A MYTHIC PERSPECTIVE OF COMMODIFICATION ON THE WORLD WIDE WEB

Glendal Paul Robinson, B.A., M.A.

Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

May 2004

APPROVED:

Brian C. O'Connor, Major Professor

Linda Schamber, Major Professor

Lori Byers, Committee Member

Jud Copeland, Committee Member

Philip M. Turner, Dean of the School of Library
and Information Science

Sandra L. Terrell, Interim Dean of the Robert B.
Toulouse School of Graduate Studies

Robinson, Glendal Paul, *A Mythic Perspective of Commodification on the World Wide Web*. Doctor of Philosophy (Information Science), May 2004, 132 pages, 7 tables, 4 illustrations, 104 references.

Capitalism's success, according to Karl Marx, is based on continued development of new markets and products. As globalization shrinks the world marketplace, corporations are forced to seek both new customers and products to sell.

Commodification is the process of transforming objects, ideas and even people into merchandise. The recent growth of the World Wide Web has caught the attention of the corporate world, and they are attempting to convert a free-share-based medium into a profit-based outlet. To be successful, they must change Web users' perception about the nature of the Web itself.

This study asks the question: Is there mythic evidence of commodification on the World Wide Web? It examines how the World Wide Web is presented to readers of three national publications—*Wired*, *Newsweek*, and *Business Week*—from 1993 to 2000. It uses Barthes' two-tiered model of myths to examine the descriptors used to modify and describe the World Wide Web. The descriptors were clustered into 11 general categories, including connectivity, social, being, scene, consumption, revolution, tool, value, biology, arena, and other. *Wired* articles did not demonstrate a trend in categorical change from 1993 to 2000; the category of choice shifted back and forth between Revolution, Connectivity, Scene, and Being. *Newsweek* articles demonstrated an obvious directional shift.

Connectivity is the dominant myth from 1994 to 1998, when the revolution category dominates. Similarly, *Business Week* follows the prevailing myth of connectivity from 1994 to 1997. From 1998 on, the competition-related categories of revolution and arena lead all categories.

The study finds evidence of commodification on the World Wide Web, based on the trend in categories in *Newsweek* and *Business Week* that move from a foundational myth that presents a perception of cooperation in 1994 to one of competition in 1998 and later.

The study recommends further in-depth research of the target publications, a review of articles in less-developed countries, and content analysis and ethnography online.

ACKNOWLEDGEMENTS

Sincere thanks go to three individuals who helped make this dissertation possible. First, thanks to Shawne Miksa, for her insights on categorization. I would also like to thank Brian O'Connor for his numerous ideas on further study and his great aptitude for problem solving. Finally, my thanks go to Linda Schamber, for her coding help and her editing prowess.

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CHAPTER I

INTRODUCTION

The World Wide Web enables rapid dissemination of multiple forms of information regardless of geographic and cultural borders. This makes the Web a powerful instrument for change. This factor makes it important to note any significant shift in the dynamic nature of the Web itself. One of the areas of concern is the Web's changing relationship to corporate investment. As cultural imperialism and consumerism spread throughout the world market—a process often referred to as “globalization”—corporations continually are involved in the search for goods, ideas, and even individuals that can be packaged to be bought and sold, a process termed “commodification.” This process is changing the World Wide Web from its original intent as a medium for the free sharing of information to a profit-driven, pay-as-you-go entity.

Commodification is a term that only came into currency in 1977, but expresses a concept fundamental to Marx's understanding of how capitalism develops. According to Marx & Engels (1963), the survival of capitalism today is due to the corporate exploitation of the masses through cultural imperialism in a variety of forms.

Cultural imperialism is generally defined as the use of a nation's political and economic power to enforce its culture on another country at the expense of

that nation's indigenous culture (Weckert & Adeney, 1977). It encourages increasing demand for foreign goods, and fosters a consumerist mentality where the need to save money is overcome by the desire to emulate the rich (Study, 1977).

This study is presented in response to the following research question: Is there evidence of commodification on the World Wide Web? The concept of commodification is approached from a mythic perspective, which provides us with a powerful lens for identification of this possibility.

Hassan (1999) states that today's shrinking material world has led corporations to take commodification into "identity spaces" of culture and society. As the World Wide Web grows at incredible speed, it promises greater than ever facility for promoting cultural imperialism without a physical conquest (Weckert & Adeney, 1997). If corporations are successful in transforming this medium—which was originally conceived as a source of freely shared information for scholars and scientists—into another profit center, the Web will most likely be dominated by "the usual corporate suspects" (Mosco, 2000). Mosco predicts that a few new commercial content players may emerge, but for the most part the Web will become an extension and reflection of existing media corporations.

The possibility of progressive commodification on the World Wide Web has elicited concern. The Massachusetts Institute of Technology announced at a press conference on April 4, 2001, that it would make the materials from virtually

all its courses freely available on the World Wide Web for noncommercial use.

Paul Brest, president of the Hewlett Foundation, called for other educational organizations to “reinforce the concept that ideas are best viewed as the common property of all of us, not as proprietary products intended to generate profits” (Mellon, 2001).

Massachusetts Institute of Technology has taken on this massive enterprise with the help of \$11 million of grants because the school sees commodification of the World Wide Web as a real problem, especially in the area of education. They seek to challenge the perception that all things of worth should have a price tag. “Open CourseWare looks counterintuitive in a market-driven world. It goes against the grain of current material values,” explains MIT president Charles M. Vest (Mellon, 2001).

Margolis (2001) cites the success of online higher education as an example of the power of market capitalism. Market capitalism is pressuring students to find college degrees from any accredited program—“the cheaper the better”—and Margolis sees the “high-tech” universities of the 21st Century being hailed as yet another triumph of the free market. He believes universities, in order to survive, will need to: (1) downsize faculty by replacing classroom lecture with both asynchronous and simultaneous interactive sessions on the Internet; (2) minimize instructional laboratory needs and physical spaces; (3) cut research costs through digital libraries and networked computers; and (4) end tenure as we know it, using appropriate economic criteria to evaluate contributions by

professors. As examples of continuing hi-tech commodification of higher education, Margolis (2001) cites the success of the University of Phoenix, with 42,000 adult students, over 50 satellite campuses, and no tenured faculty; and the Western Governors University, a private, nonprofit institution founded by governors in 15 states, affiliated with big-name corporate partners such as Apple, IBM and Microsoft—and no teaching faculty.

Commodification and related aspects of corporate hegemony of the World Wide Web would transform much of the free-based culture of the Web into a culture based on pay-as-you-go consumerism. This proposed re-presentation of cyberculture is directly related to the mythology that represents and serves as the perceptual foundation of the Web itself. Evidence of commodification would strongly suggest such a transformation is under way, whether or not it is an overtly planned strategy.

Definitions

The first challenge that lies before this study is defining terms. The *Oxford English Dictionary* (1989) can help provide generally accepted terms, but (1) in the case of some words (such as *myth*) it cannot define the concept as used in a semiotic context; (2) does not provide definitions for Greek and Latin words used in the readings. In those cases, definitions come from elsewhere.

Culture is defined as “a particular form or type of intellectual development. Also, the civilization, customs, artistic achievements, etc., of a people, especially at a certain stage of its development or history” (OED, Vol. IV., p. 121, 1989).

Commodification is defined as “the action of turning something into or treating something as a (mere) commodity; commercialization of an activity, etc., that is not by nature commercial” (OED, Vol. III, p. 563, 1989).

Imperialism is defined as “the principle or spirit of empire; advocacy of what are held to be imperial interests. In nineteenth-century British politics, the principle or policy (1) of seeking, or at least not refusing, an extension of the British Empire in directions where trading interests and investments require the protection of the flag; and (2) of so uniting the different parts of the Empire having separate governments, as to secure that for certain purposes, such as warlike defence, internal commerce, copyright, and postal communication, that shall be practically a single state” (OED, Vol. VII, p. 712, 1989).

Myth Defined

It must first be said that the term *myth* here goes beyond the common misconception of something that is not true. For the purposes of this study, the concept of myth will be defined in terms consistent with Roland Barthes’ view of them as everyday semiotic connotation, rather than narrative. As such, myths exist independent of the history of the culture or medium, and avoid questioning the present state of affairs by disguising specific statements as universal truth. This approach allows an innocent primary level of meaning (denotation) onto which the myth is grafted as a secondary system (connotation). In addition, since the purpose of this study is to identify myths, continuing reference will be made to root metaphors and established analysis used in their study, as well as

Markham's (1998) proposed *connectivity-place-being* mythic continuum as cited later in this chapter.

Research often lacks a consensus on definition of myths and mythology. Myths have been defined as a collection of stories telling human beliefs and history (Analyzing, 1995), "manufactured" objects (Said, 1986), "actual presentations in terms of the ideal" (Gaster, 1984), and an "articulated body of images that give philosophical meaning to the facts of ordinary life" (Doty, 1986). Malinowski (1984) posits that myths should be studied as living phenomena.

While the *Oxford English Dictionary* limits its definition of myth to the generally accepted view of "a purely fictitious narrative usually involving supernatural persons, actions, or events, and embodying some popular idea concerning natural or historic phenomena," (OED, 1989) this definition does not consider myth in the context of semiology as presented by Barthes.

In *Mythologies* (1984), Barthes defines myth not as a form of narrative, but as a system of communication, a message, and a phenomenon of everyday life. He asserts that "myth" is not defined by an object, a concept, or an idea, but the way in which it is expressed. According to Barthes, a tree is just an object until it is used to express another idea; it becomes the carrier of concepts, whether it is a tree that is decorated, adapted to consumption, or laden with images of nature. It becomes imbued with a type of "social usage" that is added to its material form and substance.

Saussure, the father of semiology, conceived of the *sign* as the union of the *signified*, a concept, and a *signifier*, the symbol used to manifest that concept (Moriarty, 1991). These three elements together establish the foundational basis for semiology. Barthes (1984) sees myth as a second-order semiotic system built upon the principle of connotative meaning “engrafted onto a denotational level of meaning.” That which is a sign in the first system, the associative total of a concept and an image, becomes a mere signifier in the second system. The content of a myth is “ideological, determined by history,” and therefore more than its content. As such, myth pervades writing, photography, film, reporting, sports, publicity, business life, and objects of daily culture.

Barthes sees the use of mythic messages as “seizing on a certain sign for its own ends while sheltering behind the initial literal significance of the sign,” and therefore finds it ethically objectionable, a “theft of language” (Moriarty, 1991, 24).

There are parallels between the concept of myth and the concept of root metaphors, which is tied to organizational communication. While metaphors tie an organization or an experience into a general object (“the Web as a family”) on a surface level, root metaphors are images of underlying themes at the foundation of shared experience.

The concept of root metaphors comes from Stephen Pepper’s *World Hypothesis: A Study in Evidence* (1942). He argued that the origins of philosophical systems contained common referential concepts (form, machine,

context, organ, insight, and authority) that were useful in making sense of the world. *Form* as a root metaphor focuses on categories. *Machine* as a metaphor focuses on how things work. *Context* is preoccupied with “immediate, fused experience of the here and now,” while organ is a holistic root metaphor emphasizing integration. Insight makes reference to unmediated, intense, mystical experience, while authority is an absolute perspective based on what we are told, rather than by evidence (Álvarez, 2002).

Each of the root metaphors carries a different spirit and captures a different understanding about reality. Pepper (1942) posits that each of the root metaphors contributes a unique lens for seeing reality, but any phenomenon will be better understood if it is seen in light of all of the lenses.

Markham (1998) states that myths dealing with life online fall into a continuum. At the entry level is the pragmatic view of the World Wide Web as a *tool for interconnectivity*, such as when using e-mail. The next level of myth portrays the Web as a *physical location*, a place behind the computer screen, such as cyberspace. The final stage of the continuum perceives the Web as a *way of being*, with reference to alternate identities online.

Finding and Identifying Myths

In this study, descriptors—words and phrases that add color, definition or understanding to a passage—were identified and categorized as the manifestation of myths. These descriptors were extracted from three leading print

media publications that would likely have had a significant influence on, as well as reflection of, their readers' view of the developing World Wide Web.

The three publications—*Wired*, *Business Week*, and *Newsweek* magazine—were chosen because of their audiences they serve: the Web-savvy technology leader, the issues-minded executive, and the middle-class consumer. *Newsweek* reportedly appeals to readers interested in “the week’s developments on the newsfront of the world and the nation through news, commentary and analysis” (SRDS, Oct. 2003, p. 582). *Business Week* provides a “global and local perspective on current business issues and events, economic trend projections, and technology coverage related to all business” (SRDS, Oct. 2003, p. 184). *Wired* “reaches technology and business leaders” to identify “future technologies and trends impacting their business.” (SRDS, Oct. 2003, p. 200).

Textual analysis was chosen for two reasons: (1) the project deals with change over a period of eight years (1993-2000), whereas the transitory nature of the Web precludes longitudinal content analysis online, especially in retrospect and (2) the first information most present-day Web users had regarding the Web was via print media.

Most research regarding life online has taken the form of ethnography, with the intention being to view life online as it unfolds before the researcher. Little, if any, research has been done on a symbolic level, likely because research on the World Wide Web is still in its infancy. At the same time, most research into myths has dealt with the deconstruction of myths to identify the

psychology behind them, rather than attempts to identify the myths themselves.

The identity of myths is taken as a general assumption and is based on the criteria used to define a myth.

The next chapter provides a literary foundation for this study.

CHAPTER II

THE LITERATURE IN REVIEW

The approach of this study is interdisciplinary in nature, with one discipline building upon another. Because of this, the literature under review is both extensive and broad ranging. The structure of the concept under consideration begins with commodification, what it is, and how it presents itself in the world today. Authors here include Marx, Habermas, Yerxa & Moll, Washabaugh, and Underwood. The discussion continues with the larger picture of cultural imperialism, what it is, how it works and how it affects people and perspectives. Included in this discussion is the ongoing conflict in our society and the world between *Gemeinschaft* and *Gesellschaft*. Authors cited in this discussion include Tönnies, Bellah, Habermas, Vitali, and Varian.

Media, including web history, as well as the cross-examination of media and myth, media and culture, and media and imperialism, are examined next, including comments and perspectives of Bell, Braman, Gerbner, Grossweiler, McLuhan, Stone, and Weckert & Adeney.

Then, discussion turns to the subject of myth, including definition of myth and purpose of myth. Barthes and Markham are the primary sources here, but are joined in the discussion by Campbell, Chesebro, Lakoff & Johnson, Levi-Strauss, Malinowski, and Wittgenstein. Finally, methodology is discussed, including a lengthy explanation of myth and semiotics by Barthes.

Figure 2.1. The flow of literature starts with the concept of commodification, includes discussion on cultural imperialism and media, a review of myth, and finally methodology, including semiotics.

Web History

In order for commodification to gain a foothold in the World Wide Web, consciously or subconsciously the nature of the Web would need to be perceived in a different manner than it was originally. Growing from a vehicle that was designed to provide the free sharing of information between scholars and scientists throughout the world community, the Web was gradually transformed into a mass medium with money-making potential. Commodification is the process of creating products to be sold, and the Web was no exception. But how could corporations make money from a vehicle that was free? The only way they could do that was to recreate the Web in the minds of consumers. That recreation required that the myths associated with the Web be reconstructed, taking advantage of other forms of mass communication—in the case of this study, three print publications. The reconstruction of those myths is broken down into categories, mythemes, and in even smaller portions, descriptors.

An examination of World Wide Web developments for the period of 1993 to 2000 establishes a foundation for analyzing the findings of this study. Growth statistics give evidence to the phenomenal growth of the WWW and its significance for the Internet.

In 1993, an estimated 130,000 people worldwide used the Internet. By the year 2000, that number had grown to 304.3 million estimated users, an increase of 234,000% (see Table 2.1).

Table 2.1 shows the two greatest relative increases in use of the Internet.

Table 2.1.

Users of the Internet (estimated)¹

1993	130,000
1994	4.5 million
1995	20-30 million
1996	24-37 million
1997	57 million
1998	147.8 million
1999	171 million
2000	304.3 million

The first came in 1994, the year after the World Wide Web and graphic user interface (GUI) first became generally known to the public (an increase of 3,361.5%). The second came between 1997 and 1998, when an apparent critical mass in growth took place. Use roughly doubled between 1996 and 1997 (46% to 138% increase based on 1996 rough estimates), but it showed a 159% increase between 1997 and 1998. Growth rate did not continue to increase in later years.

A large part of the growth of the Internet and WWW came simultaneous with

¹ Sources: www.Internetindicators.com/facts.html and State of the Internet (United States Internet Council) www.usic.wslogic.com.

greater visibility in electronic and print media. *The Reader's Guide for Periodicals Index* shows the following number of articles on the topic "Internet" in Table 2.2.

Table 2.2.

Readers Guide References to Internet

1993	20
1994	112
1995	476
1996	978
1997	1253
1998	1421
1999	1321
2000	1734

Again, the number of articles regarding the Internet increased significantly until 1998, when interest slowed down (1401% annual average since 1993; 13.4% annual increase in 1998). The year 1999 was the first and only year where the number of articles dropped (-7.6%). The number went back up in 2000 (31%).

Apparently, something significant happened in the 1997-1998 period. To understand this, one needs to understand the brief but rapid history of the World Wide Web. According to Segaller (1998), three events coincided to make the

Web what it is today. First, in 1990, Tim Berners-Lee wrote software for the first World Wide Web browser for use in CERN, the European organization for nuclear research outside Geneva, Switzerland. The next year CERN published the code on the Internet, making it free to anyone who would copy it. Second, commercial use of the Internet was initially forbidden by federal law. The signing of the Boucher Bill into law by President George H. W. Bush on November 23, 1992 changed that, and allowed products to be promoted and sold on the Internet. Finally, in 1993 John Doerr developed the Mosaic browser. This first attempt at a graphic interface made the Internet accessible to the average person.

When Netscape Navigator hit the market in April 1994, started by developers who had worked on Mosaic, it took the revolution from a skirmish to full-scale war. Within 18 months Netscape had 65 million users for its Navigator. The Netscape story was financial history in the making as well. In three years, Netscape stock gave initial investors a 29,500 percent return on investment.

Netscape's overnight success caught the attention of other investors, resulting in an Internet feeding frenzy in 1995 and 1996. Virtually anyone with an idea for a Web business could find financial backers. With more money came more website, more access and more reasons to be online. The acceleration of the Web phenomenon was fueled by money, technology, and the growing critical mass of major industry players.

By 1997 and 1998, the Web had grown in size and maturity so that more and more people were familiar with what the Web was, and what it could be. More technology and more websites gave more people reasons to be online. And the obvious public interest resulted in a peaked interest by both Wall Street and mass media.

Commodification

Commodification is the transformation of non-commercial relationships into relationships of buying and selling (Encyclopedia, 2003). Examples of commodification include (1) the socialization of so-called women's labor, with work such as preparing meals, caring for children, repair and cleaning clothes now being purchased on the market; (2) the privatization of government services, with education, public transport and health care being provided on a "user-pays" system instead of as public service; (3) the commercialization of scientific and cultural activities; (4) the professionalization of amateur sports; (5) and the corporatization of organizations, with internal accountability being replaced by one-line budgetary mechanisms (Encyclopedia, 2003).

The notion that international corporations will provide public good is in contrast to history as well as accepted laws of capitalist production (Yerxa & Moll, 2003). In 1995, political discourse in the West led to the conclusion that market-driven decisions would provide society with the resources necessary for a healthy democracy, including education, health and social programs, secure jobs and open, effective communication. In this new relationship, information is

increasingly seen as a resource to be exploited, culture is commodified, and communication is facilitated subject to market constraints (Yerxa & Moll, 2003).

Under capitalism, according to Marx, everything becomes a commodity; everything can be sold. The principle focus of production under the new capitalism is not the production of *use* value (how does it benefit the individual or society), but on the production of *exchange* value (profit, endless accumulation for no other purpose than to accumulate). Information, like everything else, is commodified. It becomes increasingly bought and sold in the same nature as toothpaste and cornflakes (Underwood, 2003).

According to Shrybman (2000), if water is foreseen as the most vital resource of the 21st Century, and oil and gas as the most strategic, then information may be the most valuable. The degree of value depends on how successful lawyers and courts are in transforming information into a unified, international system of property rights that are codified and can be protected by law enforcement worldwide.

Former Citibank CEO Walter Wriston states that we live in an era where money is based to information, rather than silver or gold. The market knows how valuable or worthless each corporation is by simply pressing a button, as all the world's financial data is now online. Wriston refers to these changes as "the third great revolution in the history of the world," following the revolutions of agriculture and the industrial revolution. According to Wriston, intellectual capital is far more

important than money itself. And with this “complete change in the concept of wealth,” comes inevitable political change (Bass, 1996).

Washabaugh (2003) describes the process called “disembedding” by which modern artifacts, practices and persons are objectified; alienated from their social contexts. Disembedding takes experiences out of their social and historical beds, removing them from often complicated and confusing circumstances and forgetting those circumstances, while backing those objective elements into a new reality. In this way, everything that ends up “real” does so through negation. Objects emerging from this process are considered valuable because they can be acquired, owned, and exchanged minus the baggage of social relations normally associated with them.

Cultural Imperialism

Weckert & Adeney (1977) define cultural imperialism as “the use of political and economic power to exalt and spread the values and habits of a foreign culture at the expense of a native culture.”

Schiller (1976) explains that cultural imperialism develops in a world economic system, with the terms and nature of production determined at one location and fostered elsewhere. Those who purchase goods in a world market are also buying into the ideology of the world capitalist economy. The world market effectively promotes and develops support for the values and artifacts of the system.

From a Marxist perspective, Habermas (Schindler, 1996) states that the issue of promoting consumerism starts due to the continuous accumulation of capital without adequate consumption of goods, as well as the strategic use of capital to augment the value of surplus goods. Manipulation of the marketplace leads to “commodity fetishism,” which is a redirection of class antagonism into a desire for material goods.

Cultural imperialism is used to (1) increase demand for foreign goods; (2) depress growth within local industry; and (3) foster a consumerist mentality where the need to save is overcome by the desire to emulate the foreign rich. Once such a desire is instilled in this market, the corporations (4) widen and consolidate their market by investing in merchandising facilities and sales promotion. Their goal of establishing a preference for their goods in the local economy means that they are involved in the international transmission of values. (Study, 1977).

According to Gibbons (1985), many developing countries have challenged the fundamental bases of international communication. Information can flow freely with a lack of impediment and with sufficient channels, but the free flow of information is meaningful only to those countries that have the channels. Information is closely related to economic hegemony and the extension of power and influence. Those countries use information as a means to further national, economic and political objectives.

Information flows from rich countries to poor countries, following old colonial routes, continuing patterns of economic and cultural domination. Whereas in the active period of colonial expansion flag followed trade, today it is equally true that trade follows communication channels (Gibbons, 1985).

Change is not necessarily inherently negative. Change based on cultural contact is only negative if (1) the culture in question is not in control of the change; and (2) the culture is not receptive to change. The Navajo Nation historically has had a high tolerance for cultural diversity, as well as a history of adopting technology from external cultures (Vitali, 2000).

World War II signaled a turning point in Navajo history. The need for Navajo code talkers, war-related employment, and increased exposure to the outside world resulted in a rapid increase in cultural change. The 1950s brought cultural change through the development of Navajo as a written language, and mandatory non-Navajo education of Navajo children (Vitali, 2000).

Cultural leaders learned to use technology to help foster and reinforce the status quo. The heart of bilingual and bicultural education for Navajo children is the understanding of the Navajo identity “because all future success is dependent on knowing their culture, language and who they are” (Vitali, 2000).

Rather than resisting modern technology, especially the Internet, and its ties to Anglo culture, the Navajo Tribal Council has learned to embrace it. A nation-wide computer network system will eventually link all 110 local communities and schools with the Tribal Council, Bureau of Indian Affairs, Diné

College, and Indian Health Services. It is perhaps the oral tradition of the Diné people that makes them comfortable with an electronic medium that is said to be oral in nature (Vitali, 2000).

Good or bad, it cannot be denied that those with continuous exposure to the Net are subject to change. This rapid change is directly related to the incredible speed with which the Internet has grown in the 1990s. It is easy to assume that the Web boom and bust of the 1990s has no precedent, but it actually is consistent with other technology-related businesses. Varian (2000) cites the examples of both the railroad industry in the 1880s and 1890s, and the fledgling auto industry between 1904 and 1910. Both started with a promising boom; both saw numerous bankruptcies within a few years.

Varian explains this, as well as what happened to Net investments in the 90s, by explaining the effect of fixed costs. Growth—railroad, auto, or Net—determine the fixed price based on expense of development—new rail lines or new fiber-optic cable. Once those lines or products are developed, prices are no longer fixed, cutthroat competition lowers prices, and bankruptcies are rampant.

McChesney (2000) states that the concept of a fair market is based on competition, but the key to success in the market is eliminating competition. Successful capitalists learn to avoid competition, because the less competition there is, the less risk a firm faces and the more profitable it tends to be.

According to Reimer & Rosengren (1990) there are eight main

socialization agents in society, including family, peer group, work group, church, law, school, large organizations and interest groups—and mass media.

In summary, cultural imperialism is defined as the use of political and/or economic power to spread values of foreign culture at the expense of a native culture. It develops in a world economic system with nature of production determined at one place and fostered elsewhere. The purchase of goods may result in the buying into the ideology and values of the capitalist economy responsible for those goods. Many developing countries challenge the basis of international communication because the flow of information benefits those countries that control communication channels. Information flows from rich countries to poor countries following old colonial routes and traditional paths of domination. The issue of promoting consumerism starts with an accumulation of capital, a surplus of goods, and the use of capital to heighten the value of those surplus goods. This promotion of capitalism—and the corresponding promotion of an ideology—goes beyond nationalistic boundaries and objectives.

International corporations that use the media to promote their products are imposing their consumerist culture on citizens in the U.S., Europe and elsewhere in the world, with the sole intention of cultivating a market for their product—regardless of where they live.

Gemeinschaft v. Gesellschaft

The conflict between a mass-media produced, worldwide culture and locally grown values echoes Tönnies's concept of *gemeinschaft* (community) and

gesellschaft (society). The concepts were developed to explain the transition from predominantly rural societies integrated by traditional obligations to industrial cities that grew from the capitalist market economy (Friedland, 2001). Wirth (1938) argued that the face-to-face primary bonds of family, kinship, and neighborhood (*gemeinschaft*) are being displaced by the secondary relationships of competition and formal control (*gesellschaft*).

In his theory of communicative action, Jurgen Habermas (Friedland, 2001) presents a two-level construction of *lifeworld* and *system*, with lifeworld representing those social arenas where culture, personality and institutional legitimacy are formed through communicative action, and system is composed of those arenas where integration takes place through money and power, rather than through communication. All communities, according to Habermas, lie at the seam of system and lifeworld. The community's capacity for democratic action is based, on one side, by its relation to larger political and economic systems, and on the other side by its communicative integration, or latitude for internal dialog.

Bellah, Madsen, Sullivan, Swindler & Tipton (1996) argue that community is made difficult in the United States because of the prevailing ideology of individualism. Expressive individualism stresses the exploration of self-identity and the search for authenticity, with the first leading to the pursuit of self interest and the second to hedonism and consumerism, eventually both resolving in a society oriented toward consumption as the primary standard of the good.

Frohn (1997) argues with Bellah, et. al.; not about the dangers of individualism, but with the solution to America's problem. Bellah bases his historical view of American society on Alexis de Tocqueville's view of America in the 1830s. Frohn argues that while Tocqueville sees family as the solution to individualism, Bellah calls for political action through social democracy.

Bellah seeks to reconnect Americans through communities of social memory, stating that common concerns grow from common memories of shared events, pains and joys. Frohn's concern is that Bellah's proposed communities are not based on a shared past, but on a subjective memory accepted as true.

Bellah (Frohn, 1997) states that the root problem is economic individualism, or the belief that economic success or failure is the individual's own responsibility, which has led to excessive economic inequality and deprivation. This constitutes a "war against the poor," with the upper class disenfranchising the poor.

Frohn states that Bellah's social democratic agenda has colored both his understanding of de Tocqueville's view of individualism and the inherent danger, as well as the most logical solution.

Media and Imperialism

Rather than the "public sphere" disappearing in post-liberal societies, the flow of communication that once made public discussion and self-understanding possible for citizens has been taken over and steered by the mass media (Habermas, 1981). Powerful images and sounds allow electronic media—first

film and radio, television and now the Web—to completely “permeate and dominate” the language of everyday communication. It “transforms the authentic content of modern culture into the sterilized and ideologically effective stereotypes of a mass culture that merely replicates what already exists” (page 389).

Mass media uses up a culture cleansed of “subversive and transcending elements” for an encompassing system of social controls, spread over individuals, and both reinforcing and replacing weakened internal behavioral controls. The “culture industry” of mass media is viewed as a reflection of the psychic apparatus. As long as the internalization of paternal authority is still functioning, instinctual nature is subjected to the control of the superego much as the technology has subjected outer nature to its domination (Habermas, p. 389, 1981).

According to Carolan (2001), those able to create culture possess superior cultural capital compared to those who simply experience the products produced by others. The categorical distinction between those who produce and experience culture has been maintained by limiting access to the tools necessary to produce and disseminate cultural products. Further, Carolan asserts that technology can be viewed as part of the social system, a sign from which actors cannot separate their subjective states of mind. While most analyses of technology suggest that technology is a “force of production,” a deeper analysis

of technology views it as discourse, a system of signs subject to semiotic constraints and responsive to social and psychological demands.

Just as in the late 1800s the rapidly vanishing wilderness led Americans to shift their concept from a geographic frontier to an economic one (Procter, 1992), corporations have altered their approach toward commodification. Hassan (1999) states that finite geographic space has led them to take commodification into “identity spaces” of culture and society.

Fingar (2001) states that the new economy operates in a space rather than a place, and over time more and more economic transactions will migrate to this new space. People will inhabit places, but increasingly the economy inhabits a space. The truly revolutionary impact of the Information Revolution is just beginning to be felt, as e-commerce transforms the Internet into the major, worldwide distribution channel for goods, for services, and, surprisingly, for managerial and professional jobs.

According to Schiller (1976), technology has been highly successful as a tool of cultural imperialism because it is viewed as simply hardware and software—neutral, value free, and employable under any social order. Along with that technology comes the concept of the free flow of information, which promises benefits for anyone in that flow, but exercises domination of the weak by the strong.

Bell (1976) states that although capitalism rose historically with democracy, there is no theoretical or practical reason for the two to remain

inseparable. Cultural transformation of modern society is due to the rise of mass consumption, based on the diffusion of “luxury” items to the middle and lower classes. This process redefines past luxuries as necessities, so that eventually it becomes inconceivable that anyone could live without the object. Hand in hand with the redefining process comes the acceptance of installment selling. Before World War I, installment selling was viewed negatively because (1) it was traditionally directed at the poor who could not afford major expenditures; and (2) it was equated with debt by the middle class, who considered it wrong and dangerous. With growing consumption came the rising wealth of the plutocracy, and the realization that work and accumulation were no longer ends in themselves, but means to consumption and display. In the 1920s, the rise in mass production and consumption transformed middle class life, replacing the Protestant ethic with a materialistic hedonism.

Webster (2000) purports that the information age is not the beginning of a new type of society, but the continuation, consolidation and extension of capitalism. The more it develops, the deeper it invades the private realms of everyday life. It continues to institute its basic, defining principles: (1) status based on ability to pay; (2) commodification of relationships; (3) production for profit; and (4) private ownership of property.

This is not to say that the World Wide Web does not provide unprecedented opportunity for two-way communication in our society. Never before has a medium allowed for small voices to be heard on an international

scale. In that sense, the website constructed and posted by the 10-year-old living in South Chicago is just as available to public exposure as a site developed by a multi-billion dollar international conglomerate in Los Angeles. However, money continues to be the driving force behind the Internet, and corporations continue their relentless search to find ways to make money via this new medium. This search is making it increasingly difficult to use the Web without some impact from corporate interests. Examples of this are banner and pop-up ads, cookies that farm identities for pursuit by e-mail, and the for-profit entities that provide search engines we use to search and communicate on the Web. Increasingly, even the most extreme counter-capitalist web traffic and sites are being impacted by corporate interests online.

In a sense, capitalism and the market have assumed mythological status (McChesney, 2000), bringing with it not only material gain but “elements of truth”. It has come to the top because it best serves the interest of the dominant elements of our society, while harming few if any powerful interests. Because of these factors, the “mythology of the free market” goes unchallenged, even as it is adopted into new spheres of influence—such as the World Wide Web—without any public debate on the subject.

According to McChesney (2000), the view of a future Internet utopia is based not only upon the magic of technology, but on the assumption that capitalism is a fair, rational, and democratic mechanism. Grossweiler (1998) notes the struggle between private/corporate control of the Internet and

public/state control. He predicts that corporate media will assume control on a global scale as it has other media. The Internet can benefit corporate media by enhancing and extending their control, especially on a global scale, for it can leap over national boundaries in ways television cannot. At the same time, their control will broaden the gap between the haves and the have-nots.

The Internet promises greater facility for promoting cultural imperialism than ever before without a physical conquest (Weckert & Adeney, 1997). Four reasons: (1) dominance of English on the Internet; (2) cultures are being swamped by foreign ideas; (3) cultures are having difficulty controlling what comes into their countries; and (4) education, a heavy user of the Internet, can be a strong facilitator of cultural imperialism.

Modern technology has effectively eliminated space and time constraints from the communicative process (Burgelman, 2001). Westerners can know everything as soon as it occurs and can say anything to anyone wherever they are. The phrase “global village” takes on new meaning, as we no longer live according to the rhythm of our village, but according to the pulse of the world.

Pelton (2000) states that the new millennium signals a new paradigm. The speed of the global economy and the scope of human knowledge are not merely increasing, but are growing in mathematical terms, in “fourth-order exponentials,” or leaps and bounds on an astronomical scale. This is leading to a “state of ‘jerk’ and ‘chaos’.” This is a time with an increasing rate of acceleration where nonlinear math and fractals reign supreme and traditional “common-sense”

knowledge increasingly retreats from the invasion of new and non-traditional intellectual ideas.

Stone (1995) reminds us that cyberspace extends beyond simulations, military experimentation and computer-supported work to a “space of pure communication, the free market of symbolic exchange.” Braman (1996) states that the idea of globalization is historically linked to notions of universalism, which is traced back to Durkheim. He argued that as societies expand and increase in complexity and degree of social and cultural differentiation the only thing that will be shared is our humanity. Wallerstein’s world system theory sees a global whole out of which the entities that identify themselves as states have emerged, with capital as the driving force in the globalization process.

Media and Culture

Guirdham (1999) defines culture as a historically transmitted system of symbols, meanings and norms. The essential core of culture consists of traditional ideas and their attached values. Worldview is how culture sees abstract, universal ideas such as God, humanity, nature and the concept of being. According to Guirdham, national tastes are disappearing from Tokyo to London, due to a steady diet of satellite-fed TV, movies and music that promote a consumerist culture and worldview.

Wilson (1999) posits that a person’s worldview—specifically one’s occupational and institutional structure—determines the amount and kind of knowledge to which a person has access. A farmer who has lived and worked on

a small farm in Texas his whole life is more apt to know the details about rural life in that region than someone who lives and works as an accountant in New York City. Wilson states that the size of the job, the amount of independence and responsibility, the amount of personal interaction, and the size and structure of the organization where the work is done strongly influence the amount of knowledge accumulated, as well as the kind and amount of knowledge required to function. One's position either inside or outside the world of work determines one's view of what knowledge there is and where to find it. The occupational structure of a society and its distribution of specialized knowledge obviously do not account for the social distribution of all knowledge. But according to Wilson, it is a generally systematic, knowable and usable basis of distribution (Wilson, 1999).

According to McLuhan's concept of electronic technology, it has become an extension of our senses—the phone and radio an extension of our ear, the television and computer extending our eye further than ever before. McLuhan suggests that through our extended senses we can experience events on the other side of the world as if we were there in the same physical space. McLuhan believed that time had ceased, that we live in a “global village, a simultaneous happening.” The village represents community and the idea that we can all have a role in shaping our global society. One of the greatest promises of the Internet is that it has the potential to break down centralized power, helping to form an integrated community with more shared responsibility. (Symes, 1995).

Berber (1992) suggests that the world is presently faced with a choice between globalism and tribalism. Tribalism is driven by parochial hatreds, recreating ancient ethnic borders from within. Globalism universalizes markets and makes national boundaries porous from without. Despite the claims of corporate technocrats, democracy is threatened with a dark future regardless of which viewpoint wins. Berber emphasizes that both regionalism and consumerism are unrelated to the ideals of democracy, and neither needs democracy to succeed.

Based on current trends, Mosco (2000) states that the World Wide Web will likely be dominated by “the usual corporate suspects.” He predicts that a few new commercial content players will emerge, but evidence supports the premise that digital content will appear quite similar to that of the pre-digital commercial world. In many ways, the Web is an extension of existing media and an opportunity for the unprecedented growth of advertising.

Stoll (1995) comments on the myth that the Web will bring diversity, culture and novelty into classrooms and homes. He likens it to the rapid expansion of cable television systems, where 500 channels promise to offer entertaining and informative programming from hundreds of options. But the 500 channel system delivers “unfathomable and boundless mediocrity,” because production values decline as less money is spent per program.

The birth of the World Wide Web in 1991 brought the Internet within reach of tens of millions of consumers, and resulted in various attempts to financially

profit from it. But business models based on other media—banner ads and audience segmentation—have yet to show a profit.

The one exception to that—according to their founders—are porn Web sites. Most premier X-rated sites do not settle for profit margins below 20 percent (Van Grinsven, 2000). It is estimated that in 1997, about 50 sex sites grossed \$1,000 a day or more, 20 of those took in \$3,000 or more, and less than a dozen earned more than \$5,000 a day. These big-bucks operations are run by marketing professionals, and make their money through a combination of membership fees and sales of goods and services (Rose, 1997).

According to Sholtz (2001), it is personal information, and not advertising, that fuels the Web. Packet-switched networks provide a far deeper, more detailed dialog between buyers and sellers than ever before. Invasive interaction with web surfers allow sellers to collect accurate, detailed, profile information on potential buyers, and in turn use it to update product line and target products more effectively.

Cringle (1996) states that the Internet is not a business and was never intended to be one. The Internet is an academic experiment from the 1960s to which society is attempting to apply a business model. The most significant challenge in this endeavor is the fact that there is no structural hierarchy to the Internet and it is not centrally managed. Rather than envisioning the Internet as a tree or a grid or a ring, the Internet is most accurately and commonly described

as a cloud. A map of the Internet does not exist, and no one even tries to draw one. This structure is hardly conducive to a business environment.

Rawlins (1996) expresses concern about the secrets stored in and protecting information in hospitals, banks, insurance companies, communications networks, psychiatric wards, and police departments that control access to restricted areas, school grades, currency transactions, nuclear weapons, stock exchanges, and voter registration rolls. They control the intimate workings of the government, military, mint, air traffic control and power stations. As society swims in a sea of “invisible secrets,” each time someone creates a file and makes information electronic while leaving only traditional protections, that simply makes it easier to access.

He further states that computers will not bring about a better world, but they can certainly change the world—for both better and for worse. By changing things right before our eyes, technology lets us see more clearly who we are by seeing what we value. Unfortunately, often “what we see is the ugly side of human nature” (Rawlins, 1996).

The significant difference between media in the West and in developing countries is in its financial support. For the most part, Western media is privately owned with resources coming largely from principal clients and sponsors, the advertisers. In Third World countries, private investment is scarce. Rather than media representing private establishments, they are the cultural arms of the public, mostly of governments. Media define freedom as the relatively

unrestricted ability to serve their clients—public or private. The ongoing media discussion about conflict of interest between a few centers of power and the majority of humankind has shifted from an anti-communist stance to more emphasis on the great and growing gap in freedom between the world's rich and its poor (Gerbner, et. al., 1993).

Braman (1996) identifies the Internet as the single largest machine in human history, and states that access to the Net is clearly demarked along socioeconomic, educational, cultural, gender, and geographic lines. The Net is both a source of knowledge and of innovation itself, and is getting bigger, faster, and smarter all the time.

The hacker counterculture uses the development of computer viruses and electronic breaking and entering to make an ideological statement. According to Ross (2000), hackerism is a principled attempt to challenge the use of technology to form information elites. First articulated in the 1950s, the hacker ethic is libertarian and “cryptoanarchist” in its right-to-know principles and its advocacy of decentralized technology.

The World Wide Web allows direct marketers to come into people's homes and offices and buy privacy, changing the scale of intrusiveness to something never before contemplated. Harvard Law Professor Arthur Miller feels that the possibility of hackers stealing data is a much smaller threat than the free movement of personal information in the economic system. Information is so valuable, business circumstances are unpredictable, and when a dotcom folds,

often the only asset they have is their customer base. Thus they have every incentive to sell that, often with information that is very intrusive. An example of this danger is the rampant, uncontrolled use of cookies that give corporations information about the susceptibilities of consumers (Bass, 2001).

Media and Myth

Mortensen (1972) suggests that man lives simultaneously in two realms of experience, the physical and the symbolic. Physical facts do not speak for themselves, but are acted upon based on our understanding of the way things really are. Reality results in some constraints; thinking that fire is edible does not make it so. But the conception that one has of the world determines what one attempts to do with it. And since communication can act upon that conception, it can act indirectly on what people do and upon what happens (Whiting, 1976).

Two Internet myths trace their origins to the hacker counterculture, according to Ross (2000). The image of “rebel with a modem” romanticizes the hacker lifestyle as a maverick though nerdy cowboy who fearlessly raids an impersonal system. A specific example shows computer engineers falling into language viewing themselves as the “good guys” in the white hats as they built their machine, competing with another firm in North Carolina, referred to as the “bad guys.” The second—“1984”—views new cultural technologies as monolithic, panoptical social control achieved through a smooth, endlessly interlocking system of surveillance networks.

The origin of the term “hack” is obscure, but has been used since the 1950s by various groups of students on the campus of Massachusetts Institute of Technology (Peterson, 2003). “Hacking” was used by many students to describe any activity to avoid studying—goofing off, playing cards, talking to friends—but only as part of the broader definition. Later it was defined as doing something out of the norm, as activities that tested limits of skill, imagination and wits, or as the unusual and original solution to a problem. Hacking meant investigating a subject for its own sake and not for academic advancement, exploring inaccessible places, and performing pranks. Over the years, the concept of hacking has developed its own culture, rites and established norms.

Turkle (1995) refers to the intuitive faith of space behind the screen among those who work on computers. She also views the Internet as a giant brain, self-developing, with computers and people as its neural net. In an earlier work, Turkle (1984) states that individual meanings of computation are shaped by the group as they emphasize certain modes of relating to the computer, and in effect, mythologizing them. Turkle concludes that social setting, rites of initiation, economic niche and how they relate to artifacts all contribute to the expression of the group’s mythology. Mosco (2000) acknowledges the myth that computer communication forever ends spatial constraints, observing that converging technology simply allows “the ubiquitous exchange of information from the simplest two-person exchange to the operation of a multinational conglomerate.” (p. 38)

Psychologist Jean Piaget asserted that children develop theories on how the world works through their interactions with the objects around them. The ability to understand is related to the level of “transparency” of the object, or how it works as seen through its physical structure. Children accepted and understood computers by thinking of them as psychological machines. Thus the boundary between mind and machine is successfully bridged (Turkle, 1997).

Examining myths in a field as vast as the World Wide Web might well be seen as a daunting task, one in which the very size and variety suggest the possibility of a plethora of mythic perspectives. Markham’s (1998) ethnographic study of life online suggested several ways the Web could be viewed: as a lifeline to the world, the nexus of human consciousness, a way to “meld the machine with the mind,” or cyborg, and the image of wearing masks online. Markham states that myths dealing with life online tend to fall into a continuum. At the entry level is the pragmatic view as the World Wide Web as *a tool for interconnectivity*, such as when using e-mail. The next level of myth perceives the Web as a physical location, a *place*, such as cyberspace. The final stage of the continuum perceives the Web as a *way of being*, with reference to alternate identities online.

References to cyberspace recognize the myth of place, although in a pragmatic moment, Markham clarifies the obvious. Cyberspace is not a place, going online is not going anywhere; it is being connected. Turkle states that those who work with computers develop an intuitive faith that some kind of actual

space exists behind the screen. The use of the term “cyberspace” grew out of science fiction, but for many it is a routine part of everyday life. When we read our electronic mail or post on a website, or make an airline reservation using the Internet, we are in cyberspace (Turkle, 1997).

References to “real life” make a distinction between identities (who they are online as opposed their persona in face-to-face life); real life is different than on-line conversational context. The distinction of “being” becomes most apparent in the online dialogue as subjects differentiate between their on-line self and the real-life self. Turkle (1997) states that we reconstruct our identities whenever we step through the screen into virtual communities. Some psychoanalytic theories have posited that identity is multiple in nature. The Internet has contributed to thinking along these lines as people are able to construct a self by cycling through many identities. Social and psychological theorists such as Lifton, Gergen and Martin have tried to capture this new experience of identity.

Herman & Swiss (2000) help us understand the “being” perspective of the Web by reference to Martin Heidegger’s concept of *techné*, a technology that is simultaneously an instrument and an activity through which self and the world are cast into sense—thereby transforming ‘being’ in the world. Heidegger argues that the transformative nature of technologies mythically reveals and frames being-in-the-world through *poiesis*, that is, the poetic introduction and representation of self and the world.

Doty (1986) refers to the inventive primacy of the imaginal, the poetic seizure of truth, what Heidegger calls *al_theia*, (Greek for *truth* as in “uncovering, or disclosure”) of what presents itself to us as significant, perhaps more significant than the fact itself.

At one level, the computer is a tool that helps us write, add and subtract, file and communicate. But it also offers a new medium to project our ideas to others—and ourselves. Finally, it offers more than a tool or a mirror. It gives us the opportunity to experience life on virtual worlds (Turkle, 1997).

Schindler (1996) posits that interaction or communicative action—which includes mass media—is mediated by language and governed by social rules. Symbolic interaction equips people with internalized norms and personality structures, and thus build consensus within unconstrained social harmony.

In summary, one’s conception of the world determines what one attempts to do with it, and by acting on that conception, communication can act directly on what people do and what happens. The World Wide Web is viewed based on the meaning given to it by the group using it, and in a larger sense, the myths created to describe it. Markham sees myths regarding the Web falling into a continuum including tool for connectivity, a physical location, and a way of being.

Semiotics

According to Chandler (2003), denotation and connotation are terms used in semiotics to describe the relationship between the signifier and its signified. An

analytic distinction is made between two types of signifieds: a denotative signified and a connotative signified. Meaning includes both denotation and connotation.

Denotation is defined as the definitional, literal, commonsense meaning of a sign, in many cases the definition according to the dictionary. *Connotation* refers to the socio-cultural and personal associations of the sign, typically related to the class, age, gender, or ethnicity of the person interpreting it.

Barthes argues that photography can be used to distinguish connotation from denotation, with denotation being *what* is photographed, and connotation *how* it is photographed (Fiske, 1982).

Barthes also uses advertising as an example of making a message stronger through fewer words (1977). The denotative image for a Panzani advertisement includes some packets of pasta, a tin, a sachet, some tomatoes, onions, peppers, a mushroom, all emerging from a half-opened string bag, in yellows and greens on a red background. The brief caption in French is unnecessary: the typical viewer is very aware of what is being presented. But putting aside the linguistic message, the viewer is left with the pure image, which provides a series of discontinuous signs. The connotative meanings include freshness, a trip from the market, and a sense of Italianicity. By minimizing the denotative words, the connotative meaning can more freely express itself.

A photo of Marilyn Monroe can be interpreted at many levels. At a denotative level this is simply a photo of Marilyn Monroe. The connotative signs tell us to associate this photograph with her qualities of glamour, sexuality,

beauty—as well as her drug-taking, depression and early death. At a mythic level we understand this sign as activating the myth of Hollywood as a dream factory—which can produce stars as easily as it crushes them.

In contrast to the generally accepted view of myth as larger-than-life stories that help establish foundational beliefs, Barthes proposes that anything could be a myth (Moriarty, 1991). He cites the values and attitudes implicit in advertising, newspaper articles, photographs, and other forms of mass media. He calls these messages myths, based on the etymology of the word “myth”—from the Greek word *mythos*, or message.

The process of analyzing myths is two-phased: an overt primary message is presented that common sense rejects. But in the process of literally rejecting the primary message, common sense accepts the secondary, covert message.

Barthes (1984) explains that semiology is a “science of forms,” studying significations apart from their content. Mythology is part semiology (a formal science) and part ideology (a historical science), studying “ideas in form.” Any semiology proposes a relation between a signifier and a signified.

Semiology examines the relationship of two variables, a signifier and a signified. The signified is the concept, the signifier is the mental image, or representation, of that concept. The sign is deemed the “associative total” of the other two.

An example of this might be a bunch of roses. Barthes uses them to signify his passion. The roses themselves are the signifier, the concept of

passion is the signified; together (the sign) they encompass the idea of “passionified” roses.

The semiology of myth is a mirror application: similar but not the same. For mythology is what Barthes refers to as a “second-order semiological system.” The sign of the first-order system becomes the signifier in the second system. Myths view the combined value-laden images (signs) of the first-order system as raw material (SIGNIFIER) for the new semiological chain. Graphically one sees the relationship of the two systems as shown in Fig. 2.4.

Here are two systems side by side. Barthes refers to the first-order system as the “language-object,” which is a linguistic system. Myth uses the product of this system to develop the second system, referred to as “metalanguage.” Barthes states that it is a “second language, in which one speaks after the first.” The semiologist, in studying myths, is not concerned with linguistic composition of the object, but views the total term, and only as it supports the myth.

Figure 2.4: Barthes' model of a two-order mythic semiotic system.

An example of this second-order system and how it can be seen and applied from the research is the word *cyberspace*. On a first-order level, the signified is the concept of Internet-related objects and the technology associated with interactivity. The ten-letter word *cyberspace* is the signifier. Together they allow the communicator to relate an abstract concept that would be difficult to convey without specific, relatively recently created words.

On a mythic level, the sign of cyberspace becomes a second-order signifier. Cyberspace communicates the vision of a *where* (second-order signified) to help establish the foundational myth of scene. As stated in the first chapter, these myths help those in contact with the Internet establish a relational perspective with an otherwise highly nebulous concept.

Re-Definition of Myth

As stated in Chapter I, myth is not simply something that is not true. Webster's defines myth as "a story that is usually of unknown origin and at least partially traditional, that ostensibly relates historical events usually of such character as to serve to explain some practice, belief, institution or natural phenomenon." (Gove, 1976) Etymology traces the roots of the word back to the Greek word *mythos*, which means "tale."

Said (1986) states that myths are manufactured, and that it is inherent bad faith to pretend to be a fact. Religious myth is effective because it relates precarious reality constructions of empirical societies with ultimate reality.

Lakoff & Johnson (1980) state that myths can be seen as extended metaphors, and as such can help make sense of life's experiences within a culture. Barthes (1977) states that the function of myths is to naturalize the cultural, making dominant cultural and historical values, attitudes and beliefs seem entirely natural, common-sense, and thus objective and "true reflections of the way things are." Gaster (1984) identifies myth as "any presentation of the actual in terms of the ideal."

Colavito (1992) defines myth-making in the context of five brain functions: *maia*, *mythos*, *left-brain mimesis*, *right-brain mimesis*, and *logos*. Ideology and religious scientific practice follow different paths, based on what function of the brain is used in that interpretation of reality. These "brains" are reptilian, limbic, the right and left hemispheres of the neocortex, and the interpreter module. Using Colavito's terminology, ancient cultures were classified *maia* types when the reptilian brain served as pilot, *mythos* types when the limbic brain was used, right-brain mimetic when they used the right hemisphere of the neocortex, left brain mimetic when they used the left hemisphere of the neocortex, or *logos* types if they had imageless experiences, and were able to develop substitution systems (deNicholas, 2003).

Doty (1986) defines myth as an articulated body of images that give philosophical meaning to the facts of ordinary life. According to Doty, a mythological corpus is a complex network of myths that are culturally important, imaginal stories conveyed through metaphors and symbolic diction, graphic

imagery with emotional conviction and participation. These primal, foundational accounts describe aspects of the real, experienced world and humanity's role and relative statuses within it. Doty states that the term "culturally important" is significant in differentiating myths from private fictions, and to identify them as stories that represent society.

Mythology is also defined as a collection of stories telling human beliefs and history (Analyzing, 1995). They usually deal with origin of humanity and its traditions, and the way in which the natural and human worlds function. Myths are strongly archetypal. Myths fall into various categories: primitive myths (about nature), pagan myths (humans and deity), sacred myths (from current religions), scientific myths (unproved credos), cosmic myths (beginning and the end of the world), theistic myths (about deities), hero myths (Achilles and Jesus), and place and object myths (Camelot and the Golden Fleece).

Purpose of Myths

As mentioned earlier, in the late 19th century, the mythic narrative "Acres of Diamonds" helped shift America's focus from a geographic frontier to an economic one, thus demonstrating how the same myth can be transplanted from one cultural context to another. Procter (1992) states that symbolism in myths can be adjusted to meet changes in society, especially in times of crisis and chaos. Termed "mythic regeneration," the phenomenon allows national myths to sustain the ethos of a nation, yet evolve to encompass the changing social conditions.

According to Storey (1999), social emulation plays a major part in establishing consumerism in a society. As an extension of this, Roland Barthes states that myths have a role in promoting consumption. As the stories societies live by, myths help people conceptualize and understand the world, and they help society construct and maintain a sense of self-identity.

Myths help establish history, while authenticating and justifying activity (Analyzing, 1995). Myths are a narrative resurrection of a primeval reality. Malinowski (1984) posits that myths should be studied as living phenomena.

Myths offer stability for a society (Analyzing, 1995; Doty, 1986). They convey the political and moral values of a culture and provide systems or interpreting individual experience within a universal perspective. Malinowski (1984) cites Campbell in saying modern society is in turmoil because without myths it finds life meaningless. Modern man has rejected myths in favor of science, but when viewed from a psychological (Jungian) perspective as symbolic, myths are compatible with science and therefore acceptable to modern man, and able to restore tranquility to society.

Myths codify belief and safeguard morality (Campbell, 1968; Doty, 1986; Dundes, 1984). In a business setting, myths are developed to quiet the dissonance of incongruent messages (Shipka, 1995). Oral and written narratives, corrupted over time, can be used as part of cultural, religious and political agendas to control others, and for purposes of greed (Campbell, 1993).

In supplying root metaphors as the ruling images of a society, they provide a coding mechanism that stabilizes the otherwise randomness of the cosmos. They express and confirm society religious values and norms, providing patterns of behavior to be imitated and establishing the sanctity of cult.

Myths explain the unexplained. (Campbell, 1968; Analyzing, 1995; Doty, 1986). They provide concrete conveyances for abstract thought. Myths offer role models (Analyzing, 1995). Media and corporations enlarge certain people to mythic proportions. We create our own myths. We have our deities—things that are important and vibrant and valued to us personally. We have our heroes (Michael Jordan and Mother Teresa, Abraham Lincoln and Bill Gates) in “mythic journeys” by which we romanticize our various passages through life.

Myths reconcile the mundane to the fantastic. Campbell (1968) calls it “reconciling working consciousness to the *mysterium tremendum et fascinas* of the universe as it is.” *Mysterium tremendum* makes reference to the impersonal development of gods so powerful and horrible that one cannot pray to them, only be in awe of them (Soul to Spirit, 2002). Gaster (1984) states that myths present events transpiring in eternity and involving superhuman beings of which living men and women are temporal incarnations. A mythological story gives verbal expression to the Mythic Ideal.

Myths give overall interpretation (Analyzing, 1995). They help establish community (Hoff & Dunskey, 1996) by giving a sense of hierarchy, of authority, and of the eternal.

Myths are a sophisticated way of labeling and studying psychological dynamics (Analyzing, 1995). They are easy to remember in an illiterate society, approachable and understandable by people of any level of intelligence, and stimulating to the imagination and feelings. Doty (1986) states that a simple myth seldom represents the entire worldview. That requires a collection of many interlocked stories rather than just one.

In ancient times, Lucretius (1995) warned of the dangers of myth-based belief, specifically targeting religion. He claims that “a man of Greece,” was the first that “dared to raise mortal eyes against her [religion],” and first to make a stand against her. Lucretius calls for the “vivid force of the intellect” to prevail, realizing what can arise into being and what the limits of all things are. Myth-based belief has led to “criminal and impious deeds” as when Greek leaders sacrificed Iphigenia at the altar of the virgin Trivia to ensure a successful and fortunate voyage for the fleet. Lucretius observes that: “nothing is ever divinely generated from nothing,” and states that on that principle, mankind can understand how things are generated “without the agency of the gods.”

Scholarly Approaches to Myth

According to Dundes (1984), scholars currently take 12 different approaches toward the study of myths:

1. Myths as a source of cognitive categories.
2. Myths as a form of symbolic expression.
3. Myths as projections of the subconscious.

4. Myths as integrating factors in man's adaptation to life: myth as worldview.
5. Myths as a charter—or socially acceptable roadmap—of behavior.
6. Myths as legitimization of social institutions.
7. Myths as markers of social relevance.
8. Myths as mirrors of culture and social structure.
9. Myths as a result of a historical situation.
10. Myths as religious communication.
11. Myths are a religious genre.
12. Myths as a medium for structure.

Dundes also delineates four criteria of myth: *form*, *content*, *function*, and *context*. With *form*, myth is narrative, such as a verbal account of what is known of sacred origins. An example of *content* is when myths contain information about the decisive, creative events in the beginning of time. Myths *function* as models, with no changes and no developments. Finally, an example of *context* is ritual, where patterns of behavior have been sanctioned by usage.

Levi-Strauss used a process of decomposition and re-composition to study myths. Mythic narratives are decomposed by identifying and charting their most elemental constituent units, referred to as “mythemes.” The structure of these bits and pieces reach back to cultural bedrock at many points (Levi-Strauss, 1969).

For some, mythemes are seen as believed stories that reflect one's everyday view (Willamette, 2003). For residents of Oregon, the Willamette River

brings a couple of mythemes. A *Los Angeles Times* report on the river's recovery from ecological harm served as a mytheme to reinforce the myth that the age of pollution was over. Another article made reference to Oregon being held up as a national environmental success story because of the river's recovery. Together these two mythemes painted a mythic picture of Oregon as a progressive, anti-pollution state. In reality, the river still has pollution problems and the water continues to be treated by scientists.

Klages (2001) explains that mythemes, according to Levi-Strauss' method, are the smallest components of a myth, and are laid out both left to right and up and down. The left to right axis looks at the story or narrative of the myth in non-reversible time (stable across time), while the up and down axis looks at the structure of the myth in reversible time (dependent on particular circumstances). In a common, standard structure of a myth, a hero faces an obstacle, overcomes the obstacle, and has a positive (or negative) result. Each version of the myth stereotype would follow the same structure (up and down) but may have different details in the storyline (left to right).

Levi-Strauss follows the structure, analyzing comparative units in binary pairs, looking at the relationship between pairs: A is to B as C is to D. Similar structure allows one to view different mythemes in the same structure as foundational to the same myth (Klages, 2001).

Ultimate values primarily have character of binary opposition or polar contrasts, such as life and death, good and bad, male and female, human and

superhuman, and mortal and immortal. In some cases, an intermediate term is included, such as: hot, cold and *warm*. (as asserted by Doty, 1986).

Levi-Strauss did an early study of the Oedipus myth by dissecting it down to the level of mythemes and organizing them in four different columns according to four different themes the myth deals with. The myth was then read syntagmatically (vertically), which revealed the temporal succession of events, as well as paradigmatically (horizontally), which revealed the central themes of each column. The paradigmatic reading showed a deep structure of binary oppositions and basic meaning, which when viewed otherwise would have appeared to be an incoherent series of events. (Rossi, 1983).

Barthes (Schindler, 1996) refers to “naturalness,” the process of using language, a “natural” medium, to transfigure culture into nature. Hjelmslev refers to this as transmuting historicity into eternity, playing on the conditioned fear of aging and denying the irreversibility of time. Language is employed to instill and systematize a secondary meaning, as well as authenticate the narrative of the bourgeois society into an archetype of socially acceptable behavior. Proper names become a “natural” taxonomic system for the signified objects, and words become the referents to objectify the serialized levels of lived experience and reduce them to an alienated form.

In other study, Barthes (Rossi, 1983) focused on the surface structures of narrative myths, distinguishing between *histoire*, the sequence of events as they presumably occurred, and *discours*, the sequence of events as organized by the

narrator. Barthes dealt with two types of functions: cardinal functions (metonymic plot events), and indexical (metaphoric) functions. These two types of functions combine in a hierarchy to produce the surface organization of the discourse.

Barthes has argued that myths and rituals in our society have taken the form of reasoning and speech. Language is not only a model for meaning but also the foundation of meaning. To understand the real meaning of messages, one must decipher the cultural codes governing the structure of messages and their mode of signifying systems. Any communication takes place within an ideological context; we cannot understand the messages without identifying the ideology.

Wittgenstein (Shawver, 1996) asserts that “language games” are responsible for how we learn functional language. The nature of the game is that when words are used, things happen. A toddler says the word “cookie” not to identify the cookie, but to get a cookie. In many cases, at least initially, the word is spoken without the speaker understanding the meaning of the word.

Wittgenstein refers to “language games” because games, chess for example, have implicit and explicit rules, but freedom within the boundaries of those rules.

In his work on classification theory, Lakoff (1987) draws attention to Dixon’s myth-and-belief principle: that if myth or belief ties an object to a characteristic contradictory to other attributes, then generally the object will be classified according to the myth regardless of other characteristics. Based on this, Lakoff observes: (1) there are idealized models of the world (including

myths) that can serve as categorical links; (2) specific knowledge (knowledge of mythology) overrides general knowledge.

In its process of unveiling historical myths that run counter to social reality, critical theory is coextensive with language, as it turns its back on itself to speak of its relationship with the world (Schindler, 1996).

Malinowski (1984) states that study of mythology limited to the examination of text will fall short in properly understanding its nature. Primitive mythology is tied within the context of living faith, practical morals and popular customs. The myths themselves have suffered significant transformation in the hands of scribes, commentators, learned priests and theologians. He posits that it is necessary to go back to primitive mythology in order to learn the secret of a myth as it was while it was still alive.

Markham (1998) began research of life online by analyzing common metaphors people use to refer to online interaction, looking at the metaphors in conversations online, in pop magazines, and in TV and books, analyzing eight months of conversation listening to and archiving a chat room as to how they organized their boundaries and norms, and interviewing one hacker on how he made sense of his identity online. All those approaches were replaced by ethnography as she realized that cyberspace was not a collection of texts to organize, but an evolving cultural context of immense magnitude and complex scope, thus a realm in which myth studies would be an appropriate tool of discovery and analysis.

Chesebro (1984) presents five presuppositions in the study of culture and media: First, as a concept, the media include all variables connecting people into socially shared universes of understanding. In other words, anything that connects two people socially in a shared environment should be considered within the realm of media.

Second, a cultural system may be examined as a discrete, unitary, and structural entity. Culture is a composite of societally shared standards. This presupposition provides structure for the study of culture.

Third, a cultural system is an active, not passive, entity. Because of this, what is relevant today may change with the changing of the culture. And each cultural system is sensitive to the individuals, groups and general dynamics that associate with it.

Fourth, ways of knowing determine what is known. One's knowledge is limited by the way in which that knowledge was received—and how it is shared with others.

Finally, multiple types or kinds of realities exist and affect the human being. This is consistent with Markham's (1998) concept of being, as well as Turkle's view of the multiple natures of identities. Further it is consistent with the nature and methods of this project. As communication media change the way they portray the nature of the Web, Web users not only perceive the Web as something different (a place to shop, versus a link to other minds), the actual reality of the Web's nature changes for them. It is not simply a matter of calling

the Web a cyber-mall instead of a chat link; its very nature changes in the user's mind.

That is why it is important to study the link from mass medium to consumer—in this case, the link being printed material—as well as the connection between exposure to mythemes, mythic categories and eventual perceptual change.

CHAPTER III

METHODOLOGY

The question under study is whether there is evidence of commodification on the World Wide Web. The intent of this study is to use myth as a lens to isolate and identify commodification within that medium. This study uses the process of inductive content analysis, which is defined for the purposes of this study as deriving categories from text. In the case of this study, categories were developed from descriptors identified in the texts of articles in popular magazines.

The method of this study is to locate and categorize descriptors in articles published in three national magazines during the period 1993 to 2000. Descriptors are defined as words and phrases that add color, definition or understanding to a passage. Categories of descriptors are clustered according to broad themes that are likely to establish prevailing myths in the minds of the readers. The process of identifying and categorizing these descriptors follows established procedure outlined by Krippendorff for content analysis (1980).

Research Approach

This study was intended to be open-ended and exploratory, while remaining true to the guidelines for content analysis set forth by Krippendorff (1980). It is also intended to utilize Barthes' semiotic view of myth as a

connotative meaning within everyday communication. Because it is open-ended, this study should be viewed as qualitative in nature.

The concept of descriptors used in this research is an extension of Barthes' (1972) explanation of the nature of myth combined with the description of system and its use in content analysis as presented by Krippendorf (1980).

Qualitative Research

The choice between a qualitative or quantitative approach toward research should not be made arbitrarily, but should be based on the nature of the study, and what type of research structure will most likely result in the sought results. All research methods involve structure to some extent. The key point is whether the structure is imposed, or whether the structure emerges from the research process (Wilson, 1999). Imposed structure methods produce mainly quantitative data that can be analyzed statistically. Emergent structure methods produce mainly text, which requires different methods to determine validity.

All research of any kind depends upon observation. That observation can be direct (the researcher is the observer, recording what he or she is watching), or it can be indirect (the researcher must rely on the reported observations, including self-observation, of others).

Applying the idea of structure provides four categories of methods: direct observation with either imposed or emergent structure, and indirect observation with either imposed or emergent structure (See Fig. 3.1). The classification of methods by direct/indirect observation and then by imposed/emergent structure

helps one allocate the different methods to the appropriate category (Wilson, 1999).

Structure in research methods

Figure 3.2: Structure in research methods.

One of the major challenges of qualitative research design is the lack of a universally agreed-upon format (Miles & Huberman, 1984). According to Creswell (1994), writing a theory in qualitative research is difficult because no standard terminology for theory exists; it varies by type of design. Creswell (1994) states that “the methodological use of some larger explanation must fit into the logic of an inductive process of research (1994, p. 94). A postmodern perspective can provide that “larger explanation.”

Copeland (1997) compares and contrasts the characteristics of a postmodern approach with one based on modernist assumptions. Nagel’s (1979) modernist idea of theory based on an abstract calculus and operational

definitions relies on (1) a strong ontology of “being,” a distal state that reduces thinking to discrete phenomenal states, (2) static attributes and (3) sequential events. Its structure is based on linear thinking, and implies that one can control, predict and generalize the research outcomes of any given phenomena.

According to Whitehead (1985), this line of deductive thinking views reality as comprising discrete, static and describable phenomena and sees physical objects and things as the natural units of analysis rather than the relationships between them.

In contrast, a model based on postmodern thinking views the development of a model as an emergent process. It uses inductive thinking and verbal reasoning to describe the relational interactions that are the basis of design dynamics (Chia, 1995). Postmodern thinking is an attempt to de-center static modernist thinking by enabling one to think about ignorance and uncertainty without apology, and explore negative spaces of research in a human context. The gap between modernist and postmodernist thinking is not one of “slight attitudinal differences, but of differing perceptions” (Schwartz & Ogilvy, 1979). More importantly, it is an opportunity to stimulate a dialectic approach toward research (Copeland, 1997).

Descriptors

Barthes presents myth as a type of speech defined by its intention rather than by its literal meaning. The myth, by principle, transforms history, culture, or tradition into nature, or accepted reality. From that definition, Barthes

demonstrates that any oral, written, or symbolic expression can be a myth, based not on what it means, but by what it *intends* to mean. Descriptors come from *describe*, which means to: “transmit a mental image or impression of with words; picture verbally.”² The definition does not specify what types of words should be used as descriptors as long as they are able to transmit that mental image.

Descriptors selected in this study are viewed within the second-order semiological system presented by Barthes in Chapter II. Descriptors in the first-order linguistic system are referred to as language-object. These descriptors serve as the raw material to build the second-order system, referred to as meta-language. In other words, on a first-order literal sense (signifier), the descriptor “surfing the Net,” might make one visualize a surfboard on ocean waves. The context of the article (signified), the Internet, would work with the signifier to create the sign—the concept of moving from website to website—what we know now as web surfing.

Barthes takes this a step further. The sign of web surfing (descriptor) becomes the second-order signifier on a mythic level. By categorizing these descriptors into mythemes, the researcher is able to establish a mythic foundation, in this situation, for the myth of Connectivity. Mythic language helps the user establish a relational perspective for an otherwise abstract concept.

It is important to note that the second order system goes both ways. Not only can myths be *deconstructed* by breaking them down into mythemes and

² Source: *The American Heritage Dictionary of the English Language*, p. 357.

further into individual descriptors, myths themselves are *constructed* on a secondary level as abstract concepts, and serve as the source of those same descriptors.

Categorization

In addition to allowing descriptors, mythemes and myths to present themselves as part of this exploratory project, it was deemed appropriate and potentially illuminating to apply the descriptors of this project toward Markham's (1998) continuum. Markham's ethnographic work on the World Wide Web led to the presentation of the connectivity-place-being continuum as prevailing myths on the Web. Despite the difference in media and method, this study evaluated and attempted to categorize descriptors on two levels. The eleven prevalent mythemes that appeared in this study were viewed as a Level 1 approach to categorization, while the three categories of Connectivity-Place-Being (with an added category of Other) as a Level 2 approach.

Markham (1998) proposes a template for measuring mythic perspectives on the Web with her connectivity-place-being continuum. Based on her ethnographic research, she presents *tool of connectivity* as the entry point in the continuum. As one's experience with the Web increases, one's position moves further down through the continuum, through the *place* myth, and eventually to the myth of *being*. As part of this study, the descriptors tagged in the 106 articles were categorized according to this continuum, with one additional category—Other—being added to the options.

As stated earlier, 2,661 descriptors in 106 articles were tagged. A large percentage of them failed to fit within one of the three categories presented by Markham (see Table 4.4). As few as 41 percent (*Newsweek*, 1994) and as many as 87 percent (*Wired*, 1993) of the descriptors were classified Other. The high within the Connectivity category was 30% (*Newsweek*, 1996 and 1997). The high within the Place category was 30% (*Wired*, 1998), and the high within the Being category was 14% (*Newsweek*, 2000).

Table 4.4. *Category Level of Agreement with Markham's Continuum.*

Other (percentages)

	<i>Newsweek</i>	<i>Wired</i>	<i>Business Week</i>
1993		87	
1994	46	79	59
1995	41	62	70
1996	83	65	72
1997	83	64	69
1998	77	50	73
1999	59	65	75
2000	59	75	75

Connectivity (percentages)

1993	7
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1994	13	10	24
1995	24	9	16
1996	30	10	16
1997	30	11	18
1998	27	10	17
1999	4	13	14
2000	20	10	11

Place (percentages)

1993		3	
1994	16	9	5
1995	9	20	7
1996	21	14	5
1997	21	18	6
1998	8	30	7
1999	2	21	13
2000	14	6	11

Being (percentages)

1993		3	
1994	13	3	3
1995	8	9	6

1996	12	10	4
1997	12	6	8
1998	10	10	5
1999	2	9	11
2000	14	9	7

Research Design

The research method was content analysis, specifically an examination of three publications and the way they present the Internet to their readers.

Presentation of the Web was measured by examining descriptors; words and phrases that add color, definition or understanding to a passage. Descriptors were classified into categories, which represent the foundations of myths regarding the nature of the Internet.

The open-ended, exploratory nature of using a mythic lens to examine the World Wide Web for signs of significant commodification led to the research design. Emphasis was placed on “information-rich” words and phrases that brought graphic imagery to the mind of the reader.

Data were obtained from three publications: *Wired*, *Business Week*, and *Newsweek*. The intention was to gather a sampling of articles regarding the Internet from these publications during the period of 1993-2000. This period was chosen to reflect the beginning and subsequent boom of public traffic on the World Wide Web. Only one of these three publications—*Wired*—offered any articles on the Internet during 1993. The other two publications began running

articles on the topic in 1994. Articles in *Wired* were taken from the magazine's online archives as well as stacks at the University of North Florida in Tampa. The other two publications were located at the University of North Texas central library complex, and articles were selected and photocopied there. A minimum of 30 articles was chosen from the three publications. *Business Week* had a total of 39 articles reviewed, and *Newsweek* had 37. The number was arbitrarily chosen to provide a representative variety of topics and an "information-rich" sample (Foley, 2003).

The three publications—*Wired*, *Business Week*, and *Newsweek*—were chosen based on their representation of the mass media that constantly scrutinizes and interprets the development of the World Wide Web, as well as the audiences they serve. *Newsweek* serves the general consumer who is interested in "the week's developments [in] the world and the nation"; the business-minded professional who reads *Business Week* looks for "global and local perspective on current business issues,...and technology coverage related to all business"; *Wired* "reaches technology and business leaders" to identify "future technologies and trends impacting their business." (SRDS, 2003).

Steps in the Study

The study followed the following process:

1. Articles were located in the three publications using the *Readers Guide to Periodicals Index*.

2. Articles were collected from libraries in Denton, Texas (University of North Texas) and Tampa, Florida (University of South Florida) and were either photocopied or printed from microfilm.
3. Articles were reviewed by the researcher, who identified and either highlighted or circled descriptive phrases within the articles.
4. When examination of the articles from the three publications was completed, the researcher transferred the list of marked descriptors to an electronic data sheet in Microsoft Excel. Descriptors were broken up by publication and by year, with each year of publication getting its own spreadsheet page.
5. On each sheet, descriptors were classified within eleven categories, referred to elsewhere in this study as mythemes (See Fig. 3.2).

After the entire year was completed, the descriptor list was reviewed. New categories emerged. Some promising categories were listed in the first batch but were later discarded because they were too narrow and there were insufficient descriptors later on that could realistically be put within that category.
6. The accepted categories were: Other, Connectivity (which included references to speed, water, and travel as well), Scene (or location), Being, Consumption, Revolution, Tool, Value, Biology, and Arena. Later, the eleventh category, Social, was added as well.

Nasser

1994	14	12	20	13	15	1
Other	Connectivity	Location	Being	Machine/Construction	Sex/Food	
it's hip caught on worth a try magic versatility invisible created missed a thousand opportunities the best of old fashioned full-service department stores this Internet thing all that stuff set it on its end	talk to each other speed of light one-worldness slow down in the network part of the Net part of the network connect to the digital labyrinth dial into connect to the Internet exploring the online world open the service to the full Inter	like climbing a mountain a universe away cyberspace climbed into out there intriguing outposts sent over over went online better way to get around search other sites venturing into cyberspace visit arrived online be there in cyberspace in and out of the Internet try out cyberspace stepped in the way to	leap of the imagination giant plodding number-crunchers clumsiness evolving Birth technical backbone kinship flexible and chameleonline go out and stretch your legs enrich your life rich and intriguing collection	Builders build foundation vast buzzword nimble tools technical foundaiton tower of Babel round the clock a scientific tool true guiding force technical challenge paved the way collapse paradigm shift	popular obs spit out tackled with bring to life notorious g	

Figure 3.2: Sample from spreadsheet used to categorize descriptors.

7. Finally, frequencies and percentages within categories and by publication year were tabulated and compared.

Sampling

Data were measured in both absolute terms (count) and relative terms (relative percentage). Growth of the Internet between 1993 and 2000 was viewed both as raw numbers and comparative percentages, as was the number of articles on the Web reported by the *Readers Guide for Periodicals Index*. The number of articles reviewed in the three publications was reported in absolute terms, as were average length of articles and longest and shortest articles. Word and descriptor count was in absolute terms, while word count-descriptor count for the three publications was in relative terms. Topics covered was in absolute

terms, as well as the total number of descriptors gathered. Raw results on how descriptors were classified were in relative terms.

Content Analysis

Content analysis can take either qualitative or quantitative form.

Quantitative content analysis identifies, enumerates, and analyzes how often specific messages occur in text. In qualitative content analysis, researchers are more interested in the meanings associated with messages than how often those messages occur (Frey, et al, 2000).

Content analysis was chosen for three reasons: (1) the project deals with change over a period of eight years (1993-2000); (2) the nature of the Web precludes longitudinal content analysis online, especially in retrospect; and (3) the first information many present-day Web users had regarding the Web was via print media.

More specifically, this study makes use of interpretive textual analysis, a subset of content analysis. Interpretive textual analysis includes semiotics, rhetorical analysis, ideological analysis, and many others. These types seek to get beneath the surface (denotative) meanings and examine more in (connotative) social meanings. These textual analysis approaches often view a narrative or story-telling process in which particular “texts” consciously or unconsciously link themselves to stories at play in society (Textual, 2003).

Units of Analysis

According to Krippendorf (1980), sampling units are parts of observed reality or of the stream of source language expressions that are regarded independent of each other. Most content analyses use one or more of five different ways of delineating and identifying these units: physical units, syntactical units, referential units, propositional units, and thematic units. Referential units were the type of sampling unit deemed most relevant to the research question and were used for the purposes of this study.

Referential units are defined by particular objects, events, persons, acts, countries, or ideas to which an expression refers. The 37th President of the United States may be referred to as “he” or “the first president to visit China” or “Tricky Dick.” Each reference denotes the same person in different ways and is unimportant whether the reference is made in one word or many, directly or indirectly. Referential units are indispensable when it is the task to ascertain how an existing phenomenon is portrayed. Early work in symbol analysis defined symbols by their denotation and explored values, attributes, and qualifications associated with them.

Referential units require familiarity with the semantics of the source language, with the symbols, and with the referential meaning of elements. The identification of referential units is still quite efficient but not always reliable, the principal difficulty being that references are not always clear unless one restricts the units to words or short denotative phrases.

Categories and Representing Data

Krippendorff uses the term *variable* for the process of categorization, with variable defined as “a symbol which stands for any one of a set of two or more mutually exclusive values” (p. 88, 1980). Groupings within variables indicate that the values in one group have more in common than values in different groups. A grouping based on the categories physiological, social, egoistic, fearful, playful, practical, cognitive and miscellaneous would categorize food, sex and rest in the same unit (physiological), with no difference recognized between food and sex versus food and rest.

Classification

Krippendorff defines system as a “conceptual device to describe a portion of reality” comprised of components with variable states, relations between components, and transformations. Systems lead to hypotheses of future events and unknown states based on extrapolations of existing data. An example of this is the earth’s solar system. Based on available data, a system can predict with great detail the actions of various components (solar entities). Systems can be used to predict biological, symbolic or social entities, and are extendable beyond the time and space constraints of available data.

Krippendorff (1980) states that the basis of a systems approach in content analysis is the extrapolation of trends and predictive use of patterns. Descriptors fall within patterns, and the categorization of those patterns allows the extrapolation of trends within the medium under study.

In order to encompass the tasks necessary for content analysis, Krippendorff recommends distinguishing the forms of inference that analysts may employ. He separates classification into systems, standards, indices and symptoms, linguistic representations, communications, and institutional processes.

Following this systems approach, this study is attempting to identify commodification on the Web (the nature of the Web and the increasing presence of commodification in that medium) using components (descriptors in print media that constitute mythemes) and relations between those components (prevailing and developing myths about the Web). The basis of this systems approach is the extrapolation of trends (how was the Web viewed in the '90s, today, and in the future) and the predictive use of patterns (What can be predicted by measuring the myth categories over the eight-year period? Will commodification increase or decrease?).

Validity Threats and Response

A significant difference between qualitative and quantitative study lies in the search for reliability and validity. Quantitative research seeks to provide reliability by stating that the study can be repeated with the same results, and that two or more people can have similar results by using the same categories and procedures. However, when research occurs in natural settings and involves the response of humans in the process of change, it is often difficult to replicate. Because of the natural setting, reliability is restricted by the number of observers

involved in the study (lack of corroboration), the response of informants who provide data, and the natural response and biases of the researchers as they are involved in the study for a lengthy period of time (Burns, 2000).

Validity—demonstrating that what is measured matches the causal conditions that exist in human life—is actually addressed rigorously in qualitative research. Ratcliff (1995) states that one can find validity in qualitative research by (1) divergence from initial expectations; (2) convergence with other sources of data; (3) extensive quotations from field notes and interviews; (3) other research data; (4) independent checks by multiple researchers; (5) and checks by subjects. Winter (2000) states that unlike quantitative research whose validity depends upon established tests and procedures, qualitative research encompasses an evolving retinue of techniques that can be modified or developed as the research demands. And since validity is not based on a particular methodology, process or test, all qualitative research requires is to demonstrate how representative the description is and how justifiable the findings are. Some researchers claim that “understanding” is more pertinent to qualitative research than “validity” (Winter, 2000). Qualitative research has problems whenever it tries to use established procedures of quantitative research such as experimentation, efforts of replication, and use of control groups (Winter, 2000). The one thing that does appear to bear equal importance to the validity of both quantitative and qualitative enquiries is the reliability of the research: is the research measuring what it is supposed to?

The researcher opted for manual identification of the descriptors rather than relying on computer software, due to the open-ended nature of the study. In other words, it was often impossible to predict what form the descriptors would take until they manifested themselves. The process of determining within which category descriptors should fall is subjective, and in many situations a descriptor could fit within more than one category. But judgment calls were made, often based on the context in which the phrase or word was used. While positivist research ordinarily requires that categories must be exhaustive and mutually exclusive, the messy nature of descriptors—especially those dealing with human nature—is such that context is taken into consideration when classifying them. Structure was partially maintained through the use of a codebook, which listed general instructions as well as descriptions of categories.

Chandler (2003) states that while the denotative meaning of a sign would be broadly agreed upon by members of the same culture, connotation is to some degree individually subjective and an inventory of connotative meanings generated by any sign would probably never be complete. However connotative meanings are not strictly personal and are determined by the codes to which the interpreter has access.

One might argue that for the sake of validity a set of judges should have been appointed to go through the articles, select terms and categorize them. These judges would then look for overlap and resolution of failures in overlap.

But individual examination can be considered just as valid as long as the process is established and spelled out carefully.

Reliability Threats and Response

In the case of this study, reliability was measured by the addition of a second coder. Three sample articles—one from each magazine—were marked for descriptors by an independent source following the instructions included in the study's codebook. Once tagged, each descriptor was categorized under one of the ten headings established by the study.

Based on the methods cited in Chapter III, this study attempted to unitize and categorize descriptors in 106 articles, specifically looking at terms that modified or described (1) The Internet or World Wide Web; (2) connectivity associated with the Internet; (3) activity on the Internet; or (4) users of the Internet (see Codebook in Appendix B). Intercoder reliability uses additional coders to perform the same experiment with the same resources and rules. If their results generally agree with the results of the original experiment, that level of agreement is viewed as a measurement of reliability.

In this study, intercoder reliability was approached by providing two other coders with a sample of the articles (one from each publication). Round one called for two coders to both unitize (select the descriptors from the articles) and categorize (put them in categories) the articles. The first round resulted in a 33% level of agreement with the Coder A, and a 24% level of agreement with Coder B. An analysis of the results led the researcher to determine that the codebook

was not specific enough on whether coder should select all descriptors in the articles, or just those related to the Internet. With that adjustment made, the level of agreement between Coder A and the original experiment jumped from 33% to 75%.

Round two split unitizing and categorization agreement percentages. After processing three new articles, Coder A had a 59% level of agreement in unitizing, and a 36% level of agreement in categorization. Coder B was limited to categorization alone (a list of descriptors was preselected for the coder), which resulted in a 55% level of agreement.

The codebook was again fine tuned, with an additional category (social) added, and four specific areas of descriptors listed (see above) for unitization. Coder B did categorization alone again, which resulted in a 65% level of agreement. Coder A did both unitization and categorization. The first article, from a 1997 edition of *Business Week*, resulted in a 73% level of agreement. The second article, from *Newsweek* in 1996, resulted in 70% agreement. The third article, from *Wired* in 1997, had a 29% level of agreement. Together the coding of the three articles had a 58% level of agreement.

Effort was taken to select three publications that were both diverse in their audience and interests, as well as representative of the mass media that constantly scrutinizes and interprets the development of the World Wide Web. A larger sampling of articles may have provided less bias, as would a greater representation of various publications.

The volume of material open to review in this study was intentionally limited to editorial content within three publications during an eight-year time span encompassing the greatest period of growth for the World Wide Web. The study could have reviewed other publications, a larger time segment, or advertising, rather than editorial, material. And in fact, advertising is likely to be a significant medium for commodification during this period. But the intent was to take a preliminary, exploratory look at mythic commodification during this period, rather than attempt to be comprehensive. Because of this, further research in the area of advertising is recommended in Chapter V.

This project employed cluster sampling, which uses groups of elements as sampling units. First, the sample of print media was grouped into three publications—*Wired*, *Business Week* and *Newsweek*. Second, each magazine was clustered by year. As the popularity of the World Wide Web increased, the number of articles published each year increased dramatically. Rather than increase the number of articles each year relative to their numbers in the press, the number of articles collected each year were held relatively constant (three to four). This was intended to provide a sample that would convey the prevailing perspective during that year.

The nature of this project was interpretive and subjective to a degree. Categories were applied and eliminated as they presented themselves—or failed to. Often the researcher was faced with the option of (1) having more categories than could reasonably be examined or would be meaningful to interpret; (2)

compiling a series of categories with “other” by far the largest; (3) eliminating descriptors that did not fall within arbitrarily established guidelines; or (4) generating categories that grew more and more general in nature to capture a representative group of the descriptors. In the end, the fourth option was pursued. Krippendorff (1980) states that not all concepts can be placed on a continuum between opposites, and forcing a scale on something that does not lend itself to this conception causes unreliability.

Generalizability

In its simplest terms, generalizability might be defined as making predictions based on a recurring experience (Writing, 2003). Often the purpose of research is to collect data to support a hypothesis, which is a premise regarding the behavior surrounding that data, and generalize the results to similar circumstances on a larger scale. However, generalization is founded on probability, and in many cases, such as this one, cannot be regarded as conclusive or exhaustive.

This study posits generalizability to other magazine articles about the World Wide Web. The intent of this study is to examine print magazines in their discussion of the World Wide Web with the purpose of identifying evidence of commodification on the Web. The descriptors and categories revealed by content analysis within these three magazines during the 1993 to 2000 period can be generalized to similar publications and articles within that same period. For example, a content analysis of articles about the Internet in *Time* between 1993

and 2000 would provide the same results as those harvested here from *Newsweek*.

Challenges

A large part of the challenge of doing a project such as this is dealing with descriptors that are “not what it’s about,” but “what it’s not about,” as one coder put it. In dealing with descriptors that took the form of metaphors in many cases, coders were presented with latent, context-based, words and phrases that described and modified the Internet by using words and phrases that were open to interpretation on multiple levels. Surface analysis of descriptors was in many cases misleading, and coders discussed the categorization of various words at length, with legitimate cases for categorization being often very different.

One good way to understand this conundrum is to remember Barthes’ two-tiered semiological view of myth (see Chapter II). The sign of the first level becomes the signifier of the second order, and myths are not created by the descriptors themselves, but the categorization of those descriptors in the context of the signified. The fact that agreement was necessary on two levels complicated the issue, and made agreement much less likely.

If the issue of commodification on the World Wide Web, manifested in descriptors within these 106 articles, is truly an issue of semiotics, then simple coding would not be sufficient to deal with its manifestation. Symbolic language such as dealt with in this study requires human input, such as that present in focus groups or a caucus. The unitization and categorization viewed here can

only scratch the surface as far as our understanding of this issue and the implication of these prevailing myths.

Despite the disclaimer that more and different research is needed, and considering the nature of the material in question, the resultant level of agreement is adequate, and consistent with other research in indexing and selection of subject headings. Saracevic (1991) cited indexing studies done in the 1960s with consistency values ranging of 35% to 45% for experienced indexers using aids, and 16% for experienced and 13% for inexperienced indexers where no aids were used. In other studies, an average of 24% was found for a combination of any two indexers in a group. Saracevic found that the greater the judge's subject knowledge, the higher the agreement. The lesser the knowledge, the more lenient the judgment. In selection of subject headings, the degree of match between student selection of words or phrases to search a subject catalog for specific books for which a title and abstract were supplied, and the actual subject headings used was just over 20%.

The following chapter presents the findings of the research.

CHAPTER IV

FINDINGS

One of the joys, and frustrations, of qualitative research is the nebulous aspect of this type of study, and the often “squishy” findings that can result. This study is exploratory and descriptive and takes a qualitative methodological approach. While the findings reported here can be generalized to similar publications and articles in that same time period, the dynamic nature of the World Wide Web calls for innovative forms of research and latitude in interpretation of the results.

The Sample

One hundred and six articles from three publications form the sample. Thirty articles were chosen from *Wired* magazine over the period of 1993 to 2000 (See Table 4.1). The other two publications covered the periods of 1994 to 2000, simply because they didn’t offer any articles about the Internet before 1994. Thirty-seven articles were selected from *Newsweek*, and 39 articles were chosen from *Business Week*. *Wired* magazine was chosen because of its innate association with cyberculture, and its insider perspective on the development and growth of the Internet and World Wide Web. *Newsweek* was chosen to represent a typical consumer publication for a general audience. *Business Week* was chosen to represent the perspective of business and corporate interest in Web development.

As the Internet grew and the World Wide Web developed, the subject matter of magazine articles covering them diversified widely. When selecting the articles to be included in this study, the researcher attempted to identify articles that were descriptive in nature, as well as representative of the growing general, diversified nature of the World Wide Web.

Articles included technical pieces, basic how-to articles, features about people, corporations that are in the Internet news, philosophy and ethics articles, speculation about the future and government and legal articles (see Table 4.1).

Table 4.1.

Topics Covered.

	Technical	How-to	People	Corporate	Philosophy	Future	Govt/Legal
<i>Wired</i>	3	2	5	5	7	4	4
<i>Business Week</i>	6	8	4	13	0	1	7
<i>Newsweek</i>	6	6	4	7	4	6	4

The matrix in Table 4.2 shows how the number of articles among the three publications compared year by year. For the purposes of this study. Word count was limited to nouns, verbs, adjectives and adverbs. The longest article among the 106 selected for the study was 4,984 words, published in *Wired* magazine in June, 1997 titled "The Great Firewall of China." The shortest article (94 words) was published in *Newsweek* on July 10, 2000, entitled "Africana Goes Dot-com." Total number of words for all 106 articles was 103,641, and average length of the

articles was 978 words. *Newsweek* had the shortest average length of articles (366 words), followed closely by *Business Week* (581 words), while *Wired* had by far the longest (2,288). This has a common-sense correlation with the audiences.

Table 4.2.

Number of Articles Used by Publication and Year, 1993-2000

	1993	1994	1995	1996	1997	1998	1999	2000
<i>Wired</i>	4	4	2	4	4	4	4	4
<i>Newsweek</i>		4	8	5	6	4	6	4
<i>Business Week</i>		5	6	6	6	5	6	5

Newsweek's traditional format is one of short, succinct articles for the busy, general-interest reader. Likewise, typical business-oriented readers of *Business Week* likely want articles they can read quickly and that tell them exactly what they need to know. On the other hand, with the topic of Internet, the *Wired* reader is typically dealing with an area of greater basic knowledge and interest and would desire more in-depth information and longer articles (see Table 4.2).

The concept of descriptors is an extension of Barthes' (1972) explanation of the nature of myth combined with the description of system and its use in content analysis as presented by Krippendorff (1981). Krippendorff states that the basis of a systems approach in content analysis is the extrapolation of trends and

predictive use of patterns. Descriptors fall within patterns, and categorization of those patterns allows the extrapolation of trends within the medium under study. Dividing descriptor count by word count, we find that *Business Week* had the highest average word count-to-descriptor ratio (.057), followed by *Newsweek*

Table 4.3.

	Word Count and Descriptors							
	1993	1994	1995	1996	1997	1998	1999	2000
<i>Wired</i>								
Word count	8030	8726	4764	10570	8087	10565	8584	9308
Descriptor count	74	127	95	156	114	80	57	114
WC/DC ratio		.0092	.015	.020	.015	.014	.008	.007
		.012						
<i>Newsweek</i>	1993	1994	1995	1996	1997	1998	1999	2000
Word count		1699	1874	2585	2172	1570	2597	1030
Descriptor count		73	83	137	122	34	103	43
WC/DC ratio		.042	.044	.052	.056	.021	.039	.042
<i>Business Week</i>	1993	1994	1995	1996	1997	1998	1999	2000
Word count		2148	2979	3422	3125	2384	4954	2468
Descriptor count		185	190	200	172	103	313	77
WC/DC ratio		.086	.064	.058	.055	.043	.063	.031

(.042), and *Wired* had the lowest ratio (.0125). In other words, even though *Wired* magazine used more words in its articles, fewer were descriptive in nature. Chart A2 (See Appendix A) shows a graphic representation of the word count/descriptor ratio between the three publications.

This researcher proposes that not only are the article writers and editors of these three publication attempting to describe a new, dynamic phenomenon to an unfamiliar audience, it is possible they are attempting to convince the audience that something significant is happening and to invest their time and money into this nebulous thing called the World Wide Web. While these media people are subconsciously or otherwise playing the role of evangelist to readers of *Business Week*, and to a lesser extent *Newsweek*, they are “preaching to the choir” when it comes to readers of *Wired*.

Category Classification

Descriptors were deemed those words and phrases that add color, definition or understanding to a passage. Often they are adjectives, but adverbs, verbs and nouns were also included. Metaphors fall into the category of descriptors, but descriptors are not limited to metaphors.

Initially, Other was the largest category on the spreadsheet page. After the entire year was completed, the descriptor list was reviewed. New categories emerged. Some promising categories were listed in the first batch but were later discarded because they were too narrow and there weren’t enough descriptors later on that could realistically be put within that category. Science Fiction/Magic

was a category that showed promise (“genies out of the bottle,” “magic,” “computer fortune telling,” “futuristic fantasy”) but after a few articles, the descriptors disappeared. Categories that showed consistent validity throughout all three publications and eight years of study were retained.

Two examples of problematic descriptors can be taken from *Newsweek* in 1998. The phrase “richly interactive” (“Taste the Salt, Feel the Wind,” May 11, 1998) could conceivably be classified either within the Value category (“richly”) or within the Connectivity category (“interactive”). In the same way, the phrase “fast-moving entity” (“Get Off My Desktop,” June 22, 1998) could fall within the Connectivity (“fast-moving”) or the Being category (“entity”).

Connectivity

As one of the original three categories recommended by Markham (1998), Connectivity was adopted with inherent expectations. In addition, Connectivity is the essence of what makes the World Wide Web possible. When readers are introduced to the concept of the WWW, Connectivity is most likely the first descriptor category they will come in contact with (Markham, 1998). But in relation to the Web, what exactly is connectivity? There are myriad references to the Web as a pipeline, and a river, and data streams are often associated with the metaphor of water. Also, Web usage is often referred to as traffic, with corresponding street references such as the Information Superhighway. As Internet development increased in the late nineties, emphasis went from being connected, to the speed of the connection. And as that connection improves, a

direct effect is improved interaction between people. All of these metaphors—speed, traffic, water flow, socializing—have a direct relationship to Connectivity. Examples of descriptors that fall within this category include: Model T, jumping onto, speed up, floodgate, surf the Internet, swamped, information highway, virtual stroll, free ride, whoosh, dancing as fast as we can, snowballing, poky place, and navigate.

Social

The category Social emerged as a hybrid between Connectivity and Being, focusing specifically on the interaction between two or more people. It was added to eliminate confusion in descriptors that dealt with connectivity, but on a human level. Examples of descriptors that fell into this category include: community, schmoozing, exchange views, welcomed with open arms, crash the party, and dancing as fast as we can.

Being

Some people go online to be someone else, or at least be unidentifiable as themselves. That state of Being, or not Being, falls within this category. In addition, any form of anthropomorphism would fit within this category too, plus references to specific types of individuals as well as ethics and philosophy. Examples of descriptors that fall within this category include: netizens, enrich your life, go out and stretch your legs, hip, clumsiness, myopic glow, lurching and primitive, saurian entity, showered, geekhood to coolness, and cybersavvy.

Scene

Microsoft used the advertising phrase, "Where do you want to go today?" That *where* is cyberspace. But is cyberspace *somewhere*, or just a state of mind? One might think of logging on as going somewhere, and that location, or Scene, takes many forms. Examples of descriptors that fall within this category include: orderly universe, playground, electronic malls, clubhouse, a mecca, digital labyrinth, cyberspace, looking-glass world, nexus, and gravity field of the moon.

Consumption

Initially it may seem odd to associate sex with food, but these two topics make up this category based on two characteristics: they both involve hunger, and in many situations involve a form of consumption. Examples of descriptors that fall within the category of consumption include: voraciously, pleasures are exquisite, at first blush, embraced, tackled with passion, world would drool, notorious glutton, spit out, love affair burning hot, and lures us.

Revolution

The changes to the Internet in the 90s were indeed a Revolution, and that reference is made often. Military action, or war, is associated with revolution because one often comes with the other, though not always. The competition associated with war is later referred to, specifically in the context of the pursuit of limited options to make money online. Examples of descriptors that fall within this category include: real war, frustration is legion, battle, significant blip, freedom,

dominate the online world, true guiding force, Bosnia of telecommunications, fighting the crypto revolution, flame the scum, and communication to the masses.

Tool

The computer is referred to as a Tool, and software and facilities online can be perceived that way as well. In addition, those who host websites are building something, as well as those who establish companies and corporations. Examples of descriptors that fall within this category include: best tool available, real fuel, cutting-edge, crash, no blueprints, Internet brownout, foundation, collapse, all that stuff, Gutenberg press, boilerplate text, and all those crazy ideas.

Value

This category deals with the perceived material worth of what is found online, including data, sites and people. Examples of descriptors that would fall into this category include: richer in content, information-rich, gratis, more than numbers, all the trappings, expensive component, next gold rush, money-losing, splurge, pricey, tight constraints and dirt cheap.

Biology

Originally called Organism, this category was broadened to include anything biologic, as well as the environment in which organisms come to be, including references to evolution. Examples of descriptors that would fall into this category include: threat of extinction, stunt development, embryonic, growth medium, monster companies, swarms, crop of web sites, and mushroomed.

Arena

The category Arena encompasses both areas of sport, as well as performance. Sport is often alluded to in these articles, especially in the context of competition. In addition, performance would include anything done in front of a public, including drama, dance and music. Examples of descriptors that would fall into this category include: discipline, contest, go-go pace, throw in the towel, grabbed the spotlight, jockeying to win, rules of the game, and crash the party.

Other

Even with the refined categories, Other often remained a major category simply because the nature of Internet discussion is so broad, and allusions and metaphors used to describe images are for the most part as varied as the people who write them. Obviously, the purpose of this exercise is to limit the number of descriptors that fall within the other category. However, the more categories that are activated to minimize the Other category, the greater the number of categories and the smaller the slices of the pie (as in pie chart). When the pie chart has too many slices, the significance of each slice is diminished, and it is more difficult to draw conclusions. Examples of descriptors that fell into the Other category include: Great Web Shakeout, emergence, digital equivalent, essential, deft use, producer, phenomenon, and lexicon.

Raw Results

Two thousand, six hundred and sixty-one descriptors were harvested from 106 articles in three magazines published over a period of eight years and

classified into 11 possible categories. Study of *Wired* magazine resulted in 843 descriptors, *Newsweek* produced 601, and 1,217 descriptors came from *Business Week* magazine.

Table A1 (Appendix A) shows how the descriptors fell within categories among the three magazines. When viewing the categories of choice among *Wired* articles, there appears to be a slight, if any pattern or trend. Revolution is the category of choice in 1993 (26%), when the new medium was still not only on the cutting edge, but virtually unknown to the vast majority of Americans. From there the leading category shifts each year from Connectivity in 1994 (26%), Scene in 1995 (25%), Being in 1996 (18%), Revolution in 1997 and 1998 (17% and 23%), Scene in 1999 (19%) and finally Revolution again in 2000 (24%). It appears that revolution has become a significant, but not an entirely dominating, category in 1997 and later. A graphic display of these results is presented in Chart A3, Appendix A.

Newsweek, on the other hand, shows a definite directional shift in its perspectives. From 1994 until 1998, the dominant myth category is Connectivity—one computer talking to another. However, in 1999, the year following the greatest period of percentage growth in Internet history, the dominant myth shifts to one of competition—Revolution. Connectivity averaged 24% descriptor response from 1994 to 1998, and Revolution averaged 11% during that same period. In the next two years, however, descriptors in the

Connectivity category dropped to a 15% average, while Revolution rose to 23% (Chart A5).

Connectivity is also the prevailing myth initially in *Business Week*. The period 1994 to 1997 shows a preference for myths associated with Connectivity, with an average response of 21%. In 1998 the leading myth category is Arena (24%), followed closely by Revolution (21%), both competition-oriented responses. In 1999, Arena prevails with 20% response and in 2000, Revolution is the leading category (16%) (Chart A7). Until and including 1997, Connectivity provides the largest average response. But after 1997, Connectivity no longer leads responses. Both leaders—Revolution and Arena—are associated with competition.

Graphically, results from the three publications are presented year by year in Charts A3 to A8 in Appendix A. The first chart of each publication shows all possible responses in relation to the whole for that year. The second chart simplifies the responses by eliminating all responses but the three leaders: Connectivity, Revolution, and Arena.

Chart A3 (*Wired*) shows no consistent pattern relating the year with the dominant myth category. Thinning responses down to the three leaders makes it even more obvious (Chart A4). Connectivity is dominant in most years, but is superseded in 1993, 1998 and 2000.

Newsweek (Charts A5 and A6) is a little less clear, but again, limiting the responses to the three main categories helps clarify things. Connectivity dominates until 1999, when Revolution assumes leading myth category.

Business Week (Charts A7 and A8) is even more unclear until one looks at the final chart. Limiting options to the three leaders shows that Connectivity leads the pack through 1996. In 1997 the team of Revolution and Arena, representing competition, take over as the dominant categories.

When dealing with so many descriptors, categories and mythemes, it is necessary to simplify the possible variables to see the significance of trends over this eight-year period. Most significant is that mythemes used in *Business Week* and *Newsweek* magazines move from categories that represent cooperative sharing in 1994 to categories that represent competitive advantage in 2000. Are the mythemes a *reflection* of perception, or a *promotion* of it? Following the commodification theory promoted by Karl Marx, one would believe that the latter was more the case. According to Marx & Engels (1963), it is only through the active and aggressive pursuit of new markets, new media and new products to sell to those markets that capitalism has continued to thrive. Do we have any reason to believe that the World Wide Web would be any different than any other medium in that regard? Financial figures for the Web say no. And in order for that new market to become available, the Web had to go through the commodification process that establishes the beachhead for corporate profit-making.

Categorizing Titles

During the evaluation process, it was determined that additional data could be gleaned by reviewing and categorizing the titles of the 106 articles under study, comparing how they fit categorically with other descriptors. Two coders categorized the titles independently, with a 63% level of agreement between them. The level of agreement between prevailing category of descriptors and that of titles was a paltry 4%. The prevailing categories among titles, by publication and year, are as follows:

Table 4.4.

Article Titles Categorized by Year and Publication.

	<i>Business Week</i>	<i>Newsweek</i>	<i>Wired</i>
1993			Revolution
1994	Being	Being	Being
1995	Sport	Connect/Being	Mixed
1996	Mixed	Tool	Mixed
1997	Consump/tool	Mixed	Mixed
1998	Connect/being	Being	Mixed
1999	Being	Being	Mixed
2000	Being	Other	Mixed

None of the categories shown above represented more than 50 percent of that year's and publication's titles. In many cases, the categorization was mixed, with no category getting more than one choice. In those situations, the selected category was deemed "mixed," as shown above.

CHAPTER V

CONCLUSION

In response to the research question, Is there mythic evidence of commodification on the World Wide Web? the results provided in Chapter IV lead this researcher to say Yes. Commodification, the process of turning concepts, objects and beings into objects to be bought or sold, exists on the Web today. And as will be shown in this chapter, it is most prevalent in areas where the Web is being presented to those unfamiliar with it.

The tool used in this study to evaluate the recent changes in the Web was content analysis of mythic descriptors found in magazine articles about the Web between 1993 and 2000. From the harvesting, categorization and evaluation of descriptors, the following observations are made:

1. Evidence supports the premise that foundational myths associated with the World Wide Web are changing. Whether they are being consciously manipulated to change perception or are a response to a changing environment is unknown.

The largest category of descriptors for *Wired* magazine varied over the years, beginning in 1993 with Revolution (26%), and returning back to Revolution 1997, 1998 and 2000. In the interim, predominant categories included Connectivity (1994 and 1999), Scene (1995 and 1999), and Being (1996). There

appears to be no consistent pattern in this publication to indicator trends in Internet perception.

Newsweek readers moved descriptor categories from Connectivity in 1994 through 1998 (an average of 24%) to Revolution in 1999 and 2000 (23% average). *Business Week* readers consistently categorized descriptors as Connectivity from 1994 to 1997 (an average of 21%), Revolution in 1996, 1998 and 2000 (19% average), and Arena in 1998 and 1999 (22% average).

This statistic is interpreted thusly: while *Wired* writers were content to describe the Web as cyberspace, *Newsweek* writers and *Business Week* writers focused first on connectivity, and then saw the competitive potential of the Internet. Revolution (which includes descriptors about war) and Arena (which includes sports and performance activities) can both be classified as competitive in nature. The question remains, however, whether the change in descriptors in *Newsweek* and *Business Week* was the result of purposeful manipulation, or unconscious response to changes in the Web environment.

2. Use of descriptors is inversely related to familiarity with the medium. The more familiar the audience is with the World Wide Web, the less likely it is that descriptors will be used.

Table 4.3 in Chapter IV shows that the descriptor to word count ratio for *Wired* magazine went from .009 in 1993 to .012 in 2000 with the high at .020 in 1995. At the same time the ratio for *Newsweek* went from .042 in 1994 to .042 in 2000 with a high of .056. Descriptor to word count ratio for *Business Week*

started at .086 in 1994 (the highest) and dropped to .031 in 2000 (the lowest).

Considering the nature of these three publications, one could interpret these findings thusly:

- *Wired* readers were already familiar with the Internet and the terminology associated with it, and need fewer descriptions to be informed of its development.
- *Newsweek* readers were a diversified general-interest audience. Many would not be interested in the Internet, but many others would. Those who were interested for the most part would be unfamiliar with its nature and terminology, and would need to be introduced on a primary level, using descriptors they would be familiar with.
- *Business Week* readers are not only interested in business, but also in how new technology affects business and its future. As a whole, they have a larger interest in what happens to the Internet. As such, there is a greater need, even than for *Newsweek* readers, to understand its development in terms that *Business Week* readers can understand.

3. Change of descriptors (and corresponding myth categories) over time is inversely related to familiarity with the medium. The more familiar the audience is with the World Wide Web, the less likely the descriptors (and myths) will change.

As stated in #1 above, *Wired* readers had the least amount of directed change in their descriptor categories. Even though 1997, 1998 and 2000 showed

some change in the direction of the Revolution category, there was no obvious trend indicated.

Newsweek and *Business Week* readers were less familiar with the medium, and in the later portion of the research period (1998 for *Business Week* and 1999 for *Newsweek*), the predominant descriptor category changed from one of Connectivity (working together) to Revolution and Arena (competing with each other).

4. Changes in mythology regarding the World Wide Web moved from one of connectivity in the period of 1994-1998 among consumers to one of competition (manifested in the categories of arena and revolution) in 1998 to 2000.

The point of change in descriptors (approximately 1998) is consistent with what might be referred to as a “critical mass” in the number of users of the Internet. Table 2.1 in Chapter II shows that in 1998 the Internet jumped from 57 million users to more than 147 million users. This massive influx of users followed an increase in articles about the Internet that grew from 978 in 1996 to 1253 in 1997 and 1421 in 1998 (Table 2.2).

It might be presumed that the immense popularity of the Internet starting in 1998 resulted in more attention being paid to it by corporations. With more focus being drawn to the Internet, financial possibilities that earlier may have been ignored now might have been explored. As the financial rhetoric increased, dialog began to reflect the growing interest from international corporations. And

that dialog included descriptors that surreptitiously attempted to change the way users viewed the Internet.

5. A mythic base of *connectivity* is consistent with the historic background of the Internet as a sharing medium. A mythic base of *competition* is consistent with the corporate world's desired goal of the Internet as a profit base.

Compare the following two quotes from advertisements:

"But the IBM Global Network has 5,000 network professionals and provides access to more than 90 countries. Now. So you can get a head start on the high-speed networking that'll make it seem like everyone in your corporation is working in the same office." (IBM ad, *Business Week*, 1994)

And:

"You're in the midst of a global maelstrom. A swirling mass of converging technologies and new business opportunities unleashed by the Internet . . . innovations that keep your business one step ahead of the Internet. And light years ahead of the competition." (Fujitsu ad, *Business Week*, 2000)

The rhetoric regarding the Internet has changed. Or is it the *environment* that has changed? In the beginning, the fantasy was an international company networked (*connected*) in a way that distance no longer mattered. And now, the industrial juggernaut throws billions of dollars and man-hours into its efforts to *beat the competition* and make this burgeoning medium into something that can be presented to their stockholders as a successful financial investment in technology.

And while the wishful, simplistic thinking of *connectivity* colors the IBM ad, the Fujitsu ad six years later demonstrates that corporations are no longer content with connectivity, they want to use the technology to destroy the competition. The first ad is reflective of the original intent of the Internet, to share information and bring cooperative workers closer together, eliminating the challenge of distance. The second reflects something new and alien to the original ideal. Rather than sharing information freely, we are using information as a commodity to make money.

The Question of Commodification

A generalization of the transition from introduction to novice use to established use would suggest that the Web is initially introduced as a great way to connect with others. As that connection is accepted and becomes matter-of-fact, its significance gives way to the concept of competition.

On a surface level, this paradigm seems inconsistent with Markham's continuum. How does one explain the discrepancy that is presented in Chapter IV? This researcher can suggest several possibilities.

The commodification paradigm and Markham's continuum both start with the myth of connectivity. From there, Markham suggests that the user grows into the concept of place, of cyberspace, and eventually, with maturation, a state of being. The commodification paradigm suggests there may be a splitting of possible directions, based on motivation of use (for business versus for pleasure). The second possibility is that progress along the continuum for some

is being forestalled by the intervention of commodification, with Arena and Revolution mythemes serving as a subset of the Connectivity myth. Finally, it is possible that Markham's continuum should not be perceived as linear in nature, but as possibly two or even three dimensional, turning an inevitable evolution of perspective into myriad possibilities. The rapid, dynamic growth of the Web may have resulted in a greater variety of mythic dimensions, including, but not limited to the options within the Markham continuum as well as the 11 mythemes proposed in this study. A final consideration is that Markham's perspective was based on ethnographic study of users on the World Wide Web, while the data under consideration here was located in three print-media magazines, based on the premise that print media was commonly the medium that introduced newcomers to the Web.

In any of these cases, commodification is both strongly represented in the results of this study, and missing from the Markham continuum. But the turn from cooperation to competition begs the question: Is this good news, or bad?

Is competition inherently bad? Does the mythic perspective cast business as the dragon or the demon? Competition is inconsistent with the original intent of the Internet, the free sharing of information. The question remains whether the Internet would be the pervasive entity it is today had it remained in its original free-share, noncompetitive state.

On the other hand, one might ask: Why is there such an emphasis on competition in *Newsweek* and *Business Week*, and a lack of the same in *Wired*?

If competition is perceived as healthy for the Web, why isn't it being promoted to the thought leaders of the electronic age as well?

It is unlikely that the change in descriptors from a theme of connectivity to one of competition in *Newsweek* and *Business Week* during this eight-year period was intentional. It is not the result of a conspiracy hatched in some dark conference room by cigar-smoking executives bent on conquering another medium in the name of profit margins and quarterly reports. It is more likely a subconscious action associated with the conscious decision to invest in a new medium that shows vast potential for development as a market.

The overwhelming success of Netscape Navigator in 1994 and 1995 led many investors to see the Web as a profit center. Many investments after that point were poorly made and often investors lost millions of dollars. But Netscape had established a precedent with its success. The question was no longer *if* money could be made on the Internet; the only question was *how* (Segaller, 1998).

One other question has appeared from the results of this study. While categories of competition (arena and revolution) increased in the last two to three years of study, value—which one might also associate with a corporate interest in commodification—stayed at a minimal level in *Wired* magazine (never more than 7%), went up to 12% in 1996, and then dropped in *Business Week* in the following years. Only in *Newsweek* does one see Value going up in the last two years, and then only to 10%. Why did Competition go up when Value did not?

One explanation might center around the Dot-Com boom that happened in 1997 and 1998. Initially, corporations could not see how money could be made on the Web. Then when Netscape Navigator and its investors made millions, everyone wanted to have an investment on the Web. It was not until the Dot Com bubble burst that corporations realized that money was more likely to be made *through* the Web rather than *on* the Web. Corporate America learned that the Web was a useful tool for keeping your corporation ahead of the competition through better communication, and generally was not a source of revenue in itself.

Further Research

Often when one conducts a research project, the most obvious conclusion that can be drawn from the research is simply that further research is needed. It often seems that for every question that is answered, three spring up in its place. This study was exploratory in nature; therefore it is logical that a major part of the conclusion should consist of recommendations for further research. Here they are:

1. In-Depth Research of Three Publications

The intent and focus of this project was to gather a sampling of Internet-related articles from *Wired*, *Newsweek* and *Business Week* magazines during the period of 1993 to 2000, and evaluate them for commodification-related descriptors. Further research of these publications is warranted, using a variety of methods. An example might be a textual analysis of these publications

targeting specific Internet-related words and phrases and how often they are used. A second approach might be to evaluate the major themes these three publications choose to address during this time period. Another approach might be to look specifically at advertising and what mythic images are portrayed in these magazines. All these approaches—and many others—would provide revealing insights into the psyche of that era when the World Wide Web was being discovered by the public for the first time.

2. Articles in Less-Developed Countries (LDCs)

This study focused on three well-known, influential magazines in the United States—*Wired*, *Business Week* and *Newsweek*. The purpose was to see whether the words and phrases used to describe the World Wide Web changed during the period of 1993 to 2000 to reflect a growing commodification on the Web. This study has concluded that they have.

Further research could include an examination during this same period of popular publications in developing nations as well. Cultural imperialism is a significant issue in India, the Middle East, Asia and Latin America. How would their publications—the descriptors they use and the prevailing myths those descriptors make reference to—describe the World Wide Web as compared to the U.S. magazines? And would there be a change during this same time period?

3. Other Media (TV, Film, Advertising)

Just as magazines in other regions might or might not reflect the same change in descriptors as the three chosen by this study did, further research

might focus on other media. Television programs—talk shows, newscasts, even sitcoms—might have interesting perspectives on the Web as it developed. But would the words they used during this period echo the results of this study? In the same way, film might be examined for the same reasons in the same manner. And all forms of advertising—print, electronic, and billboard—displayed during this eight-year period might illuminate this issue further.

4. Content Analysis Online (1993-2000 Archives)

Late in the process of developing this dissertation, a comment was received that online archives exist containing websites that in many cases go back to the beginning of the Web. A separate analysis might examine these. However, the information gathered there would not tell the researcher much about how the Web was promoted, described and perceived, but more about the actual nature of the medium during that time. This might be beneficial as a collaborative work to compare and contrast descriptions in other media with the reality on the Web.

5. Ethnography Online

A longer, more time-consuming study would be the ethnographic approach to how users relate to the Internet while online. The downside of this experiment would be that the study would take place in real time, and would not be an examination of the formative years of the Web. On the other hand, copious notes over a significant period of time might reveal some internal changes that would coincide with the external changes the Web is experiencing, and may help

answer where the Internet is headed. This approach has been pioneered by Sherry Turkle (1984, 1997), but still leaves much room for continued examination.

6. Semiotics and Barthes

This study has made several references to Barthes and his use of semiotics, signs and symbols to deconstruct myths in our daily lives. A further development of this technique would very likely bear significant fruit. Chapter III shows how Barthes used semiotics to evaluate the connotative and denotative messages in both photography and advertising. That evaluation is used to show how the “associative total” of the messages presents myths into our everyday language.

Further study using Barthes semiotics of signs on the Web would echo and complement his earlier work in photography and advertising. The largest question would be where to start in such an immense, dynamic medium.

7. Theoretical Model Development

In light of the claims by Markham regarding the proposed connectivity-place-being continuum, and its subsequent lack of relevancy, this study begs the issue of establishing a new theoretical development model for the World Wide Web. If the evolution of Web mythos does not follow a continuum, what does it follow? How would look graphically?

This dissertation will not take the time or space to thoroughly develop this proposed model, but the possibility of such is intriguing, and could have

significant implications for both further study of the Web, as well as communication media in general.

Final Words

It would be nice if the recommendations for further research could include the development of a comparative model that would project the future of the Internet based on the evolution of another medium. Perhaps it could be similar to the model presented by Copeland (1997) when he posited engineering design as a foundational metaphor for the development of information science.

Unfortunately, the Internet is a unique medium. It is a mass medium, and yet it is not. It is interpersonal, interactive, asynchronous and simultaneous. It presents products from multi-billion dollar, multinational conglomerates as well as those from imaginative 10 year olds working from their bedrooms, sometimes in direct competition with each other and with no distinct advantage on either side. It can provide up-to-the-minute news and information—sometimes false, often too true—to millions within seconds. It presents audio, video, graphic and text equally well to users around the world regardless of language, cultural, geographic or political boundaries. And it has no precedent.

Since history began, humans have attempted to predict the future. There have been some minor successes by far-seeing visionaries such as Jules Verne, George Orwell and H. G. Wells, who have shared a glimpse of what is to come in humanity's not-too-distant future. Karl Marx attempted to share a vision of a world where the need of the many outweighed the greed of the few. His dreams,

however skewed by his successors into what we know today as communism, provide us today with a critical perspective on the consumerist society in which we live. And regardless of the cultural baggage associated with the labels, one should be careful to differentiate between democracy and capitalism. One can have capitalism without democracy, as the People's Republic of China will attest.

As Marx stated, capitalism is built on the premise of having a ready supply of customers. And as capitalism becomes more firmly entrenched in the world, it continues to promote consumerism and commodification as the source of its future customer base.

In the late 1800s, as the Western frontier was rapidly being gobbled up, the myth "acres of diamonds" helped turn the Manifest Destiny of the United States from a geographic one to a frontier of economics (Procter, 1992). Since that time, the U.S. has grown to be the leading economic power in the world.

But as the Internet grows, evolves and develops, is it a given notion that its nature will be based on economics? Americans have lived with the consumerist paradigm for so long that it is difficult to conceive of any other foundation for this medium. However, as stated earlier, the Internet is unique. Perhaps its uniqueness calls for a new paradigm. Information is the new currency in today's market, but perhaps there are different ways of obtaining that information; alternates to commodification.

This researcher calls for an examination of the consumerist paradigm as it relates to the Internet, and a reevaluation of the foundational paradigm of free information—freely given, freely received, and freely used.

APPENDIX A

APPENDIX A

TABLES AND CHARTS

Chart A1:

Internet Users in Millions, 1993-2000.

Table A1.

Descriptor Categories by Year and Publication.

Wired

	Other	Connect.	Scene	Being	Tool	Consum.	Revol.	Arena	Bio.	Value	Social	TOTAL
1993	8%	8%	5%	9%	18%	22%	26%	0%	4%	0%	0%	100%
1994	6%	26%	11%	13%	13%	5%	11%	0%	7%	3%	7%	102%
1995	8%	18%	25%	12%	8%	4%	8%	6%	0%	7%	2%	98%
1996	4%	13%	16%	18%	11%	8%	15%	4%	4%	2%	6%	101%
1997	3%	14%	14%	13%	15%	3%	17%	3%	3%	6%	8%	100%
1998	9%	11%	15%	16%	13%	2%	22%	1%	5%	0%	7%	101%
1999	9%	18%	19%	8%	4%	7%	12%	8%	12%	4%	0%	101%
2000	11%	11%	8%	8%	16%	8%	24%	8%	5%	2%	0%	101%

Newsweek

	Other	Connect.	Scene	Being	Tool	Consump.	Revolution	Arena	Biology	Value	Social	TOTAL
1994	14%	19%	14%	12%	12%	5%	5%	8%	6%	1%	3%	99%
1995	2%	25%	31%	8%	1%	6%	13%	2%	4%	1%	7%	100%
1996	7%	22%	10%	12%	11%	2%	17%	3%	9%	3%	2%	98%
1997	9%	19%	11%	18%	6%	5%	13%	8%	3%	7%	1%	99%
1998	9%	35%	12%	15%	0%	6%	6%	3%	9%	0%	3%	98%
1999	8%	16%	11%	10%	9%	2%	25%	2%	8%	10%	1%	101%
2000	10%	14%	5%	10%	7%	10%	21%	2%	12%	10%	0%	101%

Business Week

	Other	Connect.	Scene	Being	Tool	Consump.	Revolution	Arena	Biology	Value	Social	TOTAL
1994	7%	21%	12%	13%	18%	5%	6%	1%	9%	6%	2%	100%
1995	10%	22%	10%	9%	10%	8%	13%	4%	6%	7%	1%	100%
1996	10%	18%	7%	11%	9%	5%	19%	5%	2%	12%	1%	101%
1997	19%	24%	8%	16%	6%	4%	13%	2%	3%	4%	1%	100%
1998	4%	17%	2%	10%	15%	6%	21%	24%	0%	1%	0%	100%
1999	7%	14%	2%	13%	13%	6%	15%	20%	3%	7%	0%	100%
2000	16%	14%	3%	15%	13%	5%	16%	10%	6%	3%	0%	100%

Chart A2.

Descriptor to word count ratio.

Chart A3.

Descriptor Categories in Wired, 1993-2000.

Chart A4.

Comparison of Connectivity, Arena and Revolution Categories in Wired.

Chart A5.

Descriptor Categories in Newsweek 1994-2000.

Chart A6.

Comparison of Connectivity, Arena and Revolution Categories in Newsweek.

Chart A7.

Descriptor Categories in Business Week 1994-2000.

Chart A8.

Comparison of Connectivity, Arena and Revolution in Business Week.

APPENDIX B

APPENDIX B

CODEBOOK

General Instructions

1. Articles are classified according to publication (*Business Week*, *Newsweek*, and *Wired*) as well as year (1993 to 2000).
2. Each article should be reviewed independent of other articles. The coder should scan the article, including headlines, captions, sidebars and all other pertinent data for descriptors specifically relative to the Internet or World Wide Web, or to actions involving the Web or Internet. When these are found, they should be marked, either by a yellow highlighter or by circling or underlining with a pen.
3. Descriptors are words and phrases that add color, definition or understanding to a passage. A descriptor can be a noun, a verb, an adjective, an adverb, or a phrase. Generally, you should be looking for metaphors, similes, and other phrases that liken the Internet to something it is not in a literal sense. Technical and generally accepted standard operating terms, such as “connect,” “dial in,” “zip drive,” “cookies,” and “software bug” should be excluded.
4. For the purposes of this study, we are looking for descriptors that modify or describe (1) the Internet or the World Wide Web; (2) Internet

connectivity; (3) users of the Internet; and (4) activity on the Internet or the World Wide Web.

5. Words describing a person (surfer, for example) would be classified as being; words describing an action (surfing) would be classified otherwise (in this case, connectivity).
6. After coder has completed the article and the descriptors are marked, each word or phrase should be written on the categorization sheet under the appropriate category. Eleven categories are provided there; if the descriptor does not appear to fit any other category, it should be listed under the other category.
7. In some situations, one descriptor may seem to equally fit in more than one category. In that case, the coder should look at the context of the passage for clues as to which category is most appropriate.

Categories

Scene—references to a physical location, including non-moving water and named water sources.

Examples: orderly universe, playground, electronic malls, clubhouse, a mecca, digital labyrinth, cyberspace, looking-glass world, nexus, gravity field of the moon, the Mighty Mississippi.

Connectivity—references to plumbing, moving water, travel, speed.

Examples: Model T, jumping onto, speed up, floodgate, surf the Internet, swamped, information highway, virtual stroll, free ride, whoosh, snowballing, navigate.

Social—interaction between two or more people.

Examples: community, schmoozing, exchange views, welcomed with open arms, crash the party, dancing as fast as we can.

Being—references to another identity, plane of existence, references to human traits, specific types of individuals, ethics and philosophy.

Examples: netizens, enrich your life, go out and stretch your legs, hip, clumsiness, myopic glow, lurching and primitive, saurian entity, showered, geekhood to coolness, cybersavvy.

Consumption—references to sex, food, attitude toward or consumption of either.

Examples: voraciously, pleasures are exquisite, at first blush, embraced, tackled with passion, world would drool, notorious glutton, spit out, love affair burning hot, lures.

Revolution—references to military action, competition for change, results and goals of governmental change.

Examples: real war, frustration is legion, battle, significant blip, freedom, dominate the online world, true guiding force, Bosnia of telecommunications, fighting the crypto revolution, flame the scum, communication to the masses.

Tool—reference to machinery, or building something, tearing something down, and the devices, energy, and thought necessary to do so, automobile and its parts (not traveling).

Example: best tool available, real fuel, cutting edge, crash, no blueprints, Internet brownout, foundation, collapse, all that stuff, Gutenberg press, boilerplate text, all those crazy ideas, dashboard, under the hood.

Value—reference to perceived worth or lack thereof, dealing with money, time or perceived quality.

Example: richer in content, information-rich, gratis, more than numbers, all the trappings, expensive component, next gold rush, money-losing, splurge, pricey, tight constraints, dirt cheap.

Biology—anything biologic, the environment in which organisms come to be, references to evolution, the treatment and handling of animals, mythical beings, physical size.

Example: threat of extinction, stunt development, embryonic, growth medium, monster companies, swarms, crop of web sites, mushroomed.

Arena—references to competitive sport, and performance arts such as drama and dance. Excludes surfing.

Example: discipline, contest, go-go pace, throw in the towel, grabbed the spotlight, jockeying to win, usher in a new era, rules of the game.

Other—descriptors that don't comfortably fit within other categories.

Examples: Great Web Shakeout, emergence, digital equivalent, essential, deft use, phenomenon.

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