

Theory in Support of the Culture of the Mindfrog Project

The Mindfrog Project is constructing transformative linkages that will allow a community network to provide a sense of place. This 'place' is commonly referred to as 'telepresence'. The Mindfrog Project uses the freedom of cyberspace to offer a new kind of participation in community life.

A transformative linkage is a connection that may or may not be accessed through language or text. The link transforms the way something is perceived or experienced. It could potentially become a paradigm shift in terms of experience or relationship. We still contend that this access to communication and interaction are relationship-altering.

Telepresence is a vehicle of computerization. Computerization is the process of a domain of human activity becoming substantially mediated by electronic, programmable devices for rapidly storing and manipulating data in order to extract or transmit data. The transformative nature of Telepresence lies in the new ways of manipulating information.

Mindfrog believes that technology is implicated profoundly in all human eras and that social change is both a cause and a consequence of technology. In the 1970's and 1980's, futurists worked from the premise that the computer was such a powerful machine that massive social change was inevitable. This position was a technicist position. Technicism assumes that technologies are created in laboratories and affects social process. The Computer Revolution view is also technicist in that it only can see social changes, as consequences not causes of technological change.

The popular discourse over knowledge in cyberspace implicitly assumes both that knowledge in cyberspace is a vastly expanded version of previous forms of knowledge. That knowledge production is automated, technologized and that it is de-centered, almost a hallucination that gives pride of place to paradigm shifts in the very character of knowing, and that cyberspace rethinks knowledge in profound, fundamental ways.

Mindfrog claims that it is our understanding of knowledge, rather than knowledge itself that changes in cyberspace. This is in direct conflict with both the Modernist and Postmodernist discourse. The Modernists assume that knowledge in cyberspace is socially transformative because change follows from new disembodied knowledge. Postmodernists assume that knowledge is differently embodied in the new.

Discussion of knowledge in cyberspace should establish only one of four possible general claims:

1. The Modernist Transformity Claim: cyberspace is a different, knowledge society, because the accumulation of an increasing quantity of knowledge has led to a qualitative social transformation.
2. The Non-Modernist Transformity Claim: cyberspace is a different, knowledge society, because recognition of the fragmentation of knowledges and related phenomena has forced a new way of being in the world.
3. The Modernist Continuity Claim: there is as yet no distinct cyberspace 'knowledge society' in any important sense, because, while knowledge is accumulating, such accumulations has been characteristic of modern society for some time without leading to fundamental break.
4. Non-Modernist Continuity Claim: there is yet no distinct cyberspace in any important knowledge-related sense, because while a change in basic understanding of knowledge is characteristic of contemporary society, the character of knowledge has not changed in general, only our understanding of what knowledge is and has always been.

Mindfrog believes that the Non-Modernist Continuity claim (#4) is appropriate for the scope of our project due to the interdependence of computers and society. Mindfrog focused theoretically on the impact of social process on technology rather than concentrating on the social impact of computers. Additionally, we are viewing knowledge as the potential for situated activity. Knowledge can then be understood as a relation between an individual and a social or physical situation, rather than as a property of an individual.

The Mindfrog Group attempted to approach our project in a manner that would allow us to discover the implication of our technology in immersing ourselves in the observer effect. Our initial goal was to highlight the context of telepresence rather than banish the context in an attempt to describe or explain the patterns identified with attention to the human dimensions of co-discovery with our participants/users. This goal was not met. We encountered problems with our technology and prototype building which left us in the situation of guessing what immersion in the observer effect would or could be.

Identity can be defined on the computer as 'the sum of your virtual presences'. Individuality is invented out of distinctive choices of identity options made available through the options offered by culture. Cyberspace allows access to various cultures that are not limited to place.

The Mindfrog Project will create and explore both micro and meso communities. Micro-communities are close social relationships that involve direct interaction. Meso-communities are the intermediate level of social relations and the dynamics of communities. Macro-social relations are at the national and global level. We are interested in exploring the use of our technology and the creation of relationships and communities.

Questions we will pursue are:

- Are cyberspace relationships less group and more network-oriented?
- What new kinds of intimate relationships are created and how significant are they?
- What are the social correlates in friendship formation of less face-to-face and more screen-to-screen communication?
- How will live video streaming and interactive verbal communication impact friendship formation in a hybrid of face-to-face and screen-to-screen communication?
- How are communities different in cyberspace?
- Are they substantially more network-oriented, and even less group-oriented?
- How much does cyberspace speed up the separation of space from place?
- How does cyberspace act as a go-between the imagination/reproduction of cultures?

Humans spend time connected by modem to virtual spaces, and feel they are in a 'place'... a sense of 'thereness'. The Mindfrog Project is utilizing a 3-D Virtual reality interface, facilitated by high bandwidth that will help create a feeling of 'place'. People in virtual communities usually use words on screens to exchange pleasantries and argue, engage in intellectual discourse, exchange knowledge, share emotional support, make plans, brainstorm, gossip, feud, fall in love, find friends and lose them, play games, flirt, create some 'art', and engage in a lot of idle talk. The Mindfrog Project will use 3-D video streaming with an interface instead of words on screens, which will allow the Virtual Reality participant to interact with the Augmented Reality recorder.

Technologies can be thought of as networks of interacting human, organizational, human-made objects and practices. Each element both make up and consist of the networks in which they are part of. This is the definition of a Technology Actor Network, or TAN.

Actor Network Theory (ANT) was developed initially to provide a better answer to the question “what is technology”? ANT argues for thinking of technologies as actor networks, which are mixtures of relationships among human and nonhuman entities. From the perspective of ANT, the construction of a technological network or system is an active process. The more passive elements of a system are “actants”, the more active are “actors”. Actors are active agents in the production and the reproduction of the network. Stable TANs have discernible trajectories. These trajectories are strongly influenced by the operation of those entities that become actors.

In Actor Network Theory (ANT) humans can be a type of “actant”. Humans are not more important than others are in terms of their potential and their capacity to be “actors” well as “actant” entities. Therefore, another important Actor Network Theory (ANT) basic premise is the potential for nonhuman agency.

Mindfrog avoids the trap of imagining that discourse is a closed universe. The Mindfrog Project instead recognizes the need to broaden the idea of signification or representation. We recognize that every aspect of the transformative linkage may come in all types of more or less hybrid material forms, which may have little to do with language. We recognize the underlying generative processes can be impacted by new developments. Technologies have real impacts that are informed by the understandings that humans have and influence Technology Actor Network (TAN) reproduction.

In RANT (Realist ANT), it makes sense to talk about the agency of nonhuman entities in TANS that such networks can be transformed – not just translated by nonhuman actors. Technologies are both initially constructed socially, and that reconstruction occurs repeatedly.

The relative degree of autonomy of any particular TAN can be analyzed in terms of its manifestations in the various moments of reality (empirical, actual, and/or generatively real) in which it is implicated.

Technologies have material, determinant qualities because they embody the momentum of previous human activity. This momentum is particularly difficult to change in the short run when an actual TAN –integrates widely dispersed practices. It is the limitations on human action enacted by such momentums that justify the classification of ‘agency’ to the nonhuman components of technology actor networks.

When the problem of how to make information practices in one organization compatible with those in another – a basic problem in creating a broadly accessible network – one begins to see the extent to which the building of large information infrastructures demands both greater autonomy and increased standardization.

Realist Actor Network Theory (RANT) can help us see why this is true. Before actual workers will actually take advantage of the capabilities of such media of communication, they generally need a concrete sense of its value to them, such as access to information in other organizations. Workers in different organizations need the autonomy to explore and develop their work together. Yet machines can only share information if it comes in predictable forms.

The Mindfrog Project is looking at Realist Actor Network Theory in the creation of a prototype that allows a receiver to explore a 3-D, virtual reality environment and to interact with the recorder who is recording the “real” world, augmented by the voice of the 3-D, virtual reality receiver. We are therefore, mixing virtual reality with augmented reality. We are interested in the social relationships that will develop in this transformative linkage.