Communication situations, practices, and technologies are social constructions that become invisible as they move from categories of nominal experience. Even those partially or wholly dependent on technology disappear as they are regarded as naturally occurring phenomena in a socially, culturally, and economically constructed landscape. Once naturalized communication technology becomes as seemingly innocuous as nature (Habermas 1970, 86; cf. Marx). This also applies to email as a communication technology. In our society, email has become such a common and expedient medium of communication in both workplace and leisure space that the virtual boundary between work and leisure, has for all intents and purposes, collapsed. Professional life fluidly moves in and out of personal life, personal life in and out of professional; work dissolves into home; home dissolves into work. As Judith Yaross Lee states in her study, “E-mail….presses against the boundaries of work and play. In a culture that has seen the work week increase and leisure decline, this paradox of electronic communication points to one of contemporary life’s great ironies: Labor-saving devices make more work” (324). We will demonstrate that for today’s users,
email is both a professional field and a playing field where work and recreation occur simultaneously, and thus in our paper we widen the definition of technical communication to include personal as well as professional email.

To the current generation, email appears to be the most efficient and quickest mode of communication. Email gives us the ability to send instantaneous text messages, send/receive more messages on a daily basis to numerous people simultaneously, and at any time from various locations. The growth of email is obvious worldwide. Since the first email message was sent on a network in 1972, only a few researchers and academics used email. In 2001, 87 million Americans were using email, and it is estimated that in 2006, 140 million Americans will be using email (Festa). In fact, for many email may be not only the fastest and most efficient mode of communication, but also appears to represent ‘freedom’—freedom from physical location and the limitations of face-to-face communication (see Strate et al., 139; cf. Thornton 17-18 on the dominance of the US on the World Wide Web), and from the layers of constraints and conventions that have grown in and around written discourse. In email, it seems, even business email, almost anything goes.

The freedom from physical location is evident in studies that discuss how people can email others around the world at any time (Koku; cf. Thornton), and how email allows (indeed, encourages if not compels) people to work more from various places and not be tied to the office (Kanfer; Sproull and Kiesler). As we will discuss, the unprecedented informality email allows has led both users and scholars to conceptualize email as free of traditional conventions that hamper communication via business letters. The informality of email and the breakdown of traditional conventions seem to denote that email communication is less rule-bound and more “natural” (closer to spoken language [see Lee]) than traditional communication.

The technical possibilities of email insinuate that it is a freer way to communicate (and freer
communication is believed, even by social critics, to be the only possible foundation for the revitalization of democracy [Habermas 1989; cf. Thornton]). Because of these technical freedoms, email has been described as a social panacea. Several studies show that some people who normally would not participate in face-to-face discussions will participate in discussions via email (Finholt and Sproull; McCormick and McCormick; Sproull and Kiesler). Email provides a seemingly anonymous and “secure” space for people to contribute to discussions, enabling them to participate on a more equal level free from social domination (Boshier; Selwyn and Robson). Email seems to eliminate at least some social inequities; it is not easy to determine factors such as rank, gender, power relations, etc., often evident in face-to-face communication (Dubrovsky, Kiesler, and Sethna; Huff and King). “Institutional factors enhance e-mail’s informality by establishing a sense of direct communication between equals….e-mail exerts democratizing pressure as it bypasses the hierarchies of power and status that telephones preserve” (Lee 318). (Even Habermas, unrepentant critic of all things technologically rational whose early work we will use to critique the ideology of email, seems in his later work to believe in the redemptive power of communication as the salvation of democracy [cf. Habermas 1987, 1989].)

However, as Thornton has shown, email may be anything but a panacea. In a study of the relation between the Internet and democracy, Thornton notes the social, political, and cultural optimism surrounding the introduction of the World Wide Web as part of the rhetoric of the “technological sublime” (5), including “massive social and political change…caused by the inherent technical properties of the hardware,” as well as the scale of the social revolution to be brought about by the technology (6). However, she also points out that “[t]hese recurring narratives of progress primarily function to repackage existing social structures into a new technological form, endorsing current power structures” (7). In fact, Thornton points out the illusory nature of the technological sublime/the myth of access (esp. 9), and cites a number of social, political, and
economic factors that undermine any democratic tendencies of the Internet, including legislation/government intervention, fraud and censorship, surveillance, and other means of exclusion, including wealth and leisure, the disparity between Internet-rich and Internet-poor countries and peoples, literacy, gender and rationality, first-world bias, the English language, and US dominance of the World Wide Web (Thornton 11-19; also see Dance).

Many studies have examined the generic conventions of email without recognizing the effect of ideology on these conventions. Lee examines email as a melding of spoken and written forms. She also mentions the democratizing tendency of email to flatten hierarchies through the adoption of a standardized memo form, for example, as well as a breakdown in formal syntax and other standardized conventions that tend to recreate or reinforce traditional hierarchies in discourse (also see Herndl; Katz 1993). In their sociocultural study that maps genres of electronic interaction in the development of an organizational community of an Italian corporation, Zucchermaglio and Talamo observe that email became increasingly informal for those within the group. Neither of these excellent analyses examines the role ideology also may play—the effect of technological values on the conventions of email, and on human behavior.

Some scholarship does raise the question of the relation between email and ideology. For example, in their “Postings on the Genre of Email,” Spooner and Yancey discuss ideology in the context of the questions of whether email represents a new genre: “Many…people believe that this form of communication is new, is different, and that it enacts new relationships between authors and readers. There is, in other words, an ideology already at work here, and it entails social action” (268). At least one of the authors believes that “we will see discourse communities online arrange themselves in terms of very familiar hierarchies and conventions” [270].) In a response to Spooner and Yancey’s article, Deborah Holdstein states:

I question those who would assert without hesitation that email, the Net, and
the Web offer us, finally a nirvana of ultimate democracy and freedom, suggesting that even visionaries…beg the question of access, of the types of literacies necessary to even gain access to email, much less to the technology itself. What *other* inevitable hierarchies—in addition to the ones we know and understand that relate to gender, power, and so on—will be formed to order us as we “slouch towards cyberspace.” …Yancey and Spooner’s essay, then, far from and yet inclusive of its incisive concerns with genre, also helps us see the Net with a renewed, harsh glare towards the interface, highlighting to the profession the social, ideological, and power relationships replicated on new technologies and the ways in which we must acknowledge, confront, and—is it even possible?—redefine those spaces” (283-284).

While we acknowledge the obvious and unprecedented growth of email, to ignore the ideological context and content of email is to miss important cultural, political, and economic dimensions of this technological phenomenon. While admitting our own addiction, we are going to take what may be received as an unpopular position. In this article, we will not laud the social, economic, and technical benefits of email; nor will we inveigh against the technology of email or any perceived social or culture ills it may cause. Rather, we will seek to critique the hidden ideologies that underlie email as a cultural practice. If ideology is the cultural belief in what is good, right, and best (Berlin), we look at the ideology that forms our cultural predilection for the technological and capitalistic values of efficiency, speed, and productivity, rendering them what is good, right, and best. Using Jürgen Habermas’ theory of communication and work, this paper will constitute a radical critique of the characteristics, conventions and personal relations reified by email, to reveal the technological ideology underlying them.

We use “early Habermas” because we believe that his investigation of the invisible fusion of
political, economic, and technological ideologies in communication (both business and personal), and his critique of the disappearing relation between work and social interaction is appropriate—and perhaps the only way—to understand email as a cultural phenomenon. Nancy Blyler has pointed out the connection between professional discourse and social discourse, between work and life. Using Habermas’ theory, Blyler argues for the need for an oppositional ideology—a communication ideal—to make technological ideology we live in opaque (1995). Based on Habermas, Blyler believes “that the domain of professional communication ought to be expanded to include concerns with broad social ramifications” (1994, 128).

Some impacts of email on communication patterns and behavior are due to the emphasis corporations are placing not only on writing (see S. M. Katz), but on email. But email also affects personal communication. Much like Sprint cell phone commercials where problems in relationships are cured by the purchase of a cell phone, the general conception is that email facilitates and enhances personal communication and even personal relations. As Spooner and Yancey state: “We need to think of cyberspace as the commodity that it is, manufactured and marketed by today’s captains of industry for the benefit of those who can afford it….cyberspace and its equipment are created in the real world by the same socioeconomic structures that gave us the railroad, the automobile, and the petroleum industry. It is merely our place in the hierarchy that conceals the hierarchy from us” (270-71). But even personal email must be understood as a commercial product ultimately grounded in capitalistic goals.

Habermas’ theory, with its emphasis on communication and work, is useful in analyzing the ideology behind email technology and its implications for changes in technical communication—person-person as well as corporate. It will be our contention that, ideologically as well as commercially, the distinction is now so small as to be hardly discernable or significant. Ideologically, work and leisure have become virtually interchangeable. But the ideological
dimensions of technology are often hidden from or ignored by the people who are too busy in both their professional and personal lives to keep up with the changing technology, never mind fully recognizing and examining the ways technology begins to influence their lives (Bolter; Spooner and Yancey). In email, as in other facets of professional and personal life, technological ideology has supplanted and replaced traditional values of business and personal communication.

**At Work and at Play: Inside Institutional Frameworks**

For eons humans have created technologies that serve as extensions of their own functions, enabling them to do more and making it easier to complete their work. Email technology is no different; it is a technology that extends human communication functions which includes verbal communication (speech) and nonverbal communication (gestures, facial expressions [to compensate for their loss, a whole vocabulary of emoticons has been developed] [Hafner and Lyon; Lamb and Peek; Schultz; Lee]). In corporations and other communities, the same process of extension can be understood in the development of genres, which may either be adapted from existing conventions or created anew from evolving organizational or cultural needs, writer and reader responses, and technological practices, creating patterns of commun-ication and human behavior (e.g., see Miller 1984; Orlikowski and Yates). However, tools do not serve merely as extensions; they also may cause humans to engage in new “habits of behavior,” including ‘new ways of talking and thinking,’ and new modes of embodiment, and to create new institutions and technology to accommodate and/or incorporate the new tool (Miller 1978).

In “Technology and Science as ‘Ideology,’” Habermas discusses how society’s acceptance of scientific and technological advances, which supposedly improve human existence, eventually forces people to focus more on work rather than on a balance between “interaction” and work. He argues that capitalistic ideology, with an emphasis on increasing productivity, is embedded in all
technology and that it is the hidden ideology which forces society to focus on work and triggers changes in existing societal systems. For Habermas, it is the disappearance of the distinction between work and leisure in both the techno-cultural sphere and political consciousness that demonstrates the power of the ideology of technology in our public and (so called) private lives (Habermas 1970, 107) to erase the trace of itself. In fact, even while we still retain consciousness of the ideology of technology, and so have not “succumbed” to it (cf. Habermas; Ellul; MacCormac; Miller 1978), the invisibility of email technology as ideological attests to the power of the ideology to conceal itself in normativeness.

A number of scholars have noted the blurring of boundaries and the breakdown of barriers between job and play, between workplace and leisurespace facilitated if not created by technology. As Lee states, “The playful qualities of these messages remind us, as Meyrowitz (1985) has taught us, that electronic media blur work and play, humor and seriousness, along with generational, social, and physical boundaries” (322). One scholar, Cheryl Geisler, has investigated the use of mobile technologies, particularly PDAs (Personal Digital Assistants). Geisler found that “though originally designed as a technology of the workplace, PDAs are regularly crossing the boundary between the workplace and personal life” (1). The ideology which blurs these spaces has resulted not only in the increased use of technology (surely one of the goals of the manufacturers of such products), but as Geisler points out, in behavioral and even cultural changes in both spheres (2). “Not only does work cross over into the homespace; communication technologies like cellular phones, e-mail, and instant messaging facilitate the integration of personal life into the workplace” (italics ours). The result? People with wireless laptops working at the beach, and at the ballpark! (Howe).

The integration of (what is regarded as) “the personal” into the workplace heightens the awareness of the boundary between the two, but also problematizes the once distinct spheres, as
Geisler (2) discusses; but it also makes the distinction Habermas discusses between work and interaction even more difficult to see. As Habermas, discussing Marcuse’s notion of the repression of domination, states, “subjection of individuals to the enormous apparatus of production and distribution…the deprivitization of free time, the almost indistinguishable fusion of constructive and destructive social labor” (1970, 83), contributes to this obscurity.

Geisler finds “the moral imperative implicit in the ideology of separate spheres has remained remarkably persistent” (2), but we believe email has broken this ideological barrier and is at home in either sphere, where it remains an invisible medium of the technology, originally designed for one purpose (and based on one ideology) but now integrated into many others. While “users may choose to use their devices for boundary maintenance or boundary crossing, for segregation or integration” (Geisler 2), we argue that no such choice seems to exist in email. Although Geisler’s data “does not support the claim that the use of PDA technology will automatically entail the adoption of the time management philosophy out of which the PDA developed,” it provides “some support for the belief that this form of mobile technology use is part of a general social trend to view life as a project to be worked on and managed” (Geisler 7).

Clearly, the ideology of technology is tied to capitalistic goals of production, which cannot help but change lifestyles. As Habermas demonstrates, the improvement of what is regarded as standard of living is one basis of the power and appeal of science and technology (Habermas 1970), despite the public’s awareness and ambivalence of the control technology exerts over their life (Blyler 1994, 129-131). “Technology and science become a leading productive force” (Habermas 1970, 104). As Geisler also demonstrates, the development of technological products becomes the capitalistic goal of technology; economic goals become linked with technological ones, so that progress in one is progress in the other. “The development of the social system seems to be determined by the logic of scientific-technical progress” (Habermas 1970, 105). Through email use,
the ideology of technology, with its capitalistic values of production, is ‘imported’ into personal relations. To our mind, all this extends and confirms Geisler’s comment that personal life is understood as “a project.”

Habermas presents a model of how technologies affect the framework of societies that accept the idea of scientific-technological progress in “Technology and Science as ‘Ideology.’” He describes two possibilities structured around the difference between work and communication. (These two possibilities seem to parallel the distinction between work and play that we have discussed; ostensibly they do. However, we will argue that interaction structured around work has become the reality of both profession and leisure life.) One possibility is that technologies are absorbed into a traditional institutional framework, a social system characterized by interaction. A “traditional society” is one in which interaction is governed by social norms; it is organized by ruling structure where local systems of power are established but are still part of a central system of power, socioeconomic divisions that determine obligations and rewards, and systems of ideals (myths, religion, laws) authorize political power. Subsystems of technology and production also exist in such societies; therefore, members of the society produce products necessary to satisfy the needs of the society through work with technology, but their behavior is still governed by traditional social norms.

Thus, the labor of the society, including its use of technology, is part of the interaction within the institutional framework and is guided by socially agreed upon norms. The social norms are established using a shared language, which arises from shared social contexts of members. Based on social norms, people have common expectations about how to behave in given situations. These common behaviors are learned through acceptance of social norms and through “role internalization” or imitating others, such as one would do in an apprenticeship. If members of the society deliberately do not observe the socially agreed upon norms, they are subjected to penalties.
that also have been socially determined. The reason for establishing social norms is to create a society with a focus on the individual and to provide a structure for communication free of domination. The society continues to function as a traditional society as long as the characteristics of an institutional framework prevail, even if purposive-rational subsystems spring up within it (Habermas 1970, 95).

The second possibility is that the technological subsystem that exists within a traditional institutional framework subsumes the traditional institutional framework and becomes a system of purposive-rationality. These two systems are ideologically distinct, but a purposive-rational subsystem (PRS) can exist within an institutional framework or the traditional institutional framework (TIF) can exist within a purposive-rational system. In fact, according to Habermas, in the evolutionary process of industrialization, the purposive-rational subsystem in a traditional society supplants political, economic, social, and cultural systems of the traditional society, as illustrated in Figure 1. So, for example, in a traditional medieval society, the institutional structure is ruled by the divine right of kings, religion constitutes the value system, and the purposive-rational subsystem is confined to the treasury; but with the rise of the bourgeoisie, the king is beheaded, religion is boxed in cultural corner, and the economic values of the treasury are now the dominant framework of the society.

Figure 1: Schematic Representation of the Evolution of Institutional Frameworks

Habermas distinguishes between the two systems in seven categories, which can be explained by our questions in the first column of Table 1 that interpret the categories Habermas
applies to both systems.

Table 1: Habermas’ Chart of Work and Interaction (1970, 93)

<table>
<thead>
<tr>
<th>Our Interpretive Questions</th>
<th>Institutional framework: symbolic interaction</th>
<th>Systems of purposive-rational (instrumental and strategic) action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What governs actions?</strong></td>
<td>action-orienting rules</td>
<td>technical rules</td>
</tr>
<tr>
<td><strong>What type of language is used?</strong></td>
<td>level of definition</td>
<td>context-free language</td>
</tr>
<tr>
<td><strong>What types of behavioral expectations exist?</strong></td>
<td>type of definition</td>
<td>conditional predictions conditional imperatives</td>
</tr>
<tr>
<td><strong>How are behaviors acquired?</strong></td>
<td>mechanisms of acquisition</td>
<td>role internalization</td>
</tr>
<tr>
<td><strong>What is the purpose of actions?</strong></td>
<td>function of action type</td>
<td>maintenance of institutions (conformity to norms on the basis of reciprocal enforcement) problem-solving (goal attainment, defined in means-end relations)</td>
</tr>
<tr>
<td><strong>What happens when rules are violated?</strong></td>
<td>sanctions against violation of rules</td>
<td>punishment on the basis of conventional sanctions: failure against authority inefficacy: failure in reality</td>
</tr>
<tr>
<td><strong>What is the reason for working within the system?</strong></td>
<td>“rationalization”</td>
<td>emancipation, individuation; extension of communication free of domination growth of productive forces: extension of power of technical control</td>
</tr>
</tbody>
</table>

While in traditional societies the systems are governed by social norms, in technological societies the systems are governed by technical rules. The technical rules are determined by the technology itself and are based on “empirical true or analytically correct” information, and are therefore not defined by the context of traditional societies, but rather by the purposive-rational context of industrial societies in which science and technology have become primary value systems. To function in the purposive-rational system, people must follow the technical rules by learning a set of skills and qualifications. As a result, people’s behavior is regulated by “conditional predications” in which the desired outcome determines their actions and also by “conditional
imperatives” in which an existing condition determines what the action should be. Both conditions are created by the technology itself—or the socio-economical and political systems required to maintain it (Habermas 1970).

The resulting types of conditional behavior demonstrate the means-end nature of the technology established by the technical rules. If the rules are violated, either intentionally or because a person does not have the requisite skills, the consequences, like the rules, are also determined by the technology. Therefore, if the rules are violated, the technology does not work properly and the consequence is that the person does not successfully achieve the desired “end.” Since the only outcome of following the technical rules is a successful use of one’s skills to achieve a goal, the underlying focus of purposive-rational systems is to increase productivity, which results in an extension of technical control. The increase in technical control and productivity does not threaten the institutional framework unless it challenges the underlying ideas and social norms of the institutional framework. Purposive-rational subsystems that function within institutional frameworks as subsystems generally do not challenge traditional systems, but instead incorporate capitalistic ideology within traditional societies to expand technical control and increase productivity. However, when technical subsystems take over institutional frameworks, societies are governed by technical rules for increasing productivity.

In the Beginning: The Military Genesis of Email

The ideology underlying technologies can often be determined by looking at the original motivations and reasons the technologies were created, and/or the circumstances surrounding their creation. Email was not an idea conceived by a group of inventors or business investors determined to develop a mass communication technology. Instead, email developed as a result of the Defense Department’s ARPANET network technology, developed by engineers at the request and expense
of the United States Advanced Research Projects Agency (ARPA). The purpose of ARPANET was to allow researchers to share technical resources (computer coding/software and technical data) in order to economize and increase efficiency of the research they were conducting and speed up the production of technologies they were creating. The purpose of ARPANET did not include plans for researchers to communicate with each other using text messages (see Geise on the clash between the Department of Defense mission to improve military communication, and the desire of the computer scientists working on the technology for a freer flow of communication). People who used ARPANET could exchange messages with each other using “intra-computer mail,” a technology that had existed since the 1960s which allowed people using the same computer terminal to leave messages for each other.

“Intra-computer mail” was the only type of electronic mail available until 1971 when Ray Tomlinson developed “network mail.” Tomlinson was working on a program to send technical information between computers when he decided to alter the program’s code in an attempt to send a text message. His modification worked and he sent the first email message (the content was probably “qwertyuiop”) to himself from one computer to another computer, both of which were sitting side-by-side in the same room (Hardy; Hafner and Lyon). Thus, the first trial of network email was not an effort to communicate with another human, but to see if the technical rules would allow the possibility. This history of email’s origin shows that although researchers did not intend to create an email system based on “rational ideology,” email nevertheless grew out of the Defense Department’s desire to increase efficiency, speed, and productivity of its “workers.”

Since its inception within the context of ARPANET, the development of email has continued to focus on increasing speed, productivity and efficiency, and has become driven by economic growth and the continued commercial nature of most Internet sites (Geise 150-158).³ This is evident in the way the two leading messaging vendors, Microsoft and IBM, design their email
technologies. Microsoft and IBM design their email products to enable both corporate and personal users to increase their productivity and efficiency, often in conjunction with increasing the speed of transmission and other technical factors. As Geisler suggests with mobile technologies, the technical goals and features of email can be discerned in part from the explanations and descriptions of electronic products in advertisements “for insights into how users may view devices, what motivates acquisition, and what expectations for use adopters may bring to the experience of incorporating a new technologies into every day life” (1).

The Corporate Takeover by the Email Industry

The focus of Microsoft Outlook, Microsoft’s email software, is evident in the product guide: “Outlook version 2002 can help users manage their time and information more effectively” (MPG 2). The guide states the new version’s goals were: “to make working with email, tasks, contacts, and appointments more intuitive without requiring users to learn new ways of accomplishing their tasks or spend time searching for these tools” (MPG, 1); “to enable users to spend time working rather than worrying about their software” (MPG, 9); and “to make sure setup and configuration was made simpler so that users could stay focused on being productive instead of worrying about their software” (MPG, 11). In these three points, we see that underlying the effort to improve communication technology at work is a fundamental belief in the values of efficiency, speed, productivity—what Habermas identifies as the ideology of science and technology in its fusion with capitalism.

The purpose of the email technology is also evident in the list of descriptions, included in the product guide, for thirty-four new or improved features. Twenty-one of the descriptions explicitly describe how the features allow workers to complete necessary tasks such as finding
messages (MPG 4) or looking up contacts (MPG 7) more “easily,” “efficiently,” and “quickly.” The remaining thirteen descriptions are still focused on how the features increase productivity, but they are more subtle. For example, some descriptions assert that the feature would allow the user to complete tasks such as “AutoComplete Addressing” for sending email without looking for an email address (MPG 2) or finding “messages, appointments, or tasks” (MPG 4) more quickly and easily. The fact that it is technologically possible for users to complete tasks easier and faster not only culturally signifies but pragmatically means that workers can now be more productive. In fact, two of the descriptions directly emphasize that the feature keeps the users working/producing: the “Cancel Request to Server” feature—“this allows Outlook version 2002 to be more resilient to network or server disruptions and enables users to stay working” (MPG 8), and the “Document Recovery” feature—“as a result, users spend less time recreating their email messages and spend more time working” (MPG 9).

We see the same ideological impulse at work in the advertisement for IBM’s email software, Lotus Notes. In an article describing the impact of Lotus Notes and Domino 6 (Domino is the email software for the server), IBM states they developed the latest version of Lotus Notes based on research that revealed customers wanted browser-based email, which would allow them to check email from any location with a web browser without requiring special software. The ideology of Lotus Notes is implicit in the way IBM describes the product: “We’re able to raise the level of collaboration and productivity to new heights,” and ”we are seeing major performance improvements and reductions in costs from 25 to 40 percent” (IBM). These descriptions also expose a view of workers as (human) resources or as capital to be purposively used or invested by their organization, or as parts of rational, capitalistic production systems ideally existing within organizations (cf. Miller 1990): “we’re offering our customers the ability to significantly drive cost out of their organizations, to increase productivity, and to maximize their returns on investment in
their people,”(IBM) and “now they can get significant improvements in performance on the server side – plus a set of client capabilities that really unlock the productivity of their organization” (IBM).

These viewpoints, along with Lotus Notes’ goals and product descriptions, reveal the desire behind IBM’s email technology to increase productivity of businesses and employees. By designing their email software to help companies increase productivity and to help workers become more efficient, IBM and Microsoft develop products that continue to be based on the ideology inherent in email since it was created as an extension of ARPANET. According to Habermas’ theory, since they have been based on increasing productivity, efficiency, and speed, the origin and the ongoing development of email technology demonstrates that the “rationality” of email is oriented toward the production of work, a means-end relation to which all other goals, including communication, are subordinated. As with ARPANET, the focus is on productivity; improved general communication is really a spin-off.

Personal Email and Technological Relations

The ideological genesis and continuing focus on increasing email’s efficiency and speed is not confined only to email systems that are developed for business environments, but also underlies the commercial development of email for personal use that is easier and faster, and reshapes personal relations in ways that seem to have been unpredicted or unseen. While some people may use Hotmail (the largest online provider of free email services) for business reasons, it is currently intended more for personal communication, as evident in a Hotmail update description: “The new, more intuitive and consumer-friendly interface makes it easier for people to manage e-mail and keep in touch with friends and family they care about most” (Microsoft 2003b). Although it is used primarily for personal communication, the same underlying ideology that exists in business email applications can be seen by examining the original goals of Hotmail creators that were the basis of
the application when it was launched on July 4, 1996, and the purposes behind the extensive
updates to the application that occurred in July 1999 and December 2003.

On July 4, 1996, Hotmail’s creators, Sabeer Bhatia and Jack Smith, activated it as a free,
web-based email system, which they had designed to be “fast, easy to use, reliable, and accessible
from any Internet-connected terminal” (Microsoft 1999a). This was a deliberate attempt to create a
technology that provides users with a sense of apparent freedom in that Hotmail is clearly intended
to be available to everyone on the Internet and to be available from any Internet connection.
Hotmail was to be the great equalizer of the World Wide Web. The original goals remained a
fundamental element behind Hotmail’s design even when in July 1999, three years after launching
the service, Don Bradford, Hotmail’s general manager, announced the first major update to the
eemail application, “to provide service that is fast and reliable, with easy-to-use features that help our
members get things done online” (Microsoft 1999b)—that is increase speed, productivity, and
efficiency respectively.

Thus, although Hotmail is not intended primarily for business purposes, these press
releases hint at an ideology of increasing productivity—even if it’s the productivity of leisure.
What is no longer obvious, however, is that productivity, efficiency, and speed in personal
relations are technological values—ideological goals imported from the realm of work that
turn personal relations into means-ends relations—technological relations whose very end is
to make personal relations productive, efficient, and fast. Email is not primarily or only
about ‘reaching out and touching someone.’ That is not why companies produce email
products, whether corporate or personal. It is about providing a service to make a profit
(Spooner and Yancey 270-71). Perhaps more importantly, the effect of this capitalistic
ideology is to fundamentally alter, through the values embedded in the communication
medium of email, the relation of users to machines, to each other, and to themselves, turning
the purpose of that relationship into the work of technological capitalism.

An emphasis on increasing efficiency and speed as the basis for more “productive” relationships can be seen not only in the repetition of phrases and concepts such as “speed,” “access,” and “ease,” but also in the new features of the updated Hotmail service, such as “faster page loading times,” “easier access to tools through new navigation scheme,” more “on-screen work space” and “decreased loading times for interface” (Microsoft 1999a). These features become not only the technical means to human relations, but as we will show in the subsequent sections, ideological ends themselves: the speed, access, space, and interface, establish not only the technological parameters of email as leisurespace, but also the new conventions of personal communication, and the means-ends relations created by and through them.

Although the original design and early development of Hotmail certainly incorporated the values of efficiency, productivity, and speed, the emphasis on those values is possibly even more prominent now due to Hotmail’s current affiliation with Microsoft. Four features in the update, that embody these values in software allow users to handle more information more efficiently, store larger amount of messages, and archive messages more efficiently. Directions for these new features shown in a flash tutorial on Hotmail’s website about the update include how to: respond to MSN Instant Messenger messages from within Hotmail using “Instant Reply,” enhancing the speed at which people can communicate via email applications by allowing the capability of responding to email messages with synchronous communication from within the email application itself; combat junk email by improved reporting and filters, demonstrating that Hotmail is trying to help people be more efficient by providing better ways of handling large numbers of personal email; coordinate calendars, including updating schedules, sending and tracking meeting requests, sharing calendars, and receiving reminders (Microsoft 2003a).

These features show that personal email applications and business email applications are
becoming similar since business email applications, like Microsoft Outlook and Lotus Notes have calendar functions, and previously Hotmail did not. They also show how Hotmail imports the values and goals of business into personal life, turning life, as Geisler states in connection to similar PDA functions, into a project. For example, in the tutorial, phrases such as, “several tools to automatically save information,” and “it’s easier to keep track of important names, addresses, etc. than ever before—and to do more with that information,” point to the desire and goal of users to organize their personal relations based on rational systems—and to do so more efficiently and quickly to increase the “productivity” of those personal relations (Microsoft 2003a). The outcome of this desire conflates expectations between business email and personal email and turns personal relations into means-ends ones. What’s at stake here is changing how people relate to each other.

The Hotmail website also includes an “All about Hotmail” FAQ section that includes a description of additional features that demonstrate further blurring between work and leisurespace. For example, users can access Hotmail from Outlook; this allows users to set up an Inbox in Outlook for their Hotmail account—a reversal of the relation of leisure and work, for here, instead of work intruding into leisurespace, Hotmail as a technology designed and used primarily for leisure communication is encouraging the encroachment of personal life into the workplace.

In addition to selling the product, the intent behind the new design is to provide users with control in order to communicate more effectively; but another part of the intent is the management of personal life. This is clearly stated by Blake Irving, corporate vice president on MSN Communications and Merchant Platforms at Microsoft, in regard to one of the features, “this is just one example of how MSN is providing people with the tools and technologies they need to better manage their e-mail and, ultimately, their time”; Hotmail thus holds out the illusion of control: “The new MSN Hotmail provides consumers with a wealth of tools to gain control over their e-mail, calendar and contacts” (Microsoft 2003b).
We want to note that the changes in service implemented by Hotmail, while still adhering to the original goals of the creators, were partially in response to the desires of users for more “speed, ease of use and reliability” (Microsoft 1999a). It is still influenced by these goals that shape email applications used in the workplace, goals driven by a combination of the desires of consumers, developers, and corporations. The desire on the part of consumers for more speed points to an important facet of the ideology of science and technology that Habermas discusses: the desire not only for technological goods and services but also technical relations and ends, originates, or appears to originate, at the grassroots level, from the bottom up (1970, 105-122). In fact, for Habermas it is the grassroots nature of the ideology, and the higher standard of living the economic surplus affords, that gives the ideology its stability and power. But as we know, the relation between ideology and the desires of users is complex, also involving economic needs, cultural goals, created expectations, and appealing products.

**R&D vs. I&D**

While people usually think about research and development (R&D), they don’t think about ideology and development (I&D), about products as ideologies or ideologies as products. But as Bakhtin and Foucault in different ways have shown, ideologies are material, and material things have ideological dimensions and uses. Thus, perhaps we can think about ideological development in ways similar to product development. Ideological product development, which drives the ideological as well as technological development of email applications, perhaps can best be represented by Figure 2.
Email developers/providers use the term “application” to refer to email packages, software, programs, etc. As we’ve depicted in Figure 2, feature application involves the design, development, testing, and release not only of tangible goods, but also of ideological products and technological innovations. Email applications certainly go through this process. What’s distinctive about email, perhaps, is the less obvious Marxist dimension, which may be true of all services where the primary means of production remain in the hands of the provider. Email is an ideological product.

Although users don’t really have the type of control that allows them to determine production, they do have the ability to exert some influence over the way the application is designed.
by letting the developers know about their expectations. In the update to Hotmail discussed above, Microsoft deliberately restructured Hotmail’s interface in response to user request/demand/expectation to make it seem more like Outlook, Microsoft’s business email application. Although at times the providers appear to hand control over to the users by advertising a number of new features that users asked for, this is only an illusion of control. (We don’t own the company, we don’t own the means of production, we don’t have the power to make changes; we only have the power to imbibe expectations, and make suggestions based on them.) It is the illusion that we are in control of our communication, that we are in control of organizing our life, which is actually and virtually the service that companies provide.

The Ideological Product and Technological Innovation

*Feature application* and *ideological product* create and condition each other. But ideological products are in part created and conditioned by purposive-rational/means-ends relations, which therefore shape the needs of users by defining comfort zones and quality of life. *Technological innovation* is the interaction between means-end relations and the needs of users. The illusion of control creates expectations, demands, and requests for more illusion of control, upon which the notions of comfort and standards of living are based. Within the *Ideological Product* box in Figure 2 we see the interaction of requests/demands/expectations in relation to zones of comfort and qualities of life, but as part of a larger whole we see that both requests/demands/expectations, and comforts and qualities, are the ideological products not only of feature applications manufactured by developers/providers, but also the needs of users—“manufactured” by technological innovation based on the purposive-rational system.

Technological Innovation and Feature Application
The testing and development of applications creates the request/demand/expectation of users, which are in fact not only technological products but ideological products based on needs manufactured by technological innovation. But feature application is created not only by manufacturers/developers/providers, but also the purposive-rational system of technological innovation. The needs of the users spur technological innovation. But feature applications are shaped by the purposive-rational system (in a process that is predicated on means-end relations). Thus the economic and political basis of technological innovation is concealed from the users who keenly feel their need nevertheless.

An example of the system of ideological product development would be the addition of a calendar function to Hotmail because it was already included in Outlook and Lotus Notes. The ideological product is both the desire and the outcome, the means and the ends.

*The In-Out Box of Institutional Frameworks*

Communication, whether at work or at play, is still framed by and exists within the ideology of technology. What is significant here is the ideology of technology, not just the technology itself, or what consumers use it for. Features of email can be understood within that context. People’s expectations of leisure, at least in the U.S. (cf. Thorton; Dance), are shaped to a certain extent by their experience of email technology, both professional and personal. Email is thus both a workplace and leisurespace technology. People come to expect certain characteristics they see as valuable in the technology used at work, which is based on principals of increasing efficiency, productivity, speed, and therefore start to “demand” the same fast, efficient, and productive characteristics of leisure technology. Further blurring expectations—people expect to be able to perform the same tasks at work and home.

A primary purpose of Figure 2 is to point to how needs of users are by-products of the
ideological product created by both feature applications and technological innovation. Marxists usually think about needs in economic terms of survival (cost of living), and Maslovians in psychological terms of emotional development (hierarchy of needs); but here, both economic and emotional needs are shown to be created and conditioned by purposive rationality. In other words, needs are constrained by the means-ends relation imposed on them by technological capitalism. Within this system, accessibility of email applications is a technological reduction of the notion of personal relations (see Buber). Someone experiences a need to communicate, to which business responds: “You’ve got mail!”

Characteristics: Personal, and Technological

Due to emphasis on productivity embedded in the goals and development of email technology, many individual characteristics of email allow for and indeed almost demand increased productivity. Such email characteristics not only have impacted the way people communicate, but they also have impacted expectations of how people should communicate with others. These new expectations are determined by technical conditions established by email technology, rather than by reciprocal expectations about behavior that are based on traditional social norms. The ability of email technology to deliver messages almost instantly has changed the way people communicate in many obvious ways. People can now send messages anywhere in the world that has Internet access. As a result, the speed of email has led to behavioral expectations that are not defined by reciprocal expectations, which are established by social norms of an institutional framework. Instead, speed, which is made possible by the technical rules that are inherent in email software and hardware, has established behavioral expectations. Some of the behavioral expectations regarding the speed of email are based on what Habermas terms “conditional predictions,” which is when people found behavioral expectations on the logic of: if I/they take action X, then condition Y will be the result.
For example, since email is generally delivered almost instantaneously, many people hold the expectation of: if I send an email about situation A to person B, then person B will know about situation A instantaneously (an expectation which is obvious in the almost inevitable response when person B states that he or she does not know about situation A and the sender says, ‘but I sent you an email about it’) (Dobrian; Graham).

Another behavioral expectation resulting from the speed of email is that people can handle more pieces of communication on a daily basis. Studies show the typical worker spends at least two hours daily dealing with email messages (Ferris Research 2000b). The time needed to deal with email will only increase as the amount of email received by corporate users increases yearly by 35 to 50 percent (Ferris Research 2001). This type of behavioral expectation is what Habermas calls the “conditional imperative,” which is the logic of: if condition X exists, then I/they will do action Y. For example, since email can deliver numerous messages quickly, many people expect that: since people receive messages faster and receive more messages, they should be able to respond to more messages faster because it is technically possible. Therefore, since both condition X and action Y are made possible by the technology, people come to expect it.

Other behavioral expectations which result from the technical characteristics of email can be framed as conditional predictions or conditional imperatives, such that since email is “always” accessible, people feel like they have to check email continuously, often setting up email notification systems that alert them when they have new messages (Schultz). Computer users are constantly interrupted by new email messages. The characteristic of accessibility also sets up expectations that people are always within reach even if they are not physically at work, and are expected to respond to email from home in the evening, on weekends, and even on vacations. These behavioral expectations are encountered frequently because they have developed and spread along with the rapid development and expansion of email use and they shape emerging behavior patterns.
In analyzing their behavioral responses to these expectations, some people may appear to develop an "addiction" to email, also known as "emailoholism" (Tschabitscher). One symptom may be that people expect immediate responses to their messages (this is not always a reciprocal expectation); because of the instantaneous nature of email, they feel the need to send and receive messages instantly, and thus constantly check their email just in case messages are waiting, developing what Schultz calls “communication enslavement.” We might define email addiction as a three-prong need based on technological values of productivity, speed, and efficiency that indemnify technological-capitalistic systems. Thus, we understand addiction as ideology. By making people feel the need to communicate constantly (productivity), instantly (speed), and directly (efficiency), email users develop communication dependence. One “addict” confesses, “I’m finally ready to admit I have a problem. At a trade show recently, I awoke in the middle of the night, unable to get my laptop ‘dial-up’ connected to the hotel [phone system]. I found myself in a 24-hour hotel business center looking for a ‘fix’” (Weil 2001b). Another “addict” describes the enormous impact of email: “I have been strung out on checking my email every minute for 7 years. The issue for me comes in when I get home and have to check personal email… I feel that my life is fading away” (Weil 2001b).

Research about people’s technical relationship with email supports these personal accounts of addiction. The Center for Online Addiction acknowledges that email is one of the most addictive online applications (www.netaddiction.com/whatis.htm). The Gartner Study Group provides statistics about the extent of email addiction: at the time of the report, 53% of business users check email six or more times on workdays; 34% of users check email constantly during the day; and 42% of American email users check email on vacation (CBSNews). These statistics are significant, but also significant are the facts that both users and researchers recognize and admit such an addiction exists, that researchers are monitoring it, and that some people even take the addiction seriously
enough to suggest ways to handle/control/break the addiction (Weil 2001b).^5

**The Ties that Bind: Conventions and Technical Rules**

Email has developed quickly and continuously, and thus guidelines and conventions are emerging that are comparable to those governing business letters and memos (Benjamin; Lamp and Peek; Terminello and Reed). Due to the rapid expansion of email, people have not had time to develop rigid, social conventions for using email,^6 but the technology of email itself seems to be creating a set of emerging conventions. These new conventions seem to reflect a means-end ideology based on technical rules. An example of how these conventions are governed by the technology can be seen in formatting conventions, such as the way technical rules determine the memo header. The header section of an email message generally includes the following traditional fields: “From,” “To,” “Subject,” “Cc.” However, as Yates and Orlikowski state, “In this case, computers rather than people routed the messages, so the fields of the memo heading were designed to be readable by computers (as well as humans)…. [S]ystem identifiers…are sometimes clearly recognizable variants on the individuals’ names, sometimes they are nonmeaningful sequences of letters and numbers” (316, 317).

In email there is no possibility of deviation from the memo header because technical rules establish what must occur in the header. The software enters the sender’s email address automatically in the “From” field, and the sender must enter an exact address in the “To” field. If these fields are used correctly, the message will usually reach the receiver whether or not the sender uses the remaining three fields: “Subject,” “Cc,” and “Bcc.” If the “Subject” field is left blank, most email software will query the sender to enter an appropriate subject line; in a sense, the software is asking whether the sender really wants to circumvent the convention. Therefore, the sender’s message is impacted by technical rules in two ways: 1) violating the technical rule does not change the “memo format” of the email because the space for the subject line is still there; and 2) violating
the technical rule could result in an ‘efficiency failure’ because the receiver has to open the message to determine the subject.

Thus, even though the email header, with the exception of the “Bcc” function, is grounded in the traditional memo heading format, the email header is not based on traditional social norms and expectations (Hafner; Hardy). The fields of the email header that the receiver sees resemble a memo (Hardy, 31). Traditional norms and expectations, as evident in business communication handbooks, require the memo format to be used for internal messages and the business letter to be used for external messages (Baugh; Inkster). When the members of ARPANET first began to use email, 60-70 percent of the messages were sent internally to people. Now that email is used both internally and externally, the format of the email header is based on technical rules that have blurred the distinction between internal and external messages (perhaps explaining students’ confusion re: when to use memos vs. letters).

The result is that while email users readily adapt the memo form of email as a genre to corporate or personal ends (Zucchermaglio and Talamo), the email technology itself, not the social context or the user, chooses how the message will look. Email has apparently flattened the traditional internal and external boundaries of business communication by instantiating memo header conventions (cf. Lee 310). Other factors influence the relation of senders and receivers, but the technological embodiment of the memo heading as the generic form of email is indicative of a purposive-rational system, rather than the traditional institutional system.

Technical rules have also generated guidelines regarding how email text should be formatted. While users can often determine text formatting on their machine, they are ultimately not in control of how it will look on the receiver’s machine, depending on software compatibility. This compatibility both instantiates and creates the set of expectations that constitute technical rules and to some extent govern behavior. For example, some email software will automatically format the
spacing of the text by allowing for text wrap and will allow the user to format text in ways similar to that of word processing software, such as using bold, italics, underlining, bulleted lists, different font sizes, colors, and types. However, the email software used by the receiver may not be able to decipher the formatted text, and the text may appear as plain, unformatted text or may include gibberish characters in place of the formatted text. Therefore, email manuals tend to stress that formatting is not important since the sender cannot control how the receiver will view the text (Benjamin; Bly).

In Habermasian terms, technical rules can be either non-optional or optional. In regard to the formatting of email, if non-optional technical rules in a purposive-rational system are violated, rather than the consequence of traditional, socially agreed upon punishments, the “failure in reality” is a failure of message not being sent (it never reaches the inbox, or reaches the wrong box). This failure in reality could have two possible causes: a human violation or a computer violation of technical rules. A computer violation would be when a computer violates its own technical rules, for example, when it inserts “nonsense characters”—html code—into an email message. Someone receives this message: “Love? &nbsp; are you kidding??” In the context of a troubled relationship, he interprets the &nbsp as “and no bullshit please,” which makes all too perfect sense in the context of the email, further damaging the relationship. In actuality, &nbsp is html code for “non-breaking space,” but was inserted in the message (many more times than shown here) in linguistically significant and emotionally crucial places as above by the email application. In cases like this, the phantom machine becomes visible—its code transmigrating software from the realm of the unseen to the screen.

As we see in Table 1, a violation of “optional” rules also could result in a failure in reality. One type of optional rule is is technical, as when, for example a receiver has not turned on text wrap and is forced to use the horizontal scroll bar to read long lines of text instead of being able to see the
message in one glance. The other type of optional rule is “nontechnical.” As noted in many
netiquette books (see Terminello and Reed 56), a sender should use a specific subject line; if this
rule is violated, the receiver may not read a message or may misunderstand the content and/or
purpose of a message even after reading it (cf. Lee [316], and Zucchermaglio and Talamo, who
believe that there is a correlation between length and detail of subject lines and personal relations
among groups of email users). While the subject line is a holdover from the traditional memo form,
its incorporation in email in effect becomes a technical rule (a “soft necessity”) not because it is
embodied in the genre, but because its non-use violates the ideological means-end relations in
which the email message exists.

Email Styles and Personal Relations

Email conventions emerging from the way users are adjusting to email technology suggest
users may be moving away from rules established within the traditional institutional framework
toward a purposive-rational system. For example, traditional rules governing the salutations of
business letters are based on social norms and mirror a firmly entrenched social hierarchy, a
characteristic noted by Habermas’ in traditional institutional frameworks. Malcolm Richardson and
Sarah Liggett, discussing social hierarchies in medieval and modern letters, showed that
hierarchical differences between people were especially evident in the formal wording of the
salutations, which were governed by formulas dictating how a writer should address the reader
based on the reader’s societal position (see Anonymous of Bologna, who presented a hierarchical
list of salutation formulas based on social position).

Both the advice of the email “experts” and the actual behavior of the users depict a move
away from traditional forms of salutation. Email guidelines suggest including a traditional salutation
in an email the first time a writer sends a message to someone—afterwards the sender may use the receiver’s first name or omit the salutation entirely (Angell and Heslop; Locker and Kaczmarek).

According to Laurie A. Pratt, the recommendations of the communication experts are reflected in the writing practices of email users: only 3.9 percent of messages include the standard greeting format “Dear Mr./Ms. X,” of traditional business letters. Instead, people tend to use a more informal salutation style (research shows 46.8 percent of messages use a more informal salutation by only including the first name of the receiver, and 48.3 percent of messages do not include a standard salutation or either the receiver’s first or last name [Pratt]).

The move away from traditional conventions may indicate that new email salutation conventions reflect Habermas’ idea of language free of traditional ‘social’ context, as shown in Table 1, since senders can usually address both superiors and subordinates by their first names in email messages without fear of reprisal based on violations of traditional social norms, and because social interactions in this case are now at least partially governed by “technical rules.” The resulting communication style seems to indicate a flattening of traditional social hierarchies with less emphasis on a traditional approach where an “intersubjectively shared language reflects social norms and hierarchies” (i.e., writers addressing readers based on their title and/or hierarchical position).

In the context free category (Table 1), another move away from the traditional institutional framework appears in email style, which often combines conventions of writing with those of speaking (Lee), and thus leads to a more informal style of writing [Zucchermaglio and Talamo 279-80]). Email users pay less attention to conventions of traditional, formal business communication, such as structure, spelling, and grammar (Benjamin; Yates and Orlikowski). As Lee remarks, “[B]etween people who already know each other or who share institutional links—the vocabulary and grammar of email lack the formality of many other genres of professional communication”
Other ‘non-traditional’ email conventions include short replies that depend totally on known context, “less contextualizing or background,” less redundancy; an abundance of abbreviations, use of lowercase, initials in name, phonetic spellings, jargon, colloquial vocabulary; incomplete or ungrammatical sentences and “haphazard” punctuation (309-319). An email that one of us received from a student reads: “Hey, sorry about …ill just copy paste lol...cause files are too difficult for my computer illiterate brain 😜” (mrrandal). This email message does sound more like a verbal conversation than a written message.

For Lee “deviation from formal grammar usually signifies efforts to visualize talk…. [E]-
mail constitutes a junction in which orality and literacy, in their extreme or purest forms, meet. One reason is obvious: e-mail adapts the technology of the keyboard, a by-product of print, to the requirements of talk” (319; 323).

One example of written and spoken conventions being combined is that in addition to incorporating and adapting written conventions regarding salutations, email also incorporates greetings used in telephone and face-to-face conversations. Some people have integrated the conversational convention of “Hello,” as well as other characteristics of informal writing, into email as an informal replacement for both complex medieval and streamlined modern salutations based on rank, social class: “hello! hope this finds you sane and well… im doing great…. (smile). still shying away from school…. (im laughing)” (julichny). Other changes might include: rapid reply; reply with prior message included; subject lines which can be the whole message, completely dropping salutations and closings used in letters and memos (Lee 311); “[r]eceipt tracing,” when the code appears as a form of closing, “confirms the end of the communication in much the same way as the blank space at the end of a letter or memo” (Lee 317).

These scholars attribute the shift to informal styles on email to: the merging of oral and literate traditions, to the development of personal relations on and offline, to changes in genre. Yates and Orlikowski attribute the toleration of spelling and grammatical errors in email to “the
typical rapidity of and lack of secretarial mediation in this medium, as well as its weaker editing facilities and lack of typing skills among many electronic mail users” (317). But the shift in conventions and styles may go beyond the quotidian. For example, speaking of the subject line, Orlikowski and Yates state, “[I]n this case we see a creative use of a formal structure that emphasizes efficiency of the communication permitted by the electronic-mail system” (266). In fact, it is possible that the shift in writing conventions and styles is at least partly driven by technical rules and values created by email technology itself. Ironically, despite the informality of email and the apparent freedom of it, minimal context and the proliferation of abbreviations, phonetic spellings, colloquial vocabulary, and incomplete sentences, may be based on the values of efficiency and speed in communication. That is, from an ideological perspective, the new conventions noted above move away from rules established within the traditional social institutional framework to those inscribed in the purposive-rational institutional framework.

But the wider significance of the restructuring of conventions (almost without conscious volition of users) is that it reflects and affects more than just the mode and style of the communication. It also reflects and affects how we interact with the technology, how we interact with others, and thus how the technology affects our lives. Perhaps email, like the telephone, does not fundamentally transform affect conversation (Miller 1996, 284–285; Spooner and Yancey). But as Miller suggests, “technology changes the constraints and thus the rhetorical situation; the technology does potentiate ‘new relationships’ between authors and readers,” out of which genres may grow [1996 285]); it at least affects beliefs about how we should live—ideology (Berlin).

The ideology of email thus leads not only to the issue of genre, but points beyond it as well. We believe that the “social processes” Yates and Orlikowski discuss as the basis of genres of organizational communication are themselves at least partly determined by the ideology of technology, and that “the reciprocal interaction between institutionalized practices and individual
human actions” (299) are conditioned if not determined by this ideology, reproduced and reenacted by practitioners and students (Herndl); these social processes need to be comprehended by Habermas’ critical theory (Blyer). If “genres can be viewed as social institutions that both shape and are shaped by individuals’ communicative action” (300), then they exist like organizations themselves within larger cultural ideologies that find expression in the mega and ill-defined genres of social, political, and economic forms and organizations of existence.

The Purposive-Rational Genre of Existence

Within the purposive-rational system in which email exists, users learn software and skills necessary to increase efficiency, speed, and productivity, not necessarily to maintain the traditional norms of an institutional framework. Relations—both personal and business—become focused on the technical production of communication. Figure 1 on page 107, “Schematic Representation of the Evolution of Institutional Frameworks,” therefore applies not only to social and corporate organizations, but to individuals as well. The translation of Habermas’ chart in Table 2 below summarizes the purposive-rational ideology applied to email in ways that raise questions about professional and personal life for practitioners and students to consider.

For example, based on Habermas’ category of “type of definition,” practitioners and students, like emailoholics, expect an immediate response to their email, thus ‘enslaving’ the recipient who is obligated to respond immediately or risk violating the behavioral expectations established by the characteristics of “conditional predictions” and “conditional imperatives” of the purposive-rational system. The characteristics of “context free language” described by Habermas can illuminate the problem of students using Netspeak inappropriately in writing, making Baron’s advice that “[we] must decide whether to employ conventions of informal speech…or assumptions about more formal writing” (410) more difficult to implement or teach. Likewise, the advice on
making the content of email messages clear by using a ‘direct, concise style’ (Benjamin; Bly) does
not really address implications of Habermas’s ideological category “functions of action type,”
dealing with means-ends relations: while advice about concise style
doesn’t provide students adequate rhetorical strategies to improve their writing, it does suffice for
communication in the purposive-rational system based on technical rules. The means-end relations
of production has become a foundation of education (see Watkins).

Table 2: Habermas Translated: Systems of Purposive-Rational (Instrumental and Strategic) Actions in

<table>
<thead>
<tr>
<th>Habermas’ Categories</th>
<th>Habermas’ Characteristics</th>
<th>Definition of Characteristics</th>
<th>Examples of Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>action-orienting rules (What governs actions?)</td>
<td>technical rules</td>
<td>Rules that are inherent in the technology</td>
<td>Format of email header (To/From...) Text formatting</td>
</tr>
<tr>
<td>level of definition (What type of language is used?)</td>
<td>context-free language</td>
<td>Language that is free of traditional “social” context</td>
<td>Lack of recognition of social/power hierarchies in salutations in email messages</td>
</tr>
<tr>
<td>type of definition (What types of behavioral expectations occur?)</td>
<td>conditional predictions</td>
<td>If I take this action then this condition will be the result</td>
<td></td>
</tr>
<tr>
<td></td>
<td>conditional imperatives</td>
<td>If condition exists then I will perform this action</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If I send the message via email it will get there instantly.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>If I get this message immediately, then I will answer it immediately.</td>
<td></td>
</tr>
<tr>
<td>mechanisms of acquisition (How are behaviors acquired?)</td>
<td>learning of skills and qualifications</td>
<td>Learning how to perform tasks necessary for production/work to occur</td>
<td>Learn to use and understand the equipment/software</td>
</tr>
<tr>
<td>function of action type (What is the purpose of actions?)</td>
<td>problem-solving (goal attainment, defined in means-end relationship)</td>
<td>Actions geared towards achieving objectives</td>
<td>Email to request action or accomplish other work-related task</td>
</tr>
<tr>
<td>sanctions against violation of rules (What happens when rules are violated?)</td>
<td>inefficacy: failure in reality</td>
<td>When rules are violated, the objective (end) is not attained.</td>
<td></td>
</tr>
<tr>
<td>“rationalization” (What is the reason for working within the system?)</td>
<td>growth of productive forces; extension of power of technical control</td>
<td>Focus on increasing production through technology and adherence to technical rules</td>
<td>Amount of time spent on email Checking email on vacation/after hours/continually...addiction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase in # of communications able to “handle”</td>
<td></td>
</tr>
</tbody>
</table>
Conclusion

Email use increases productivity, which is evident in studies that show the use of email technology has increased the output of individual laborers and thus in turn the productivity of businesses. Email saves the average employee 326 hours each year, which results in a 15%-20% increase in productivity for each worker (Ferris Research 2000a). Even when businesses subtract the time workers spent dealing with nonessential email, such as spam, they still see a productivity gain of $9000.00 per employee per year because of email (Ferris Research 2000a). However, while it is apparently not widespread, some organizations are limiting or banning email among their employees because they believe email is preventing necessary face-to-face communication (Farrell; Best; CNN.com).

Some studies have shown that regular email users speak to fewer friends, immediate family, or neighbors face-to-face during the week and have weaker ties with their communication partners than do people who do not use email (Kanfer). Many researchers have stated that while people may notice some of the problematic changes occurring because of email use, they are frequently unaware of the implications of those problems. People have an increasing dependency on email, both psychologically and logistically to complete their work (Hallewell). Many email users state that it is their preferred way to communicate and that they would be unable to complete their work if the email system were down and would be upset about the loss of email capabilities (Lamb and Peek; Collin).

Email users generally communicate more than nonusers of email; yet, they overestimate the amount of email they actually send and receive, which may relate to feelings of “communication overload” and be a factor in email being one of the top ten stresses in the work environment (Kanfer; Hallewell). The expanding technical control of email on the job and in the home affects the
way people live by increasing the expectations of the amount of work required and the amount of
time people must spend working. Most people, if they think about the increase in work at all,
probably see it as just an incidental effect of email use, and not part of the essential nature of email
technology. However, this analysis reveals that increased productivity is not a coincidental
extension of email technology, but the result of it.

The phantom machine is purposive-rational ideology, which permeates every dimension of
our being.
Notes

1 We note here that the division between work and leisure is not only socially constructed, but in communication media already virtual and thus easily crossed with symbols. We also note that on email, as on the Internet generally, work and recreation not only refer to the discourse of work and recreation, but to actual activities themselves (see Moskow and Katz).

2 Strate et al. also discuss the breakdown between private and public spheres in cyberspace (1-26).

3 Cf. Geise’s discussion of the “National Information Infrastructure,” where he finds the social motive of users themselves as a countertrend, making a distinction between business and social uses of the network [152-158]).

4 However, there are some possible technological, economic, and cultural limitations to this freedom; see Spooner and Yancey; Thorton; Dance.

5 For an ironically humorous discussion of how to conquer an email addiction, see Are You Addicted to Email? [www.newbiesnet.com/addictedtoemail.htm].

6 While some email conventions seemingly are becoming standardized, Baron states, “pronouncements on email usage… sometimes reflect personal taste more than established linguistic conventions” (Baron 405). For example, “…Virginia Shea, author of Netiquette, acknowledges that she made up many parts of her book as she went along” (Baron 405).

7 Although email has moved away from noting social distinctions in salutations, such social distinctions may exist, and as Lee notes, are evident in domains and subdomains that serve as indicators of hierarchy: “The shorter one’s address, the higher one’s status (Lohr 1994), perhaps because a longer address provides more information about a sender, thereby defining the person more by function and membership than by personal traits” (314). Lee points to the identifiers of countries and of organizations (for example, university and governmental organizations vs. .com service providers) as indicators of
status that contain not only technical but social information. For our purposes, these URLs flag users and define the relations of writers and readers in terms of the technical rules governing URLs.

8 We note an interesting anecdote: After firing composer and friend Bernard Herrmann during the making of *Torn Curtain*, Alfred Hitchcock never spoke to him again; but he did email him (Mankiewicz).

9 The word “Hello” first came into use as a verbal greeting when the telephone was a new technology and its inventors were trying to establish a way of initiating a telephone conversation. Alexander Graham Bell recommended the word “Ahoy,” which was a call to hail ships, and Thomas Edison recommended “Halloo,” which was a traditional hunting call to the hounds, but eventually changed it to “Hello,” which subsequently became a face-to-face and telephone greeting in the United States (Baron 408).
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