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A FAUSTIAN EXCHANGE: WHAT IS TO BE HUMAN IN THE ERA OF UBIQUITOUS TECHNOLOGY?

Concerted knowledges and practices: an experiment in autonomous cultural production

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Abstract About 20 years ago, the ecology of media art practices proliferated in two domains: those that attached themselves to high technology labs or companies like Xerox PARC, and those that took advantage of personal computing to form collectives only loosely coupled to academic institutions or disciplines. In this essay, I closely examine the diverse epistemic cultures and diverse technical, political, and generational interests in such "cyber-anarchist" networks. I sketch the economy of knowledge in recent media arts and technology communities of practice in the wake of Open Source. I use as my lens the experience of creating a responsive media space called the TGarden, with a collective that gathered more than 26 artists and engineers from 11 institutions and 7 nations.

Keywords Art and technology · Science and technology studies · Media art · Autonomous production · Responsive environments · Open source · Knowledge economy

1 Introduction: what is a TGarden? Who builds it? And why?

A TGarden is a responsive media environment, a room in which people can shape projected sound and video as they move. Upon entering a TGarden space, each person is asked to choose a costume from a set of garments commissioned to estrange the body from its habitual movement and identity. An assistant straps wireless sensors on the chest and arm of the visitor, called a player, and then dresses the player in a vestibule. Then, the player is led into a dark space illuminated only by video projected from 5 m above onto the floor, a space filled with sound already in a residual motion. The assistant tells the player only to listen as she moves to understand what effect bodily motion has on the ambient media. As the player moves, his or her gestures and movement across the floor perturb the field of sound, modifying existing sound, and introducing new patterns. The room's associated software processes generate a musical "cantus firmus." Also, each player introduces his or her own "voice," but one that is parameterized both by gesture and by the state of the event as traced by the software system. The synthesized video that is projected onto the floor provides a visual topography for the player to play. In some instances, objects appear projected onto the floor, transforming semi-autonomously according to the movements of the players (Fig. 1).

In such a space, we are experimenting with how people can improvise meaningful gestures solo or collectively, where the gestures are mapped to video and sound via a continuous, dense, dynamically varying sensuous field. We are exploring how people can make sense of and navigate a dense media environment that is constantly evolving. Think of our highways and airports that are already annotated with public display, driven by implicit processes whose logic is largely alien to the viewer's interest and not articulated in any legible representation. These public displays typically project normative as well as informative content multiplied by networks and ubiquitous embedded computing.

A large part of the impact of the TGarden as a phenomenological and theatrical experiment derived from careful staging and costume design—we explicitly designed this space as an in vivo experimental play space.

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