

REFIGURING THE POSTHUMAN

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In the five years since the publication of my book, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics*, the integration of humans with intelligent machines has become more extensive and at the same time more diverse in its implementations, effects, and significance. Whereas my point of reference to chronicle these changes was the comparison of the posthuman with the liberal humanist subject, recent work tends to focus on divisions within the posthuman landscape itself. The articles in this special issue on posthumanism richly illustrate the scope and depth of the questions at stake. How can we understand the impact of globalization as simultaneously local and transnational, economic and psychological? How can Japan be understood as at once a Western-style technocracy and a unique product of its national history? How can bodies be deterritorialized and still used as sites for representation? How do memories function simultaneously as machine functionalities and generators of human affect? What strategies of mimicry and imitation can serve as transducers between machine and human action? In virtual environments, does embodiment still matter? How are race, ethnicity and class constructed in virtual game environments?

Amidst the plethora of questions raised by these essays, three themes emerge as focal points for inquiry: globalization, performativity, and virtual embodiment. As we shall see shortly, each theme points toward and involves the others. Also at issue are the modes of inquiry performed by these essays. As autonomous subjectivity is drawn into question, human memory problematized, and human-machine connectivity emphasized, who or what is the cognizer carrying out the analysis? Is the writer's implication in what Mark Poster calls a "humachine" registered in what she writes? Displaying diverse approaches to the relation between the subject of writing and the

subject that writes, the essays range from the declarative style Mark Poster favors in his analysis of the information empire to the impressionistic rhetoric of Jamie Skye Bianco as she chronicles the subversion of subjectivity in three contemporary films. The essays perform as well as analyze the co-evolution of medium and content.

Although the posthuman has been variously defined, most versions include as a prominent feature the joining of humans with intelligent machines. Mark Poster's "The Informative Empire," delivered as a keynote address at the 2003 conference of the American Comparative Literature Association, coins the neologism "humachine" to mark "an intimate mixing of human and machine that constitutes an interface outside the subject/object binary." Taking Negri and Hardt's *Empire* to task for continuing to focus on subjectivities, he suggests that analysis should proceed beyond the realm of individual agents and focus on the interfaces joining humans and machines. Any such analysis, he insists, must not buy into the notion of an immaterial virtuality, but rather should focus on the materiality that the technologies of cyberspace require and embody. His focus on materiality goes along with his equally strong view that the new forms of power enabled by the Internet include the potential for greater democratization and enfranchisement of citizens across the globe. While recognizing the dangers of the Internet, he remains an eloquent advocate for its liberatory potential. With such a sweeping agenda, "The Information Empire" is perhaps best seen as a provocation rather than a conclusive argument. Issues raised but not settled by his intervention include the extent to which "humachines" have actually displaced individual subjectivity; how the material specificities of media interact with empire; and whether newer configurations of control societies have indeed replaced discipline societies or rather continue to co-exist with them.

In contrast to the universalizing implications of the neologistic "humachines" is Kumiko Sato's analysis in "How Information Technology Has (Not) Changed Feminism and Japanism: Cyberpunk in the Japanese Contexts." Sato anatomizes the uneasy convergences and fault lines of cyberfeminism, cyberpunk and Japanese national identity that enabled a paradoxical union of past and future when cybernetic identity came together with *nihonjinron*, or Japanese uniqueness. Tracing the changes in cyborg subject formations from the post-World War II period to the present, she demonstrates the turns whereby the militant female cyborg hero came to represent both the historical specificity of Japanness and the technological superiority that in post-World War II Japan was associated with the

West. A paradoxical amalgam of past and future, self and other, Japanese historicity and Western futurism, the female cyborg was produced in part, she argues, by the assumption that Japan's unique historical trajectory coincidentally anticipated Western cyberpunk, a synchronicity that allowed convergence without indebtedness. The complex results, rich in irony, are like rock strata that fold first in one direction and then another, producing convoluted in-mixings quite different from the clean epistemic break Poster performs when he announces the demise of the subject/object binary. Warning against "the tendency to categorize the entirety of humanity without deliberate examination of cultural diversities," Sato's analysis serves as an effective complication and qualification of Poster's "humachines." Their differences notwithstanding, Poster's and Sato's arguments converge in implying that information technologies are powerfully affecting contemporary subject formations, moving them away from autonomous individuals and toward posthuman collectivities of humans and intelligent machines.

James Berkley relates this movement to traditional concepts of mimesis and the sublime in "Post-Human Mimesis and the Debunked Machine: Reading Environmental Appropriation in Poe's 'Maelzel's Chess-Player' and 'The Man That Was Used Up.'" Mimesis, in his account, becomes a transducer transferring the power to evoke wonder and terror from one site to another, while the sublime sets up the transfer by presupposing that a connection exists between environment and system, stimulus and affect, externalized object and internalized subject. Although Poe was not unique among nineteenth-century writers in locating the source of the sublime in technological objects rather than natural landscapes, his work is unusual in linking the sublime with a logic of debunking. Poe's texts enact a reflexive turn, Berkley argues, when they use debunking to drain the wonder from a technological object and transfer it instead to the narrator, specifically to the masterful logical exposition that the text performs. In his analysis, Berkley preserves a delicate balance between the free-floating energies liberated by the sublime and putative boundaries between subject and object. Claiming for Poe's texts a "transfer of power' [...] that] bring[s] together mimesis, sublimity, and post-human subjectivity into a dense conceptual nexus," his rhetoric nevertheless constitutes texts as entities distinct from their represented worlds, narrators distinguishable from what they narrate, and readers separate from the texts they read. Although Berkley's reinscription of these presumed boundaries is appropriate to his announced task of writing a "pre-history of the posthuman," his analysis suggests a progression whereby "transfers" (a term implying the existence of discrete entities between which

transfers take place) could erupt into supercharged chaotic energies capable of annihilating the subject/object binary.

This next step in the evolution of the posthuman is performed by Jamie Skye Bianco in “Techno-Cinema.” Bianco mobilizes through her rhetoric the flows and intensities that create the continuities of play in *Lola Rennt*, the transformation of memory into perception in *Memento*, and in *Requiem for a Dream* the fusion of belief with “non-organic rhythms, diffractions, and effects.” As time is liberated from linear chronology, perception from history, and embodiment from coherent subjectivity, the focus shifts from objects to processes, analysis to performance, realistic narration to energetic flows, captures, and control points. Working outward and backward from these enactments, “Techno-Cinema” suggestively points toward the implications of this perspective for film theory. No longer can the viewer be considered as a passive observer watching a pre-existing artifact. Rather, the viewer here becomes absorbed in deterritorialized flows surging across the screen to mobilize affective and perceptual capacities, resulting in a viewer played by the film even as she plays the film.

Intriguing as this re-orientation is, it leaves out of account some notable structural features of the films Bianco discusses. *Memento*, for example, is much more rigorously choreographed than her emphasis on its temporal disruptions would indicate. The reverse-angle sequences of Lenny in the motel room, rendered in sepia-toned black and white, follow a forward chronology, while the backward chronology of the full-color sequences spliced in with them are also coherent within themselves if placed end-to-end, with the beginning of the preceding sequence matched to the end of the one that follows it, like so: $T_2 \rightarrow T_3$ (leads to) $T_1 \rightarrow T_2$.

Bianco rightly observes that an analytical approach does not explain the film’s affective dimension, but her affective enactment does not account for the film’s structural precision, including the enfolding of the two chronologies at the film’s conclusion. The larger issue here is the incompleteness of any theoretical perspective that does not account for *both* processes and substances, technoscience’s affective dimensions and the logico-rational methodologies necessary to create technology and science as such. Another way to say this is to observe that posthuman collectivities are still articulated and enunciated by humans acting as more or less self-contained conscious subjects called, for example, “Katherine Hayles” or “Jamie Skye Bianco.” These caveats notwithstanding, Bianco’s essay is an important contribution to the on-going work of reconfiguring the object/event binary, a dynamic distinct from but related to the subject/object binary.

Although Bianco discusses the films' actions as game play, she does not locate them within the ludology tradition. Eric Hayot and Edward Wesp in "Style: Strategy and Mimesis in Ergodic Literature" ground themselves in that tradition when they argue lucidly for the serious study of computer and video games as important cultural objects/events. Given the economic importance of computer games and their growing centrality, especially in youth culture, games clearly deserve the critical analysis for which Hayot, Wesp, and others argue. In their analysis, Hayot and Wesp demonstrate that civilizations in the game *Age of Kings* are encoded both with national identities and characteristic qualities such as building strong fortifications, having mounted cavalry and talented archers, etc. The effect is to discipline players toward what they call (following Rey Chow) "coercive mimeticism." Reminiscent of Bianco's argument with regard to film is their implication that players not only play the game but are also played by the game, disciplined by the game's logic into an identification made more intense by the kinesthetic and embodied aspects of game play. Although a player can choose any of the game's civilizations with which to identify, the fact that she must make some choice in order to play means she necessarily participates in the game's "genetic logic" and therefore in the premise that civilizations have stereotypical qualities. Not all games perpetuate stereotypes, however, as they show in their discussion of the hugely popular online game *Everquest*. In making the dark-skinned "Erudites" physically weak but intellectually powerful, the makers of *Everquest* seem deliberately to be subverting stereotypes. Complicating the choice of race in *Everquest* and similar games is the introduction of class, i.e., whether to be a warrior, wizard, cleric, etc. Hayot and Wesp argue these occupation-based stereotypes are actually more important in determining a player's strategies than is race. Because the user can make choices, they suggest that ergodic games offer the opportunity for the player to develop a distinctive style—a possibility that can be realized to the fullest only when the player can help create the parameters that determine the game world's functioning. The emphasis on style, they note, connects the individuality of the player with the specific formations enabled by the game world's architecture. Their argument thus demonstrates the ways in which construction of subjectivity is increasingly entangled with algorithmic procedures governing the game world.

This entanglement meets a logical endpoint in the complete fusion of subjectivity with program, a trajectory that Catherine Waldby has associated with IatroGenic desire, the desire for programmable matter. Following Waldby, Tama Leaver uses IatroGenic desire to interrogate Greg Egan's

novel, *Permutation City*, with its vision of uploading human subjects as Copies running in an artificial computational world. Permutation City, the computational space where the Copies live, has within it another artificial world called the Autoverse. The Autoverse differs from Permutation City in being a world *evolved* from the bottom up, whereas Permutation City is a patchwork of ad hoc rules reflecting the state of the art at the time it was launched. Consequently the Lambertians, highly intelligent insect-like life forms that inhabit the Autoverse, possess biological and physical coherency the Copies lack. When the two artificial cultures come into conflict, the Lambertians are able to triumph because their reality is more coherent than the patchwork construction of the Copies. Leaver reads this outcome as making two points: that Otherness is “not an unproblematic given but rather a construction with destructive tendencies,” and “that even in a completely digital content, embodiment and bodies still matter.” One could argue this outcome also reinforces rather than challenges coherent subjectivity, the subversion of which Bianco found exciting in the films she analyzes. The broader conclusion, perhaps, is that the posthuman can and is being used for very different purposes in different contexts.

Taken as a group, the essays point not so much to consensus as to common sites where contestations to determine the future of humanity are especially intense. These include issues of globalization as disparate cultures race toward informational convergence; performativities that re-define the human through mimetic imitation of intelligent machines; and virtual embodiments that discipline human users to coordinate their perceptions with algorithmic procedures. It is too soon to say where these engagements will end. Perhaps the only clear conclusions are that the future of humans will increasingly be entangled with intelligent machines, and that embodiments will still matter in some sense, however virtual or cyborgian they become. The posthuman, these essays suggest, cannot and will not mean only one thing. Posthumans are likely to be as complex and diverse, as historically and culturally specific as humans have been. Whatever the future, we can be sure that it will not be simple.

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