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IS IT DIGITAL? WHO'S INVITED TO THE DIGITAL REVOLUTION?

by

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Sarah E. Dempsey
IS IT DIGITALL? WHO'S INVITED TO THE DIGITAL REVOLUTION?

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A significant issue surrounding the increasing dependence of U.S. society on technological products surrounds questions of equity. Research suggests that our increased dependence on technology has acted to further stratify our society in regards to gender. A growing body of literature which takes a critical stance of technology acknowledges that there are gaps between technology 'haves' and 'have-nots' (Aronowitz, 1988; Brosnan, 1998; Harvey, 2000; Loader, 1998; Millar, 1998), suggesting that utopian perspectives of technology need to be re-examined. Research has addressed issues regarding gender politics and technology (Caputi, 1988; Jansen, 1989; Millar, 1998; Zimmerman, 1983), yet little research has examined the rhetorical strategies and persuasive means advertisers employ while promoting technological products. According to Millar (1998), Wired magazine positions itself as the authority on the future. Taking a feminist approach, this study uses rhetorical criticism and the study of gender to examine advertisements for technological products within current issues of Wired magazine. It examines both the presence and the absence of images of diverse women to derive meaning from the texts. Specifically, this study employs Foss’s (1989) four criteria as a methodological framework for implementing feminist criticism and intends to contribute to, and subsequently expand upon, our current understanding of how gender is constructed through advertisements for new technologies.
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CHAPTER ONE

INTRODUCTION OF THE PROBLEM

Western society increasingly has placed greater emphasis on the use of new technologies, which has warranted the label of “information society.” Computers and other information technologies are now present in almost all aspects of contemporary life (Brosnan, 1998). The social effects of such a technologized orientation need to be critically examined. For example, Slack (1984) states:

If there was ever a time when we ought to tread [sic] thoughtfully and cautiously in technological matters it is now—as information technologies assume not only a national but global significance that promises to surpass the significance of Industrial technologies. (p. XV)

In the twentieth century, industrialized nations have undergone massive technological growth. This growth has led to such immense restructuring that social critics now refer to the United States, Europe and other countries as “technocracies” and maintain that social existences, as well as economic means, have become increasingly technologized (Harvey, 2000; Loader, 1998; Scott & Brock, 1972). According to Loader (1998), these changes are driven by a combination of new technologies, which include personal computing, digital telecommunications, virtual reality, nanotechnologies and biotechnologies, along with a range of multimedia applications and software. A central feature of these technologies is that they “allow the creation, communication and dissemination of information in ways which transcend modernist conceptions of time and space” (Loader, 1998, pp. 4-5).

The glorious promise of these technologies is continually presented as the ultimate panacea for all manner of social ills (Millar, 1998). For example, recent developments in communication technologies such as the Internet have brought utopian
claims by many of possessing the ability to erase inequalities based on race, ethnicity and/or gender. Free from imposed social classifications, Internet users are able to construct new identities (Haraway 1991; Squires 1996). As such, the Internet has been heralded as holding the potential for a truly gender-neutral medium. However, Loader (1998) holds that the division between those who have access to technologies and those who do not “is likely to have profound implications for economic, cultural and social development in all societies around the world” (p. XV). A growing body of literature that takes a critical stance of technology acknowledges that there are gaps between technology ‘haves’ and ‘have-nots’ (Aronowitz, 1988; Brosnan, 1998; Harvey, 2000; Loader, 1998; Millar, 1998), suggesting that the many utopian perspectives of technology need to be questioned.

Historically, technology has been linked to men exclusively—they are the designers, producers and consumers of technology (Rakow & Navarro, 1993). In the rare instance where histories of technology mention women, it is as users rather than as creators (Rakow & Navarro, 1993). Many feminist theorists argue that men have used technology to control their surroundings and to control women (Hellman, 1996; Rothschild, 1983; Wajcman, 1991). Current discourse regarding technology fails to adequately include the “world of the everyday, the private sphere, the traditional sites of female-gendered skills” (Jansen, 1989, p. 199). Women have been systematically excluded from the public arena and from those social institutions that support science and technology. This exclusion has assured that technology remains within the masculine domain. Technology is also constructed as a wholly masculine institution because technical competence has become an integral part of male identity, while women’s identity is not changed or improved by their use or mastery of technology (Hellman, 1996). According to Brosnan (1998), the dominance of men within the computer science industry also reinforces these gendered patterns.
Technologies as Social Constructs

There is a general need for a greater understanding of the persuasive messages the public receives about technological products in regards to gender. According to Millar (1998), we are constantly subjected to multiple power relations that occur within society. Power relations reinforce notions of domination and subordination and, in turn, influence how we make sense of the world and ourselves. These hegemonic forces are disseminated in two ways: through material means such as physical force or threat and through discursive means such as language and myth (Millar, 1998). Millar (1998) states that “in our media-saturated society, the influence of discourse over how people live, behave and think about their lives cannot be underestimated” (p. 23).

Historically, gender has not only been constructed unequally, but the female gender has tended to be devalued (Foss, 1989, p. 151). A main tenant in the area of feminist criticism recognizes: “All of the means for constructing and maintaining this negative conceptualization of the feminine gender involve the use of symbols; constructions of gender are accomplished through rhetoric” (Foss, 1989, p. 151). This research focused on understanding how technologies are symbolized in the advertising rhetoric used to promote them.

Jansen (1989) classifies “technological designs” as a form of “social designs” through which cultural, political and economic norms and values are transmitted (p. 196). Examining how the rhetoric of technologies may perpetuate or create social stratification and how the rhetoric of technology generates meaning about who its users are is important to the field of communication. Miller (1998) has argued that studying the rhetoric of technology “should help us understand the wide dissemination, diverse applications, and cultural potency of technology as a shaper of our lives and minds” (p. 310). In fact, critical scholars have examined advertisements as cultural texts which create sexist and racist meanings and differences (Rakow, 1992). Consequently, it is
important to uncover what rhetorical strategies advertisers employ to sell these new technologies in order to examine their cultural and social significance.

The current line of research described in this paper analyzes the rhetoric of Wired magazine advertisements that promote communication technologies. Advertisements are important as rhetorical cultural artifacts given that the effects of these messages go largely unexamined. Scholars agree that advertisements act to do more than sell a product, they also encode values, rules and beliefs found in society (Danesi, 1999; Millar, 1998). Kellner (1995) argues that advertisers “promote a worldview complete with ethics, politics, gender role models, and a sense of appropriate and inappropriate social behavior” (p. 325). According to Rakow (1992), “much feminist criticism--particularly in the 1960s and 70s--was directed against advertising’s oppressive content, understood as false or inaccurate portrayals of women” (p. 132). This research will extend previous research on portrayals of women in advertising (e.g., Rakow, 1992) to examine how technological discourse represents women.

Three steps guided this research. The first was a description of the artifacts (advertisements) to gain a sense of common themes or strategies that were present in the messages. Here, I describe the reoccurring messages and symbols about technologies that are found within Wired. The analysis then moves on to an interpretation, based on feminist criticism, of the rhetorical strategies used within the advertisements. This step constructs categories that are based on the themes that emerged from the texts. The last step evaluates the impact or effects of these types of rhetorical strategies on the public. This step relies on careful analysis of the rhetorical functions used by advertisers and their possible effects on an audience.

Specifically, this study employed rhetorical criticism from a feminist perspective to examine the strategies companies use to promote certain technological innovations to
the public and to understand how gender is constructed within advertisements in *Wired* magazine. Semiotics was employed as a framework to understand the symbols advertisers use that contribute to the gendering of technologies. It is important to understand what values and messages about gender the public are receiving in regard to technology as access to these technologies becomes increasingly critical for economic, social and political prosperity. This research intends to extend theory about technology, gender, and representation by increasing our understanding of how advertising contributes to the construction of technologies and its users as masculine.
CHAPTER TWO

REVIEWS OF RELEVANT LITERATURE

Currently, there is a body of research that discusses gender, rhetoric and technology which is particularly relevant to this analysis. The following chapter examines feminist theorizing about rhetoric and introduces the ways in which technology and scientific progress have been traditionally associated with masculinity. From there, I discuss the ways in which advertisements act as cultural artifacts that we may “read” for social significance and illustrate how technologies become gendered. Lastly, my analysis of the rhetoric of Wired magazine advertisements is described.

Feminist Theorizing About Technology

Popular usage of the word rhetoric is taken to mean “empty” or “meaningless” speech (Foss, 1989). A more scholarly view of a rhetorical message as defined by Foss (1989) as “the use of symbols to influence thought or action” (p. 4). Rhetoric traditionally has been defined as those messages that attempt to persuade or influence. Aristotle’s definition sees rhetoric as all the available means of persuasion. Burke (1966) defines rhetoric as anything that induces cooperation through the use of symbols. When employing this definition, rhetoric includes an especially wide range of messages.

Scholars who study rhetoric, according to Foss and Griffin (1992), “seek to discover how and to what degree our rhetoric constructs our world” (p. 330). Rhetorical messages are by nature very broad, and may assume a number of different forms. Warnick (1999), in her examination of computer mediated discourse, advocates that rhetorical critics should move to study new communication forms.

Oravec (1991) emphasizes that the forms that persuasive messages take hold ideological meaning in themselves. When analyzing rhetoric, then, it is important to
also evaluate the form, or medium of the discourse, because it creates a unique context within which meaning is developed. It is important to place the rhetorical form in a historical or cultural context, as Oravac does in her examination of the ideological significance of nineteenth-century women’s autobiographies.

A critical approach to rhetoric asserts that discourse is negotiated within a “context of power and domination” (Lannamann, 1991, p. 187). The traditional definition that situates rhetoric as persuasion and communication as something that influences and persuades others has been challenged by a number of feminist scholars (Condit, 1997; Foss & Griffin, 1995; Sheperd, 1992). Definitions of communication historically have featured a rhetoric of patriarchy, placing a “value on changing, and thus, dominating others” (Foss & Griffin, 1995, p. 2). In response to this, feminists increasingly have encouraged the inclusion of women in the area of rhetorical analyses. Scholars who work from a feminist perspective find most theories of rhetoric to be lacking a feminist perspective (Foss & Griffin, 1995). The traditional theories see rhetoric as a means of persuasion and ignore the experiences of women or others who define it in different terms. Shepard (1992) holds that the traditional definition of rhetoric is one of masculine dominance and that those who differ from this point of view may be in danger of being seen as incompetent. According to Foss (1989), a male standard has constructed traditional methods of rhetorical analysis.

Feminist scholars have worked to create alternative theories in regards to rhetoric. One of these perspectives, invitational rhetoric, is an effort by Foss and Griffin (1997) to build a rhetoric influenced by a different set of feminist values than previous rhetorical theories which defines rhetoric as persuasion. The traditional model of rhetoric is a rhetoric of patriarchy, “reflecting its values of change, competition and domination” (Foss & Griffin, 1995, p. 4). In contrast, an alternative, feminist model is based on the principles of equality, immanent value and self-determinism. Such forms
of rhetoric are intended by Foss & Griffin (1997) to “work for both men and women in ways that contribute to a transformation of our culture” (p. 119). Invitational rhetoric’s goal, then, is to reach an understanding of differing perspectives. This understanding is meant to replace the traditional view that denigrates other perspectives because they exhibit deviation or difference.

Defining Gender

In order to clarify this discussion of rhetoric and gender, the meaning of gender also must be addressed. It is important to make the distinction between gender and sex, as this paper separates the two concepts. This section gives a pragmatic definition of gender and goes on to propose the use of Crenshaw’s (1997) ‘intersectional analysis’ to address gender.

Deuax (1985) has argued that sex refers to biological traits and is concerned with biological distinctiveness. In contrast, gender is used for behaviors which convey psychological, social and cultural understandings of one’s idea of self as a man or a woman (Deuax, 1985). Gender reflects prescribed cultural values and norms and every society has its own specific roles that are seen as “masculine” or “feminine” (Chambers, 1992). Differences in social roles, power structures and religious factors, among others, contribute to variances in gender roles for men and women (Waldron & Mare, 1998). Ideas about gender are transmitted through a variety of means, some of which include the family, organized religion, and the media. Part of a complex web of social institutions, these messages act as “gender lessons” that reinforce societal stereotypical representation of gender (Foss, 1989, p. 152). Researchers theorize that these socialization practices construct males and females to behave in different ways, which accords them different power positions in society (Lerder 1986; Shepard, 1992). Cultural roles are transmitted through gender constructs. They act as “a costume, a mask, a straitjacket in which men and women dance their unequal dance” (Lerder,
1986, p. 238). This research paper analyzes how advertisements transmit ideas about gender and technology and focuses on examining how the feminine is denigrated or absent from rhetoric that glorifies technology.

Researchers continue to develop feminist methodologies to examine gendered communication—methodologies that aim to include the perspectives and experiences of all people (Foss, 1996). Crenshaw (1997) argues that intersecting differences among women deserves further examination. Gender as an analytic category has been reconceptualized to include more than differences between men and women to acknowledge the diversity within women (Crenshaw, 1997). For example, Davis (1998), has argued for the creation of “an inclusive community of scholarship” which looks at the interconnectedness of, for example, race, gender, and class (p. 79). Lorde (1984) has argued:

By and large within the women’s movement today, white women focus upon their oppression as women and ignore differences of race, sexual preference, class and age. There is a pretense to a homogeneity of experience covered by the word sisterhood that does not in fact exist. (p. 116)

In addition, Collins (1986) holds that Black feminist thought centers on the interaction of multiple systems of oppression. Its focus is on developing new theoretical interpretations of these interactions rather than simply adding new variables of study (Collins, 1986). Russo (1991) advocates for the need to approach race as an integral part of sexism and misogyny in order to recognize that race affects all women.

This research is guided by what Crenshaw (1997), in her rhetorical analysis of media portrayals of women serving in the Persian Gulf War, names a “feminist interdisciplinary scholarship that values pluralized differences among women and seeks to understand how these values are ideologically valued or devalued in the texts we examine” (p. 220). Gender as a construct is extended to include more than the differences between men and women. Crenshaw’s “intersectional analysis” uses both
the presence and absence of images of diverse women to derive meaning from texts. This diversity involves recognizing differences in age, socioeconomic status, ethnicity, race and dis/ability, among other factors. A core critique by Mohanty (1991) of the use of “women” as a group is that it limits the definition to simply include gender, thereby bypassing other salient parts of identity.

According to Crenshaw (1997), an array of literature devoted to the differences among women has “challenged all feminist scholars to be more aware of multiple forms of oppression” (p. 222). In addition, Davis (1998) argues that it is important not to compartmentalize issues of gender and race--that “essentialist assumptions continue to reify the central positions of power” (p. 82). It is necessary, then, to shift from the idea of gender as a strict male/female dichotomy. Instead, the many differences among women and among men are included for analysis.

Feminist Conceptualizations of Technology
Balka (2000) argues that a focus needs to be put on gender and the new forms of gender relations that emerge in relation to new technologies. Combining feminist methodologies and the study of technology brings with it the potential to uncover shortcomings within existing communication theories (Balka, 2000). Existing research recognizes that technologies are “enmeshed” in everyday social relations; however, gender as it relates to technologies remains undertheorized (Green & Adam, 1998). The following section summarizes literature that describes various critical perspectives of technology.

The definition of the term “technology” has undergone much change. Two threads occur frequently in definitions of technology: technology as a physical device or tool and technology as the realization and organization of principles of scientific arts (Slack, 1984). The first part of this categorization is concerned with the particular machine or device, while the latter examines a social force or pattern. Miller (1998) has
argued that rhetorical criticism that addresses technology should broaden this second definition of technology as social forces or patterns. Her revised definition considers technology to be a “broad cultural phenomenon” which includes epistimic, artifactual, technical, economic, aesthetic, and political aspects (Miller, 1998). This study operates from within Miller’s definition of technology.

Humans have used technology to survive from the very beginnings of human societies but the twentieth century can be described as “the age of the machine and the machine-generated plenty” (Ferkiss, 1993, p. 154). What we see happening in Western societies as we move into the twenty-first century, according to Harvey (2000), “is a curious divorce between the individual nature of specific technologies and the impact that technology per se may have on social groups” (p. 12). Recently, a movement has emerged that conceptualizes technologies as tools which are not neutral, but instead are value-laden and, therefore, hold hegemonic meanings (Millar, 1998; Winner, 1977; Zimmerman, 1983). Woodward (1993) has argued for the need to shift from the view of technologies as “instruments and objects of choice” towards examining how they contribute to the creation of social, cultural and political environments. Technology itself is conceptualized by Ellul (1980) as having a number of innate consequences. Here, technology is a system that “represents a certain structure, certain demands, and it brings with it certain modifications of man [sic] and society, which force themselves upon us whether we like it or not” (p. 155). Technology is autonomous and will take a certain path of its own accord (Ellul, 1980).

Contemporary feminists have been concerned with the ways in which a society’s pattern of development and use of technology reinforces a patriarchal ideal (Caputi, 1988; Jansen, 1989; Millar, 1998). All societies differ in the quality and quantity of their technologies, their access to them, and the purposes of the people who use them (Harvey, 2000; Ferkiss, 1993). There has been a marked reduction in the
social definitions of gender roles and an increase in gender-consciousness in U.S. society. In the last century, U.S. Americans have changed their attitudes toward the domestic division of labor and the social roles women typically hold. However, many scholars acknowledge that technology is not used as a neutral medium and that a male-biased culture has developed male-biased technologies (Caputi, 1988; Millar, 1998; Zimmerman, 1983). This bias is described as operating both on conscious and unconscious levels. Zimmerman (1983) holds that it is inevitable that the creators of technologies encode their own biased values, thoughts, ideologies and beliefs into new technologies. In fact, Rakow and Navarro (1993) have argued that “we might want to look for the ways in which a technology is used to construct us as women and men through the practice that put it to use” (pp. 23-24).

A lack of dialogue about our information society and gender politics is, in fact, a socially structured silence and the patterns which have acted to stratify society are still being fully employed (Jansen, 1989). A previous case study by Bytwerk (1979) of the rhetorical methods used to promote a new technological product examined a case study involving Boeing Aircraft’s SST military sonic jet. However, this was done with no reference to gender politics. The case instead studied the persuasive manner of the rhetoric that surrounded the SST’s introduction as a controversial new technology. Understanding the methods and tactics, which are employed in a new technological product’s launching, is important. It serves to give us insight into the study of rhetoric and its impact on audiences.

Kaplan (1990) examined examples of advertising for home computers and telephone systems found in public interest magazines. He found four reoccurring ways in which technologies were visually represented, arguing that these metaphors “provide interpretive frameworks for organizing frameworks for new technologies” (Kaplan, 1990, p. 44). The visual metaphors used by advertisers included technology as a web,
a lever, a machine in a garden, a synthesis of old and new values, and as a revolution. This research illustrates that advertisements for technologies communicate certain social values about their products. These values help to shape technologies socially and inform the public ideology with regard to their potential.

Feminist theorists recognize the gendered nature of technological discourse (Balsamo, 1996; Millar, 1998; Springer, 1996). However, there is an inherent contradiction that emerges as feminists try to extract codes and meanings in their discussion of technology and rhetoric (Jansen, 1989). In order to do so with any credibility, they are trapped, in effect, by the “language of the authoritative discourses” (Jansen 1989, p. 199). The linguistic terms used to describe the major themes in technology and “advancement” have been defined from a male perspective. This perspective fails because it has not considered “the world of the everyday, the private sphere, the traditional sites of female-gendered skills” (Jansen, 1989, p. 199). The widespread recognition of the importance of language as a reflection of unequal status has resulted in feminists’ use of discourse analysis to understand how power functions within various forms of discourse (Millar, 1998).

Technology and scientific progress have been identified and defined through a “male” world, so much so that Caputi (1988) has dubbed technological innovations as “phallotechnologies,” and Jansen (1989) holds that “histories of Western technology have been histories of male activities” (p. 199). When women are mentioned in historical overviews of “progress,” they are often described as the “users” of the technology and not the “producers.” It is necessary, then, to analyze whether the rhetoric being used to promote new technologies prescribes to these same kind of practices that act to exclude women.
Gendered Persuasive Appeals

The decision to use advertisements as texts for studying technological rhetoric was based on the theoretical premise that advertisements serve as pervasive cultural texts and important rhetorical artifacts. Kaplan (1990) has argued that "cultural values and personal beliefs mediate public acceptance of technological innovations and the willingness of the people to incorporate them into their lives" (p. 37). Based on this assumption, I argue that advertisements play an important role in transmitting cultural values. I am concerned with the ways that advertisers position a technology to be masculine rather than feminine and posit that these representations are important for their discursive function of sense-making (Dyer, 1982). Do advertisements for technology symbolically create a technological culture in which diverse images of women are absent and unwelcome?

In the United States, businesses invest over $102 billion a year on expertly crafted advertisements (Kellner, 1995). Print advertisements are an important part of this industry, with fifty percent of advertising revenues a result of various print media (Kellner, 1995). Print advertisements are not only a widespread form of rhetoric, but they also are easily accessible for the purposes of this study. Previous research underscores the importance of this medium. Winant (1983) analyzed meanings about gender found within billboards and newspapers. Using discourse analysis, Winant has argued that these print advertisements for the movie, Bloodline, activated sexist meanings already known to viewers. In addition, print advertisements within issues of Popular Science and Business Week were examined in Rakow and Navarro's (1993) study of the use of the cellular phone to uncover how the technology is marketed in regards to race, gender and class.

Examining how advertising "works to oppress women," Rakow (1992, p. 133) studied previous feminist critiques about advertising. Her conclusion was that nothing
in advertising has changed by any means. For example, typical themes such as beauty and body image still dominate advertising texts. However, where Rakow (1992) sees change is in feminist theorizing about advertising.

Several researchers have identified ways in which advertisers link a product with an exclusive, or sexist, system of language (Caputi, 1988; Rakow, 1992). In Rakow’s (1992) words, advertisers are in “the practice of manufacturing difference” as they create sexual and racial differences within their target markets (p. 137). For instance, marketers now direct products at specific markets: products are aimed at white women and white women alone and black women and black women alone, thereby excluding everyone else as the “other.” As a result, specific products and services have become gendered and racialized (Rakow, 1992).

Feminist criticism as a method for examining rhetoric holds that women’s lives have not been incorporated into language. Foss (1989) describes this silencing, or muting of women’s voices, to be a result of the “androcentric nature of language” (p. 152). Many feminists share the view that it has been men who overwhelmingly have supplied the words we use, and, therefore that our language “names” things from a wholly male perspective which acts to exclude women (Cameron, 1985; Foss, 1989). An example of this is the tendency for generic terms such as “man” and “he” to be used to represent both men and women. Women’s voices are, in effect “muted” by their absence in public discourse (Kramarae, 1981). According to Cameron (1985), continuing to use these terms as if they were representative of all of humanity distorts the truth and, ultimately, fails us:

> It is the business of language to represent reality, so to the extent that it is stuck in a vanished world where women’s place was in the home, and so on, language is misleading us and failing to do its job (p. 103).

Language transmits and encodes social values, beliefs and stereotypes and is one way in which these practices are passed along to others (Cameron, 1985). It was
important that this study provide an examination of the language advertisers used when selling technological products. A previous feminist critique of discourse by Kramarae (1981) argues that the use of language that excludes women constantly reinforces sexist assumptions and a sexist worldview and mutes women’s presence in a technologically-oriented society.

In contrast to Rakow (1992), Caputi (1988) deconstructs pieces of popular technological culture in addition to advertisements in order to “read” their social and political messages. Her work uses rhetorical analysis to uncover meanings in such cultural artifacts as the movie Star Wars, IBM Computer advertisements and President Ronald Reagan’s announcement to build the defense system dubbed as “Star Wars.” She asks us to consider the forces in current myth and metaphor that work to cement the identification of man with machine and man with weapon. Her analysis of cultural discourse reveals that technology is commonly equated with masculinity rather than with femininity. Caputi (1988) looks beyond the world of advertising to also include popular cultural artifacts as important texts that we may “read.” Her early analysis of technological rhetoric illustrates how neutral technologies become socially situated.

As new information and communication technology is developed, we are bombarded with advertising for these technologies (Green & Adam, 1998). Early analysis of the marketing of personal computers (PCs) by Caputi (1988) revealed particular symbols that IBM, the first mass marketer of the PC, used in their advertising campaign. Here, the symbol of Charlie Chaplin associated a human face to this new technology and came to signify values such as humanity, survival, innocence, the beauty of the commonplace, and the soul or spirit (Caputi, 1988). In addition, McLuhan (1951) coined the term ‘mechanical bride’ to describe what he deemed to be one of the “most peculiar features of our world--the interfusion of sex and technology . . . a widely occurring cluster image of sex, technology, and death which constitutes
the mystery of the mechanical bride” (p. 205). Within this research, he describes the sexualization of technology, particularly in advertisements. Caputi (1988) cites examples of advertisements for cars that are linked with women as sex objects as images which have only increased “the technological container of feminine symbolism” (p. 508). Here, very clear associations are made by using symbols of female bodies to enhance the appeal of technological innovations.

When rhetors invite women to become part of a technological culture, their attempts to reach women markets are not always successful. For example, a rhetorical analysis of a wide range of appeals towards women to come on-line found that these appeals served to marginalize and exclude some women rather than welcome them. (Warnick, 1999). As evidence, Warnick (1999) describes a 1997 *Wired* magazine article about Digital Citizens as “a sign of a pervasive phenomenon in discourse about technology--elitism” (p. 2). Warnick’s (1999) analysis of print media ranging between the years 1995-1997 found that the appeals valued activity, aggression, currency, technology and wealth while devaluing passivity, hesitancy, convention and poverty.

The Gendering of Technology

New technologies, when released to the public, are shaped socially. According to Hellman (1996), these meanings are constituted in a social process whereby users “adopt [a technology] according to their own requirements and shape its uses and meanings” (p. 6). How a technology is used is negotiated through a user’s requirements and needs. In fact, the technology is linked to cultural codes that signify a gendered persona. Hellman (1996) holds that this permits a sort of “interpretive flexibility” which allows machines to be used in ways that their designers did not intend. Technologies enact gendered ideology as adopters use them and are positioned as being for men or for women.
Technologies are known to have gendered personas, for example, vehicles and ships are commonly signified as being female. In addition, Rakow and Navarro (1993) hold that the gender of a user is also associated with a particular technology. Technologies that are used to exert control and power also have been signified as masculine. Technologies are also assigned gender in relation to whether they are used in the public or private sphere (Rakow & Navarro, 1993).

Technologies also enact gendered characterizations as products are targeted towards different sexes. For example, the home computer was promoted for men, while domestic technologies were promoted for women. Both technologies, however, may be equally useful to both (Hellman, 1996). In addition, a technology may be used by both sexes for different functions. Research has concluded that women on average are heavier viewers of television and that their viewing habits and preferences differ from men (Lull, 1988). Gershuny (1982) found that men mainly use technologies with highly visible end products whereas women use machines for the execution of household chores. A gendered division of labor occurs resulting in the maintenance of a hierarchical societal value structure (Kramarae, 1981).

A classic example of interpretive flexibility is found in the history of the telephone. Early promoters resisted marketing the telephone as a device to be used for 'female' social purposes. They instead wanted to signify the telephone as a machine used for utilitarian practices, such as conducting business. It was encouraged as a masculine activity and conceptualized in male terms, "as an instrument of control rather than an instrument of sociability" (Rakow & Navarro, 1993, p. 146). However, the telephone has acquired a feminine association and the manner in which women use this product coupled with society's evaluation of women's talk, labeled as gossip, are seen by Rakow & Navarro (1993) as indicative of women's social status. The use of the
telephone for social purposes, while carrying out important interpersonal functions, has not been accepted as a legitimate use of this technology.

Similar comparisons can be made in association with the use of cellular telephone service. Marketed almost exclusively as a business technology, the cell phone is signified as a tool that gives its users freedom. Marketers claim that they have not targeted men in their advertising or associated it in a masculine way (Rakow & Navarro, 1993). However, as late as 1989, an East Coast cellular company reported that 97% of their users were men (Olsen, 1988). The cellular phone represents a technology that inhibits both the public and private sphere and research shows that men use it to bring the public world into their private lives. Women, in contrast, use it to extend their family lives more completely (Rakow & Navarro, 1993). There may be nothing inherently masculine about a technology—instead, its use is signified through complex cultural practices.

According to Rakow and Navarro’s (1993) research, men and women use cell phones in very different ways. They believe that these differences are both caused by women’s social position and help to perpetuate this inferior status. Their research on suburban, middle class women revealed two main phenomena that distinguish women’s relationship to the cell phone. The first is a perpetuation of the belief that women are at risk and that they need protection. Here, promoters reinforce the belief that women are physically vulnerable and need to be protected when they market the product as a way to make women safer. The husbands in the study overwhelmingly bought cell phones for their wives for the reason of safety, and the researchers hold that this transmits ideological patterns of gendered discourse (Rakow & Navarro, 1993). Secondly, cell phones can be ‘read’ as symbols of women working what Rakow and Navarro (1993) call ‘parallel shifts.’ Women use cell phones to bridge the space and time gap between home and work spheres (Rakow & Navarro, 1993).
Other technologies also reveal gendered dichotomies. Research has shown that the video cassette recorder (VCR) has been labeled as a predominantly masculine entertainment technology (Gray, 1987; Morley, 1986). Males make the decision to purchase, operate the machine more frequently and even maintain authority over its use. It is firmly contextualized within the private sphere by two characteristics: it is used for entertainment, and secondly, it is closely associated with the role of television (Hellman, 1996). For men, this domestic sphere represents leisure whereas it has been traditionally signified as both a work and a leisure site for women. Its adoption and use is also related to cultural distinctions as well as gender characterizations--in the U.S., VCRs were associated with middle-class consumers, while in Britain, users were primarily working-class (Hellman, 1996). Again, differences are seen in how the technology was negotiated. Research also revealed a fundamental difference in how the act of viewing has been traditionally perceived. Women see viewing as a social activity involving interaction with others whereas men prefer to view without interruption (Morley, 1986).

Researchers have taken different approaches towards explaining the difference of VCR usage between men and women. It may be that these differences are a result of agreements among spouses over which household tasks each is responsible for. In this case, VCRs signify a masculine technology, and men are given the responsibility of using it more frequently in accordance with how it is signified. Gray (1992) holds that women have created a strategy of ‘calculated ignorance’ that reflects traditional ideas of gender roles. This trend is representative, then, of the negotiation over the division of labor in the home. According to Green (1996), domestic technologies such as these are “utilized within the context of a conversation about roles and responsibilities between the genders, and between the generations, that constitute the family unit” (p. 59). In this regard, technologies hold the power to act as a signifier for gendered relations.
Sex Differences in the Use of Information Technologies

The introduction of new technologies into organizations has been the focus of much research. Greater degrees of occupational segregation occur in high-technology sectors than in any other and research has consistently concluded that the gendered nature of technology restructures the economic basis upon which different kinds of work is valued (Millar, 1998). New technologies allow jobs to be defined according to beliefs about the worth of certain practices. These practices are infused with gender ideology.

Small computers and electronic office machines became available in the early 1980s (Marsden, 1990). Focusing on power relations as related to gender and the workplace, Marsden (1990) holds that the division of labor in our society is situated in organizations. The division of labor was complete in her case studies: males and females used new office technologies in very different ways, creating a technological hierarchy. Male managers decided which equipment to buy and women secretaries in the organization were responsible for working these machines into the social network of the office (Marsden, 1990). Marsden (1990) has argued that these tensions between who did what were communicated through symbols, organizational structure and social hierarchy. These new technologies enacted traditional views of gender roles. The practice of separating the notion of what women’s work is and what men’s work appeared to be reinforced through these new technologies. Maintaining sociability was associated with a feminine use of technology, while a task-orientation was associated with the masculine.

Access to computer technology was once limited to scientists, the military or professionals with experience in the field itself. The introduction of the PC has brought with it greater access, allowing for new niches to be created such as in organizations, schools and the home (Brunet & Proulx, 1989). However, research shows that there
still may be many gaps between technology haves and have-nots. Studies reveal that boys of all ages respond more favorably to computer-based activities and instruction (Krendl, Broihier, & Fleetwood, 1989). According to research by Straker (1989), computers are being used more by boys and male teachers than by girls and female teachers (cited in Brosnan, 1998). Male children have greater confidence in their computer skills, report a greater interest in computers, rate the value of computers to be higher and have significantly more experience with using computers (Krendl et al., 1989). Analyses of more recent technologies shows that certain trends are continuing, despite new mediums and shifting gender roles.

A drawback of much of the research on children and computers is that it has been focused on a one-time analysis, with few longitudinal studies. Krendl et al. (1989), in their longitudinal study, reported that girls and boys responded differently to computers even as they gained more experience with them. Negative attitudes about computers may prevent girls from gaining access to computers or even enrolling in computer courses. In contrast, Callan (1998) compared business student’s attitudes towards computers between 1984 and 1997. They found that the women in 1997 declined in computer apprehension and reported significantly greater exposure to computers than those interviewed in 1984. The 1997 study also showed differences in how experienced students rated themselves to be. Sixty-one percent of the men reported they were computer-literate versus 33% of women (Callan, 1998).

Turkle (1984) argues that sex differences are the result of differences in strategy selection. This research holds that males prefer analytical strategies and because the majority of computer programmers are male, these masculine strategies are encoded into computing. As a result, females have to conform to a different way of thinking rather than their preferred style. Turkle (1984) holds that this creates anxiety and contributes to a fear of this technology. A contributing factor is that both recreational
and software programs transmit the gender biases of their designers and that research has shown that educational software is predominantly designed with males in mind (Huff & Cooper, 1987). Chen (1987) also found that computer games are aimed at boys rather than girls. When computer games are created for girls, the majority reproduce gender and racial stereotypes with titles such as “Barbie as Fashion Designer” and ‘Barbie as Repunzel” (Millar, 1998). Parents also enact this gender ideology, and are much more likely to buy a computer for male children than for female children (Campbell, 1988). Again, these differences can be associated with perceived views of what is appropriate for females and what is appropriate for males. All of these factors contribute to the perceptual labeling of computer technologies as masculine.

Suggesting that social cues are more important than biology, research by Clarke (1985) found that females in single-sex schools were more likely to stereotype computing as a female activity. Students in mixed-sex schools, however, were more likely to rate computing as being ‘male.’ Siann, Durndell, MacLeod and Glissov (1988) contend:

While the reasons for women’s exclusion from technology are complex and interactive, there is little doubt that at least some of their disadvantage stems from a type of self-selection where females, even at primary school age, exclude themselves from technological areas. (in Brosnan, 1998, p. 130)

It is important for critical scholars to investigate this sort of phenomenon more deeply. A possible solution may be to involve women in computer training. However, research on this area proves to be problematic. According to Brunet and Proulx (1989), computer training for men and women results in different outcomes. These courses reach few socially underprivileged people and of these, the majorities are less educated women holding supporting positions in organizations. Brunet and Proulx (1989) found that traditional training helps men advance in their careers while women use it to “catch up” and to get a grip on their work environment. Even training programs, then,
serve to reproduce patterns of economic relations that are beneficial to men and may not allow women any sort of advantage (Brunet & Proulx, 1989).

The Internet has become a major influence for people around the world, bringing with it changes in organizational and social life. Still, studies have shown that gender is a predictor of use--Lindstrom (1997) found that 14.4% of men versus 7.5% of women had used the Internet in the last 3 months. Millar (1998) warns against heralding the Internet as a great gender equalizer -- it is often because of sexual harassment that women choose a male username in cyberspace. In fact, Silver (1997) describes new digital technologies as “same message, different medium” (p. 53). Analyses of women’s on-line experiences has suggested that cyberspace does not act to subvert existing power relations (Millar, 1998). Despite this research, a commonly held belief transmitted through media texts is that technologies hold the power to create equality by removing previous inequalities. According to Zdenek (1999), Wired magazine continually links these ideas of freedom from oppression with technological advances. Technology acts to signify freedom and this serves to benefit those very institutions that promote technological products.

New Technologies and Gender Stereotypes
More recent technologies such as the PC and the Internet continue to exhibit gendered identities. For example, technologies such as virtual reality and computer networks act as “cultural stages for the performance and enactment of gender” (Balsamo, 1996, p. 161). This next section reviews literature that focuses on newer technologies in relation to how they are currently being negotiated.

Applying gendered metaphors to personal computers is made more difficult by its “complicated relationship to gender” (Springer, 1996, p. 9). However, marketers attempt to masculinize their product by connecting them with images of power and strength (Springer, 1996). Springer (1996) further argues that the masculine and
feminine stereotypes, which contribute to the gendering of technologies, are likely to continue as long as there is a two-sex system in place.

The anonymity of cyberspace is heralded as containing the ability to remove all traces of gender or sex, a practice known as ‘gender-swapping.’ Requiring an ability to behave and act like the other sex, research indicates that even when gender swapping is attempted, gender roles remain stereotypical (Millar, 1998). The anonymity associated with virtual environments also may have negative effects, sometimes acting to foster an on-line misogynist space, as seen in chilling Multi-User Domain (MUD) murder-rape scenarios. MUDs are virtual environments which can also be ‘read’ as transmitting gendered symbols. They are computer programs that allow players to communicate with each other within a text-based reality.

A very recent phenomenon is the Chatterbot (bot), which is a software program that uses a natural language system to interact with users in a MUD on the Internet. Bots are socially constructed and also may carry the creator’s own gender ideology. These programs interact with other users on-line and are even able to pass as being human. Zdenek (1999) studied how gender was constructed in a bot named Julia presented in a MUD as a young woman. Gender constructions of this type provide interesting examples of gendered discourse, since they were wholly computer-mediated, as communication in MUDs are entirely outputted on computer screens and do not take place in the ‘real’ world. According to Zdenek (1999), gendered bots “have pedagogical power, and, when coupled with means of reaching millions of people, teach us about how men and women (should) interact” (p. 382). While unpacking Julia’s gendered discourse, Zdenek (1999) found that stereotypical female characterizations were routinely signified. Examples include referencing Pre-Menstrual Syndrome (PMS) as the cause of emotional distress, which resulted in symbolizing her
as being at the mercy of unpredictable emotions. She also enacted other stereotypical portrayals such as not being in control of herself or her environment.

The Wired Machine

Feminist criticism, using semiotic analysis as applied to technological discourse and practices, is important in order to further investigate how meanings become indexed and serve to represent 'truth.' Clearly, much research has already investigated how a technology remains gendered (Rakow & Navarro, 1993; Zimmerman, 1983). Research also addresses differences in how men and women use technology and how these technologies affect each group differently (Loader, 1998; Wajcman, 1991). As we become increasingly dependent on new technologies, gender ideology will continue to be transmitted through cultural signs, as indicated by stereotypical gender traits being assigned even in the virtual world (Zdenek, 1999).

There is much research to be done in order to fully explore technology, gender and rhetoric. As our society becomes increasingly dependent on all things technological, it is important to become more critical of ways in which technology perpetuates gendered values. Advertising creates associations designed to link a product with certain values or beliefs. It is important to uncover the rhetorical strategies advertisers employ when selling technological products. These strategies must be examined in order to see how the rhetoric of technology constructs gender. Research conducted within the realm of this study contributes to the knowledge of rhetorical criticism and to our understanding of gendered messages in cultural texts -- texts that society consumes about technology.

This study analyzed the rhetoric of Wired magazine advertisements. According to Millar (1998), Wired is an important cultural symbol for digital elites. The magazine represents the future--it is important to study what kind of a future advertisers create. Furthermore, according to the 1996 Intelliquest V3.0/Business study, its readers are
more involved with the Internet than are readers of other technological magazines, including publications such as PC Magazine and Net Guide. Wired claims that it speaks “not just to high-tech professionals and the business savvy, but also to the forward-looking, the culturally astute, and the simply curious” (Wired, 2000). Its readership statistics, however, suggest a greater exclusivity than purported. According to Millar (1998), the average reader is a thirty-nine-year-old white male college graduate with an annual income of US$83,000 and a household income of US$122,600.

Wired holds that it is the “journal of the record of the future” but it is also a journal laden with advertising. Its web site claims that seventy-two percent of its readers purchase products they have seen in their magazine and that sixty-five percent of these have impacted their businesses (Wired, 2000). In fact thirty-two percent of Wired readers hold a high-ranking managerial position in which they are likely to make important decisions about how technology should be used in their organizations (Millar, 1998). Advertising in Wired certainly is designed to influence; to what extent does it concomitantly also construct meanings about gender? Given existing research, one suspects that ideologies are being sold along with the products.

Conclusion

The increasing importance of technological innovations leads to questions of equity in their use and practice. The appropriate feminist response to the apparent gendering of technology is not to boycott new technologies, but rather to create a virtual renaissance in which we “conceive, create, code, use, and theorize technologies, gender, information, epistemology, and communications” (Jansen, 1989, p. 206). This research follows Jansen’s lead by extending theorizing about gender, rhetoric and technology.

As discussed in this literature review, this line of research is intended to promote further analysis of the rhetoric of technology advertisements. The initial
examination of this type of rhetoric could evoke greater interest in the study of gender and technology. This research helps contribute to feminist analyses and rhetorical criticism. More specifically, this research provides a clearer view of how gender is constructed through advertisements for technological products in Wired magazine and what these constructions mean for women's lives.

In short, this study was concerned with the social significance of how technological products are advertised. The explicit purpose was to discover common themes in the rhetoric of technology through a three step process: description, interpretation and evaluation. This study was guided by two main research questions:

RQ1: What common themes and values about gender are typically found in the rhetorical strategies used to promote modern technological products?

RQ2: What is the social and cultural significance of these rhetorical strategies?

Feminist scholars have uncovered ways in which advertising devalues femininity and the female gender through symbols and cultural codes (Foss & Griffin, 1995; 1997; Millar, 1998). It is important to determine to what extent advertisements about technology continue to present a worldview where men are the makers, the users and the consumers of technology. Wired magazine presents itself as a contemporary document of digital discourse and its advertisements will be examined for messages about gender. An emphasis was placed on examining both what is present and what is absent in these texts.
CHAPTER THREE

METHODOLOGY

Advertisements commonly portray a “story” through which we “read” cultural messages. From a feminist viewpoint, it is important to understand what types of stories these cultural texts tell us about gender. According to Millar (1998), Wired magazine positions itself as the “authority on the future.” However, scholars hold that technology has historically been constructed as masculine and that women have been symbolically annihilated by their lack of presence (Caputi, 1988; Jansen, 1989; Zimmerman, 1983). Does this gendering of technology still occur in the magazine of the future? This research paper describes to what extent Wired advertisements portray technology as a masculine product. This chapter addresses elements of rhetorical criticism and discusses the relevance of Foss’s (1989) framework of analysis to this research paper. Each level of analysis is given, as well as an overview of the importance of semiotics to the examination of advertisements. Finally, the textual analysis is described.

Overview of Research Methodology

Rhetorical criticism provides a way to understand symbols and how they are used for social commentary. It examines cultural artifacts in order to increase the understanding of their social effects and meanings. According to Foss (1989), a purpose of rhetorical criticism is to better understand a rhetorical artifact and to use this understanding to ultimately create social change. Rhetorical analysis allows a critic to not only describe and study communicative practices, but also to interpret them. This study is concerned with messages that may act to exclude women and intends to increase the awareness of how technology becomes gendered by discussing what this means to women’s lives.
Ultimately, this research uncovers hegemonic themes found in Wired magazine to foster public awareness and debate.

I used feminist rhetorical criticism as a methodology in my examination of the messages the public receives about new technologies. What differentiates this type of analysis from other forms of criticism is the focus on gender as a construct, as traditional rhetorical theories do not take gender into account when evaluating artifacts (Foss, 1989). Rhetorical criticism, according to Foss (1989), “done from a feminist perspective, then, is designed to analyze and evaluate the use of rhetoric to construct and maintain particular gender definitions for women and men” (p. 151). Feminist criticism aims to contribute to rhetorical criticism, and Foss’s approach to feminist criticism is a particularly relevant and useful way in which to carry out this research. This study used Foss’s four criteria as a methodological framework for implementing feminist criticism.

Feminist criticism as a method for examining rhetoric also holds that women’s lives have not been incorporated into language. Foss (1989) describes this silencing, or muting of women’s voices to be a result of the “androcentric nature of language” (p. 152). This study analyzed both the language (linguistics) and the images within the texts for meanings about gender.

Feminist researchers often use triangulated research methodologies in order to “cast their net as widely as possible in the search for understanding critical issues in women’s lives” (Reinharz, 1998, p. 128). This study was no different; it used semiotics to inform feminist rhetorical criticism. Previous work by Cooks, Orbe, and Breuss (1993) used a semiotic analysis of Pretty Woman to uncover sex-role stereotypes within a mass media text. Every pattern of signification is a cultural convention and semiotics provides a framework within which to understand the cultural processes that contribute to the gendering of technology.
Semiotics

The study of semiotics is interested in cultural representation. It is the study of signs in human life and how meaning is represented. According to Eco (1979), semiotics is "concerned with everything that can be taken as a sign" (p. 7) and investigates all cultural practices as processes of communication. A sign is two-fold; it is composed of a signifier and the signified (Eco, 1979). A sign only has meaning if it is interpreted to contain meaning—a receiver must decode the meaning. Therefore, a relationship exists between the sign and what it signifies. Meaning is created and maintained through an associative process (Eco, 1979). According to Orbe (1998), semiotic analysis focuses on how certain signifiers are emphasized with such repetition that they come to be associated naturally with particular elements. These meanings occur with such redundancy as they are transmitted through cultural practices that they become synonymous with the "truth."

For the purposes of this study, I used a semiotic approach in my analysis of the signification process that linked technological products to certain groups over others. Special attention was paid to those images not present within the texts. Semiotics as a method holds that what is absent from a text is as important as what is present (Fiske, 1994). Therefore, what was absent or silenced within the advertisements became central to my analysis and critique of technological rhetoric.

Planned Textual Analysis

This study looked at the most recent one-year time period in order to investigate how current advertisements construct gender. Every fourth month was examined and only full-page advertisements that focused on communication technologies were considered. Millar (1998) used discourse analysis to study the symbols that are communicated by the editorial and information content of Wired magazine. However, this research investigated the advertisements exclusively. It allowed for themes to emerge from the
texts, as I was interested in looking at overall patterns of particular reoccurring ideas about gender, class and race. Each advertisement was noted and analyzed using Foss’ (1989) feminist analysis framework in addition to semiotic analysis. I looked for reoccurring themes and symbols and emergent values about gender that were communicated through the advertisements.

More specifically, this study used Foss’ (1989), four criteria for implementing a framework within which to operate (p. 155). Within this framework, exemplars were used to provide examples of representative (typical) symbols and socially significant findings within the texts.

The first unit, according to Foss (1989) is the analysis of how gender is conceptualized and constructed. This step involves a critical examination of how gender is presented. Do these advertisements present a male perspective or a female perspective? It reports on what typifies gender messages about technology. It becomes important, during this level of analysis, to determine whether the advertisement presents the experiences or viewpoints of only one gender. This includes looking at the type of language used within the artifact. Is the language inclusive or exclusive? The absence or presence of a diverse group of women was examined to understand their ideological meanings.

The second step explains what Wired advertisements suggested about gender roles. Foss (1989) holds that at this level of analysis it is important to ask how femininity and masculinity are depicted in the rhetorical artifact. Traditional masculine themes include power, domination and aggressiveness while feminine values suggest a focus on nurturing, mothering and relationships. The advertisements will be assessed to see if they follow this representation. When women have been mentioned in historical overviews of “progress,” they are described as the “users” of technology and not the “producers.” The advertisements were examined to determine whether gender
was presented in this traditional way to assess how these public texts influence men or women to view themselves or others. Foss (1989) states that analysts should ask what the rhetorical artifact suggests are the behaviors, concerns, issues, values, qualities, and communicative patterns of women and men. There is a need to go beyond simply stating if technology is biased towards one gender; we must also to be aware of the values or qualities which are presented by the particular text (Foss, 1989). This step was designed to look at reoccurring metaphorical, linguistic and visual images that are used to construct meanings about technology.

The third step assessed how the particular texts may assist in changing, or helping to transcend stereotypical gender roles that have been assigned to women. A purpose, then, was to offer strategies women may use to resist or deny any unfair portrayals of gender in these advertisements. How can these findings be used to improve women's lives and society in general? A critical awareness of how technology is constructed may be helpful in feminist criticism. This study identifies ways that technological rhetoric is gender biased in order to uncover the insidious ways that public messages influence audiences. Uncovering these strategies is the first step in fostering awareness in hopes of providing ways to refute them.

The last level of analysis requires a discussion of how the particular research informs rhetorical theory (Foss, 1989). This study investigated to what extent the themes found in the artifacts contribute to a greater understanding of how symbols function within rhetoric.

The texts were thematized to identify and interpret reoccurring themes. I used detailed researcher's notes after repeated examinations of the artifacts. Additionally, although Foss's (1989) criteria provides a framework within which to operate, this study also allowed for themes to emerge and was open to exploring meanings as they
became uncovered. In this way, the artifacts were not forced into previously constructed categories.

Focusing on one magazine may not be representative of the messages about technology and gender that are communicated to the public at large through advertisements. However, this study was interested in looking at the rhetoric of current advertisements for new technologies in order to find common themes about gender. *Wired* magazine, with 1.9 million readers, represents a widely read contemporary magazine that features technology as its content and therefore will contribute to an understanding of the persuasions used in advertising about technology. Every fourth month within the year 2000 was examined. In this way, selected advertisements covering one year were analyzed.

**Conclusion**

As discussed in the literature review, this line of research intends to facilitate further analysis of the rhetoric of technology. The initial examination of this type of rhetoric could evoke greater interest in the study of gender and technology. Completion of this research helps contribute to feminist analysis and rhetorical criticism. More specifically, this research provides a clearer view of how gender is constructed through advertisements for technological products.

Advertising creates associations designed to link a product with certain values or beliefs. It is important to uncover the rhetorical strategies advertisers employ when selling technological products. These strategies were examined using Foss’ (1989) criteria of feminist analysis and the study of semiotics in order to see how the advertising rhetoric in *Wired* constructs gender and impacts women. Research conducted within the realm of this study contributes to the knowledge of rhetorical criticism and to our understanding of gendered messages in cultural texts -- texts which society consumes about technology. It also acts as an initial study in order to gather
preliminary research and data in which to then use in future broader analyses of rhetorical messages about technology and gender
CHAPTER FOUR

ANALYSIS OF ADVERTISING CONTENT

This study focused on one-page or longer print advertisements featuring communication technologies published within the April 2000, August 2000 and December 2000 issues of Wired Magazine. An attempt was made to select those advertisements that sold products to both a general audience as well as a technical one. These included, for example, advertisements for computer hardware and software, advanced telephony, digital cameras and personal assistants, among others. Examples of advertisements that did not meet the selection criteria were omitted from the sample and included such products as automobiles, liquor and clothes.

A total of 274 advertisements for communication technologies were identified. Of these, 99 were from the April (8.04) edition, 73 from the August edition (8.08) and 102 from the December edition (8.12) issue. The advertisements were reviewed in part by labeling the issue number, its placement within the magazine, and the number of pages it occupied within the magazine. For example, “8.12:4” would refer to the fourth advertisement within the December 2000 issue of Wired. Advertisements appearing more than once are noted.

The first reduction of the data involved assessing whether or not a human figure was present. Ninety-eight (36%) of the total advertisements did not contain a figure. Closer attention was paid to advertisements containing a figure; the advertisements were then separated into three general categories: men only, women only and mixed sex (See Table 1). This reduction was necessary to record how often each sex was represented and to compare the presence of women, men and both sexes within the texts. Each advertisement was then clearly described in terms of sex, race, class (where applicable)
and the values and themes that were communicated through the texts. Multiple rhetorical features of these messages were examined. They included the appeals advanced within the advertisements, the content and images within the messages, the structure of the messages as well as elements of language and semiotics used within the texts.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>Mixed Sex</th>
<th>Men Only</th>
<th>Women Only</th>
<th>No Figure</th>
<th>Total Ads</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>14 (15.5%)</td>
<td>41 (41.4%)</td>
<td>10 (10.1%)</td>
<td>34 (34.3%)</td>
<td>99</td>
</tr>
<tr>
<td>August</td>
<td>15 (20.5%)</td>
<td>26 (35.6%)</td>
<td>5 (6.8%)</td>
<td>27 (36.9%)</td>
<td>73</td>
</tr>
<tr>
<td>December</td>
<td>15 (14.7%)</td>
<td>39 (38.2%)</td>
<td>10 (9.8%)</td>
<td>38 (37.2%)</td>
<td>102</td>
</tr>
<tr>
<td>Total</td>
<td>44 (16%)</td>
<td>106 (38.6%)</td>
<td>25 (9.1%)</td>
<td>98 (35.7%)</td>
<td>274</td>
</tr>
</tbody>
</table>

The next step involved sifting through the data and deriving common themes from the texts. I used detailed researchers notes to record my reactions and interpretations of each advertisement. Multiple viewings of the data helped to refine my analysis and solidify the themes as they emerged.

This chapter describes the common themes found within each category that I identified. The first two stages of Foss’s (1989) framework are intertwined throughout these descriptions to include an analysis of how gender is presented within the texts as well as what the texts suggest are the corresponding gender roles for women and men. I ground these descriptions in Crenshaw’s (1997) intersectional analysis framework in order to uncover the interlocking nature of gender, race and other salient factors.
Advertisements and Gendered Values

Several dominant themes emerged from the texts. These present valuable insights into the dominant themes and codes that work to represent a technological world. Although each advertisement proved to be worthy of its own analysis, there are common elements that allowed a thematization of reoccurring phenomena across advertisements. As such, five major gendered values were eventually derived from these advertisements. Each of these represents a way in which a technological product was repeatedly represented or signified. The themes of competition, power, innovation, simplicity, and connection contribute their own unique set of signifiers that emphasize certain values over others. For brevity's sake, I have used exemplars to illustrate each theme rather than laboriously given a lengthy description of each text. A set of opposing forces run throughout each of these themes and will be discussed in greater detail in Chapter Five.

Competition

An importance is placed on the value of competition within the rhetoric of technological products. As such, these advertisements situate technology within a masculine domain. The advertisements portray a grueling business world where rivalry reigns and winners take all. Implied in these texts is the message that there can be only one clear leader. As such, technological products are signified as occupying the lead at the expense of all others.

The linking of technology and the masculine value of competition is accomplished in a number of ways. First, it occurs explicitly through the use of language. An advertisement for Fidelity Investments on-line services (8.08:31), for example, reads “We put the customer first, and ended up there as well.” Microsoft (8.08:54) identifies its “leading” software as being consistently chosen “over any others.” Credit Suisse First Boston Technology Group claims to be “the leader in
technology/Internet mergers & acquisitions" (8.08:35). Language laden with terms connotative of leadership and superiority was commonly used to promote technological products. The three sub-themes of war, protection and psychological turmoil help explicate this larger competitive theme.

**Technology and the Metaphor of War**

A number of advertisements employed a war metaphor to illustrate the competitive nature of business technologies. War, for example, acts as a symbol of legitimized male aggression. Interland, a web solutions company, depends on this code by using very large black print on a light yellow background to convey an alarming tone (8.08:75; see Appendix A). The print reads “WWI, WWII, WWW.” The copy reinforces the metaphor, reading, “So if you want your business to come out victorious in the big WWW, join forces with Interland and enjoy a little peace of mind.” This ad very explicitly signals images of battle and competition by its use of the world wars to symbolize the nature of the World Wide Web. Hence, the meanings behind both world wars are appropriated and used to put the Web into a new, more violent and serious context. Realcall (8.04:30), a provider of web site support, also positions their technological services as occurring within a fierce context by the use of the phrase “Live by the click, die by the click.” The word ‘die’ is enlarged and serves as the focal point of the ad, acting to reinforce the seriousness of the competition at work within the technological world.

The metaphor of war is also enacted in a more subtle way. Technologies are positioned as allies who bring with them power and strength. For example, an advertisement for Macromedia Flash software (8.12:22) tells us that we can be web design superheros and another explicitly tells consumers that its product is a powerful ally.
Technology as Protector

Technology is positioned as occurring within a battlefield, and is then signified as a protector and enforcer. With the competitive nature of the technological world firmly established, companies are able to move toward selling products to help users cope and survive within a competitive environment. A two-page spread for McAfee.com, a company providing wireless protection services (8.12:7), features a bristling porcupine with a computer power button on its body. The advertisement instructs technologists to “show hackers your unfriendly side.” A very similar image is created by an ad by Rare, a provider of e-commerce services, solutions and investments (8.12:4). Here, a fish’s hapless journey into a large shark’s open jaws is used to represent the perilous journey that companies embark on when they launch their businesses on-line. The accompanying text tells users that “launching an Internet business is easy. Being there a year later is the hard part.” In addition, Neon positions itself by comparing the new economy to an ocean of opportunities (8.08:33). However, they warn, “sharks have been sighted.” These warnings create a dangerous, ominous backdrop in which technologies are sold.

Technology and Psychological Turmoil

A considerable amount of the texts that I examined contain signifiers that link psychological stress and turmoil within a technological world. These all operate from the underlying premise that the technological world induces high levels of stress, anguish and torment, which is presented as the inevitable result of the highly competitive nature of the technological world. The technologies advertised enact these images as they simultaneously promote themselves as the cure. In order for consumers to buy into the idea that these technologies are the cure, they must first agree that the technological world is indeed stressful and hurtful. Advertisers convince us of this in
very graphic, dramatic ways. For example, a man is shown gripping a surface with whitened knuckles (8.08:26; see Appendix A). Sweat is dripping from above his wide eyes and wrinkled brow. His hair is disheveled. He is clearly struggling. The technology is advertised as the cure to his ailments. Another text for Datapipe uses the image of an extremely close-up view of a man violently screaming to sell their dedicated hosting services (8.08:73). His eyes are shut tight, his forehead is wrinkled and his mouth is wide open. The text reads, “Still screaming for support? It’s time to talk to us.” Their technological services are promoted to soothe the stresses of a technologized business world.

Just as images of stress are used to promote the need for certain technologies, signifiers of tranquility and peace are also enacted. These advertisements show the relaxation and peace that are the inevitable results of various technologies. For example, Telenisus capitalizes on the idea of a stressful world by advertising its electronic services in a very specific way (8.12:12; see Appendix A). A male figure sits cross-legged on the shores of an ocean. He is meditating with his eyes closed. The text reads, “e-composure.” This composure is shown as the beneficial result from the use of this particular technology.

Taken together, advertisements that make reference to ideas about war, protection and psychological turmoil help to position technologies as existing within a hostile environment. Corporate America is constructed as a battlefield. These technologies are then positioned as tools to enable businesses to survive the stressful environment and go on to lead the market. In this way, masculine values of competition and survival are highlighted over others. Implicit in these texts are the overriding tensions of winning vs. losing, and stress vs. tranquility. The theme of power, discussed next, extends the linking of technologies with masculine qualities.
Power

A common theme found within the rhetoric of technology is one of power. Traditionally desired as a masculine characteristic, this use of power situates technologies as masculine tools. A number of products are linked with symbols of strength and shown to be in direct opposition to weakness. This dichotomy is perpetuated in a number of ways. For instance, the focus on power is done through the use of visual metaphors. One company uses the Taj Mahal (8.08:16), “built to last forever,” as a symbol of strength and durability. An ad for Anderson Consulting (8.04:59) asks “Is your ecommerce strategy built to last?” as a large letter “e” made of ice drips and weakens in a harsh desert environment. Teligent hands over its power to its users, saying, “The network belongs to us. But the power is all yours” (8.08:36). Associations like these are created to link technologies with the masculine value of gaining power as a commodity rather than as something that may be shared. These texts carry out underlying tensions that emphasize strength while devaluing weakness.

The masculine business world is further constructed to contain violence against the weak. Perhaps the most alarming example was created by Tradecast software (8.04:32; see Appendix A). The top of the advertisement proclaims, “Our apologies to the meek and the world they shall not inherit.” Below, a man lies face down on the pavement. His broken glasses hang off his face. His lip protrudes gruesomely and a large footprint covers the side of his head. Clearly, this man is the subject of violence. The tone of the ad suggests that this violence was warranted, and even deserved, because the man was “weak.” The components of this text normalize violence and brutality as the technology is linked with notions of strength and power.

An advertisement for Media Depot’s web content management systems also promotes these values of strength, protection and masculine ideals (8.04:13). An army
of white men in military dress form a visible barrier around the focal point of the text. Their eyes are masked with dark sunglasses and they each hold machine guns in their hands. Within the middle of the protected area is copy that reads “Your content here.” This text works by enacting codes of masculinity such as the military uniforms and machine guns. Implicit within this ad is that the business world is dangerous. It offers its product as the key to gaining power and strength. In all of these advertisements, technology is signified as the protector, an idea that has been traditionally linked with masculinity.

Power is signified as being an important part of the technological world, while weakness is devalued. With power comes the ability to win in this competitive environment. The themes of competition, then, become associated with power. Masculinity is more heavily negotiated within the next theme of innovation. However, innovation is mainly signified as making technology users more powerful/competitive in the technological world. These masculine values become inextricably linked together as they are signified as crucial to survival within corporate America.

Innovation

A large number of advertisements relied upon ideas that glorify innovation. Here, technologies were positioned to be unique and cutting edge and giving a competitive edge over others. The advertisements linked the featured technology to ideas of modification and change. A number of advertisements that meet these criteria simply featured the product with text containing themes of innovation and change.

The Natural and the Crafted

Traditionally, men have been linked to ideas of innovation and modification (of the earth, for example). Innovation is illustrated by Compaq’s iPAQ machine (8.04:67) through the use of text that reads “A Computer? That is so last century.” In this category, advertisements create a separation between new and old, with a positive value
being placed on new. Novelty and innovation are even signaled by natural birth, such as Spaceworks’ repeated advertisement for software (8.08:56; 8.12:29; see Appendix A). At the center of this advertisement is a baby peering out of a cardboard box. The text reads “How to give birth to your B2B e-Commerce solution in as few as 60 days.” The visual image of the baby, as well as the reference to giving birth link this technological product to the creation of new life. This creation can then be linked to the human act of giving birth, thereby situating the technology in a traditionally feminine domain.

An interesting way that innovation is also presented is through an association to revolution. This association echoes masculine characteristics of war and competition. For example, Flashcom (8.04:68) invites us to join the revolution with faster Internet service. An army of turtles is propelled by jetpacks bearing the Flashcom logo. The turtles (nature) have been “improved” or “innovated.” These modifications signify and amplify Flashcom’s claim to provide “Internet up to 100 times faster.” Caperian broadband services (8.12: 90) uses an ambiguous image of a swirling vortex with the words “The next industrial revolution starts here.” Finally, Why.com uses a dramatic advertisement with a pale background that proclaims, in large, black letters, “Finally a revolution where you won’t get jailed, shot or beheaded” (8.08:10). Taken together, these three texts create an association between technology and the overthrow of old values.

These texts emphasize ideas about innovation and invention. Interestingly, the association between new technologies and innovation are made in two very different ways. The first is through the feminine association of natural childbirth, while the second is through the use of the masculine metaphor of manipulation of nature. Together, these themes contrast what is natural with what is able to be ‘improved’ or created through unnatural (human) means. Taken further, this contrast can be read as
two opposing forces—what is natural (feminine) vs. what is crafted (masculine)—that operate within the rhetoric of technological advertisements.

**Children and Possibility**

Furthermore, children are often used as symbols of the future of innovation in advertisements for technology. Many of these texts relied on children to link their products with youth and possibility. The untold potentials of technologies are successfully associated with the untold possibilities that lie before a child as she or he grows. The majority of these texts used boys to represent these values; however, when girls were present, they were shown as equal participants in the glorious world of technology painted by advertisers.

Only two advertisements contained boys and girls together. The children are all shown as active and given equal placement within the advertisement. An advertisement for Linux operating systems show two white children jumping off a platform (8.04:88). They hold hands as they leap forcefully. The name of the product, Freedom, is placed under them. Ideas of freedom are linked to their jump and the emphasis is on both children. In accordance with these same values, Sony portrays four, active children of color running in jumping bags. They are smiling and are shown as the subject of Sony’s digital camera (8.12:91; see Appendix A). All are active, engaged and the subject of the digital camera.

Several advertisements contain boys as the subjects. In each, the boy smiles. Three of the five boys pictured are Asian; the others are white. In many of these, children represent the never-ending possibilities of a technology. Their youth is held out as a symbol of future growth and possibility. Each boy represents unmarked potential. Taken together, these advertisements advocate for a utopian perspective of technology. For example, an advertisement for Hughes technological services focuses on the face of a young Asian boy as he smiles (8.12:44). The text is placed over his
cheek and reads “we dream the future, and then we bring it to you.” The boy’s youth represents the multiple possibilities of the future. The possibilities that children bring with them are linked with the potential of the many technologies listed within the advertisement: satellite, television, wireless, internet, broadband, networks, e-commerce and convergence. A similar advertisement presents us with a picture of another Asian boy who is being swung in the air by an unseen person (8.12:2). The background swirls behind him as he smiles brightly. The text next to the child reads, “dreams made real.” On the second page, “Faster. Faster” introduces additional text that details Agilent Technologies’ recent innovations and technical triumphs. The concluding remarks instruct us to “Hold on tight, we’re just getting started.” Again, the exuberance of youth is consistently used to communicate positive ideas of innovation, improvement and possibility. However, girls are absent from these glorious promises, as boys were used to transmit these ideals.

Altered States

The emphasis on innovation is also replicated through advertisements that contain technologized images of men. Although this type of advertisement appeared only three times, the replication of this common image warrants discussion. These consistently present an altered, technologized male head. Serving as visual metaphors for the product advertised, they suggest that what is natural can be changed and improved by technology. This perspective can be linked to masculine perspectives of technology that emphasize domination over the natural. As all of the figures are male, this domination over the natural may be implicitly linked to the traditional domination of the masculine over the feminine.

The first is an advertisement for Internet Pictures Corporation (8.04:21; see Appendix A). Within this media text, a white male with piercing blue eyes is shown against a dark background. He has multiple eyes that cover every surface on his bald
head. There is even a large blue eye centered on his chin. From each of the eyes exudes a blue aura. The copy directs us to “see everything!” In addition, we are told that their product “lets you see across the Internet. Anywhere. Anytime. In any direction.” These statements are compounded by the image of the altered man.

Next, a black man is shown from the shoulders up (8.08:48). He has a shaved bald head and is looking towards the right. The left side of his face fades into the dark background and a light switch dangles from his right temple. The text accentuates the metaphor of a light bulb with text that reads “E-business ideas that turn on your brain.” What is perhaps most intriguing about this image is the shockingly unnaturalness of the metal light switch as well as the ambiguous expression on the man’s face.

The last advertisement described here promotes a memory stick that can be used to add additional memory to computers, personal assistants and digital cameras (8.12:82). We are given a close view of the back of a white man’s head. Centered between his ears is a slot with a square Memorystick sticking out of it. The copy simply directs us to “Imagine it.”

Taken together, these men are signified as a hybrid of what is innovated and what is natural and each are dehumanized as they are altered. These advertisements, both with figures and without, emphasize that technologies are tools that carry with them stereotyped masculine values of innovation and control over what is natural.

Simplicity

The third theme that emerged was simplicity. Technologies were positioned as clear, straightforward, and easy to use. These themes can be linked to a stereotypical masculine worldview that values directness and logic and devalues emotion and intuition. In these texts, distance is intentionally created and embellished between complexity and simplicity through both visual and linguistic means. For example, an advertisement for Esurance features a maze (8.04:81). On top of the maze is a
paragraph that reads “To find your way through the maze of auto insurance, just follow this highly detailed, step-by-step guide.” Under this paragraph is the concise “Step 1. Esurance.com.” The confusion of the maze is juxtaposed by this simple direction. As a result, simplicity and complexity are dichotomized. As a result of the positioning of the black large text over the pale green of the complicated maze, Esurance is allied with simplicity. The advertisement “works” because it relies on the highly recognizable code of the maze.

In addition, two companies advertise their services by creating a tension between simplicity and complexity through technological imagery (8.04:7; 8.08:68). First, Aeromexico promotes their on-line travel services to Mexico (8.04:7). Here, the symbol of a hand pointing is followed by the “&” symbol and then a picture of an airplane. Both the pointing hand and airplane are simple signs composed entirely of pixels. This reference to computing automatically situates them within a technological context and depends on readers’ prior experiences with pixels and computer screens. The relationships between these are spelled out below in text that says “Click ... Fly!” Booking a trip to Mexico is signaled as being as simple as clicking on their web site. This advertisement illustrates how products are situated within a technological culture through codes such as pixelized images.

Futurelink also promotes their software by situating it within a technological context (8.08:68). The text directs us to “Think of us as pay-per-view for your software needs.” Centered within the text is a close up of a television remote control resting on a bare surface. More text, featured below, emphasizes the relationship between the two technologies by asking “What if getting the latest applications to your users was as easy as cable TV?” Cable TV is positioned as an easy–to–use technology and then linked to Futurelink’s own technological services.
A number of advertisements promote ideas about simplicity and ease through their precise language choices. IMC online, a web site host, promotes their on-line services, stating “Put your company on the Internet today! It’s easy with Microsoft Frontpage & IMC online” (8.04:91; 8.12:95). Another text instructs readers to “Update your corporate portal manually, once a week” (8.04:39). A smaller set of words add “Or automatically, every minute.” Both sentences are transposed on top of an image of a glowing, technologized typewriter. The product is touted below, in smaller text, as being “so simple and personalized, it’s guaranteed to be the indispensable fixture on every employee’s desktop.” The services offered provide efficiency as well as simplicity. The name of the company is Autonomy, a name that connotes masculine values of independence and self-sufficiency.

Datek’s advertisement for online trading (8.12:34) also relies on a system of everyday signifiers communicating the tensions between complexity vs. simplicity. In this example, the sign connotes that of a subway map. On one end is the “market” and on the other, “you.” There are two paths that can be taken. On one, there are stops between the “middleman,” the “trading desk,” and “your broker.” The direct route only stops at “Datek.” The text asks “Wouldn’t it be nice if your online order made fewer stops on its way to the market?” Within the text next, the subway metaphor is extended with “Yet with many online brokers, the majority of orders ride the local rather than the express between you and the market.” The term “express” reiterates ideas about simplicity and directness. Of interest is that the term “middleman” signals an adherence to an exclusionary system of language, thereby situating the technology within a certain, masculine context.

The signifier of simplicity that runs throughout these texts is certainly not valueless—indeed, these texts are laden with clues that code these products as easy to use
masculine tools. These associations are accomplished through the use of masculine imagery and language.

Connection

Technologies were also positioned as providing connection, which is traditionally associated with feminine values. Technologies are positioned as allowing users to interact and exchange information. However, this connection is not necessarily relational in nature. A set of contradictions operate within these texts as technologies are linked with gaining power through networking rather than maintaining personal connections. Technologies are signified as having a competitive edge over others because of this connection—connotating masculine values. As a result, these advertisements contain reoccurring cues that signify that these communication technologies were created to be used in traditionally masculine ways.

The majority of these advertisements were for advanced telephonies such as cell phones and personal communication systems. An emphasis was placed on mobility. Linked to this mobility is the idea of remaining independent while still being informed. For example, Motorola promotes their Talkabout as being able to provide two-way texting, e-mail and Internet information (8.12:32). Their advertisement features a map of a mall with two dots that represent two people present within the mall. We see that the blue dot is in the food court, while the turquoise dot is near the movie theatre on the other end of the building. Below, three Talkabouts display what is being communicated by the two shoppers, as represented by a blue machine and a turquoise machine. The first screen says “I need twelve more cents for a slice.” We are shown the reply: “Check the fountain.” The response is “I already did.” This advertisement illustrates how the product can be used and is the only text that is grounded within personal interaction. This interaction enacts certain values about the product. The people who are communicating are shown as doing so for task-related reasons rather
than for relational ones. Technologies were never signified as providing safety through their ability to connect with others. Taken together, these advertisements are clearly selling to a masculine audience.

These products are also portrayed as allowing for greater flexibility because information and connection can be obtained and maintained from anywhere. The common phrase “wherever you want it” was commonly found throughout these texts. The technologies ask “Want to make your business more productive? Take the office with you” in an advertisement for Sprint’s PCS phone (8.12: 84). Both “your” and “you” suggests a focus on the self rather than a focus on connecting with others.

Sprint’s second advertisement for their PCS Wireless Web Cellular phone illustrates how advertisers are able to juxtapose ideas of connection and separation (8.08:65). The text reads “The office has left the building….productivity is portable with the Sprint PCS Wireless Web.” The phone, connected to a laptop computer, is then pictured below. This technology is positioned as allowing a user to be mobile and independent while also maintaining their connection to the workplace. Again, the majority of these advertisements place technologies within a work context without connoting relational uses for the products.

An advertisement for ADC broadband services features two empty lawn chairs under an umbrella on a beach (8.08:45; see Appendix A). The text reads, “In the broadband world, no one is an island” because their products “provide unlimited access to information anytime, anywhere—redefining the way you live, work and play.” This ad suggests a blurring between the lines of what is work and what is play. It signifies that even in a vacation (non-work) setting, you can be connected to your business. This advertisement illustrates how advertisers implicitly de-emphasize isolation with others as they associate their product as allowing independent users to maintain a connection.
The texts of these advertisements also signify that users can take work “anywhere they want.” These would appear to appeal to women users because for some they may hint at notions of a woman’s ‘second shift,’ whereby women pull a double shift with work and family demands. Rakow and Navarro (1993) call these ‘parallel shifts,’ and have describe how women use cell phones to bridge the space and time gap between home and work spheres. However, this opportunity to link technologies with female users is squandered as males are overwhelmingly portrayed as the idealized technology user.

Logically, it seems that advertisers would be more likely to use advertisements that did not contain humans because they would be less likely to exclude certain demographic groups over others. By not using a person of a particular sex and gender to signify certain values within their texts, advertisers could position technologies as useful for both men and women. Taken together, however, these advertisements -- whether containing a figure or not -- transmit a set of values that are inextricably linked with gendered associations. Some of these associations, such as innovation and connection reveal both feminine and masculine values. Overall, however, the themes of competition, power, innovation, simplicity, and connection are consistently portrayed in masculine ways and linked to masculine uses of technology.

Advertisements and Sex Roles

A large number of advertisements depict at least one human figure. These are filled with ideas about femininity and masculinity. The figures within these texts enact a set of behaviors and values (signs) that create a technological world limited by sex and gender. These differ from the previous themes because the focus here is on the negotiation of sex roles within texts that feature human bodies and faces. Specifically, I was interested in how the technologies as well as the relationships among men and women were contextualized within a variety of settings through the use of symbols and
codes. The advertisements described in this section suggest how a technology can be used as well as who should use it. Some offer an inclusive version of a technological world; however, the majority proscribe much more narrow conceptualization.

**Traditional Portrayals of Sex Roles**

Generally, advertisements rely on traditional sex stereotypes to sell their products. Here, men and women fit into very constrained social roles. They “work” by using signs that connotate a very traditional perspective about the roles that men and women occupy in society. The majority of these illustrate previously critiqued stereotyped portrayals of men and women by media scholars (e.g. Millar, 1998; Rakow, 1992). Women are disempowered by their lack of voice as well as how they are signified as passive objects. Men are allowed a greater range of images; however, many of these also contain harmful messages about masculinity. These traditional sex roles are accomplished in a number of ways through the rhetoric of technology.

**Technology Users as Masculine; Onlookers as Feminine**

Perhaps the largest number of advertisements in the overall sample contained a male user using the technology advertised. Women and feminine values are often signified as the “other” by their absence or their (rare) background presence. Typically, scenes showed active males as complete humans rather than parts of bodies, as women are often depicted (Caputi, 1988; McLuhan, 1951). The complete replication of the portrayal of male users contrasted with female onlookers is replicated so completely to render it a dominant hegemonic force.

A number of these types of portrayals contained a white man using a laptop computer. This image is replicated throughout the texts and symbolizes mobility and access. They also act to construct a user profile of the “average” technology user. A smaller number of these feature men using digital cameras. An advertisement for photo-finishing papers appears in each of the three issues of *Wired* (8.04:48; 8.08:12;
In it, a man smiles as he holds a digital camera up to his right eye. Across this picture are the words “the future of photography is digital.” Below is a computer printer holding a color picture of a boy dressed in a baseball uniform, holding a bat and smiling. Both the user and subject give clues that indicate that this technology is gendered. The boy is further contextualized within a masculine world through the use of cues such as his sports uniform.

**Male Spokespersons**

A number of advertisements relied on the ethos and status assumed by spokesmen. Women were not used as an authority figure to sell technological products. This stream of male portrayals uses quotes from various powerful and influential men to sell their products. For example, the president of Hitachi as well as musician Carlos Santana appear within these texts. These advertisements again rely on the traditionally masculine value of power and the status that is attached. The authoritative symbol ranges from a musician to CEOs to company founders. Each of the men gaze directly at the viewer and maintain the worth of the products featured. Most of them are European American. There were two Asians represented and one South American.

Examples include the president and director of Hitachi standing next to his personal testimonial to the consumer (8.04:16). Highlighted in red is his quote “I promise you there will be one company you can trust to lead the 21st century info-electronics revolution.” The copy beside him details Hitachi’s vision within a large block of text. Next, the CEO and founder of Staples office supplies testifies that he has registered his brand at register.com (8.04:86). Nortel Networks uses well-known musician Carlos Santana to gain ethos (8.04.1). Each of these representations work to link the products with men of status. Perhaps the most obvious of these is Launch.com’s appropriation of Einstein’s image in their advertisement for electronic music services (8.04:84). A picture of the famous scientist is shown with the words
“genius” underneath him. Next to Einstein is a picture of the technology and the words "ingenius." This advertisement borrows Einstein’s status as a genius to enact the symbols at work within this text.

**Males as Active**

The majority of advertisements that contain both men and women present the main actor as male. A male perspective is assumed when the focus of the advertisement is on a male actor. In these types of scenarios, women most often appeared with men in the background of the advertisements. For example, an advertisement for Microstrategy proclaims that “the difference is intelligence” (8.04:75; see Appendix A). Difference is escalated by the positioning of the actors. On the left is a thick line of harried travelers. On the right, a European American businessman talks on his cell phone as he is being helped by a female travel agent. He is the only traveler who has broken free from the line. The physical differences are also signified through other means. The main, male actor is shown in color. In contrast, all of the other figures are in grayscale. The strategies at work within this text clearly announce a focus on the masculine actor. He is able to take control of his surroundings through the use of the advertised product.

Males were overwhelmingly pictured when a human was shown using the technologies. These texts 'worked' to create gendered associations by showing men as active users of technology and women as passive onlookers. For example, CDW advertises its computer centers in two nearly identical advertisements (8.04:61; 8.12:70). Both feature a cluster of young employees of mixed sexes and races. These advertisements represent a rare instance where racial/ethnic diversity is portrayed. There are seven people present in each advertisement; five of them are used in both advertisements. In each scenario, the men are actively engaged with technology. They are shown building computers and typing on computer keyboards. Both advertisements feature the same woman who looks over her male colleague’s shoulder as he points to
the computer screen. A woman is shown using a telephone. In both advertisements, an Asian woman stands smiling with her hands clasped in front of her. She is the only figure who looks directly at the viewer and is in the background of both advertisements.

In another advertisement, Visa advertises Beyond.com’s anti-virus center by placing its services within the masculine domain of a military setting (8.04:27; see Appendix A). A row of white male soldiers wait to be given an inoculation by a male doctor. A buxom white female nurse looks on. The shot represents the anti-virus software that can be obtained through this particular website. The lone woman is not a participant in the action, but rather a passive observer constrained within a stereotyped role of the accessory. Advertisements such as these reinforce traditional sex roles and fail to challenge conventions about technology and gender.

An advertisement for an MP3 digital music player, Nomad Jukebox, relies on traditional representations of men and women (8.12:88). This technology is clearly situated within the masculine domain as the text proclaims that “This is not your daddy’s Jukebox.” Four scenarios within the text illustrate the versatility of the technology and enact gendered values. All of the actors pictured are white. An older businessman sits listening at his desk. The signs used—professional dress, age, etc. situate the Jukebox within a work context. In the next scene, a young male listens to the product as he relaxes in his living room. He is also shown listening to the Jukebox as he drives; a white woman sits alongside him in the passenger seat. Lastly, a white male demonstrates the Jukebox as two women smile and look on. Again, the men are shown using the technology while the women are merely observers. Advertisements that portray male actors engaged with technologies as women passively observe perpetuate traditional ideas about technology.
Males serve as focal points in another common type of advertisement. In these, a European male is commonly portrayed as the meeting leader in business settings while the other male and female employees are shown in the background, listening (for example, 8.12:45; 8.04:65; 8.04:72). These perpetuate and normalize white masculinity as the standard for leadership, control and power. People of color and women are implicitly signaled as “other” by their conspicuous lack of presence.

**Women as Passive**

In contrast to men, women are rarely portrayed as the focal point of an advertisement that contains both men and women. Occurring only six times out of the 272 advertisements examined, nearly all of the women pictured were of European descent. There are two patterns that emerged within this category. The first uses women as spokespersons for the product. Never are they shown engaged with a technology. Instead, they stand within the forefront and look directly at the viewer. One features a woman standing at the front of the advertisement. She is dressed in a suit and holds a briefcase (8.08:61). The copy says “insights that stick.” Business catchphrases are literally placed on her body. They say, for example, “cash-free economy, “Mobil commerce,” and “Go Global.” She is used as a canvas to be painted on. Women are most likely to be pictured alone when they are not using technologies. In this way, they are positioned as passive consumers, rather than active, engaged users. Their status as consumers is confirmed in a number of different ways. First, this is signified through their passive body language.

Two advertisements for Nortel Networks and Zeroknowledge contain women who even mimic the same, bowed posture that signals their lack of power. One is positioned behind a layer of hanging dresses and replicas of an airplane and two planets (8.08:24). The woman is identified as fashion designer Vera Wang. Her positioning behind the façade of objects rather than at the focal point of the advertisement places her
within a specific, less powerful context. The traditionally feminine occupation is used to position this technology within a female domain.

A similar advertisement for Zeroknowledge provides contradictory ideas about power and gender (8.08:2 A, 8.08:2 B; see Appendix A). The text proclaims “I am not a piece of your inventory.” This bold, powerful “I” statement is then contrasted with the white woman who accompanies it. Only her face is shown as she looks down. A bar code is stamped on her neck. She becomes both the product as well as the consumer. The text’s emancipatory declarative becomes less dramatic when contrasted by the passive posture and literal commodification of the figure.

Nine advertisements contain women portrayed as an average consumer. Five of these women assume various, non-active poses. Two are Asian, one is African-American, one is Hispanic and five are white. They are shown being, not doing. Their presence casts the technologies within a feminine domain by their rare presence in these texts. They are also rare in that they appear to market technological products to women. Two advertisements provide hints of an empowered woman. The first is for Lotus Software (8.04:35). The copy instructs us to “Work as if you’re all standing around the watercooler. Except the Pacific Ocean is the water.” The woman pictured is African American and stands tall with her hands on her hips. She is standing looking at a giant a map of the world. Her hair is natural and she is dressed in bright red clothing. She represents a rare image of an empowered woman of color through her confident posture and gaze.

A second image for Hostpro contains a white woman who is actively picking money from a tree (8.04:67). The text minimizes her role by inviting businesspeople to let the company put their businesses online to watch the money grow. Again, she is
cast as the consumer, and the technology is offered as a means to gaining power. This company offers to do the work—the consumers simply watch the action.

**Masculine Signifiers**

This category of advertising casts men in very predictable ways as they enact gendered ideas of what it means to be male. Humor is often used to offset the seriousness of the stereotyped portrayals. This is accomplished in three ways. First, their relationships with technologies are emphasized and portrayed as ‘natural’ and important. Secondly, men are portrayed as bumbling idiots with a limited amount of expertise. This expertise can be gained by using a new technology. Lastly, values traditionally associated with males and masculinity are emphasized and replicated and used to position technologies within a male sphere.

All of these representations used white males as the standard. Advertisements that featured only images of males allow for a greater range of portrayals than any other type of advertisement. Unfortunately, they also enact stereotypes about masculinity that are harmful to both men and women, such as the reliance on power and domination. Also harmful is the lack of images of diverse men. Instead, white masculinity remains the dominant hegemonic force at work here. These various stereotypical representations vary greatly from those images of women we see within the texts.

**Masculine Relationships With Technology as Natural**

Two advertisements for Replay TV rely upon ideas that men have exclusive relationships with the medium of television. This relationship is portrayed as all-consuming and occurring at the expense of other relationships. For instance, the subject of the first advertisement is reminiscent of the “average Joe” images discussed earlier (8.12:83). He has a vacant look on his unshaven face. Page two of the advertisement is filled with text. Here, a quote from the man is highlighted and made to look as if it is on a television screen. It reads, “I use pause live TV when I order a pizza. And when the
pizza guy comes. And then later when I order Chinese. Stuff like that.” He is portrayed as socially isolated and completely dependent on the technology that allows him to pause live television. His words are calculated to portray him as a caricature of a stereotyped image of lazy, suburban middle class masculinity.

The second Replay TV advertisement reinforces this image (8.08:34). An older man stands next to a television screen that reads “If I had my own instant replay button I do believe my wife would go completely insane.” The text creates distance between the husband and wife as it positions the technology to be for him and not for her. As such, there is distance created between masculine and feminine. Within this distance, males are specifically highlighted as the active users of a technology. Additionally, Pioneer emphasizes the importance of the relationship between man and technology in an advertisement for their televisions. Here, a man in a robe and slippers pushes a large screen television out of his burning house. Below, we are told that “everything else comes second.” The seriousness of the fire is trivialized while the importance of the television is highlighted.

The Bumbling Male Technology User
Concentric advertises its web hosting services by returning to an image of a bumbling male user (8.08:74; see Appendix A). We are shown a close-up of a white businessman chomping on the end of a cigar. The copy describes Concentric’s services as “Web hosting that everyone can understand, from the mailroom guy to the CEO. Yes, even the CEO.” The image and text combine to create a poor portrayal of the person in charge of the company. This text subverts issues of power and identity that would usually be associated with such a figurehead. Subversion and rebellion against traditional business courtesies are transmitted through this advertisement.

An advertisement for E Online tells us to “Do one thing well. Leave the rest to us.” (8.12:10). A white male is shown smiling and holding up six large fish he has
caught. Masculinity, as represented by the act of fishing, is signified through a narrow definition. The authoritative voice of the advertisement proscribes which activities this "average" man should be involved with—as signified with the traditional masculine activity of fishing. The technology is being sold as an authority. This ad proscribes that potential consumers rely on the product instead of on their own bumbling autonomy.

**The Sports Enthusiast**

A common role that men play in advertisements was that of the active, sporty, man. A common thread between these is that the action usually has no connection to the technology itself. The image of the active, masculine male runs throughout all of these advertisements. Pure masculinity is symbolized through these images in the hopes that this label will then be attached to the products themselves. Masculinity has traditionally been glorified as a desirable trait and the focus on sports encapsulates this glorification.

These representations play with notions of masculinity as they portray men engaged in a variety of physical activities separate from them actually using the technology advertised. For example, Rackspace.com uses an arguing umpire and baseball player to sell their Internet server management (8.08:59; see Appendix A). A businessman speeds away on his scooter in an advertisement for Fujifilm digital devices (8.12:36). Sony relies on mountain bike riders to sell its handheld computers (8.12:53). A rollerblader pumps his legs and arms in another text (8.12:97). The blurry, out of focus background suggests his great speed. A figure surfs the flowing lava of a volcano in an advertisement for Adobe software (8.08:51). Replicated in a number of advertisements is this similar image of the sports enthusiast. In all but one of the scenarios the figure is white.

**Just the Average Joe**

A series of advertisements rely upon images of an "average Joe" to sell their products. Here, an image of a regular "everyman" is used to suggest the widespread appeal of the
technologies. The men that appear in this stereotyped category are white, overweight and slightly unkempt. They are portrayed with a hint of mockery and are visually set apart from the other figures for deviating from traditional business dress and traditional portrayals of the idealized man. These texts position women and minorities as the "other" because of their lack of presence and voice within these texts.

In addition, business services for on-line companies are sold in an advertisement for Add a Shop.com (8.04:73). An overweight man sits in his office shoving potato chips in his open mouth. His shoes are removed. These details situate the figure within the "average man" context. The text is then used with irony, "Just made $12, 510 selling Buns of Steel videos." In another example, a man stands, holding a pitchfork and a bucket with a globe in it (8.08: 37). He is wearing overalls and a straw hat while chewing on a piece of straw that hangs out of his mouth. The copy says "He’s got a website. Do you?" The farmer symbolizes backwardness. This done by using a set of codes that link the farmer to a devalued occupation. Another advertisement for Quintus electronic services echoes the image of the farmer (8.04:82). In it, an unshaven man with a baseball cap looks directly at the viewer. The text reads "I want it on-line. I want it now." There is a truck and trailer in the background and the outline of a barn is shown. The roof tiles are of an American flag. All of these images signal a midwestern, rural way of life. The image of a farmer is repeated to represent the common man and his abilities. These technologies are also placed within a certain socio-economic context.

The Male Body as Model

Male figures are often used as props to showcase technologies. Several advertisements contain nonfunctioning males. These figures are not engaged with a technology and are not shown in active roles. Instead, they stand, arms crossed, next to a technology and lend their likeness to the product advertised. A few of them simply smile in the
background. Others are there to play the role of the “typical” user of the technology, as signified consistently as being white, professional men. In all but one of these, the typical user is a young European American wearing business dress. There is a marked difference between how these males are portrayed with how ‘the average Joe’ is portrayed. These male models fit a dominant hegemonic image of sharply dressed, idealized professional white men and do not convey a slightly sarcastic or marking judgement of the figure. Instead, these images are of the idealized male.

These portrayals differ from how women’s bodies are used in advertisements because these male models are not sexualized. Their function in these advertisements is not as sexual objects but as representations of a typical, idealized user. For example, an advertisement for Oracle software illustrates how an anonymous male figure is positioned as a technology user (8.04:19; see Appendix A). The text features an Asian man sitting in a thinking pose reminiscent of Davinci’s famous sculpture. The copy reads “65 of the Fortune 100 run Oracle for e-business.” The function of this figure is to provide a human face and idealized image of a user rather than link the product with sexual desire.

The image of the male model is also used in a different way. A series of advertisements contain parts of male bodies that exhibit a technology. Some hold computer components in their hands, such as an advertisement for Epoch Internet (8.04:36). The focal point of this text is a close-up view of a hand holding a computer chip. The tableau is labeled as the “birth of the microchip.” The company then defines their name as “A period of time considered remarkable.” As the company links ideals of innovation and creation with their product and company name, the hand serves as a backdrop. It is assumed that the person connected to the hand is a creator and an innovator. The shape of the hand (sign) signals themes of white masculinity (signifier) that become inextricably linked with the product (signified).
A number of advertisements use white male hands that aren’t engaged with a technology. Instead they serve as cues that point toward a masculine domain. An advertisement for Computer Associates software, for instance, portrays two white hands (8.12:92). The hand on the right is pulling on the left hand’s suit cuff. In the open left hand is the text “I’ll never lose a customer again.” Next to this, the advertisement claims “He’s either dreaming or working with CA’s Intelligent CRM suite.” Both the language and the images within texts such as these gives us specific clues about who the user is.

Other advertisements use a male body part that is engaged with a technology. An advertisement for Intersil communications reveals two white hands dialing a cellular phone (8.12:60). An image of Santa using a Seiko Instruments Thinkpad is used to illustrate how the technology may be used (8.12:57). The text then situates the hand by declaring that this is “how Santa keeps his list.” Together, these images of the male model contribute to the linking of these technologies as largely used by white males.

**Feminine Signifiers**

Women are signified in stereotypical ways just as men are in technological rhetoric. Advertisements predictably enact gendered ideals that act as gender lessons. From these, we learn that although technologies may transform the business world, they do not necessarily transcend traditional sex roles. Females are rarely portrayed as active users of technologies and femininity is often hinted at by either delegating females to the background of a text or by showing only parts of female bodies. Overwhelmingly, women’s bodies are sexualized in a way that men’s are not.

Women are given few opportunities to challenge sex stereotypes within the limited number of advertisements they appear in. Instead, their status as objects vs. subjects is heavily negotiated. The majority of these representations, surprisingly, do not even attempt to market to women, let alone women of color. Together, these texts
do not challenge stereotyped images of women, but rather perpetuate dominant
hegemonic forces. What is perhaps most conspicuous about these may be that which is
absent. What is absent are diverse images of women as powerful technology users.

**Women as Sexualized Objects**

Women are portrayed very differently in advertisements for technology than are men. A
number of advertisements “work” to de-emphasize the presence and power of women
by relying upon familiar female signifiers. These include the portrayal of women as
preoccupied by her appearance, a stereotype not associated with males. An
advertisement for Best Buy retail stores (8.08:15; see Appendix A) features a man
playing with the multiple features on his cell phone while waiting as his girlfriend tries
on clothes in a dressing room. He is sitting down and we only see the woman’s legs
under the dressing room door. She is reduced to parts of a body; we do not even get to
see her face. The text reiterates the cues that are at work with “Digital Webphone.
Internet Access. Long lasting lithium ion battery. And the ability to score points while
checking out the big game.” The woman is preoccupied by her focus on her body, as
illustrated by her trying on clothes. Again the man is shown as the user of the
technology as well as the one who can benefit by “scoring points.” Never in these
technological texts are men concerned about their appearance. Within this text, the roles
that women and men are allowed to occupy are extremely limited. Women are rarely
shown as the users of technology, but are instead shown as being focused on
themselves.

Femininity is used as the backdrop in another example that relies upon notions
of betting and chance while summoning values about gender (8.08:4; see Appendix A).
A man is seated at a roulette table as he places a bet. Three women watch in a scene that
is reminiscent of a James Bond movie. The women’s function within the advertisement
is an ornamental one, as they are dressed in showgirl-esque costumes and smile
vacantly. The copy reads, “Why take chances? Streaming media made easy.” The product is linked with ideas of security and protection. Again, women are not portrayed as active or engaged. Instead, they serve as status symbols for their male companions.

The use of women’s bodies to sell consumer products has been widely observed by many communication scholars (for example, Dyer, 1982; Kellner, 1995). The female body is also objectified to sell goods within technological rhetoric. Even though the following advertisements only contained women, it is clear that the products are being marketed to men.

An advertisement for NC digital cameras, for example, appeared twice (8.04:70; 8.12:57; see Appendix A). It simply features a woman posing for the advertised digital camera. She wears thick make-up and her arms are crossed over her bare chest. The image is pronounced to be “Stunning in 6 million amazingly clear pixels.” This declarative describes both the woman and the technology. This image of an idealized young white women is a familiar one: it is replicated countless times in U.S. consumer culture. It appears here as a hegemonic force that links the image with the technology. It is a fusion of sex and innovation fraught with cliché and familiarity.

The same image is repeated in an advertisement for Data Return Web Hosting (8.12:64). A very thin, young white model walks on a runway. She represents sexuality and objectification. The ad copy tells us that “When Victoria’s Secret needed a managed hosting partner, we had them covered.” This statement is ironic, as the woman is barely covered by her skimpy bikini. Data Return’s advertisement echoes the same hegemonic forces about sex and gender that have been well documented in other types of advertising.

Two advertisements very explicitly signify that they are directed at heterosexual males. An advertisement for Adero, a provider of software and services for international content delivery, features a two-page spread containing a woman’s heavily
made-up face (8.04:77 A, 8.04:77 B; See Appendix A). Next to her is the phrase, “Darling, in this part of the world, we like our lovers to take their time. Not our websites.” Her expression is seductive; her head is bent towards the right side of the text. The ad ends with “That’s potent stuff, daddy” in red text. Clearly, the audience for this advertisement is intended to be male and sex is being used as the vehicle to command their attention. The ending statement, delivered by the provocatively posed women, suggests a reference to male virility. This advertisement presents a mocking challenge of both masculinity and femininity in order to appeal to male technology users.

The second is used by Casio to sell their digital wrist camera watch. Four white women are pictured from the waist up (8.12:47; see Appendix A). They wear skimpy dresses and are holding cocktails in their hands. Each of the women’s bodies are in color. However, their faces are covered by black and white “photos” of them that contain descriptive notes and dates and times. For example, “Suzie” is double-jointed. “Pam” loves football, and Debbie is “from Dallas.” The use of Debbie from Dallas signifies a sexual reference to a pornography film. The copy on the top of the page employs the phrase “Time for your little black book to grow up,” further contextualizing the scene as sexual in nature. The advertisement goes so far as to proscribe a scenario for how the product is to be used:

You’re out having a good time. Making new friends. Then you point your new Casio Digital Wrist Camera Watch and click a few photos of a girl you dig. Play it cool though, you don’t want to use all your 100 images on one girl. Type in her name, number and other info so you can give her a ring later. Then download the images to your PC with the optional software and e-mail them to your friends. Pretty cool for a $199.95 digital wrist camera that also tells time.

This scenario situates the technology within a stereotypical masculine word where men are sexual predators and “girls” are sexual objects. These women are so one-dimensional as to be summed up by a phrase and a date and time. Again, even though
the advertisement does not visually contain a male figure, a stereotypically masculine perspective is very explicitly created. The technology is positioned as a tool to allow men to carry out their gendered, stereotyped behavior. The product is,ironically, positioned as “new” and “innovative” even as it simultaneously carries out very old and trite gender roles.

Women as Victims
This next category of texts are contradictory in nature, both with what they imply about femininity as well as what is explicitly presented. For instance, an advertisement for OmniSky communication devices appears twice (8.08:21; 8.12:48; see Appendix A). It features a female babysitter at the forefront. She is literally bound and gagged. In the background appear four children who are tearing apart a house. There is smoke in the air and objects strewn throughout it. A young boy writes on the cupboards in crayon. Another boy is aiming a bow and arrow and standing on the counter. A young girl is dressed in a fairy costume. A baby sits near the main actor, crying. The babysitter is using the OmniSky communication device to contact the parents of the children. This image provides a contradictory reading. She is shown using the technology, but is also pictured as a victim. The technology is positioned as something that will help her get out of trouble.

This same sign is suggested in an IBM advertisement for its e-business customer service (8.04:78; see Appendix A). A professionally dressed African American woman is shown stopped at a gas station and is standing next to her car. She talks on a cell phone with one hand. The other is resting on her laptop computer. It is unclear if she is using the technology for business or to get help. The text states that “IBM helps businesses find web-enabled solutions.” Her expression suggests that she is concerned. The look on her face is significant, in part because the vast majority of women pictured in advertisements are shown smiling. As a result, we are left
somewhat alarmed by this disjointed portrayal. Both the text and the image position her as needing help.

These ambiguities provide contradictory ideas about femininity. Although both women are shown using the technologies advertised, there is an implicit suggestion that this use is a result of an inherent weakness that marks them as victims in need of assistance. The replication of these images contribute to a mediated climate that views women as users of technologies only when there is a need for assistance.

**Non-Traditional Portrayals of Sex Roles**

Female images within ads for technology offer a considerably different view than do advertisements that contain only males. For example, women are most often offered more of a restricted role than are afforded males. However a smaller number of advertisements do portray men and women interacting with equal power, access to technologies, and ability to use them. These texts strive to minimize differences between men and women and the roles they occupy, both in the business world and in their relationships. These are grouped into two major spheres: men and women in professional settings and men and women in social settings. In addition, a series of advertisements present rare images of women actively engaged with a technology. Lastly, children of both sexes are used to represent the untold possibilities of technology, as signified by the children’s youth. Together, these representations offer a way for females and males to break free from stereotyped sex roles as they relate to the technological world that is created by advertisers.

**Women and Men as Equal Actors**

Realmedia’s series of advertisements illustrate how both males and females can be equally represented (8.04:31; 8.08:50). These advertisements portray a group of diverse men and women who are shown being drawn equally to the use of their product. For instance, an advertisement for Socket’s communication applications
surreally describes a “communication uprising.” Here, men and women rise out of their cubicles and use computers while floating in the air. All are engaged in their individual work.

Another example is seen with Hewlett Packard (HP), who uses a two-page advertisement to illustrate that both men and women are competitors within the business setting (8.08:18). Page one features a woman standing with a briefcase and looking at the viewer. The copy reads, “Go David.” A man stands with a briefcase on page two, and the text reads, “Go Goliath.” This advertisement plays on notions of power that are attributed to each sex. They summon the age-old biblical reference to David as the underdog and Goliath as the powerful giant. HP pitches e-services for small businesses as represented by “David” and “woman.” The man is then coded as the “Goliath,” or as “big business.” Interestingly, both are positioned as viable enterprises that would benefit from HP’s technological services while emphasizing women’s underdog status. Gender power relations are consciously enacted by these representations.

Relationships between women and men are portrayed in professional settings as well as within social environments. A set of advertisements situate technology as entertainment for heterosexual couples. Both partners are portrayed as ‘normal’ users of the technology. A common portrayal is a cross-sex couple engaged with the technology as they cuddle with each other. This is shown in advertisements for Kodak digital cameras (8.12:81) and Phillips televisions (8.12:72). An advertisement for Rio digital audio players shows an African American man and a white woman dancing separately (8.08:28). Swirling anonymous figures in the background indicate a variety of other dancers. The message is clear: everyone is invited to use this technology.

**Women as Active Users of Technology**

A total of five out of 272 advertisements contained images of women exclusively using technologies. Of these five, all are white. They are shown as powerful and competent.
The technologies many times are positioned as a tool that women can use to gain power and status. In these cases, the women play a central role within the text, rather than as a prop, or symbol of a generic technology user. For example, an advertisement for Linux devices pictures a woman standing tall and holding Linux’s Machz product in her raised hand towards the viewer (8.12:79). Her posture is powerful and she is positioned as fiercely independent. There is another, smaller picture of the woman on the left of the page. She is lying on her stomach and using a computer. The text between the two images of her reads, “The potential to change everything!” This text declares that anything—improved status, power, productivity—may be possible through this product even as there remains is a certain amount of disparity between the tall, powerful image and the less active one.

In contrast, two of these advertisements show women as “typical” users of a technology (8.04:37; 8.12:38). They are both shown using a computer and are referred to as customers within the copy of the text. The women in these advertisements are secondary to the product being sold. The codes associated with sex are not emphasized in these. However, they stick out because of their rarity.

Advertisements transmit values of independence and autonomy in the next two cases. Esurance advertises their online insurance services by relying on symbols that signify these values (8.08:25; see Appendix A). The same image of a woman driving in her car is replicated. On the left, an arrow points to the woman and the word “Sarah” is used as identification. An arrow labeled “Sarah’s Insurance Agent” points to her on the right. Underneath the two images is the statement “Sarah loves saving time and money. Oddly enough, so does her insurance agent.” The car as well as the product are linked with ideas of control and autonomy. Sarah is the only person in control of her destination and her insurance.
Lucent technologies echoes these values in their advertisement for mobile internet (8.08:22). A laughing woman holds an open laptop computer. She is situated within the monitoring station of a wind farm. Oddly enough, her name is also Sarah. The text reads, “Sarah @ the wind farm. Sarah @ the monitoring station. Sarah @ doing business anywhere.” The freedom to do business anywhere is illustrated by the placement of Sarah in the remote setting of a wind farm. The phrase “Expect great things” echoes Linux’s previous message. Taken together, these advertisements link the potential of new technologies with a version of the emancipation of women. These technologies are shown as tools that help users gain control, autonomy and power. The similarity between the two women illustrates the dominant reoccurring image of a young, white women used to represent all women. These texts constrain the image of women to include only those who are of European descent.

Very few advertisements for technologies feature images of women of color. Of these, women are offered even less positive images. Instead, females are overwhelmingly white, young and depicted as onlookers rather than as diverse, powerful, multi-aged women.

Conclusion
The advertisements described here are laden with gendered meanings and values about technology and its use. Masculine signifiers such as competition, power, simplicity and innovation and connection appear as dominant frames within which technologies are positioned. A certain amount of feminine values and representations operate within these limiting frameworks. However, these female signs are heavily negotiated, as the majority of advertisements position women and femininity as a stereotyped backdrop rather than at the forefront of these mediated images. Both femininity and masculinity are constrained to fit within stereotyped signification systems. Both female and male stereotypes contain harmful messages and values about gender, power and presence
within a technological world. These advertisements transmit clues about who the users of technologies should be. The dominant image of a technology user that is replicated throughout these texts is of a young, white male.

These reoccurring signifiers are further interpreted and synthesized within Chapter Five. In addition, a focus is put on explicating the role that dialectical tensions play within technological rhetoric. Next, these images are discussed in terms of how they can be used to change or subvert sex stereotypes as well as inform rhetorical theory.
CHAPTER FIVE

DISCUSSION

Advertisements present calculated versions of reality that rhetorical critics may read for meanings about gender. From a semiotic point of view, these signs can be viewed as social forces (Eco, 1979). Because they are socially constructed, signs can be read for social meanings and values. The sets of signifiers found within these advertisements do not work solely in isolation, but are, instead, part of a larger signification system. According to Leeds-Hurwitz (1993), a single sign does not convey meaning by itself, but as a part of a larger set of signs. The signifiers at work within these advertisements hold meaning only as they relate to this larger system of signs. These texts “work” to transmit gendered values as they rely upon a reader’s identification of the interlocking nature of the sign and what is signified. Those signs identified within these advertisements, therefore, operate within the larger signification system of U.S. American culture.

Those advertisements found within Wired Magazine create a very specific set of gendered values about technology and its users. Together, they help to create an environment that marginalizes women and their experiences. Overwhelmingly, masculine values are used to promote technologies while feminine values are implicitly coded as the other half of a dichotomous relationship. These cultural texts work to perpetuate a division between the sexes within technological cultures. From these texts, a vision of an idealized technology user is maintained. The replication of this image as young, white, and male is repeated so completely as to become seemingly natural. Chapter 5 works to address how these images impact women’s lives and transmit ideas.
about femininity and masculinity. The impact that this analysis holds for feminist rhetorical theory is also discussed.

Polarization

Technology advertisements reflect an either/or tension that constricts sex and gender roles within very specific contexts. It would be very difficult for women and men to live up to these narrowly defined roles. The signs that operate within this rhetoric use dichotomous signifiers to emphasize the importance of competition, power, innovation, simplicity and connection. These tensions run throughout the rhetoric of technology and are discussed in greater detail below. Feminist criticism can be used to gain insight into how gender is negotiated throughout each pair of tensions.

Table 2 outlines the five main values that are transmitted throughout these texts, as well as the corresponding tensions that are used to sell technologies. Each tension is composed of two opposing forces, each with a positive and negative set of signifiers. Advertisers attempt to link their products with the positive sign while distancing themselves from the negative sign.

This is explicitly illustrated by Tradecast’s (8.04:32) software advertisement that features a battered man whose face is shoved into the ground. His status as a victim is sealed with the words “Our apologies to the meek and the world they shall not inherit.” Hence, the man is devalued and serves as a spectacle and illustration of the inevitable effects of being weak. Simultaneously, advertisers position their product as being a source of strength. In this way, advertisers rely on the opposing forces of strength vs. weakness to link their product with the positive sign of this dichotomy.

Table 2 organizes the gendered values found within these texts as pairs of implicit tensions. The contents of this table will be further elaborated on in subsequent sections.
Table 2
Gendered Values and Their Corresponding Tensions.

<table>
<thead>
<tr>
<th>Values</th>
<th>Implicit Tensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition</td>
<td>Winner vs. Loser</td>
</tr>
<tr>
<td>Power</td>
<td>Strength vs. Weakness</td>
</tr>
<tr>
<td>Innovation</td>
<td>Created vs. Natural</td>
</tr>
<tr>
<td>Simplicity</td>
<td>Easy vs. Complex</td>
</tr>
<tr>
<td>Connection</td>
<td>Autonomy vs. Association</td>
</tr>
</tbody>
</table>

Gendered Values

Values about gender are transmitted throughout these cultural texts. The three themes of competition, power and simplicity consistently bring masculinity to the forefront while ignoring femininity. The values of innovation and connection are less clear cut, as gender is negotiated much more heavily within these. The associations that advertisers employ to bolster their products operate through the use of dichotomous signs.

Competition as a masculine value is highlighted by the consistent reinforcement of the opposing forces of winning vs. losing. Products are associated with tools that will help masculine users compete against others. For example, we are told to win at all costs through the graphic metaphors of war, revolution and violence. Advertisers also employ the dichotomy of tranquility vs. stress to link their products with ideas of relaxation and tranquility. We are convinced that the technological world is so hostile that it may induce psychological turmoil. Once advertisers convince us of this, they then propose their products as tools that can soothe the stresses of this hostile world.
These dichotomies function to create a competitive view of the technological world in order to link their products as tools that users can wield in defense.

All of these activities reside within a traditionally masculine domain, where a focus is placed on the importance of winning. It is implied by default that losing is unacceptable within this technological world. Losing then becomes signified as ‘weak.’ As masculinity/winning are positioned as the positive side of this dichotomy, femininity becomes associated with losing and is, therefore devalued. The price of losing within this technologized world is great, besides becoming feminized, we learn that it may even warrant ridicule and violence (8.04:32). The implications, then, for women are great, as anything labeled feminine is signified as negative and is distanced from technologies. Concomitantly, masculinity and technology become increasingly intertwined. Technology, therefore, is a masculine product.

The reoccurring emphasis on masculine definitions of power occurs throughout these texts. The value of power becomes linked to the previous emphasis on competition. The power that is emphasized in these advertisements is a power ‘over’ others, certainly not ‘with’ others. Power is repeatedly signified as a commodity, and as something that will allow users to gain a competitive edge. Advertisers then associate their products with these masculine definitions of power. Weakness is simultaneously devalued, and even mocked, as boldly illustrated by the Tradecast software advertisement that employs a battered man facedown after a brutal attack to signify what might happen to those who are weak and powerless (8.04:32; Appendix A). The opposing tension of strength vs. weakness is consistently used to signify products as tools of power. However, the implications for women are again great, as masculine conceptualizations of power ignore them. Because these tensions exist to create either association or distance, they, in effect, signify that anything that is not masculine/powerful is automatically feminine/powerless.
In addition, the importance of simplicity depends on the creation of the opposing tensions of ease vs. complexity. Technologies are positioned as logical, straightforward tools that can be used to solve problems directly rather than intuitively. Together, these texts consistently use males to position technologies within a masculine domain. Advertisers create associations between their products by highlighting simplicity and then creating distance between their products and complexity. These associations depend on advertisers’ use of common, everyday symbols of simplicity such as mazes (8.04:81), subway maps (8.12:34), and technological symbols like other technologies and technologized computer icons. The overwhelming use of ease vs. complexity illustrates how advertisers depend on simple imagery to signify masculine ideas about technology such as directness and logic.

Ideas about gender are more heavily negotiated within the values of connection and innovation. Here, contradictions about what it means to be feminine or masculine operate within both values.

Connection has been consistently linked with feminine values and as something that women strive for in their communication practices. However, these texts appropriate themes of connection and link them to masculine portrayals. Advertisers situate connection for informational purposes rather than relational ones. Technologies are positioned as business tools to gain networking power rather than as social tools that help people connect. The dichotomy of association vs. isolation helps to link technologies as products that will help businessmen connect in traditionally masculine ways. Technologies are situated as tools to gain control and power over others. The information gained through connectivity is also signified as a powerful commodity. Connection then becomes inextricably linked with the previous values of competition and power. Advertisers situate connection as something men use for control, rather
than as something women use to maintain connections. The conspicuous lack of feminine presence renders women absent from these uses.

Lastly, advertisers replay themes of innovation to promote their products. An emphasis was placed on human manipulation or control over what is natural, as illustrated by the advertisements that feature altered, dehumanized male heads (8.04:21; 8.08:48; 8.12:82). These ideas about technologies are enacted through the use of the opposing forces of what is natural vs. what is crafted. These altered, male heads serve as metaphors for man’s domination of nature. They create a technological culture that promotes control over that which is natural, whereby communication technologies become situated as the product of man’s innovation. Masculinity becomes embedded into this technological world through the replication of this metaphor. Femininity becomes associated with nature, further extending the metaphor of man’s control and domination.

Childbirth and childrearing have traditionally been situated within the female sphere. However, children as well as childbirth itself, are not signified as wholly feminine but instead are used to represent the multiple possibilities that are created through human innovation and manipulation of the natural. These signifiers extend the metaphor of man’s domination over the natural. Because these futuristic children are overwhelmingly male, potential is linked to a specifically male potential. References to the creation of life are appropriated as symbols of what is crafted (masculine), not that which is natural (feminine).

Gender and Sex as a Continuum

The human figures contained within Wired magazine advertisements transmit a number of negative stereotypes about femininity. These reoccurring signs are so thoroughly replicated as to become seemingly natural characteristics for women. These repeated significations can also be expressed as a set of dialectical tensions that help to position
technologies as being for males and not for females. These dialectics further contribute to a conceptualization of each set of tensions as sets of opposites. Difference rather than similarity is highlighted and masculinity and femininity become juxtaposed as opposing; and not complementary, forces. This progression is outlined in Table 3.

Table 3
Continuum of Sex and Gender Dichotomies

<table>
<thead>
<tr>
<th>User ↔ Onlooker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active ↔ Inactive</td>
</tr>
<tr>
<td>Male ↔ Female</td>
</tr>
<tr>
<td>Masculine ↔ Feminine</td>
</tr>
</tbody>
</table>

Table 3 illustrates the divisive categorization of that which is feminine from that which is masculine. A set of opposing forces signify ideas about sex and gender just as the five values of competition, power, innovation, simplicity and connection employ implicit tensions to signify ideas about gender.

As illustrated by Table 3, women were rarely shown using technologies, while men consistently were situated as users. The replication of these portrayals leaves little room for deviation and reflects a set of dichotomous relationships. Women are consistently portrayed as onlookers, so therefore, they are not associated with technology users. Their rare presence contributes to an environment that appears
unwelcome to those women who actually are technology users. These associations set the precedence for the next sets of continuum.

Women are also signified as inactive, while men are active. Those advertisements that contained both women and men overwhelmingly present men as the active focal point within the text. In great contrast to men, women are placed at the margins of the advertisements. They are literally and figuratively situated as technology outsiders.

The implicit tensions that operate within these texts signal ideas about sex and gender. The spectrum of signifiers that are used by advertisers can be plotted on a continuum between masculinity and femininity. Male-ness becomes intertwined with the masculine definitions of competition, power, innovation, simplicity and connection. These values are then continuously associated with the technological world. Female-ness becomes linked with those opposing forces that are distanced from advertisers’ products. Unfortunately, these are the very values that fall on the opposite end of the continuum and are consistently devalued and ignored.

Feminine Signification and Women’s Realities

A main focus of feminist criticism is to attempt to uncover how a particular text impacts women’s lives (Foss, 1989). Because of this, it is important to increase our understanding of how symbols within technological rhetoric function to promote patriarchal values. Uncovering these strategies is the first step in fostering awareness in hopes of providing ways to refute them.

The feminine is consistently under-represented and devalued throughout these texts. First, this occurs through marked differences in how women and men are signified. When women were present, they were repeatedly depicted as passive onlookers rather than as active users of technology. Women were also most likely to be used in the texts if men were also present; they rarely occurred alone but are instead
seen in mixed sex groups. In accordance with this, the vast majority of children who appeared within these advertisements were boys and not girls; never did a girl appear alone. The lack of women and feminine values within this rhetoric contributes to a climate that appears to be unwelcoming to women. Women are also denied a voice within this technological world, as these texts clearly present a stereotyped masculine perspective.

What may be more insidious and subversive to women’s realities is the absence of images of themselves in technological rhetoric. According to Fiske (1994), semiotic analysis holds that what is absent from a text is as important as what is present. Women become situated as unnatural technology users by their lack of presence. As communication technologies become increasingly important to organizational and social existences, this masculine culture may act as an integral, unspoken barrier for women. The perpetuation of dominant, compartmentalized portrayals of gender and race within technological rhetoric transmit inadequate gender lessons. These lessons are continued as girls are also consistently found to be absent from these texts.

This particular feminist reading of technological advertisements finds that these cultural texts largely perpetuate stereotypes for women and men. They also present unrealistic, constricted images of masculinity and femininity. These stereotyped images are clearer cut for women: they are either signified as passive onlookers or as sexual objects of desire. Feminist ideologies attempt to work against categorizations that contain such either/or dichotomies (see, for example, Crenshaw, 1997; Hill-Collins, 1986). Much feminist thought has addressed the inadequacies of binary characterizations such as these.

Men’s significations, however, allow for a much greater range of meanings. For example, men are signified as active users of technologies, spokesmen, bumbling users of technology, sports enthusiasts, average Joes, and idealized users. Both
systems of signification construct unrealistic meanings about what it means to be part of a technological culture. All of these significations rely on a dominant (white, young, heterosexual) coding system.

Women who read Wired may feel excluded from this glorious technological rhetoric as they interact with negative portrayals of themselves. This exclusion is even more complete for women of color. All of these negative portrayals rely on stereotyped images of an either/or status of white women as onlookers or as objects of desire. For female technology users especially, there may be such an absolute lack of positive images as to create a sense of disorientation between the portrayals and their own realities. When women are used in advertisements, their portrayals are so stereotyped as to be ridiculous. See, for example, the Adero advertisement that features a women-as-object portrayal (Appendix A; 8.04: 77). This advertisement illustrates the replication of outmoded marketing strategies that use sex (as signified by a young, white woman) to sell products to males. Because these images are so ubiquitous, both women and men may reject them as well as the implicit values about technology, femininity and masculinity that they transmit. Reading these texts as contrived, outdated images that bear no reality to women's realities can allow women to subvert the dominant meanings within them.

Implications for Feminist Rhetorical Theory

This research project was guided by Foss's (1989) framework of analysis. The first step analyzed how gender was conceptualized and constructed within the texts. Within this preliminary step, five gendered values were used to describe how masculinity was consistently highlighted while femininity was continually marginalized. Clearly, these texts transmit masculine perspectives of technologies. The second step then moved on to described the values and qualities that advertisers associated with femininity and masculinity. These are articulated through a set of
feminine and masculine signifiers. For example, men were consistently portrayed as active technology users while women were positioned as passive onlookers. The third step addressed the role of this analysis in fostering an awareness of the gendered values that exist within technological texts. It is hoped that this awareness assist in helping to begin to challenge stereotyped portrayal of women and men. The last stage of analysis focused on situating this particular study within rhetorical theory and is discussed below.

An analysis of technological rhetoric explicates how ideas about gender are created, negotiated and maintained throughout rhetorical devices. Wired magazine presents itself as a contemporary document of digital discourse. The focus on those advertising messages that are present within its pages provides insight into persuasive messages that promote communication technologies. This study informs rhetorical theory by focusing on how dominant, hegemonic codes about gender are transmitted through cultural texts through sets of dialectical tensions. An analysis of the dialectic tensions that operate within the artifacts contributes to a greater understanding of how symbols function within rhetoric and how femininity and people of color are coded as “other.” This particular reading of technological advertisements presents but one perspective that is grounded within feminist rhetorical criticism. As a result, it does not attempt to speak for all rhetors, or even all women.

Foss’s (1989) framework of analysis focuses on uncovering how gender as a social construct is presented in rhetorical artifacts. Differences between women, however, are downplayed within this method. It is imperative that conceptualizations of gender include other interlocking salient factors such as race/ethnicity, sexuality, country of origin, religion, (dis)ability, health status and socioeconomic status. Feminist critics of rhetoric must not merely acknowledge these but attempt to move towards an understanding of how they combine to impact women’s realities in unique
ways. Foss's framework can be extended to include how multiple forms of oppression work together within rhetoric to devalue women and their experiences.

Limitations and Future Research Directions

This study demonstrates the power of advertisements to promote gendered meanings about technologies. Clearly, advertisements within *Wired* magazine transmit masculine perspectives that describe how technologies should be used. However, this study is limited in that it only covers three months of advertisements within one magazine. It is constrained by the nature of its sample, taken only from *Wired* magazine and focused on the business aspects of technology. *Wired*, the self-described authority on all things technological, has a much more limited readership than that of a general interest magazine. Perhaps technology advertisements in other magazines present broader conceptualizations of technology users.

Another limitation is that this interpretation is grounded within my personal experience as a woman interested in technology issues. As such, my perspective is limited to my experiences as an educated, white woman who is immersed in the use of technologies. My interpretation, as such, is guided by these experiences. Similarly, the analysis was limited by my adherence to the use of semiotics and Foss's (1989) framework of analysis. This method downplays the crucial interaction of gender, race and class within technological rhetoric. Other theoretical frameworks would offer important alternative analyses that focus on these interactions.

Several additional lines of research might follow from this research project. For example, future research could address whether these same reoccurring masculine themes are found within a larger sample of technological rhetoric within general interest magazines. These magazines could range from an analysis of technological rhetoric within children's magazines, news magazines and women's magazines.
It is also important to investigate whether these same themes are apparent in other forms of media such as television commercials and Internet advertisements. Are these dominant images replicated across media? In addition to this, the rhetorical strategies that advertisers use to market technological products to women could be compared to those appeals used to entice men. Do appeals aimed toward women contain stereotyped values also?

Valuable insight on these issues could be gained through the use of focus groups or interviews with men. These research methods would allow researchers to record the experiences, perceptions and interpretations of those who are part of the target market of technology advertisements. Qualitative methods could also investigate the experiences, perceptions and insights of women within technological cultures.

The increased importance of technologies within social and organizational life also warrants an increased investigation of feminine access to technologies. It is crucial that future studies work towards building feminine conceptualizations and perspectives of technologies. What is lacking from current technological rhetoric are the voices of powerful, diverse women and girls. Communication researchers have given very little attention to the experiences of women who work and live within technological cultures. It is hoped that this study will stimulate further work in this area.
Appendix A

Selected Advertisements
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Telemisus is-responsive

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PM 10:45

DEBBIE
FROM DALLAS
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2000. 11.11.
PM 10:05

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