stair, Ralph, and Reynolds, George. (2010). *Principles of Information Systems, A Managerial Approach*. (Ninth Ed). Boston, MA: Course Technology, Cengage Learning.

Stone, Allucquere Rosanne. (1991). Will the Real Body Please Stand Up? Boundary Stories About Virtual Cultures. In Jenny Wolmark (Ed.) (1999). *Cybersexualities: A Reader in Feminist Theory, Cyborgs and Cyberspace*. Edinburgh: Edinburgh University Press, 69-98.

Stephenson, Neal. (1992). *Snow Crash*, Random House.

Taylor, T. L. (1999). Life in Virtual Worlds: Plural Existence, Multimodalities, and Other Online Research Challenges. *American Behavioural Scientist*, 43.3: 436-49.

---. Living Digitally: Embodiment in Virtual Worlds. In R. Schroeder (Ed.) (2002), *The Social Life of Avatars: Presence and Interaction in Shared Virtual Environments*. London: Springer-Verlag.

Teli, Maurizio, Francesco Pisanu, and David Hakken. (2007). The Internet as a Library-of-People: For a Cyberethnography of Online Groups." Forum: Qualitative social research, sozialforschung. Vol. 8. http://www.qualitative-research.net/index.php/fqs/article/view/283

Turkle, Sherry. (2008). Always-on/Always-on-You: The Tethered Self. In James E Katz (Ed.), *Handbook of Mobile Communication Studies*. Cambridge, MA: MIT Press, 121-137.

---. (1995). *Life on the Screen : Identity in the Age of the Internet*. New York: Simon & Schuster.

Wellman, Barry. (2004). The Global Village: Internet and Community. *ideas&s* 1.1: 26-29.

Wilson, Samuel, M. & Peterson, Leighton, C. (2002). The Anthropology of Online Communities. *Annual Review of Anthropology* 31: 449-467.