The computer user has played an active part in uncovering changes brought on with microcomputer technology. Electronic mail (or "E-mail"), which enables users to send and receive messages through bulletin board services ("BBSs"), is often considered one innovation of the computer revolution. A BBS provides opportunities for both "live," real-time exchanges with the BBS host or a fellow user and "asynchronous" message exchanges. BBS telecommunication differs from other forms of computer-controlled communication in that it occurs in a non-task-oriented, active environment. Play theory, which examines the relationship of a medium user to the medium, may explain why computer users choose to employ the BBS. According to play theory, "communication play" is a form of self-expression that takes advantage of a medium in promoting a feeling of individuality. Computer-mediated telecommunication is an example of what has been called "participatory play," which occurs when communicators are free to alter interaction to achieve goals.

Analysis of computer-mediated telecommunication must consider both the decision to use the medium and the unique features of the medium that provide content cues of communication play. A network analysis (examining who talks to whom about what) might also shed light on the influence of play communication. (Fourteen references are attached.) (SG)
A Play Theory Analysis of Computer-Mediated Telecommunication
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A Play Theory Analysis of Computer-Mediated Telecommunication

One estimate says that over 19 million people have become micro-computer users since 1981 (PC Computing, 1987). Few people would argue with the contention that micro-computers have produced a revolution in the way people conduct business and in the way many spend their leisure time. Since the early 1980's scholars have scrambled to provide interpretations of the effects of the new machines on their users. Some have concentrated on global social effects (Williams, 1987; Wilson, 1988; Perrolle, 1987), others on the changes that are occurring in organizations (Allen and Hauptman, 1987) and another category deals with the effects on learning (Hiltz, 1986). Most of these social interpretations place an "effect" squarely on the shoulder of the technology.

However, it seems pertinent to ask: What is the role of the computer user in uncovering changes brought on with computer technology? It seems improbable that the technology itself is responsible for creating an information society and that users are somehow passive agents transformed by technology they can not control. This essay will explore a theoretical avenue that can provide a set of hueristics to uncover the role of the
Bulletin Board Conferencing: An example of Computer-Mediated Telecommunication

Electronic mail is often considered one innovation of the computer revolution. With E-mail, computer users can send messages through networks, and read them on their computers. While the ability to do this on a mainframe computer has been around since the 1960's, micro-computer users have introduced innovations with broad implications for communicators. Micro-computers provided an inexpensive means to set up and operate a bulletin board service (BBS) within one's own home. With the aid of a modem and telephone line, a "personal" computer could become an "interpersonal" computer, providing the hub for a groundswell of communication activity. The use of the computer to communicate at a distance can be referred to as computer-mediated telecommunication.

BBS's sprouted up soon after micro-computers arrived on the scene. One of the first was set up in 1978 to provide connections for members of a Chicago based computer club (Bowen & Peyton, 1988). The number of BBS's grew as the number of micro-computer users grew. BBS's became a populist form of computer
support, often public domain and/or "shareware" programs were provided for distribution to those who connected to BBS's. Today it is estimated that there are over five thousand BBS's operating around the country.

To become a member of a BBS is relatively simple. Dial the number with a modem and answer some subscriber information. Most BBS's are free, but some are beginning to charge member fees. BBS's are used for a variety of purposes. In addition to privately run systems, some are set up by schools (Alifrangis, 1988), others are set up by businesses (especially those that deal with computer products), and private organizations use BBS's to support the activities of their members.

The communication opportunities provided by BBS's fall into two categories: 1) "live" real time interaction with a BBS host or fellow user, or 2) "asynchronous" e-mail type exchange of messages. "Real time" interaction is often limited by the number of phone lines (and thus the number of simultaneous users of a system). On most micro-computer systems, "real time" interaction occurs only between a caller and the host. However, larger computer services provide conferencing capabilities between many users. Compuserve is the largest and best known of these
systems. E-mail is the most common form of BBS communication. One user of the system may leave a note to another user, or may leave a general note to be answered by any user who cares to.

BBS telecommunication has a quality that sets it apart from other forums of computer controlled telecommunication. BBS telecommunication occurs in a non-task oriented, active environment. While teleconferences are often concerned with issues, and videotext is a passive delivery of information, BBS telecommunication takes place because users voluntarily and (in most cases) happily communicate. The appeal of BBS telecommunication is thus hard to explain in theoretical models that place heavy emphasis on computer technology as an agent of communication behavioral change. Clearly, a focus on the role of the user as communication innovator should be considered.

Play Theory

Why does a computer user choose to extend his/her communication experience through computer-mediated telecommunication? Perhaps, as Katz and Blumler (1974) argue for other media, uses and gratifications may be provided. Thus, the ability to chat with other computer users in a Compuserve conference or on a local BBS may provide an opportunity to relax during a lunch
hour. There are a set of forums provided on Compuserve for science teachers, journalists, public relations personnel, among others. The opportunity to connect with others may thus seem attractive, but a computer user must gain expertise using communication software to do so. This is not an easy task for the novice user, and we must wonder what could draw such effort.

Play theory provides a framework that can give some answers. Introduced in 1967 by William Stephenson, play theory focuses on the media user's relationship with the medium. Stephenson argued that "play" involved the ability to select among a number of products, ideas, issues, and entertainment options from the media. According to Stephenson, media content is used to engage in "convergent selectivity" — making choices about media allows us to express ourselves. Our patterns of choices provide a feeling of individuality that we use to subsequently understand ourselves. This is Stephenson's concept of "communication play," a form of self-expression that takes advantage of the various media to promote a feeling of individuality.

While Stephenson found communication play a uniquely personal experience, Davis and Baran (1981) extended the play concept into interaction endeavors.
Using Goffman's (1974) definitions of play and "keyings" Davis and Baran argued that there are two types of communication play: participatory play and elite dominated communication play. Participatory play takes place when communicators are free to alter interaction to achieve their goals. On the other hand, elite dominated communication play is a passive activity. Here play exists only through making choices of what to use from existing media content.

Participatory play provides a center of interest when considering the example of computer-mediated telecommunication. The medium of play becomes the computer-teleconnection, the content of play is determined by the participants. Thus, two types of play choices can take place during computer-mediated telecommunication: 1) the decision to use the telink, and 2) unique features of the link that provide content cues of communication play.

Goffman's (1974) explanation of interaction play can provide a helpful means to analyze the content cues of communication play. Goffman believed that "play" was a situation grounded on a transformation of a serious situation. Thus "play" fighting takes place with wooden swords with mimicked moves. The transformation from serious to "play" situation is rule
governed and takes place as long as the participants observe the rules. Within the rules of the play situation, cues are provided that establish and maintain the transformation to play. Goffman regarded these cues as "keyings," (similar to the music metaphor) that signaled a special form of interaction based on a serious type. Among the types of behavior that Goffman considered play are jokes, dramas, sports contests, games, simulations, practices, and role-playing.

Play theory provides two areas of explanation for the appeal of computer-mediated telecommunication: 1) the choice of the medium may help the user gain a sense of individuality through gaining control over a media use, 2) the medium may be used for communication play activity.

Operationalizing Computer-Mediated Telecommunication Play

Play theory provides a set of heuristics that can guide research of computer-mediated communication situations. These involve the choice of the computer as a medium for communication, along with the way the computer medium is used to key into a play situation.

It is important to note that there are a number of situations that are not explained by play theory. One
situation involves the forced use of computer-mediated communication. When sending e-mail is required by work related or school related activity the computer user may do no more than is required by the supervisor. Similarly, messages sent to accomplish a task (such as asking a question or giving advice) are not motivated by the need to play.

The Choice to "Play"

The focus of research to investigate computer-mediated play must naturally start with the choice to use the medium. In a particular situation, did the computer user choose among a set of alternatives to use CMC or was the choice foisted upon the user? If a choice was made, why were alternative media discarded? Perhaps play is only part of the reason to choose computers as a medium of communication. It may be quicker to send a message to a group of users through the BITNET academic network than it would be to produce a set of letters. However, the user may also wish to promote a self identification as computer user to his/her colleagues. There thus may be a secondary motive based on play behind the choice of computer-mediated communication.

A set of variables concerned with the choice of the use of a computer to telecommunicate will reveal
the extent to which the user engages in play communication using this medium. A survey of computer users should thus focus on the extent to which the user freely chooses to use the computer to telecommunicate. Questions could be asked about the freedom of choice, the advantages and disadvantages of other media of communication, and the user's control over the situation.

A play theory analysis would also be interested in discovering the user's feelings about being a "telecommunicator." Does the user feel comfortable with the medium (discomfort would signal either a learning attempt, or lack of control of the situation). Another line of questions could investigate the gratifications of making the choice to use computer-mediated telecommunication. What contributions are made to the user's self image through the choice to telecommunicate?

Communication Play: Keyings and Content

Following Goffman's (1974) approach, we see that much of our interaction involves play activity. Thus a play theory analysis of computer-mediated telecommunication should account for the content of play communication using the medium. We should seek to investigate the types of play that occur within the
computer medium and relate these to the functions they serve computer users. Another fruitful avenue of investigation would trace networks of connections established through and for play communication.

An analysis of the content of play communication could begin with the cues of play activity, referred to as keyings. Content analysis can be employed to determine the nature and use of cues that signal a joke or sarcasm. One such cue is the "smiley," [:-)] often used as a cue that the preceding phrase in an e-mail communication is to be taken lightly. The interesting thing about such cues is that they often mimic nonverbal behavior that can only be communicated face to face. An analysis of this type of keying behavior may provide insight into the adaptations made to promote individuality and personal expression, prime "play" goals according to Stephenson (1967).

Content analysis can also elucidate the topics of communication play on computer-mediated telecommunication networks. Compuserve, for instance offers a number of alternatives for those seeking to interact with other computer users. One may join a conference discussion on a variety of topics and issues ranging from computer hardware critiques to a recent forum on the constitutionality of banning flag burning.
Compuserve also provides a public communication forum where users may connect with whomever they wish and discuss whatever they wish. Sandler (1986) describes the content of an anonymous semi-erotic encounter on the Compuserve network that he called "Compusex" (p. 95). In addition, there are interactive games available on the network that users perform in competition with others.

Topics of computer-mediated play telecommunication seemingly range from the mundane (how are you?) to the exciting. A content analysis of keyings will help determine when play communication takes place. For instance, a seemingly serious message could contain tag at the end that signals a joke. The interesting thing will be to use this analysis to uncover communication behavior unique to the computer medium itself.

In addition to a content analysis, a network analysis may shed light on the influence of play communication with computer mediation. A network analysis of who talks to whom about what could explain the draw of the medium. One approach is provided by fantasy theme analysis (Bormann, 1972; Cragan and Shields, 1981). A message could be followed as it "chains out" through a network of communicators. The attraction of the medium may be explained through
determining the contributions of participants. An example of this is the discussion of issues among scholars on the BITNET connection. Eloquence in an ongoing dialogue may be the result of wanting to participate in a public forum. Play theory analysis says that such participation is the result of making media choices that one feels enhances one's self-concept.

Summary

Play theory can provide heuristics to investigate the nature of voluntary computer-mediated telecommunication. The choice to use computer-mediated telecommunication, the topic, the content, and the network of participants in computer-mediated communication settings may thus indicate the role of user innovation in using new technology to provide new communication experiences.
References


