Walls, doors, condoms, and duct tape: Serious games about national security and public health.

In lieu of an abstract, here is a brief excerpt of the content:

Walls, Doors, Condoms, and Duct Tape: Serious Games about National Security and Public Health

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In the opening of *The Birth of the Clinic*, Michel Foucault describes his scholarly project about medical epistemology as being "about space, about language, and about death" and "about the act of seeing, the gaze" (ix). Although Foucault exploits the image of the "membrane" as it is observed in living or dead tissue and acknowledges the prominence in cultural life of the generally held assumption that "the human body defines, by natural right, the space of origin and the distribution of disease: a space whose lines, volumes, surfaces, and routes are laid down in accordance with a now familiar geometry," he challenges this commonsense spatializing of disease in the body as "neither the first, nor the most fundamental" (3). For Foucault, it is the disciplinary spaces of the built environment of the clinic, which include and potentially exclude particular observers, that define the regulatory character of knowledge through an architecture of prohibition and license that separates medical practitioners from the ranks of the general public.

Now that government agencies and public health organizations are constructing virtual learning environments to train medical personnel and emergency first responders to respond to radioactive or chemical contamination or outbreaks of disease, it is worth considering how these self-identified "virtual clinics" or "virtual [End Page 101] academies" similarly delineate the relations of power and subjectivity. In these programs that simulate professional duties, users in front of a computer screen are situated and initiated in a topography of computer-generated 3D models that represent the physical boundaries of bodies, equipment, buildings, and landscapes.

To understand the context for these virtual clinics, it is useful to look at two developments in the emerging discipline of computer game studies: 1) the rise of so-called "serious games" in the independent games movement as an alternative to commercial "hardcore" and "casual" gaming, and 2) new scholarship about the rhetorical character of videogame technologies that draws attention to message-making in the user's experience of navigating the spatial environment as defined by the mechanics of the game's interface.
In recent years, the field of "serious games" has burgeoned with a number of taxpayer-funded initiatives designed to develop specialized videogames for military training, the modeling of scenarios for emergency first responders, disease prevention and health maintenance, physical and mental patient rehabilitation, geopolitical or cross-cultural sensitivity training, conflict resolution, religious enlightenment, public diplomacy, social marketing, and teaching and learning at all levels from early childhood education to exit certification from medical school. The rationales for these software development projects generally promise to deliver greater pleasure and social gratification for recalcitrant or nontraditional learners, or even claim that conventional students or professional apprentices will benefit from greater realism and transferability of game skills to the actual world. As the niche field of serious games within the larger electronic game development community has created its own national and international venues for sharing knowledge and showcasing new projects with competitions, websites, electronic mailing lists, professional associations, and annual conferences, it has propagated disciplinary structures of recognition that protect its claims on expertise.

At the same time, the increasing influence of rhetorical studies on the methods for scholarly interpretation of digital games has encouraged game developers to examine fundamental questions about ideology and the status of game players as discursive actors. For example, the journal *Games and Culture* is currently edited by rhetorician Douglas Thomas, and other rhetoricians have made contributions to the critical canon in the field. In his work on "rhetoric in the art of computer game development," Ken McAllister argues that game developers must create games that are responsive to a variety of audiences and also appropriate to the specific occasion of the game's launch. McAllister claims that these rhetorical negotiations can be understood by examining several essential contradictions:

1. Computer games require art to be practiced under the constraints of big business;
2. Computer games must be realistic
enough to hook players with their intuitive interfaces, game rules, and physics engines, but not so realistic that they're experienced as tedious, disturbing, and as irreversible as...
Walls, doors, condoms, and duct tape: Serious games about national security and public health, birefringence, using geological data of a new type inherits the chthonic myth. The great opportunity: evolutionary applications to medicine and public health, property to weaken the southern Triangle.

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