

Helen J Burgess

Research Statement

As a digital humanist, my primary research interests lie in electronic literature and digital authorship, and I have been publishing in these areas of academic research since 2001. My particular interest lies in the field of digital scholarship and the ways in which new media of publication might transform the humanities. In this role I have not only published my own work in digital format but also worked to build an infrastructure for other scholars, both in my work as technical editor for the online journal *Rhizomes*, and as creator and managing editor of the journal *Hyperrhiz: New Media Cultures*.

The three published essays I have included in this dossier deal specifically with some aspect of digital authorship. Each essay considers a different facet of the relationship between technology and the creative and critical work we do as academic professionals: digital pedagogy, scholarly publishing, and electronic literature. “<php>: 'Invisible' Code and the Mystique of Web Writing” concerns itself with the role computer code plays in the writing classroom, as students learn how to interact with digital markup. “New Media in the Academy: Labor and the Production of Knowledge in Scholarly Multimedia” discusses the challenges digital scholars face in the humanities, and in particular the tricky idea of “work” as an intellectual endeavour. “Collaborative New Media Poetry: Mixed and Remixed” revisits the idea of digital collaboration and the role it plays in both the reading and writing process as creative writers and scholars interact with electronic literature. These essays have all helped to place me as a central participant in the emerging field that is broadly designated “digital humanities,” and in particular as a scholar who is working to define what it means to be an “author” in digital media.

Because intra- and interdisciplinary collaboration is central, both in method and product, to the digital humanities, I have focused my research on key questions surrounding the politics of authorship in contemporary scholarship. I am profoundly interested in how the traditional disciplinary understanding of “authorship” in the humanities as a lone activity impedes the kinds of collaborative and experimental work that scholars do in the digital humanities. In particular, I am concerned with the ways in which collaboration and intellectual and technical labor are “counted” (or not counted) in the academy, a concern that was central to my article “New Media in the Academy: Labor and the Production of Knowledge in Scholarly Multimedia,” which has been used in graduate classes such as those at Syracuse University and the University of Nebraska, and cited at scholarly conferences such as the Shakespeare Association of America. I am also concerned with the ways that current rules in copyright and fair use are impeding the ability of scholars to interact with media objects in a meaningful, rigorous fashion.

My abilities as a developer of both standalone and web-based digital media led me to my niche as an academic in the digital humanities. I “cut my teeth” digitally while working on an interactive DVD-Rom, published by the University of Pennsylvania Press in 2001, with collaborators Robert Markley, Harrison Higgs, and Michelle Kendrick. This project, entitled *Red Planet: Scientific and Cultural Encounters with Mars*, was one of the first scholarly multimedia titles to be published under the imprint of an academic press. *Red Planet* explored the scientific and cultural narratives used in talking about the planet Mars, at the time a popular

subject owing to the recent Pathfinder/Sojourner mission. *Red Planet* included video interviews with prominent NASA planetary scientists, astronomers, and cultural critics. *Red Planet* was well received, with *Library Journal* calling it an “innovative, engrossing, multimedia DVD-ROM” and *Configurations: A Journal of Literature, Science, and Technology* reporting that it was a “fascinating and elegant work of multimedia scholarship”. During the development of the project, I conducted original research at the Lowell Observatory in Flagstaff, Arizona, and participated in the design and authoring process, working to produce screen layouts and conduct and edit video interviews.

My next comprehensive scholarly publication was *Biofutures: Owning Body Parts and Information*, coauthored with Robert Mitchell (Duke University) and Phillip Thurtle (University of Washington) and published by the University of Pennsylvania Press. As the project’s specialist in digital composition, I was responsible for creating an argumentative structure for the project as well as contributing to written material; in my role as multimedia author, I constructed and managed the entirety of the project through its completion and delivery to the press. Before being released as a DVD-Rom in 2008, the project passed rigorous internal review boards at the press, and was also reviewed by an external advisory board consisting of experts in the field of bioethics, law and biology. It was rereleased as an open access online project in 2012. *Biofutures* deals with the complex relationships and flows of information between human bodies and corporate, legal and educational entities. It looks at specific case studies in which biological or genetic material comes under claim of “ownership”, as in the case of John Moore, whose discarded spleen cells were patented as a cell line by the University of California Regents in 1984. In the project we argue that body parts and genetic material, rendered into digital form by databanks and the Human Genome Project, represent the latest instance of a long-running concern with who “owns” information, who should have access to it, and what it should be used for. In composing *Biofutures*, we organized the project according to “flows” of information in three separate fields: Law: the way in which court cases in which body parts and cell lines have been patented; Biology: flows of information and scientific bodies in the laboratory, as well as the development of hybrid animals such as Nexia Corporation’s “spider goats”; and Culture: popular films such as *Jurassic Park* and *Resident Evil*, as well as the emerging discipline of “bioart,” wherein artists manipulate cells and genetic information to produce profoundly unsettling living artworks.

Biofutures received a very positive review in the prestigious journal *Nature*, which praised our decision to present the research in an interactive medium: “*It is appropriate that a commentary on the possible futures and dangers associated with owning parts of the body — a discussion anchored in biology as information — should be presented as a hypertext DVD rather than as a conventional book.*” The reviewer also praised our work for the complex, interdisciplinary issues it addresses: “[a]ny bioethicist would struggle to find principles that might act as an arbiter of the moral dilemmas posed by the different cases in *Biofutures*.”

My most recently completed research project is a major work coauthored with Jeanne Hamming, entitled *Highways of the Mind*. It will be published by Penn Press in 2014 as an interactive iBook for iPad. I have included the introduction here and a complete copy is available on request. In *Highways of the Mind*, we examine the Interstate Highway System as a cultural phenomenon that reflects twentieth century anxieties with ecology, technology and infrastructure. Abstractly, we argue that it represents an ongoing tension in our culture

between centralized and decentralized forms of government, urban planning, and everyday life. We draw upon the theoretical frameworks of the media theorists Marshall McLuhan and Mikhail Bakhtin, each of whom deals in different ways with the trajectory of the “road narrative” through real and imaginary landscapes. This research, which began as my dissertation, is centered on the 1939 and 1965 World’s Fairs, and includes extended archival work in the Norman Bel Geddes Papers at the Harry Ransom archives; it yielded two peer-reviewed articles: “Futurama Autogeddon: Imagining the Superhighway from Bel Geddes to Ballard,” and “Road of Giants?: Nostalgia and the Ruins of the Superhighway in Kim Stanley Robinson’s *Three Californias*.” A web-based demonstration was shown at the 2008 MLA Summer Seminar East Session on Digital Media. As was the case with *Biofutures*, we hope to subsequently release the project online in an open format.

My most visible contribution to the field has been my work in digital editing and publishing. Following publication of a web article in *Rhizomes* in 2004, I was invited by the senior editors to become the technical editor for the journal; in this capacity I am responsible for the production of each issue, and also sit on the advisory board. I then developed an online journal, *Hyperrhiz: New Media Cultures*, which is about to publish its ninth issue. *Hyperrhiz* began as a small section of *Rhizomes*, showcasing net art and electronic poetry; I took this section and developed it into a fully-fledged, independent journal, registered as ISSN 1555-9351 with the Library of Congress. As editor, I am responsible for soliciting works, managing a rigorous peer review process, and working with authors to revise their work for publication. *Hyperrhiz* has developed an international profile, publishing works from prominent artists and scholars Jason Nelson, Alan Sondheim, Stephanie Strickland, and Thom Swiss, as well as critical essays from John Cayley, Rob Kendall, and Donna Leishman, three of the most respected net poets in the field. *Hyperrhiz* competes with *Leonardo Electronic Almanac* and the *New River Journal* as a significant venue for net art and scholarship, and I consider my work on this journal to be among the most rewarding professional activities I perform.