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"The Globe is Now Officially Open for Business!"

The Advertising of Cyberspace: Globalization and the Politics of Cyberculture

Vinu Govind Warrier

A Thesis

In

The Department

Of

Communication Studies

Presented in Partial Fulfillment of the Requirements

For the Degree of Master of Arts

Concordia University

Montreal, Quebec, Canada

August 2002

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Abstract

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This project is concerned with comprehending the effect of the Internet—a cosmopolitan technology—on marginalized and 'Third World' groups, in light of both the cultural politics it sets in motion such as those of cultural destruction, hybridization and homogenization, political economy and resistance, as well as in the ways it bears upon discourses, and models, of development. Arguing that critical theorizing around the Internet must move beyond the Utopian versus Dystopian debates that largely prevail, I propose it be viewed as technology evolving as a mutation of a certain globally inflected logic that is equally, and simultaneously, economic and cultural. It is economic for it establishes a new global economy impacting every individual, everywhere, irrespective of the degree of access she/he has to it. It is cultural for it evolves from, and transmits, a 'future –envisioning' cocktail of discourses of democracy, freedom, modernity, and of material human progress, among others. The processes/institutions of modern advertising, I further argue, are crucial to *both of* these formations.

I begin by establishing that the commercial Internet of today is a *historical product* of deeply interwoven ideological strands, which continue to shape its ongoing evolution—its global architecture, economics, and structures of governance. Subsequently, I examine how advertising bears upon all points of the commercial Internet. Finally, I argue that the inequities characterizing the Internet, whether of access,

content, its socio-cultural impact, or within the global economy it enables, necessitate a

reformulation of the ways in which its imperializing influence may be resisted.

ACKNOWLEDGEMENTS

This project took so much longer than I expected it to, and this has meant that I owe a debt of gratitude to many people, all of who have helped me complete it. The first person that comes to mind is my supervisor, Martin Allor, for setting me on this path, for his enduring patience, and constant encouragement. Thank you, Marty, for showing me how the best teachers work.

Among my other professors at Concordia University, Montreal, Lorna Roth, Iain Cook, Reeta Tremblay, Chantal Nadeau and Kim Sawchuk, have been fundamental to this thesis in ways that they may not even know. Lorna introduced me to the complexities of debates around development, cultural imperialism, and media, with texts that have literally changed my life. Iain accompanied me those crucial first few times as I disembodied into the technological world of the Internet to explore these issues, and made sure I didn't lose my way. I will never forget our discussions at his home, and outside, about advertising, the Internet, and technology in general. Chantal, Kim and Marty, through their courses, both taught me the breadth, scope, and immense value of critical thinking, as well as helped me develop the vocabulary and the skills to be able to do so. Reeta not only helped me publish the paper wherein the seeds of this project was born, but also funded me with assistantships that allowed me to survive, summer after summer. Thank you all for the generosity with which you share of yourselves and your work.

Sheelah O'Neill has been a friend, philosopher and guide from the moment I nervously entered her room my first day in Montreal, pleading for a teaching assistantship. A great share of any credit for this project is undeniably hers.

I would like to acknowledge the incredible encouragement I have received from my friend and teacher at Hyderabad Central University in India, Probal Dasgupta. His inputs over endless cups of tea at the HCU canteen, as well as during the six months he spent in Montreal, gave me the courage to keep pursuing my academic interests. In Iowa City, I am especially grateful to Tom Swiss and Murli Natrajan who have been so generous with their work, as well as to the little 'club' of international students and the management, at Iowa City's only twenty-four hour coffee shop—Donutland, for keeping my spirits up through those long nights spent writing this thesis. I am also deeply indebted to Stephan Beckert of TeleGeography Inc. in Washington D.C., for so readily providing me free access to all the data I required, particularly in writing the second chapter of this thesis.

Kochaman, Nirmala Ammayi, Hari and Devi, made this project possible in very embryonic ways and I owe them a debt of gratitude that I know I can never repay. Papa, and Rajesh, kept me on track with their silent, yet strong and continued support, through the writing of this thesis. Thank you all for being there for me.

To my "harshest critic and fiercest supporter," my wife, best friend, and the tireless editor of this thesis, Priya Kumar, thank you for your faith in me even through times when I had none. As with everything else, this project is born of your wonderful web of love, laughter, and support.

Finally, to the three precious, earliest, nodes of my network, Achan, Amma and Malu, you've spent a lifetime teaching me to be me — this thesis is therefore dedicated to you.

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Introduction

The notion of a new globally networked world has come to have more resonance today, at the turn of the century, than ever before. Theorists writing in a wide variety of contexts including John Tomlinson, Arjun Appadurai and Manuel Castells, among others, have all been concerned with the emergence of a global economy enabled in great part through technological breakthroughs in the areas of human communications and the transportation of peoples and commodities, and in the consequences of the spatial proximity of heterogeneous cultures achieved in such an economy.[1] A primary site of such analyses is the newly globalized media, largely regulated by the global processes of advertising, which has increasingly become among the most valuable currencies in global transactions of capital, peoples, and cultures, between nation-states. The most visible marker of this new globalizing impulse is the convergence of various audio-visual technologies into the newest mass medium of communication: the Internet.

In its study of this new medium of mass communication, the Internet, my thesis situates itself in what I view as a disjuncture between the Internet's self-proclaimed privileging of the notions of access to information, freedom of expression, decentralization (its much vaunted potential as a *democratizing force* that cuts across all communal boundaries), and its contemporary *advertising-supported* evolution into a vehicle for consumerism—in effect its evolution into a new dynamic, alternate, albeit

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[1] See John Tomlinson, *Cultural Imperialism* (Baltimore: Johns Hopkins UP, 1991), 60-62; Ien Ang, *Watching Dallas: Soap Opera and the Melodramatic Imagination* (London: Methuen, 1985); Arjun Appadurai, "Disjuncture and Difference in the Global Cultural Economy," *Global Culture: Nationalism, Globalization and Modernity*, ed. Mike Featherstone (London: Sage Publications) 295-310; Manuel Castells, *The Rise of the Network* Society (Oxford: Blackwell, 1996).

virtual, global marketplace. Within the discursive space provided by such a fundamental

paradox, I seek to examine the cultural and socio-economic consequences of such an

evolutionary, constitutional shift in the new, and first truly interactive, mass medium. In

other words, my thesis concerns itself with why and how advertising *works* in the context

of the Internet, how audiences constructed by this new medium differ qualitatively from

those constructed by older, traditional media, and how the medium facilitates a new order

of *cultural imperialism*. Such an effort is imperative in the larger context of

comprehending the effect of cosmopolitan technologies such as the Internet on

marginalized and 'Third World' groups, specifically in light of the cultural politics they

set in motion such as those of cultural destruction, hybridization and homogenization,

political economy and resistance.

Among the most striking characteristics of the Internet is its mind boggling,

exponential rate of growth. A conservative estimate has the number of users of the

Internet doubling annually, or at a rate of about 0.19% per day. Similar estimates have

46% of the American and at least 29% of the Canadian populations on-line. While the

radio took 28 years and the television, 13, to achieve an audience of 50 million people, it

has only taken the Internet five years to become a mass medium with about 50 million

interactive users.[2] While the world took 15 years to move from less than one million

users of PCs to 150 million of them (1980-95), it is estimated that in no more than five

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[2] These and most other statistics that I use have been garnered from a variety of sources. See Mary Meeker and Chris DePuy, *The Internet Report* (New York: Harper Collins, 1996); Mary Meeker, *The Internet Advertising Report* (New York: Harper Collins, 1997); Jim Sterne, *What Makes People Click: Advertising on the Web* (Indianapolis: Que Corporation, 1997); Evan I. Schwartz, *Webonomics: Nine Essential Principles for Growing Your Business On the World Wide Web* (New York: Broadway Books, 1997); Paul Levinson, *The Soft Edge: A Natural History and Future of the Information Revolution* (London & New York: Routledge. 1997); Katie Heffner and Matthew Lyon, *Where Wizards Stay Up Late* (New York: Simon and Schuster, 1996); Eugene Marlow, *Web Visions: An Inside Look at Successful Business Strategies On the Net* (New York: Media Enterprises, 1997).

years, the number of Internet users rose from less than one million to 150 million. Similarly, in the space of one year in 1997, 50 million additional people were using Netscape's browsers. What these figures suggest is that the transformation of this new medium/technologies of communication, from great unknowns to its mass consumption, has been incredibly swift, which makes it imperative that we examine its impact on the institutions of human society and in the formation of new cultural equations. As Marshall McLuhan once observed: "once a new technology has come into a social milieu, it cannot cease to permeate that milieu until every institution is saturated."[3]

The technologies that led to the birth of the Internet have been traced back to the promotion of powerful calculators by the U.S government during the Second World War. These efforts evolved, after the war, into gigantic "mainframe" computing machines, a handful of which was assumed to be sufficient for all industrial and scientific-military needs. Gradually, as the potential applicability of these machines expanded, 'personal computers' (PCs) emerging from corporate development laboratories began their incredibly rapid ascent to dominance. However, while the hardware infrastructure for the beginnings of the Net continued to evolve, unknowingly, in the corporate world, the shift from isolated calculating machines to a communicating network was not a concept born spontaneously of the interaction of free market forces, but, significantly, one that was advanced and fostered by the convergence of an assortment of material and ideological circumstances.

Locating the origins of the Internet and the accompanying perpetuation of a 'cyberculture' within the socio-cultural matrix of deeply entangled, intersecting

discourses of capitalism, democracy, the increasingly popular notion of 'free flow of information', development and modernity, I argue that the construction of such a matrix must be seen as being fundamentally inflected upon by the concurrent globalization of the processes of advertising that continue to mediate the ongoing commercialization of the Internet. Given this context, my project attempts to explore a series of urgent and important questions such as: what new narratives of social constructions of reality and of negotiation with such constructions are being generated or revised within/through the Internet and the Information Age it heralds? How are various constituencies of people negotiating specific forms of power, authority, representation and knowledge within cyberspace? How do experiences within this space created by emergent technology differ for people in differing social, spatial and temporal locations? And most importantly, how do practices within, in, around and informed by such technologies relate to the globalization of the processes of economic, political, and cultural production and dissemination?

Centrally, my thesis argues that the Internet, and the information-based cyber-age it is widely perceived as enabling need to be rearticulated as the expression of newly evolving mutations of global capitalism. These mutants, while working through masking myths that establish specific formulations of notions such as the democracy of cyberspace and the rights of the free consumer/citizen, only succeed in consolidating power and the social structures of control within the new age, to a central network of global and local elites. While new emergent technologies such as the Internet do not determine social organization or cause the rise of global capitalism, and while they do admittedly offer

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[3] Marshall McLuhan, *Understanding Media: The Extensions of Man* (New York: Signet, 1964) 177.

subversive and anti-hegemonic possibilities to their users, they are certainly simultaneously deployed toward consolidating/perpetuating existing hegemonic social and political structures by the ways in which they are able to permeate regions, practices and ideologies. Consequently they also necessitate a reformulation in the ways through which such imperial tendencies may be resisted.

Observable, in the late twentieth and early twenty-first centuries' obsession with emergent technologies and in its eagerness to foster an almost militant pro-technology movement, is a tendency to conflate discourses of science and technology with that of a unilateral, post-Enlightenment vision of modernity. I argue that this may be read as a potent new mutation of capitalism in a postmodern world that establishes an overarching framework within which are collapsed, not only notions of democracy, freedom and thereby narratives of progress and modernity, but also issues related to political, social and cultural struggles for autonomy. By effecting, in essence, a complete privatization of the global public sphere, the socio-cultural world the Internet creates allows for a multiplicity of local-global articulations to be contained within the free market economy/consumer democracy framework; for this world is not just a virtual space where information flows at blinding speeds, it is also a global marketplace in itself. This affects, for example, the very relationship between popular envisionings of democracy and capitalism. The 'free world' from being comprised of a network of 'democratic capitalist societies' now becomes a system of 'capitalist democracies/alternatively constituted societies.' It is my argument that this new world order is leading to the growth of a global system of nationalistic elites creating a newly marginalized population who become the citizens of a new digital 'Third World'; this world while still being marked by

localized/domestic exploitation and struggle, is simultaneously part of a new network of global marginalization that cuts through traditional geophysical, socio-cultural boundaries of nation states. Envisioning resistance to these new forces of marginalization thus requires a new global mobilization of will, people, and resources. For me, what emerges as especially ominous in the formulations of the new society that the Internet represents is the insidious conflation of a multitude of complex notions that have been traditionally recognized as emancipatory, including the discourse of democracy.

My first chapter, "Networked Histories," attempts to trace the evolution of the Internet from its military origins to its contemporary popular form. Here, I seek not only to qualify it as an emergent mass medium of extraordinary significance, but also to explore its apparently paradoxical evolution from a project born of military research to an increasingly popular medium of mass interaction, which is commonly eulogized as facilitating egalitarianism between global political, social and communicative practices. Drawing upon the works of a range of theorists: of net historians such as Howard Rheingold, Paul Levinson, Bruce Sterling, Mark Geise, John Stevenson, Stephen Levy etc.; of cyber-critics such Manuel Castells, Ziauddin Sardar, Jerome Ravetz, Vivian Sobchack, Arturo Escobar etc.; and of cultural critics such as John Tomlinson, Armand Matellart, Herbert Schiller, and Arjun Appadurai among others, "Networked Histories" is essentially a historical overview of the Internet. However, my central theoretical concern in this chapter is to examine the history of the technological emergence of this new medium in conjunction with the deeply intertwined histories, in the last quarter of the century, of modern advertising, transnational capitalism and the (mis)appropriation of the concept of democracy into *consumer* democracy, the notion of 'the free flow of

information'; and its linkages with the growth of a process of globalization of commerce and culture as well as with the rise of US global hegemony (and decline of the Soviet Socialist model) and finally, with the history of the simultaneously occurring consolidation of linear ideologies of development and modernity I also seek to interrogate the pivotal role of the State (primarily effected directly or indirectly by the state-policies of the United States), in the coming to being of the Internet, including its recent decisions, both to transfer the Internet's management into the private sector which now has the power to decide how the medium will evolve, as well as to nurture its growth as a commercial medium of interaction and a global marketplace.

By examining its history in conjunction with these various processes - the advent of the global economy, the histories of advertising and transnational capitalism, the discourses of development, modernity and democracy—it becomes easier to understand why the Internet has become a much-contested site of both utopic and dystopic representations. My first chapter also examines the significance of the repeated and widespread use of recurring myths and metaphors in descriptions of cyberspace. I propose that deconstructing such originary myths allows us to firmly locate the Internet's genesis and growth within a specific socio-cultural context. What emerges is that much of the democratic, liberatory, emancipatory rhetoric around the Internet are as much grounded in visions of free access to information and free interactive communication and social participation, as in the realities of a freely interactive, commercial global marketplace. I argue that within such myths, which collate notions of progress, development and democracy, may be observed, a process through which the profit motive fundamental to capitalist growth enforces a continual investment in the generation of

advanced technology. This results simultaneously, in both a constant growth in such technology, as well as in the rapid obsoletion of such manufactured products. In short, production thus necessitates continual consumption, which then stimulates further production. Concurring, in part, with Marxist perspectives, I argue further, that advertising and mass media may be regarded as working towards bringing consumption of information technology and its derivatives in line with its frenzied production (articulated differently, this can be referred to as the process of the 'search for new markets'). Since mass media (the Internet) is itself, in turn, dependant on such emergent (electronic) technologies, technology becomes a transformational force both within the "core" and the "superstructure." Through these discussions, it will emerge that the growth of the Internet was neither free or an accident, nor was it a revolutionary appropriation of a military weapon towards the common good of humanity. Thus my effort in this chapter will be to establish that the commercial Internet of today is a *historical product* of deeply interwoven ideological strands that merit close attention.

In Chapter Two, "Evolving Geographies," following this attempt to unravel the various historical discursive strands that I argue are integral to any examination of the history of the Internet itself, I concern myself with identifying the reconfigurations it necessitates in global power geographies. The Internet, both in its role as a mass medium of interactive communication and as a conduit of global commerce, must be situated among the cultural and political machineries, which work towards discounting entire physical territories that then become the deprived geographies of the world. My aim here is to examine the various ways in which such territories become marginalized and irrelevant in the physical construction of cyberspace. While, in Chapter One, I establish

how the basis for such silencing arises from within the unique evolutionary processes of the Internet itself, in my second chapter I try to physically locate some of these territories and identify some of the constituencies that are unrepresented in cyberspace. In the process, I also seek to deconstruct another myth constructed around the Internet and the newly democratic society many claim it is ushering in—that it allows for free, equal access to information about everything, to everybody, everywhere. Further, I establish how access to the Internet remains an expensive luxury, despite endless 'free market' rhetoric about becoming progressively and rapidly inexpensive, particularly for the large section of humanity who is outside of the capitalist institutions of modernity. In this chapter, then, I examine the particular geography of the Internet as it has evolved and continues to evolve. This entails an overview of its global architecture and the way it is physically structured, a look at the economics that define this architecture, and finally, an examination of its structures of governance, which are key to its future growth. In this way, my first and second chapters will set up the terms and problematics of my thesis, showing that any study of the Internet within the context of its ongoing commercialization cannot afford to adopt simplistic, technologically deterministic utopian or dystopian stances. On the contrary, my project emphasizes both the urgency of the need to unravel the complex and fundamentally interwoven ideological strands that are woven into the very fabric of cyberspace, as well as to study the processes through which the nature of this fabric influences the construction of the physical infrastructures of cyberspace and impacts the very foundations of the Internet.

Arguing that the advertising-governed mass media in general, and the Internet in particular in this context, emerges as the most crucial site wherein the social power

structures in the societies of the new, Internet-led age are defined, I propose, in Chapter Three, "The Medium is the Market," to develop the insights established in the previous chapters of my thesis, by studying some of the processes that are effecting the current ongoing commercialization of this mass medium. Focusing not only on the kinds of corporate and other forces responsible for such processes of change, but also on how these forces themselves are evolving and adapting to their new environment, I attempt here to establish the relationships between advertising, the economic realities of the global marketplace and the perception of the Internet as being representative of a global shift to a new form of economy. For my analysis in this context I utilize the various online resources that I have availed of in the last few years, such as subscriptions to online journals like Wired, CNet, India Online, Nua Internet Survey etc., as well as the experience of being part of such on-line communities and clubs at sites like Geocity, Yahoo!, the Internet Advertising Discussion List, and the Internet Direct Marketing Discussion List.

I propose that the fact that it is *now*, once it has been completely thrust into the market economy, that the Internet stands poised on the verge of its most explosive period of growth becomes crucially significant; both the qualitative and quantitative nature of its growth are now determined by the capitalist forces of global economy. Expressed differently, this is basically an examination of the Internet's fundamental claim to *true interactivity* as a mass medium of communication. On the one hand, I examine how 'host' corporate websites literally construct spaces of public discourse, while on the other, I investigate the significance/relevance of "discussions" that occur in these spaces. Thus, in the first section of "The Medium is the Market," I explore some of the ways in

which the processes of advertising impose themselves on all points of the compass as far as the commercial Internet is concerned. In the Internet economy, I argue, the medium is clearly the market, a view reinforced by the fact that the globalization of the advertising industry and advertisements themselves, occurred concurrent to the development of the Internet.

I subsequently turn to an effort to comprehend the fundamental role of advertising in the processes of cultural formation in such a context, which, I argue, must by necessity also be an attempt to understand the cultures of globalization and modernity. Having established that there is a fundamental disjuncture between the emancipatory capabilities attributed to it in discussions about the Internet, and the contemporary reality of its commercialized form where it is an advertising-driven network of global consumption, I argue that this qualitative shift in the fabric of cyberspace has important cultural and socio-economic implications. My central argument in this chapter is the one that I refer to earlier in this introduction, that the Internet-driven economy is a newly evolving mutation of global capitalism. Such capitalism works either to consolidate power and control over the social structures of this new age to a central, traditional capitalist elite, or to redistribute it amongst a newly created capitalist techno-elite. In such an economy and culture, a multiplicity of local-global articulations can be subsumed within the globally networked frame of reference of free market economy/consumer democracy framework; for the world that the Internet signifies is not merely a virtual space where information flows at blinding speeds, it is also a global marketplace in itself. Advertising, both on and about the Internet, both offline and online, performs the crucial role of establishing the *universality* of the ideology of information technology, which I establish in Chapter One

as being an integral part of any vision of development, while global economics concurrently ensures that national economies adopt precisely such a development paradigm. In order to make this case, it is necessary to understand the impact of advertising on the Internet; due to a variety of reasons it emerges as one of the most influential shapers of information/ communication at both the national and the global level.

I argue thus that cyberspace does not as much promise to dramatically transform the public sphere or render it more equally and democratically accessible, as much as it threatens to effect a complete privatization of the public sphere. This ensures that the ways in which we understand, experience and engage with modernity become firmly entrenched within the techno-capitalist framework. Through such processes, these visions of modernity and development are universalized, becoming unquestioningly synonymous with the processes of globalization. The debate, within global institutions of power and influence, is thus cleverly rearticulated from a questioning of the abilities of the processes of globalization to effect *real development*, to one which questions the conditions that need to be achieved in order to secure the success of globalization as a doctrine.

"Conclusion: Networking Resistance," my fourth and concluding chapter, brings together the various arguments made in the previous sections as well as draws on a few illustrative examples where the Internet is being/has been used as a technology towards networking resistance. Given the backdrop of the changes discussed in the earlier chapters, I conclude that critical theorizing around the Internet and the processes of commercialization that inflect its growth, must move beyond the easy utopian versus dystopian, techno-celebratory versus techno-phobic, debates that have largely prevailed. I

argue that the Internet needs to be viewed as a technology that has evolved as a mutation of a certain globally inflected logic that is equally and simultaneously economic and cultural. It is economic in that it has allowed the establishment of a new global economy that affects, advantageously or otherwise, the material conditions of existence of every individual of every nation irrespective of the degree of access (or non-access) they possess to such an economy. It is cultural in that it is also technology that evolves from, and transmits, a 'future-envisioning' cocktail of discourses of democracy, freedom, modernity, material, social and cultural development, and of human progress, among others. The processes and institutions of modern advertising, as we have discussed earlier, are crucial to both of these formations, which themselves grow in strength by virtue of the fact that each continually nourishes the other. The Internet therefore, I argue further, is a medium that functions *in excess of* the sum of its abilities to remarkably transform human communications.

In the concluding section of my project, I also suggest that the emancipatory potential of the Internet undeniably derives precisely from its *interactive nature* as a medium of communications. I argue that the sites of such resistance lie as much within the logic of the commercial globalization of the Internet, as much as outside of it. My examination is not intended to be, by any means, comprehensive. All I aim to do is study a few exemplary sites where various constituencies—both formerly and newly marginalized—are resisting becoming the casualties of the ongoing processes of globalization, and using precisely the Internet to fashion such resistance. It becomes clear that the new global mobilization of will, people, and resources, required to struggle against marginalization in the newly networked age, may only be achieved by re-

appropriating such technologies like the Internet towards such an agenda; in effect, explicitly ensuring that the emancipatory and utopian possibilities of these technologies are not allowed to vanish in the ways that they are being used by the new global economic system.

My thesis proposes that contemporary cyberspace may be more accurately viewed as being woven by an imperial, colonizing Web, whose key networked nodes— economically, socially, and culturally—dominate the marginal nodes, *while still requiring that these peripheral nodes—equally integral to the construction and architectural construction of such a Web—be connected.* These marginal nodes: local economies, cultures, and populations, are becoming increasingly dependant, both for survival and for global relevancy, to the dominant modes. In this sense my argument may be regarded, in parts, as both a 'dependency' and an 'imperial' one, when seen in the light of theoretical models that have been used to study communications media in the context of the 'Third World'. At the same time it also differs from both models, since I also argue that it is precisely the Web's *very architecture—that of a global network of 'locals'*—that offers the potential that can be harnessed toward forging global resistance to existing inequities. For the Internet's unique interactivity as a medium also opens up real possibilities for the global networking of local resistance(s). This completes my examination of the Internet—the history of its evolution and the ongoing processes of its commercialization, specifically via advertising—where the overall objective is to examine some of the ways in which different societies are adapting to this uniquely transforming mediascape.

Above all, my effort in this thesis, is oriented towards comprehending how discourses of development and the development models they create, are themselves fundamentally impacted by social and cultural envisionings occurring in the context of the Internet and other emergent inter-nationally networking technologies. I contend that such efforts may allow us to understand, and therefore perhaps collectively influence to some greater degree, the processes that shape the flows of global capital (in the form of loans and aid from global financial organizations such as the World Bank, IMF etc.) within the new global economy; for such processes—justified, legitimized, universalized, and firmly anchored within the logic of such socio-cultural discourses as those mentioned above—foundationally impact the material conditions of existence, and futures, of the human beings who live in this newly interconnected world.

1. Networked Histories

..in a sense there is no Internet, only two networking standards—TCP/IP (Transmission Control Protocol and Internet Protocol)—which allow an ever-increasing number of private data networks across the world to exchange digital information. These networks and the traffic they carry give the Internet its form; that they interconnect give the Internet its substance.

TeleGeography, Hubs and Spokes[1]

The formative history of the international advertising networks is that of the first steps towards the media in all their modernity. In effect, it is by means of these networks, through a flow of messages of transnational dimensions, that a permanent, daily and generalized connection is developed between particular societies and cultures, local, regional and national. Hence the primary confrontations between the public cultures belonging to the particular territories of the nation-state, and the cultures of the private sector and the market, with their universalizing tendencies and ambitions. Also, the prime tensions between scattered popular cultures and the centralized mass culture, which is produced industrially. If this is so, it is because behind the concept of advertising in its instrumental sense- namely, 'the multiple and impersonal announcement of goods, services or commercial ideas by a named advertiser, who pays an agency and a transmitter (the medium, or advertising support) to deliver his message to the market'- behind this concept is hidden another, an idea deeply rooted in the history of the mode of communications: that of a new model of social organization, a new means of creating consensus, of forging the general will. This is advertising as the fundamental apparatus of the democratic marketplace, democracy of and for the market - for this is effectively the substance of the message. The fatherland of aggressive advertising - the place where it was inscribed directly into the logic of the marketplace- the country which first assumes this new vision of the world is the United States.

Armand Mattelart.[2]

As we enter the new millennium, we find ourselves confronted with a

proliferation of theoretical and popular discourses on globalism and globalization.

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[1] TeleGeography Inc., *Hubs and Spokes: A TeleGeography Internet Reader* (Washington: TeleGeography Inc., 2000) 9.

[2] Armand Matellart, *Advertising International: The Privatisation of Public Space*, trans. Michael Chanan (London: Routledge, 1991) 31.

Contemporary narratives of globalism find their geo-political moorings in the awareness

of an increasingly inter-connected world, whose definitive quality is a hitherto

unprecedented flow of money, commodities, peoples, information and knowledge. The

most visible manifestation of this change – which in turn now serves as its most potent

fuel – is the convergence of various audio-visual computing technologies into the newest,

and in historical terms of growth, the most rapidly proliferating mass medium of

technology – the Internet.

While the dazzling and dizzy pace of the 'coming of age' of the Internet, and of

its most popular component, the World Wide Web (WWW), allows "little time for

reflection, viable dissent, or a change of direction," even the most cursory critical glance

at this new technology reveals that the dominant metaphor permeating its very existence

is that of global networks.[3] Thus the Internet has been defined variously as "the network

of all the computer networks of the whole world; a global, horizontal communication

network of thousands of computer networks (comprising over 300 million users in 2000,

up from less than 20 million in 1996, and growing fast) that has been appropriated for all

kinds of purposes, ... by individuals and groups around the world"; or as "no more than

the sum of the computers that can communicate using its language, the protocol

TCP/IP."[4] Understood, in general, as referring to a collection of computer

software/hardware technologies that has facilitated a specific kind of communication and

information exchange, the defining characteristic of the Internet is its representation as

the *networking* of a set of computer networks. The global *flow* of communication through

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[3] Ziauddin Sardar and Jerome R. Ravetz, "Introduction: Reaping the Technological Whirlwind," *Cyberfutures* ed by Sardar and Jerome R. Ravetz (New York: New York UP, 1996) 1&7.

these networks is what defines it as a medium of mass communications. The Internet, thus, is simply a collection of technologies that enable communication. In fact, the Internet is not even a very comprehensible technology in comparison to many earlier technologies that have had a well-defined material form. It becomes far more difficult to understand and theorize what the term means: email addresses? domain names? software applications? a networking protocol? computers? content? In terms of access, it is still a minor technology when compared to older technologies like the television or the telephone. In terms of production and consumption—be it of the content that flows through the networks, or that of the networks themselves—the Internet appears to be difficult to locate, dispersed as it is among a multiplicity of locations, institutions, and individuals.

Which leads us to the question: how is it that the Internet has come to be celebrated by cyber-prophets as ushering in a new human utopia with an ability to generate uniquely egalitarian social networks? Or, by contrast, vilified by dystopists as heralding a world dangerously and unequally infiltrated by an emergent technology, which works to undermine divergent struggles against exploitations of all kinds by threatening to permeate every sphere of human activity? To think around the Internet then, is to begin with the acknowledgement that "the Internet is as much a discursively created object as a single, given artifact."[5] As Neil Postman reminds us, "a technology is merely a machine. It becomes a medium as it employs a symbolic code, as it finds its place in a particular social setting. A medium is the social and intellectual environment a

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[4] Sardar and Ravetz, "Introduction," Sardar and Ravetz, p.1; Castells p.7; Christine Hine, *Virtual Ethnography* (London: Sage, 2000) 27.
[5] Hine 28

machine creates."[6] Consequently, the 'Internet' and its most widely used component, the 'World Wide Web' (we will use the terms interchangeably for the rest of this project), can be perceived as being fundamentally shaped by the social context they arise within. Access to the Internet and the applications which constitutes it, both shape and are shaped by human expectations of what the Internet is, what it symbolizes, and how it must be used.

Given these insights, it becomes necessary to examine the historical development of the technologies that constitute the Internet in conjunction with the social and cultural circumstances that they arose in. Accordingly, my effort in this chapter is to comprehend the emergence of the Internet in the context of what, I argue, were simultaneously occurring discourses of material and economic development, modernity and democracy. Here, I trace the origins of the linear model of development that prevailed for much of the second half of the twentieth century wherein arose a new global geo-political system of representation with categories such as "First World," "Second World," and "Third World." It is significant, I suggest, that such a system of representation, was as much based on the material and economic prowess of nation states post World War II, as much on the ideological affiliations that these states professed—within the binary framework of the Cold War, the choice for militarily and economically weaker nation states was restricted to one between capitalism versus communism, and democracy versus socialism. I further contend that what can also be observed during this historical period is the capitalization of the notion of the democracy, whereby individual democratic rights began to be defined by, and conflated with, individual consumer rights within the

emerging global economic system. Along with the emergence of a new transnational capitalism characterized primarily by instantaneity and simultaneity, I argue that the parallel globalization of the advertising industry, and indeed, of advertisements themselves, were crucially important in establishing the processes I mention above. I contend that advertising was the site wherein such ideological transformations occurred, perpetuated by the successful establishment of certain globally recurring myths and metaphors. Centrally, this chapter aims to articulate the history of the Internet not as a mere convergence of various emerging technologies, but also, as the historical product of a unique convergence of multiple ideologies and discourses—all of which not only fuelled the growing importance of the Internet as a medium of mass communication but also ensured its appropriation toward the emergence of a new global economic system. My attempt in this chapter to study the development of the Internet must therefore begin with the attempt to map the ways in which the Internet connects to its "'Outernet'—the network of social, cultural, and economic relationships that criss-crosses and exceeds the Internet," "surrounding and connecting [it] to larger flows of labor, culture and power."[7] In order to do this, it is also imperative that we look at the dominant metaphors and myths that have seminally influenced its development and are shaping its future.

In his widely used work on the processes of mythmaking production, Roland Barthes has pointed out that myth may be seen as a process, or processes, by which pre-existing signs are stripped of their context, history, and meaning. These signs then work to transform an historical intent into a natural justification by deforming reality. This

[6] Neil Postman, cited in John V. Pavlik, *New Media Technology: Cultural and Commercial Perspectives* (Boston: Allyn and Bacon, 1996), 13.

central characteristic of myths helps create a world free of contradictions. Barthes

suggests that with myths, the relationships between human beings are not defined as

much by truth, as by utility. "Myths serve to depoliticize decisions made by the elite

according to necessity and circumstances, thus hiding ideological abuse."[8] As the Internet

marches into the twenty-first century, as the undisputed facilitator of global

communications, critics who attempt to theorize around it have often used the insights

provided by Barthes. Gilles Willett, for example, proposes that the very idea of "global

communications," in fact, seems to be grounded in myth "because it presupposes that

communication might have been, or could be, fragmentary. If the idea of global

communication refers to telecommunication systems, then the proper term would be

global telecommunication."[9] What Willett is questioning here, is the easy semantic

equation of the terms 'communication' and 'global communications', arguing not only

that the latter term erases distinctions between the notions of communicating and

telecommunicating, but further that such a synonymy is one that is deliberately

established and perpetuated by global telecommunication companies.

Obscuring the reality that human beings are capable of communicating, the myth

of a global communication ascribed to cyberspace, reduces communication to the

transmission and exchange of information. In the process, Willett concludes, this myth

also obscures new strategies of control of individuals and societies. He suggests that

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[7] Tiziana Terranova, "Free Labor: Producing Culture for the Digital Economy," *Social Text* 18.2 (2000): 34.

[8] Roland Barthes' cited in Gilles Willett, "Global Communication: A Modern Myth?" http://www.unisa.ac.za/dept/press/comca/212/willet.html, accessed 9/6/98 4:16 PM, 5.

[9] Willett 1.

myths about communication depend on the way that the notion of communicating has

been conceived of and defined, historically:

> ... around 2500 years ago, Corax of Syracuse elaborated the fundamental
> principles of rhetoric, or the art of pleading a cause (Harper 1979). Later
> Antiphon decided that rhetoric should apply to political communication and
> Georgias de Leontini stated that it also applied to the direction of ceremonies.
> Later still, Aristotle defined the fundamental paradigm of rhetoric, which he
> conceived as the art of persuasion. As for Cicero, he decided to broaden the
> concept of rhetoric by adding that it was also the art of announcing, alerting,
> instruction, comforting and encouraging. Furthermore, according to Protagoras,
> since truth and reality are social constructs, rhetoric constitutes a means of
> creating cultural realities. ... By conceiving communication *as a means of*
> *persuasion*, those who set standards of communication models have defined
> *persuasion as an art*. And art is obviously the province of the elite, and the
> authority of members of the elite has always been taken for granted. In this
> perspective ... the relationship between sender and receiver is essentially a
> relationship of dependence and submission. (emphases mine)[10]

Communication, thus conceived of as a means of persuasion, leads to an

equivalency between communication, information, and message, through which it is

reduced to an object sent back and forth between a sender and a receiver, a process which

the individual no longer controls. This forms the basis for the majority of communication

myths. Examining some of the nineteen communication myths identified by Dionne and

Quellet (1990), Willett argues that the idea of global communication makes

"telecommunication systems indispensable for the survival of institutions, businesses and

individuals while distracting us from the fragility of the artificial cyberspace, whose

existence depends not only on electromagnetic waves but also in computer science."[11]

This leads us to subscribe to theories that equate social progress with technological

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[10] Willett 6.

[11] Willett 5.

progress wherein social problems may be resolved through the judicious use of technology.

In a similar vein, critics have also suggested that such metaphors become crucial towards the establishment of certain specific ways of viewing the Internet while excluding others. Stefik, for example, has argued that the metaphors we employ to study the Internet have crucially influenced its development and are significantly involved in shaping its future. Assuming the dominant metaphor to be that of the "Information Highway," Stefik suggests that metaphors such as those of the "digital library," "electronic mail," "electronic marketplace," and "digital world," all serve to establish the Internet, variously, as a store of knowledge, a communications medium, a commercial forum, and a place for experience. Stefik concludes that the kinds of policy-making options that present themselves to members of the state and various national techno-elites are fundamentally defined by the metaphors they use.[12] This is a crucial insight for it suggests that while the Internet's growth is defined by the kinds of available technologies and the physical locations of networking infrastructures, it is also circumscribed by the kinds of policies that various nation states, located on different points of power within the global economic system, can adopt/do adopt, with respect to the Internet. This is further explicated in the next chapter where I undertake a detailed examination of the physical geography of the contemporary Internet.

Examining the metaphor of the "electronic frontier," another theorist, Ziauddin Sardar, proposes that we view the construction of cyberspace as being predicated upon a set of interacting fantasies that originate from the western imperial history of political and

cultural conquest. Contending that the West (beginning with Renaissance Europe) has always sought new territories to conquer, Sardar sees cyberspace as a "new continent" imagined into existence as a substitute for old colonies, to satisfy its insatiable desire to acquire new wealth. For Sardar, the use of colonial metaphors such as that of "the new frontier" and the similar quest for new markets in the Internet economy, the similarities between colonizing corporations of the past such as the East India Company and the new software-hardware conglomerates, serve to establish a strong parallel between the colonization of non-Western cultures and the colonization of cyberspace. Sardar concludes that cyberspace is the newly discovered Other of Western civilization.[13] While Sardar's arguments about the power such metaphors wield, in shaping the way the Internet, and cyberspace, is perceived are certainly relevant, I would argue that such an unequivocal comparison tends to flatten out the differences between colonial world economic systems and the new Internet-based global economy. It also fails to recognize that the power equations between the colonizers and the colonized, in the context of cyberspace are qualitatively and quantitatively different than from the imperial processes of colonization. Further I would contend that the nation state—both as a site and a product of imperial colonization—is one rendered only marginally important in this new digital colonization; while the those newly marginalized are not merely distinct, geographically localized, populations, but people who share a common parameter of marginalization—that of inaccessibility to the digital economy.

Similar arguments have emerged in the works of critics such as Vivian Sobchack and Arturo Escobar. Observing that the Internet appears to offer new freedoms but does

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[12] Stefik cited in Hine 30.

so only within the framework of pre-existing commercial and cultural constraints, Sobchack brilliantly compares the coexistence of contradictions within an "ideology of the information age," to the coexistence of contradictory meanings of the notion of "franchise" as it exists in the United States. Herein, the term signifies both "freedom," as in the right to vote, and "property and privilege," as in a franchise for a global restaurant chain, department store, or sports team. For Sobchack, the concept of cyberspace, given the contradictions with which it is being constructed, "will be profoundly dialectical: enhancing and reducing, freeing and enslaving, unifying and dividing, all along new lines that emerge out of old structures, but never transgressing the boundaries of power."[14]

In attempting to comprehend how the Internet alters relations between the 'developed' and 'developing' worlds, Escobar shares some of Sobchack's concerns. Escobar's overview of the discourse of development and the way this it has evolved after the end of World War II, is seminal for my project, not only in the way that it enables me to trace the ideological intersection of this discourse with the others I have already mentioned, but also in the important questions that Escobar raises. Concerned with what he calls "the anthropology of cyberspace," Escobar poses a series of questions that he argues are imperative, be answered. Given that the Internet will continue to be directly or indirectly shaped by economic and military concerns, what are the newly emerging narratives that are helping construct social reality, and what are the new ways of negotiating with such constructions occurring within/through the Internet and the information age it heralds? How are various constituencies dealing with specific forms of power, authority, representation, and knowledge within cyberspace? How do experiences

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[13] See Sardar and Ravetz, Introduction in Sardar and Ravetz, 1-14.

within this space created by the Internet and other emerging technologies differ for people situated in different social and, spatial, and temporal locations? How do practices within, in, around, and informed by, such technologies, relate to the global accumulation of capital and the globalization of cultural production and dissemination?[15]

These are questions that must form the backdrop as I attempt, in the next section of this chapter, to trace the emergence of the Internet as the newest "global" medium, within the deeply intertwined histories of modern advertising, transnational capitalism, and the consolidation of linear imaginings of ideas of development and modernity.

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"Cyberspace did not appear from nowhere as a mystical spark of inspiration from the mind of one individual."[16]

"Cyberspace originates in a well known social and cultural matrix, that of modernity."[17]

In *The ise of the Network Society*, the first volume of his trilogy, Manuel Castells comprehensively details how a fascinating blend of military strategy based on scientific cooperation from the academy, technological entrepreneurship and counter-cultural innovation led to the development of the physical Internet.[18] He points to the fact that various Internet historians, including Abbate (1999), Naughton (1999), Hart (1992),

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[14] Ibid.

[15] Sardar and Ravetz, Introduction, Sardar and Ravetz, 1-14.

[16] Chris Chesher, cited in Sardar, "alt.civilizations.faq," Sardar and Ravetz, 17.

[17] Arturo Escobar. "Welcome to Cyberia: Notes on the Anthropology of Cyberculture." Sardar and Ravetz, 113.

Hafner and Markhoff (1991), and Himannen (2001), among others, all refer to the widespread view that the Internet originated from within the efforts and institutions of the Cold War. In this story, as Castells tells it, the US Defense Department's Advanced Research Projects Agency (ARPA)—spurred by the launching of the first Sputnik which served as a visible triumph of Soviet technological superiority—began to invest massively in the idea of a decentralized communications/computational network which would not be rooted in any single geographical location—and thus remain relatively invulnerable to a nuclear attack. Based on an idea proposed in the early sixties by Paul Baran in the United States and separately by Donald Davies in the United Kingdom, one strategy that emerged was the idea of a network, which would use 'packet-switching technology' whereby messages could be broken down into packets of data, each packet be made to travel independently along multiple directions along the network, and be reassembled at any desired point on it.

The first computer network, named the ARPANET, came into being on September 1, 1969, connecting the University of California, Los Angeles, the Stanford Research Institute, the University of California, Santa Barbara, and the University of Utah. Eventually, as they began to appropriate the network for their own communication purposes, the ARPANET, in 1983, came to be devoted exclusively to scientists, while a separate network called the MILNET (Military Network), was created for the sole use of the military. Late in the eighties, the National Science Foundation (NSF), helped create two other networks: a scientific network called CSNET, and a network intended for the use of non-scientific scholars named the BITNET, which was established with the

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[18] See Manuel Castells, *The Rise of the Network Society*, especially Chapters 1, 2, 3 &5. This section of my

support of IBM. The backbone of all these communication networks created in the

eighties was still the ARPANET, which consequently came to be called the ARPA-

INTERNET, and eventually, simply, the Internet. At this stage in its evolution, the

Internet was still funded by the Department of Defense, and was administered by the

NSF. When the ARPANET was shut down on February 28, 1990, the NSF's NSFNET

became the backbone of the Internet.

The early nineties saw the rise of several corporate as well as non-profit networks,

and in April 1995, the last government funded backbone of the Internet, the NSFNET

shut down, replaced by mutually beneficial cooperative arrangements between private

networks which were essentially commercial spin-offs of the NSF's regional networks.

Once the basic infrastructural elements of the network were in place, the NSF began

funding data-networking research at thirteen nationwide supercomputing centers in 1985.

Academic institutions, increasingly eager to be connected to the NSFNET, began leasing

local and regional circuits from local telecom providers—by then a nationwide telecom

circuit had already been commissioned by the NSFNET. The purposes to which the

network could be used was laid out by the NSFNET in its Acceptable Use Policy (AUP)

which stated that "NSFNET backbone services are provided to support open research and

education in and between US research and instructional institutions, plus research arms of

for-profit firms when engaged in open scholarly communications and research. Use for

other purposes is not acceptable."[19] However, in 1991, three private networks—General

Atomics (CERFnet, now owned by AT&T), UUnet (now owned by MCI WorldCom),

and Performance Systems International (PSInet)—circumvented the AUP to create an

chapter is indebted to Castells' account for historical information and statistics.

alternative 'open' point of network-traffic exchange called the Commercial Internet exchange (CIX). By 1992, the US government decided to stop funding this network and consequently in 1994, the NSF was forced to commission four separate network access points (NAPs), which would function similar to the CIX. These NAPs, run by different telecommunication companies, were set up at New Jersey, Washington DC, Chicago, and San Francisco.

It is important to note that such a process of privatization meant that in the first stage of its development, there was no single, centralized overseeing administrative authority for the Internet. The management of pre-existing coordinating Internet organizations—the Internet Activities Board (IAB, ironically the same acronym as that for a later, equally influential organization, the Internet Advertising Bureau), and the Internet Engineering Task Force (IETF)—were handed over by the NSF in January, 1992, to a non-profit organization called the Internet Society (ISOC). ISOC, describing itself as "an international organization for global coordination and co-operation on the Internet," is a US-based professional membership society that acts as a non-governmental institutional and fund-raising umbrella organization for the Internet. As the Internet grew globally, the Internet's main coordinating responsibilities that involved the assigning of virtual addresses worldwide became a hotly disputed issue. Until 1998, incredibly, one man, Dr. John Postel of the University of Southern California's Information Sciences Institute (ISI), managed these responsibilities. In 1998, a new American-based regulatory body was established to deal with such issues, called the Internet Corporation for

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[19] TeleGeography Inc. 29.

Assigned Names and Numbers (ICANN), (I will go on to examine the governance of the Internet in more detail in the next chapter.)

The evolution of the 'network of networks,' the Internet, was fundamentally enabled by the various technologies that emerged in the technological revolution towards the end of the millennium. For example, the establishing of this network depended on the creation of two computing protocols in 1978—the Transmission Protocol (TP), and the Internetworks Protocol (IP), by Cerf and Postel from the University of California, Los Angeles, and Cohen from the University of Southern California. These protocols, that allowed computers to communicate with each other, became established as a US standard in the late eighties. In fact when European telecommunication carriers decided, around the same time, on a different international communications protocol, the Internet was almost split into two mutually non-communicable networks. The story of the Internet then, is also the story of how TCP/IP were adapted to win acceptance as a 'common' standard for computer-enabled communications.

Other such stories of standardization, globalization, and universalization, around the emergence of the Internet, abound as well. The invention of email communications by Ray Tomlinson at Bolt, Beranek and Newman (bearing the acronym BBN, this was one of a handful of specialized, technological 'Cold-War' think-tanks funded primarily by the Department of Defense. Others included Massachusetts Institute of Technology's Lincoln Laboratory, Stanford Research Institute (SRI), and RAND Corporation, while the privately funded think-tanks included Paul Alto Research Corporation, funded by XEROX and AT&T's Bell Laboratories,) which is now widely regarded within the Internet industry as the 'killer' application of the Internet is one such story. The invention

of the 'modem' for PCs by two Chicago students, Ward Christensen and Randy Suess, in

1978, who proceeded to diffuse this technology online at no cost, is another. Others

include the creation of USENET, an online forum of discussion, by three students (at

Duke University and the University of North Carolina, both of which were not part of the

initial ARPANET), who made their software freely available to anyone who wanted it; as

well as the creation of a system to post bulletin boards on PCs by Tom Jennings in 1983,

which was again freely distributed, and became the origins of one of the earliest

grassroots networks called FIDONET. By 1990, FIDONET was a network comprising

two thousand five hundred computers in the US. The model on which it was based made

it inexpensive and easily established, and it became especially successful in poorer

economies at the time, until the commercial development of the Internet led to its

eventual demise.

The most significant of these inventions, in retrospect, was that of the World

Wide Web by Tim Berners-Lee at the European Center for Nuclear Research (CERN).

Deviating from the ARPANET tradition, Berners-Lee turned to the work of Ted Nelson.

In 1974, Nelson had published a pamphlet called 'Computer Lib' that exhorted people to

seize and use computers for their own benefit, proposing a new system of organizing

information on the Internet, calling it 'hypertext.' Based on the system of hyperlinks,

Berners-Lee's World Wide Web was a convergence of audio-visual technologies that

created an easy interface to access the Internet with. In keeping with the prevailing

'hacker ethic', the WWW was distributed free. It, along with the later MOSAIC and

Netscape browsers created by Marc Andersen in 1992 (also distributed free), went on to

become the technologies primarily responsible for the Internet's evolution into a global, interactive, mass medium of communications.

While these were the technological innovations that enabled the growth of the Internet in its present form, it is also important to examine the emergence of the Internet as a discursively constructed cultural entity. To reinforce a point made earlier, I argue that the collection of technological histories like these, by themselves, lead merely to the perpetuation of a myth wherein the Internet evolves as a technology simply because it was "natural" for it to develop, and too good not to! Such a founding myth of the Internet's origins, I propose, may be seen as straddling two seemingly contradictory positions—one of ARPANET's vision of a 'command-and-control communications system,' and the other of the post-sixties counter cultural hacker impulse exemplified in Giese's widely quoted proclamation - "information wants to be free"![20] In this story of the historical development of the Internet may be identified "some key themes: the appropriation of a militaristic technology for humanitarian and libertarian purposes; the assertion of the natural human desire to communicate; the reclaiming of a weapon of destruction for the good of the people."[21]

Much earlier efforts at constructing histories of the Internet have been concerned with the apparent contradiction between its military origins and its current avatar as a globally popular sought after medium of mass communication. In an incisive effort to examine the early historiography of the Internet, Luba Krekhovetsky draws upon a social constructivist perspective as elaborated by David Crawley: "For students of media,

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[20] Luba Krekhovetsky. "From Military Strategy to Mass Medium: A Historiographical Analysis of Internet History, unpub. paper, 5. I am grateful to Luba for generously sharing this paper with me.

[21] Hine 31.

perhaps the most interesting theme to emerge from this mix is the emphasis on the development of domestic spaces and the constituencies built up around successive and overlapping forms of electronic communication that connect these sites to wider social worlds—telegraphy, telephony, broadcasting, and now computing. These studies pay particular attention to the inner workings of technologies—case specific histories, the role of technical knowledge and new professions, and above all the social actors who organized themselves and otherwise gathered around technical knowledge and its artifacts."[22] Using Crawley's concept of 'constituency groups,' Krekhovetsky examines the work of four net historians: Rheingold, Sterling, Giese, and Stevenson, and discovers that each of these four historical accounts of early Internet development are different accounts focusing on different historical aspects, attributing agency and intentionality to different constituency groups. Rheingold structures his history around visionary computer scientists and engineers, effectively diminishing the military's role; Sterling's history revolves around technological infrastructure, locating the power of the Internet within the decentralized, egalitarian nature of the medium itself; Giese focuses on competing constituencies—the Internet becomes a product of oppositional negotiations between hackers and ARPA researchers wherein the hacker community succeeds in becoming the dominant influencer in its shaping; while Stevenson's social history of the Internet views it as a product created by the processes of mediation and negotiation between the hacker culture and various institutions of the government and the military. Krekhovetsky concludes that these historians fail to interrogate their own values while constructing their histories of the Internet.

Much recent work has sought to question such one-dimensional histories of the Internet. Work by Hafner and Lyon, for example, describe the Internet as a product of a complex web of interactions between computer scientists, politicians and funding agencies, which may very well have developed differently than it did, if it developed at all. Abbate, similarly has argued that the ARPANET's development was shaped in the context of multi-dimensional objectives and policies, of which the Cold War was only one.[23] Likewise, Christine Hine speculates that themes that revolve around the anarchic nature of the Internet, the anti-establishment culture of the hackers and cyberpunks who were part of its growth, and the emphasis on the sense of a shared responsibility of netiquette, are what led to the early focus on new ways of communicating and sharing, of identity formations online, and about the development of Internet communities among Internet theorists. However, she argues, its commercialization and commoditization have marked a major shift in the Internet's identity that needs to be closely examined. Hine concludes that the Internet is currently understood and used as a result of "historical (as an embodiment of Cold War military ideals or as a triumph of humanitarian values over said military ideals), cultural (through mass media in differing national contexts), situational (in institutional and domestic contexts within which the technology acquires symbolic meaning), and metaphorical (through the concepts available for thinking about the technology) shaping."[24] It is this social shaping that is responsible for the creation of an Internet that connotes different things for different people.

My own concerns take as their point of departure, Hine's suggestion that the *commercialization* of the Internet implies we revisit its history. It is my argument that any

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[22] David Crowley, "Doing Things Electronically," *Canadian Journal of Communication*, 19 (1994): 11.

analysis of the social shaping of the Internet cannot afford to ignore the impact of the

simultaneously occurring histories of the globalization of commerce and culture, and

discourses of development and modernity on the development of the Internet itself. I

further argue that these histories themselves must be understood as being fundamentally

inflected by the globalization of advertising. A good example of how these various

discourses had begun to be understood as relational to one another at around the exact

same historical moment of the privatization of the Internet is evident in the following

excerpt from a widely quoted speech of Al Gore, wherein Gore, then Vice-President of

the United States, is reported to have claimed he coined the term "information

superhighways," as a metaphor for understanding the Internet:

> The President of the United States and I, believe that an *essential prerequisite to
> sustainable development, for all members of the human family*, is the creation of a
> Global Information Infrastructure. This GII will circle the globe with information
> superhighways on which all people can travel. The GII will not only be a
> metaphor for a functioning democracy, *it will in fact promote the functioning of
> democracy* by greatly enhancing the participation of citizens in decision-making. I
> see a new Athenian Age of democracy forged in the fora the GII will create.
> - Al Gore, US Vice President, 21st March 1991, in a speech to the International
> Telecommunication Union conference in Buenos Aires.[25]

The emphases added to this quote are mine. However, it is Gore's emphases on

the linkages between discourses of 'development' and 'democracy' with that of the

Internet that interest me. One of the most comprehensive efforts to comprehend the

discourse of 'development' that I have come across is Arturo Escobar's fascinating study,

Encountering Development. Escobar, examining what he deems to be the fundamental

force shaping the field of development - the discourse of development economics,

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[23] Cited in Hine 31.
[24] Hine 32.

attempts to articulate a 'cultural critique' of economics. He points out that to understand

the discourse of development, it is necessary "to analyze the conditions of its coming into

being; how it emerged, building upon the already existing Western economy and the

economic doctrine generated by it (classical, neoclassical, Keynesian, and growth

economic theories); how development economists constructed "the underdeveloped

economy," embodying in their theories features of the advanced capitalist societies and

culture; the political economy of the capitalist world economy linked to this construction;

and finally, the planning practices that inevitably come with development economics and

that became a powerful force in the production and management of development," in

order to comprehend the currently dominant economic discourse.[26] Escobar argues that

the discourse of development was a fundamental anchor for the restructuring of global

culture and political economy in the early post World War II period.

It is important for my project to note that this vision of development originated in

the United States. President Harry Truman's inaugural address on January 20, 1949, was

also a proclamation to the world that the United States needed to work towards resolving

the problems of the "underdeveloped areas" of the globe.[27] Escobar takes note of the

Truman vision, which was to extend the noble American dream of peace and material

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[25] Cited in Cees J. Hamelink, " The Democratic Ideal and its Enemies," *The Democratization of Communication*, ed. Philip Lee (Cardiff: U of Wales P, 1995), 15.

[26] .\rturo Escobar, *Encountering Development: The making and Unmaking of the Third World* (Princeton: Princeton UP, 1995), 18.

[27] "More than half the people of the world are living in conditions approaching misery. Their food is inadequate, they are victims of disease. Their economic life is primitive and stagnant. Their poverty is a handicap and a threat both to them and to more prosperous areas. For the first time in history humanity possesses the knowledge and the skill to relieve the suffering of these people . . . I believe that we should make available to peace-loving peoples the benefits of ours store of technical knowledge in order to help them realize their aspirations for a better life . . . What we envisage is a program of development based on the concepts of democratic fair dealing . . Greater production is the key to prosperity and peace. And the

abundance to all corners of the world. The way this was to be achieved, however, was by

creating the conditions that would allow the worldwide replication of features

characterizing the 'developed' societies of the time. Capital, science, and technology

were the chief ingredients in this vision, to enable a revolution leading to substantially

high levels of industrialization, urbanization, technicalization of agriculture, material

production and living standards, and the adoption of 'modern' education and cultural

values. Escobar also outlines how by the end of the fifties, a will towards such a

revolution became fundamentally inscribed within the circles of power in states

everywhere. To illustrate this, he cites one of the most influential reports written in 1951,

by the Department of Social and Economic Affairs of the United Nations in 1951:

"... rapid economic progress is impossible without painful adjustments. Ancient

philosophies have to be scrapped; old social institutions have to disintegrate; bonds of

caste, creed and race have to be burst; and large numbers of persons who cannot keep up

with progress have to have their expectations of a comfortable life frustrated."[28] By the

end of the seventies, Escobar points out, "reality ... had been colonized by the

development discourse, and those who were dissatisfied with this state of affairs had to

struggle for bits and pieces of freedom within it, in the hope that in the process a different

reality could be constructed." Thus several new concepts came into currency within the

discourse of development post World War II that gradually permeated and became

established within the sociopolitical, economic and cultural spheres as well, popularized

by their frequent usage within global institutions of influence, such as the United Nations.

Notions such as those of the 'First World,' a category comprising the most highly

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key to greater production is a wider and more vigorous application of modern scientific and technical

industrialized 'free' nations of the world, the 'Second World,' compiled of the industrialized, communist nations of the world, and the 'Third World,' referring to the poor, unindustrialized nations of the world, became established as a vocabulary of geopolitical representation for/by the whole world.

The primary forces shaping the discourse of development during this period were the need for the United States to locate new markets, the significantly increased faith in science and technology, and the Cold War—which, as we've already discussed, was a significant shaping influence on the Internet as well. Escobar describes the period from 1945-55 as one that saw a rapid consolidation of US hegemony in the world capitalist system. As more and more formerly colonized territories—earlier, hubs in an imperial system of commerce—fought for independence, the US's primary foreign policy objective became to help rebuild the economy of its allies in Western Europe. Simultaneous with the need to locate new sites to invest its surplus capital, however, the imperative to expand the market for its products abroad also became increasingly urgent. Further, expanding the US economy also required access to raw material for this was the only way that the growing capacity of US industries, particularly its emerging multinational corporations, could be met.

Consequently, the US made a massive investment ($19 Billion between 1945-50) in economic aid to Western Europe. This, interestingly, was capital that was simply 'given' away (similar to the way in much software was disseminated during the early development of the Internet!). Escobar notes how it has been argued that the Marshall Plan of 1948 was the first time in capitalist history when it was deemed necessary to

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knowledge." Harry Truman, cited in Escobar, 3.

'give away' money and goods. This massive investment, prompted by Truman's well-known Point Four Program, occurred in historical conjunction with the establishment of new 'global' financial institutions such as the World Bank and the International Monetary Fund (IMF). Escobar observes that while the Point Four Program proposed that the poorer parts of the world be fortified by a diet of two crucial 'developing' forces, that of capital, and of technology, the 'Third World' did not get as much 'free' money as it did technological assistance. Thus, in the same period that Western Europe received $19 billion in economic aid as part of the Four Point Program, Latin America received less than 2% of US aid, and only about $150 million was spent on all of the 'Third World.' Global financial institutions such as the World Bank and the IMF, backed by the United States and the other relatively strong economic powers of Western Europe, insisted that the 'Third World' create 'the right climate' before economic aid could commence. The right climate meant, among other things: a visible commitment to capitalism as the path to future development, the curbing of various nascent nationalisms, and the 'controlling' of the Left, the working class and the peasantry. The Cold War, Escobar says, was one of the single most crucial factor that confirmed the strategy of development: "In the late 1940s, the real struggle between East and West had already moved to the Third World, and development became the grand strategy for advancing such rivalry, and at the same time, the designs of industrial civilization. The confrontation between the US and the Soviet Union thus lent legitimacy to the enterprise of modernization and development; to

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[28] Escobar, *Encountering Development*, 4.

extend the sphere of *political and cultural influence became an end in itself*,"(the

emphases is mine.)[29]

Escobar also underlines the centrality conferred upon *technology* within this

discourse of development, observing that within the vast literature on the sociology of

modernization, technology came to be theorized as a force that would inexorably enable

the progress of the 'Third' and 'Second' worlds towards the liberating model of the

'First.' Escobar concludes that while the discourse of development economics continually

offers "successive promises of affluence for the Third World through active intervention

in the economy in the 1950s and 1960s, planning throughout the development era,

stabilization and adjustment policies in the 1980s, and anti-interventionist, "market-

friendly development" for the 1990s," all it really does is to 'discover' poverty on a

global scale and all it really seeks, disguised as the harbinger of freedom and democracy,

is to exploit such poverty.[30] For the emerging order of capitalism and modernity in this

period, he argues, relies not only on industrial and technological superiority, but also on,

what he terms, 'a politics of poverty,' to not only effect a social transformation whereby

the poor become *objects* of knowledge and management, but also, crucial in the context

of my project, to create *consumers*.

The period from the late seventies to the end of the millennium, and further, has

been the subject of much discussion among critics for the emergence of a multitude of

discourses therein, that have influenced how contemporary globality came to be. Escobar

establishes how the discourse of development became the ubiquitous but central operator

of the politics of global representation and identity. Extending this insight, I argue that

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[29] Escobar 34.

the development of the Internet must be seen in the light of the deeply intertwined regimes of representation provided by development, modernity and globalization. Underlying all these regimes is the discourse of democracy and overlying them, the commodifying, consumerizing force of advertising.

In order to examine the linkages between the processes of capitalism and the notion of 'free trade' with concepts such as 'freedom' and 'democracy', it is educative, at this juncture to turn our attention to studies that have sought to trace the evolution of the process of democratization. One comprehensive overview is provided by Majid and Katherine Kia Tehranian who offer a conceptual historical framework that emphasizes the interactions of democratization with modernization and communication. While I do not critically endorse their formulation in its entirety, it is useful to examine it in the light of my project for the connections it draws between the histories of the discourses we consider fundamental to an understanding of the Internet.[31] The Tehranians argue that the processes of democratization and communication through new technological, economic, political, and cultural formations can be traced through seven successive waves of modernization in the last five hundred years, as integrating heterogeneous societies around the goals of security, liberty, equality, and community.[32] According to them, the end of World War II in 1945 ushered in a new era of globalism marking 'the fifth wave of democratization.' While the creation of centralized institutions of global financial management such as the World Bank to channel investments into the less developed

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[30] Escobar 58

[31] Majid Tehranian and Katharine Kia Tehranian. "That Recurrent Suspicion: Democratization in a Global Perspective" in Lee ed., 38-75.

[32] Tehranian & Tehranian, 53, 55 & 56.

national economies, the IMF to manage the convertibility of international currency

exchange, and the General Agreement on Tariffs and Trade (GATT) to facilitate world

trade by reducing tariff and non-tariff barriers, provided the economic basis for a new

global capitalist system, the United Nations provided the political basis for a global

security system.

Despite the fact that the Cold War undermined the influence of the United

Nations as a system of security, globalization continued its growth through the

emergence of the transnational corporations (TNCs) and the multinational corporations

(MNCs). These TNCs formulated global strategies aimed at retaining centralized control

while facilitating spatial and managerial dispersion, while the expanding reach of global

advertising fostered the global culture of mass consumption that they required to exist. In

this process, the Tehranians observe, "the seductions of the 'soft power' (Nye 1990) of

cultural appeal may have proved nearly as powerful as the 'hard power' of military might

and economic gravity."[33] The Cold War was crucial for now globalism appeared as two

unique versions—that of liberal capitalism as opposed to that of Soviet communism. In

effect, the Enlightenment idea of progress was packaged in two forms—development by

the rule of a free-market economy, or by central planning. Describing the emergence of

global competing media (BBC, VOA, CNN, MTV, TIME, LIFE, Wall Street Journal,

International Herald Tribune, Newsweek, The Economist, Hollywood films, global

advertising, and Direct Broadcast Satellites versus their ideological counterparts in the

'Second World', such as Radio Moscow, Radio Beijing, New Times, Beijing Review

etc.), the Tehranians argue that the increasingly global commercial media—print, film,

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[33] ibid 55.

television, satellites and computers—played a central role in this war. However, one noteworthy consequence of the increasing global presence of such media, was the emergence of a new breed of communication elites, in both ideological camps, who were the managers of the enormous new technostructures of global communication. These 'technologues' came into being along with the simultaneously occurring convergence of voice, data and mages into a single stream of electronic, digital signals called the Integrated System Digital Network (ISDN) that began to rapidly dissolve boundaries between media technologies, institutions and professions.

The new technologues combined an intricate knowledge of such emerging technologies with the managerial skills required for such massively complex technocracies. In the 'Third World,' however, where technological development was comparatively slower and more localized, the types of communication elites formed were qualitatively different from the 'technologues.' These groups, who the Tehranians call "communologues", conversant in the languages of indigenous, religious, ethnic, and nationalistic discourses, largely rejected secular views of progress. Arguing that exposure to the diversity of global cultures in this period challenged the foundations of globalism as an ideology of modernity by decentering its universalist claims and creating a new sense of cultural relativism, the Tehranians conclude that "the tension between the global and the local has been an incipient political and cultural feature of the Fifth modernization."[34]

For the Tehranians, the Sixth wave of modernization and democratization began with the end of the Cold War. With the subsequent collapse of the Soviet Union and

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[34] Ibid 58

China's steadily progressing entry into the structure of global capitalism, the capitalist vision of globalism, they suggest, became, and continues to be, increasingly irresistible. While the US Congress rejected the WTO as, ironically, a threat to *US* national sovereignty, GATT, passed in 1994, became the dominant channel for the management of world trade; lowering tariffs by approximately 38% for a total gain of $744 billion for the one hundred and twenty three participating nations. On the other hand economic regionalism, in the form of politico-economic organizations like the European Union (EU), Association of South East Asian Nations (ASEAN), the North American Free Trade Agreement (NAFTA), and the Asia-Pacific Economic Cooperation (APEC) are also becoming increasingly consolidated. Thus the Tehranians observe that *glocalization* emerges as the dominant feature of our world wherein the global market adapts to local conditions while simultaneously using them towards global competitive advantage. They further argue that democratization in its Sixth wave has come to be defined by two simultaneously occurring 'ideologies and pathologies': globalism versus localism, and commodity fetishism versus identity fetishism. The global market, obviously, emphasizes secular ideologies of progress, which encourage commodity fetishism. In effect, modernization and democratization become dialectical processes where the requirements of economic accumulation and political participation compete for the material and symbolic resources of power. Globalization creates a global elite who are linked directly or indirectly to technocratic, capitalistic organizations that are fuelled by deterritorialization and informationalization. However, "the globalist ideology of capitalism is ... torn between the contesting principles of one dollar-one vote versus one

person-one vote."[35] To sum up, what the Tehranians describe is a convergence of processes in the last quarter of the last century, wherein we can observe the increasing interchangeability of the notions of 'democracy' and 'capitalist democracy.'

It has been widely postulated, especially among theories of post-industrialism, that the end of the last century has seen the emergence of a new economy. Castells, for example, refers to a new economy that is informational, global, and networked. He suggests that this new economy is "*informational* because the productivity and competitiveness of units or agents in this economy (be it firms, regions, or nations) fundamentally depend upon their capacity to generate, process and apply efficiently, knowledge-based information. It is *global* because the core activities of production, consumption, and circulation, as well as their components (capital, labor, raw materials, management, information, technology, markets) are organized on a global scale, either directly or through a network of linkages between economic agents. It is *networked* because, under the new historical conditions, productivity is generated through and competition is played out in a global network of interaction between business networks."[36] Castells goes on to describe how the need to open up new markets led to the rise of multinationals. The growth of these MNCs required an environment that was defined by two major components—the deregulation of markets worldwide and new information technologies that would enable dramatically enhanced global communications. For Castells, the globalization of financial markets, beginning from the eighties, and facilitated primarily by new communication technologies, formed the backbone of the new global economy. Castells further observes that this global economy

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[35] Ibid 72

was not a pure creation of market forces, but a product of complex negotiations and interactions between markets, governments, and international financial institutions that were representing various national and international market interests. The networking of most nations to the newly formed global economic system occurred by a two-fold process: either political pressure was applied through the actions of the economically and militarily dominant states on the other states, or economic pressure was imposed through the global institutions of this new economy like the IMF, World Bank, or WTO.

The mantra (that we've already seen to have evolved from the Truman vision,) was that global capitalism, fuelled by the information technology revolution, would usher in prosperity, democracy, and reduce levels of inequality to everyone's benefit. Pointing to the fundamental complicity of the Clinton administration in this process, Castells refers to a 1999 *New York Times* report that elaborately detailed the Clinton team's concerted effort in this direction, which involved both applying direct pressure on governments worldwide, as well as issuing strict instructions to the IMF to follow the similar strategies. The Clinton administration, according to Castells, clearly grasped the fact that given the established presence of American MNCs worldwide, as well as the hegemonic American influence within global trade and financial institutions, economic globalization was advantageous to American firms and to the US economy. Castells further notes that once the global economy—a network of interknit segments of various national economies (a 'network of networks' in other words!)—was established, it became a decentralized network, wherein any of the non-fundamental economic nodes that disconnected itself from it could simply be bypassed while resources continued to

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[36] Castells 77.

flow through the rest of the network (the comparison to the working of the Internet is obvious). At the same time, any such national economy that attempted to disconnect was also faced with the prospect of paying an unbearable price – economic devastation in the short term, and the closing of avenues of economic growth, in short, global economic irrelevancy, in the long term. Thus Castells suggests that the framework of values as conceived of within the productivism/consumerism dynamic of the global economy offers no alternative for people, firms or countries: "once the global economy has been constituted, it is a fundamental feature of the new economy." [37]

Simultaneously, however, fact of the territorial concentration of science and technology within a handful of 'First World' nations significantly influenced the constituting of the sites and networks of such a global economy. Castells notes that in 1993, ten nations in the world accounted for 84% of global Research and Development (R&D) and 95% of US patents. Even as recently as up to the late nineties, a fifth of the world's population living in high-income countries, accounted for over 74% of the world's telephone lines, and 93% of its Internet users.[38] Consequently, Castells argues that while this suggests a model of labor comprised of new economy producers located in a few 'global cities and regions' and of the rest of the technologically dependant economies of the world, the realities of global immigration patterns (fuelled in no small measure by the discourse of development as well as by the rise of elites such as 'technologues' and 'communologues as we've discussed earlier), has created an economic environment wherein capital, and the processes of production and consumption are *global*, while the bulk of labor is *local*. In such a global economy, only an elite

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[37] Castells 147.

techno-labor force is truly globalized. What Castells is arguing here is that while the informational economy impacts the whole world, and *is* global to the extent that all socio-economic processes relate to the structurally dominant logic of this economy, most people on the planet *do not* participate in it. This is an insight similar to Otto Imkens's comment on the Internet: "...even those who attempt to disconnect from, or are not yet connected to, the global grid, still live in its glow."[39]

An inevitable corollary to the growth of MNCs in the same period has been the emergence of the modern, global, advertising industry. It is illuminating, for the purposes of this project, to briefly examine the growth of this industry. Cultural critic Armand Matellart in his *Advertising International: the privatization of public space* provides a comprehensive history of the evolution of modern advertising. It is interesting, in the context of my examination of the Internet, that the transnational dimension of advertising, for Matellart, reveals itself as the very history of modern advertising as "a network, and a network of networks."[40] For Matellart, this is a social network that constitutes the crucial link between the emerging global economy and a global culture, inflecting media, economies, cultures, politics, as well as international relations, rendering the idea of a globally communicating society synonymous with that of a globally *consuming* society. This poses a fundamental socio-cultural change, Matellart argues, for it provokes an array of mutations and redefinitions in the practice of *democracy*, and needs to be closely studied.

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[38] Castells 124.

[39] Otto Imken, "The Convergence of Virtual and Actual in the Global Matrix: Artificial Life, Geo-Economics and Psychogeography," *Virtual Geographies: Bodies, Space and Relations.* eds. Mike Crang, Phil Crang and Jon May, (London & New York Routledge, 1999) 102.

Tracing the history of the advertising industry, Matellart observes that the rise of

the globalism post World War II, coincides with the moment in its history when

advertising, formerly conceived of merely as 'a technique for the modernization of

selling,' began to define itself as a crucial apparatus of the democratic marketplace and a

process that helps in the construction of a new global model of social organization.

Matellart's argument, rephrased in our context, is that advertising began, in effect, to

think of itself as part of the American (Truman) vision whereby, besides being a new

global channel for the promotion of commerce and industry, it also saw itself as a

network wielding considerable cultural and political influence. Matellart quotes from an

article in an issue of *The Advertising Age* of the time to make his point: "It can be said

that advertising and marketing can be a nation's unofficial diplomat overseas,

representing a country's way of life more dramatically and realistically than official State

Department or Foreign Office ambassadors. The tremendous international impact of

marketing and advertising in the United States, in fact, has led to the coining of the word

"adplomacy""[40]

The United States, with its new vision of the world was where this new vision of

advertising was inscribed into the global economy, and the new vision, Matellart notes,

was that of an "educational mission." This vision was subsequently, considerably

consolidated by the Cold War era, when concepts such as 'freedom' and 'democracy'

were further inserted into the discourse of advertising. Thus in 1968, the President of an

US-based international advertising agency recalled: "Democracies with high living

standards are at the top of the list of countries spending a high per cent of national

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[40] Matellart ix.

income on advertising, whereas communist dictatorships with relatively low living standards are at the bottom ... Freedom must have its advertising, or else it will surely run into danger, ... the American marketing system has at its basis that sudden upsurge of the idea of human freedom."[42] In the same historical moment, Matellart notes, the US advertising industry also began to equate popular culture with 'mass culture', arguing through various trade publication articles, that the United States was the first nation in history to have a 'centrally organized,' 'mass produced' folk culture, which came from advertising agencies, networks of newspapers, radio, and television.[43]

Matellart describes this stage in the evolution of advertising as the 'Imperial' order and suggests that it ended in the beginning of the seventies when the exclusive monopoly of the United States within the advertising industry began to wane. Matellart speculates that this wane occurred due to the economics of the time wherein the United States, from being the principal investor in investments abroad, primarily in Western Europe, also became the primary destination of foreign investment, again, primarily from Western Europe. Thus while the US initially received approximately 10% of the world's investment flow, this figure became 30% by the end of the seventies, and 50% by the end of the eighties. Consequently, there was also a consolidation of national advertising markets and agencies. Matellart describes a race launched, in the eighties, by the US advertising industry to form global networks of advertising, a process that closely paralleled the global expansion of American multinationals. He details how this growth was envisioned according to the prevailing 'globalization of commerce' models of the

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[41] Matellart 32.

[42] Matellart 32.

time, such as those proposed by management theorists like Theodore Levitt and Peter

Drucker. Assumptions around the globalization of markets and advertising agencies

revealed and emphasized three major tendencies: "1) Four key influences on the media

landscape: consumer convergence, technology, the need to be a low cost producer, the

growth of advertising expenditure; 2) Four major trends: the globalization of the media

and the big communications groups, the increasing size of media-owning companies, the

segmentation of the media, new media and new kinds of opportunities; 3) Three types of

effects: the increasing pace of globalization, pressure on governments to liberalize

broadcast media, increase of attention to the function of media."[44]

For Matellart, the prime facilitator of the globalization of the advertising industry

was the process of economic deregulation, which, as we have already seen, was the stick

brandished by the United States via global intermediaries (such as the World Bank,

WTO, IMF, and GATT), prior to the offer of the 'carrot'—the flow of 'development'

capital. Given the already inscribed discourse of development, economic deregulation

was a concept adopted by most nations during this stage, particularly after the

disintegration of the Soviet Union. Arguing that economic deregulation was not defined

as much by the absence of economic trade regulations as much by the establishment of a

different set of regulations, Matellart contends that this was, in fact, a project that sought

to "rearrange public space."[45] Deregulation redefined the notion of free speech, wherein a

citizen's free speech directly competed with 'commercial free speech'. Such a hypothesis

resonates well with some of the others we have examined thus far, such as the 'one

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[43] Matellart 32.
[44] Matellart 50.
[45] Matellart 86.

dollar-one vote' formulation of the Thehranians, and Sobchack's insights about the twin

oppositional semantic domains of the term 'franchise'.

Matellart argues that "deregulation has thrown finance into the arms of

communication (mediated by advertising)—and communication into those of finance: the

convergence of two highly internationalized sectors, at the apex of network techniques,

the vanguard in the process of globalising the market."[46] Convincingly demonstrating that

it was the advertising industry that took the lead in lobbying for the emerging discourse

of deregulation, and making insightful arguments about the multiple ways in which the

advertising industry inflects every sphere of our modern 'globalised' life, Matellart

declares that "the democratic marketplace so beloved by the heralds of this new 'human

right of commercial free expression' is in no way the same as the democracy of the

defenders of human rights, the rights of the citizen and of nations. Between them there

lies the immense abyss with which the new and inegalitarian rationality has bisected a

planet that is pierced by social exclusions."[47]

By examining the history of the Internet in conjunction with the evolution of these

various processes - the advent of the global economy, the histories of advertising and

transnational capitalism, the evolution of the discourses of development, modernity and

democracy - it becomes easier to understand it as a site of contesting utopic and dystopic

representations. It is obvious that much of the democratic, liberatory, emancipatory

rhetoric around the Internet are as much grounded in visions of free access to information

and free interactive communication and social participation, as in the realities of a freely

interactive, commercial global marketplace. Through this, as well as from our discussion

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[46] Matellart 95.

of the common myths and metaphors that accompanied its evolution, we see that the

growth of the Internet was neither free, nor any accident; neither an inevitable evolution

of technology, nor a revolutionary appropriation of a military weapon towards the

common good of humanity. Deconstructing such originary myth allows us to firmly

locate the Internet's genesis and growth within a specific socio-cultural context. I argue

that within such myths, which collate notions of progress, development and democracy,

may be observed, a process through which the profit motive fundamental to capitalist

growth enforces a continual investment in the generation of advanced technology that

simultaneously results in both, a constant growth in such technology, as well as in the

rapid obsoletion of such manufactured products. In conjunction with Marxist

perspectives, I argue further, that advertising and mass media may be regarded as

working towards bringing consumption, in this case, with such frenzied production

(articulated differently, this is the process of the 'search for new markets'). And since

mass media (the Internet) is itself, in turn, dependant on such emergent (electronic)

technology, technology becomes a transformational force both within the 'core' and the

'superstructure.' I would thus align myself with Leonard Acosta, who argues that the

technological element itself may be read as having absorbed and fused within it, the old

capitalist myths, only in the process, give them *a new presentation.*[48]

This chapter establishes that any study of the Internet in the context of its ongoing

commercialization, cannot afford simplistic, technologically determined utopian or

dystopian stances, but must be undertaken through the unraveling of the complex and

[47] Matellart 218.
[48] Leonardo Acosta, "Mass Media and Imperialist Ideology (Cuba 1973)," *Communication and Class Struggle*, eds. Armand Matellart and Seth Siegelaub (Volume 1, New York: International General, 1979) 151.

deeply interknit ideological strands that are woven into the very fabric of cyberspace.

Having located the Internet within a territorially privileged site, it is necessary now to

identify the reconfigurations it necessitates in global power geographies. The Internet,

both in its role as a mass medium of mass communication, as well as a conduit of global

commerce, is situated among the cultural and political machineries that work to discount

entire territories that become the deprived geographies of a newly global world. We have

already seen how the basis of such silencing of territories within the assumed social

globality of cyberspace, exist within the unique founding process of the Internet itself. In

the next chapter, I examine what these territories are. In the process, I will also

deconstruct another myth constructed around the Internet and the newly democratic

society many claim it is ushering in, that it allows for free, equal access to information

about everything, to everybody, everywhere. In actuality, as Sardar has pointed out,

neither is all the information in the world on the Internet—which can never be unless all

cultures that exist will themselves into virtuality, nor is even information that does exist

online, free; much of it exists in encoded form, and within the boundaries of 'firewalls'

erected by various organizational intranets that are also part of the Internet.[49] And it is

evident that *access to the Internet,* despite endless 'free market' rhetoric about becoming

progressively and rapidly inexpensive, remains in fact, *an expensive luxury,* particularly

for the large section of humanity who exist outside of the capitalist institutions of

modernity.

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[49] Sardar in Sardar and Ravetz 14-42.

2. Evolving Geographies

> Cyberspace ... is not the new free, global democracy we presume and defend, but an aristocracy of location and disposition, characterized, ironically, by acute sensitivity and territorialist proclivities. ... To remember that the vast majority of humanity, both outside and within the highly industrialized worlds, have no knowledge whatsoever of this new platform of liberties, to speak less of access to it, is to underline not only the esotericism of our discourses, but also to call our attention to the challenges of forsaken geographies and silent territories, of populations and denominations on a new margin of our own creation.[1]
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>   - Olu Oguibe

As I contend earlier, this thesis is an attempt to theorize, think through, reflect, and meditate, on an increasingly ambiguous medium of communications. In contrast to the proliferating rhetoric of utopias/dystopias that prevails around the Internet, my project, eschewing such simplistic binaries, tries to understand this newest medium of communication by locating it in specific physical and ideological contexts. In the last chapter I have tried to unravel the various historical and ideological discursive strands that have appeared to me to be integral elements of the modern Internet. In this chapter, my focus is on the evolving geographies of the physical Internet; by this I mean an examination of its global physical architecture, a look at the economics that define this architecture, and finally, an overview of its structures of global governance. Such an effort is not only key to envisioning the future trajectories of the physical Internet's growth; it also dramatically enhances our comprehension of the way it currently exists. Subsequently, it allows me to explore the various reconfigurations such an existence effects on global social, economic, and cultural power geographies. Given its twin roles—that of a medium of mass communications, as well as a uniquely powerful conduit

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[1] Olu Oguibe, "Forsaken Geographies: Cyberspace and the New World 'Other,'"

of global commerce—I concur with critics who argue that the Internet must be seen as a significant node in the network of politico-cultural machineries that discount entire physical territories and populations of the world in the ways that they function. These regions thus become the deprived geographies of cyberspace. I propose that it is by physically locating the Internet that we may be able to locate some of these territories, and constituencies of peoples, that are presently un/mis-represented in cyberspace.

Through this effort, I hope to establish that the geographies of cyberspace both overlap with, and diverge from physical geographies. I argue that while they differ in the ways they are defined by different terms of references—access and control to, and over, Internet infrastructures governed largely by the economic relevance of specific constituencies and territories within the global economic system define virtual geographies, while physical distances, political borders, and cultural commonalities are what characterize physical geographies—they simultaneously overlap in that the shapes of the networks constituting the Internet are revealed to be a remarkably accurate virtual reflection of those capitalistic networks offline, which constitute the new global economic system. Consequently, the first section of this chapter overviews some of the contemporary critical efforts that have tried to locate the Internet as an integral part of the processes of economic and cultural globalization, representing it as a convergence of technologies that serve to consolidate the social structures and institutions of power within a global network of local elites who exist in the financial and commercial capitals of the new economy. I use these insights in conjunction with my own subsequent inquiry into the infrastructural geographies of cyberspace, to expose the fallacy of widely

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http: //arts.usf.edu/~ooguibe/madrid.htm, accessed 9/6/1998 5:29 p.m., p.12, originally delivered at the 5th

disseminated myths constructed around the Internet that would have it herald the emergence of a newly democratized world which facilitates free, fair and equal access to its transformational powers. Through this chapter then I hope to demonstrate how, despite popular claims to the contrary, access to the Internet for the numerically significant newly marginalized populations outside the spheres of overwhelming influence of the capitalist institutions of modernity, is far from being an inevitable function of the Internet's growth. Concurring with theorists like Birdsall, I argue that the global spread of the Internet produces and establishes an e-capitalism, a new mutant that emerges from within evolving capitalist processes of the commodification of all spheres of human activity. Enabling access to those marginalized by the functionings of such an e-capitalism, I argue, will require an activist intervention on a newly global scale.

It is important to clarify here that these theorists are obviously speaking from within the various ideological (largely Marxist, in this case) positions that they have adopted. Their views are doubtless open to criticism; for instance one could take issue here with the ways in which they unquestioningly espouse that linear vision of development, which I have questioned earlier in this project. The purpose of my reference to their work here is prompted not as much by the objective of critically analyzing the ideological complexities of their adopted positions, as much as it is to survey, and engage with, the *kinds* of questions being raised, within theoretical discussions around the Internet, about the inequities perpetuated by the information technology revolution. This sets the ground for my examination of the structures of the

International Cyberspace Conference, Madrid, June 1996.

physical Internet to see if the seeds of such inequities are embedded in the very physical,

economic and financial architectures of this new medium.

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It is instructive, for my purposes, to briefly discuss how the ongoing processes of

globalization have impacted the emerging differential geographies of the Internet. As

we've already discussed at length, the Internet emerged and grew in the context of the

contemporary growth of what critics have variously referred to as 'the new economy' or

'the information economy.' We have seen how the roots of the "ideology of information

technology"—the ideology of the Internet—can be traced to much the same set of

circumstances and events that constitute the roots of both the processes of modern

globalization and the emergence of the physical Internet itself.[2] The sixties and seventies

saw massive investments by the United States, and subsequently by the economically

revitalized nations of Europe and later, of Asia, in economic and development policies

that trumpeted the virtues of the 'free market.' These policies focused on technological

developments, emphasizing economic productivity over social welfare in the process, and

believed that science and technology were the most effective way to achieve maximum

efficiency in all areas of public and private enterprise.[3]

This ideology, a converging of free market economics and information

technology, was also accelerated by the success of a new political Right in the United

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[2] William F. Birdsall, "The Internet and the Ideology of Information Technology,"
http://www.isoc.org/isoc/whatis/conferences/inet/96/proceedings/e3/e3_2.htm, accessed 9/6/98 2:42 PM,
pp.1& 2.

[3] For an incisive elaboration of these processes, see Birdsall 2.

States which came into power with agendas that preached less government regulation and more privatization of existing public services—Birdsall points to the highly publicized relationship of Newt Gingrich and Alvin Toffler as symbolic of this fusion of information technology, economics and politics. It was further reinforced and constantly reiterated by various techno-prophets who exhorted a move from a 'Second Wave' industrial society to a 'Third Wave' post-industrial, hi-tech, information society.[4] This, as I've already discussed, was a vision of development that most states worldwide either adopted voluntarily, or were made to adopt for reasons of economic survival. In the United States, by most accounts, these policies led to an unprecedented degree of financial support for technological research and development by the military, the private sector as well as within the academy. This support among other things is what led to the emergence of the Internet.

It is easy to observe that the new global economy that has wrought enormous amounts of reorganization and restructuring within the global private sector, from the sixties until now, was principally a product of the symbiotic convergence of two primary industries: the financial industry, and the information technology industry. Manuel Castells provides an elaborate description of the accelerated growth within these industries in the past few decades. In the United States, Castells notes, the IT industry, itself constituting only about 8% of the US Gross Domestic Product (GDP), accounted for a staggering 35% of GDP growth between 1995 and 1998. Projections emerging from the US Department of Commerce suggest that over 50% of the US labor force, by 2006, will be employed in industries that either are global producers or enormous consumers of

information technology products.[5] The principal constituents within the IT industry,

given its enormous impact on the shaping of the ways in which business itself is

conducted, are of course, the Internet-related firms. Projections from Forrester Research

calculate that by 2003, the value of e-commerce transactions will have increased from

only $43 billion in 1998 to an astonishing $1.3 trillion. Not surprisingly, when regarded

in the light of their typically small sizes, short histories, and non-existent profits, the

Internet industry can be seen to have had highly disproportionate growth in market

capitalization value, revenues, and employment, until the recent economic slump. The

Internet industry's growth to a combined value of over $500 billion at an annual rate of

approximately 68% in 1998-99, compares extremely favorably to the growth of other

major industries such as telecommunications ($300 billion) and the airline industry ($355

billion). Extrapolating from this kind of growth, the Internet industry would conceivably

be generating revenues exceeding $1.2 trillion in 2003. Notwithstanding the recent

economic recession, what needs to be noted is that, clearly, the rate of growth of the

Internet industry is far superior to that of the traditionally major industries of the pre-

Internet economy.

In defining the Internet industry, Castells proposes a useful four-layer

classification. The first layer comprises the companies that provide Internet

infrastructure, including telecommunication companies, Internet service providers,

backbone carriers, and end-user networking equipment manufacturers, who together

posted revenues of over $40 billion in the first quarter of 1999, with the top ten

companies accounting for 44% of this revenue. The second layer includes companies

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[4] For one such gripping account, see Alvin Toffler, *The Third Wave*, (New York: Bantam Books, 1981).

manufacturing Internet-infrastructure applications including software and services that range from online business consulting to website development and maintenance. In the first quarter of 1999, this layer, growing at a rate of 61%, generated revenues exceeding $20 billion and again, the top ten companies in this layer accounted for the majority of its entire revenue - approximately 43%. The third layer, consisting of what Castells describes as "a new kind of company"—companies that generate revenue not directly from business transactions, but from advertising, membership fees, and commissions in exchange for free online services—include some of the best-branded media companies, brokerage firms, resellers, portals, and other intermediaries in the Internet economy, such as Yahoo! (www.yahoo.com), E-Bay (www.ebay.com), and E*Trade (www.etrade.com). In the same period of time, this layer generated $14 billion and was growing at a rapid 52%. This was a less concentrated layer, interestingly, with the top ten firms representing only 25% of the total revenue. The fourth and last layer of the Internet industry, in Castells' formulation, are the e-commerce companies such as the online bookseller Amazon.com (www.amazon.com), E-Toys (www.etoys.com), Dell-Direct World (www.dell.com), and TheStreet.com (www.thestreet.com). Growing at a phenomenal 127%, this layer posted first quarter revenues of $37.5 billion in 1999, with the greatest proportion of revenue being accounted for by computer companies. It is this fourth layer, Castells suggests, which uses the Internet more directly than the companies of the other three layers to promote and distribute physical goods through the Internet, that is the future of the Internet industry. A crucial insight that emerges from the picture provided by Castells, is that almost 80% of total Internet industry revenues come from companies

that either provide the physical Internet infrastructural material, or from companies that use the Internet to promote the consumption of physical goods. While the Internet-led IT economy can be seen as the current core of the US economy, it is apparent that this economy deals as much with material goods as it did before the advent of this new medium of communication and commerce. Information in this economy clearly exists primarily to facilitate the production, distribution, and consumption of such goods. Thus while the Internet economy may be an information-based economy, it is obviously as much predicated in the economics of the physical production, distribution, and consumption of goods as any earlier economy.

This emerges clearly in the concurrent evolution of the contemporary, global financial industry. Castells, like other theorists I have discussed above, describes how the financial industry leveraged the freedoms provided by both the adoption—voluntary or forced—of policies of economic deregularization by most national economies, as well as technological advances such as the birth of the Internet, to *fundamentally reinvent itself,* both technologically and organizationally. On the one hand, global mergers consolidated the industry into a few global financial groups who could now provide a complete spectrum of integrated financial services worldwide. On the other, technological advances helped transform the very ways in which financial transactions were conducted. E-networks like the Internet revolutionized financial transactions between firms, investors, sellers, buyers, and the stock exchanges themselves, while new ever-more-powerful computers enabled the sophisticated real-time designing, tracking, and forecasting of increasingly complex financial products. Information technologies and the

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[5] Castells 148–49. I draw upon Castells for the statistics I cite in this section of my project.

Internet in particular, constituting what Castells calls "the technologies of transmission,"

have proved to be extremely significant in the globalization of the financial industry in

the ways they have reduced the costs of financial transactions by almost 50%. Castells

describes how such a reduction has worked to both reduce the costs of attracting

significantly larger numbers of individual investors, as well as to allow the growth of new

investment opportunities for millions of individual investors. These processes lead to a

massive increase in the amounts of money being traded by not only attracting more

investors who invest their savings in search of higher returns on them, but also increasing

the rate of turnover of this capital. In such an environment, information online becomes a

key factor influencing financial volatility. This is the information that individual

investors, for example, depend on to make investment decisions. Again, what becomes

clear is that within the 'new' economy, of which the global financial markets are a

founding feature, information (or disinformation) *is* key; *but only information, however,*

that relates directly or indirectly to the profit motive.

Castells goes on to argue that the IT industry, evolving primarily around an

Internet which emerges as a core source of mobilizing both new technologies as well as

politico-economic strategies for the whole economy, facilitates a network-based process

of globalization, while the financial industry fuels an electronically connected, globally

impacting, financial market, which becomes the ultimate arbiter of value in this new

economy. Thus "the new economy is certainly, for the time being, a capitalist economy.

Indeed, for the first time in its history, the whole planet is capitalist or dependant on its

connection to global capitalist networks" even if "this is a new brand of capitalism,

technologically, organizationally, and institutionally distinct from both classical (laissez-faire) capitalism and Keynesian capitalism."[6]

Given these insights, I would argue that the Internet must be seen as technology enabling the propagation and consolidation of a newly mutant global evolution of the capitalist logic of commodification, which can be referred to as e-capitalism. This is a proposition similar to ones that have appeared in much recent critical literature. Birdsall, whose work I have referred to earlier, argues that "the ideology of information technology is a set of values and propositions that represents an inherent extension of capitalism's drive to commodify all spheres of economic and cultural life. This ideology links the adoption of information technology with free market values and the commodification of information."[7] Birdsall argues that far from representing any *radical break* from the traditional industrial economic and political culture, informational technology in fact reinforces and consolidates its dominant feature—the *commodification* of products and services. By facilitating the privatization of public services wherein the ability to pay determines the availability of such services, information technology transforms the balance between the economy and the State. Birdsall's biggest concern is with what he sees as such an ideology's tendency to permeate all spheres of social and cultural life with the values of the marketplace.

Similarly, Roberto Verzola, examining the political economy of information, argues, "what we are witnessing is the emergence of a new type of colonial relation that can exist between an agricultural economy and an information economy, where the former becomes the source of cheap raw materials and a market for highly profitable

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[6] Castells 160-161.

information goods. Indeed, this new type of colonial relationship can even exist between

an information economy and an industrial economy, where the industrial economy

becomes a market for expensive information products and a source of relatively cheaper

and lower margin industrial products. ... the special role that the Internet will play in this

scheme is as the global infrastructure for the distribution of the information goods, which

advanced information economies will be selling to the rest of the world."[8] Verzola

illustrates his point with an interesting example:

> Consider the following typical products: sugar, television set, software. Consider the products to be worth $300 each; and are therefore tradable with each other. At 15 cents a pound, an agricultural country needs 2000 pounds of sugar to earn $300. An industrial economy needs to produce one color TV to earn the same $300. An information economy, on the other hand, has to sell one copy of a $300 program like WordPerfect® to earn the $300. In short, an information economy like the US can come to the Philippines and trade one copy of its WordPerfect for our 2000 pounds of sugar, or for one of Taiwan's color TV sets. Yet how long does it take to produce 2000 pounds of sugar, compared to another copy of WordPerfect? How many Filipinos have to work, how many days, to produce value that is equated to a product which can be copied by one person in a few minutes?[9]

What this example suggests is that new information technologies like the Internet

become critically important in spurring a process of modern economic globalization

wherein information economies can charge end users for their access to informational

goods. A fundamental dynamic of any new global information economy, it would appear,

are the insidious strategies of creating artificial scarcity of, and enhancing demand for

such information goods, whereby huge profits are accumulated by key players in the

information industry. These players, who constitute the capital-generating core of the

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[7] Birdsall 1.
[8] Roberto Verzola, "Towards a Political Economy of Information," http://www.solinet.org/THIRDWORLD/obet1.htm, accessed on 9/6/98 2:41 PM, p.5.

dominant economies in this global network, not only impose, and charge for, the distributional infrastructure for the transfer of such commodified information, but also impose, via the institutions of global trade such as GATT, monopoly rights on such information. In this, they are backed by a deeply complicit State, through the state-supported endorsement of intellectual property rights and patent ownership, which prevent the copying or sharing of this information.

Likewise, Arun Kundnani argues that developments in information technology have ushered in a new era of capitalism, one aspect of which is the emergent processes of globalization. Information technology, he suggests, allows the emergence of a new globalised market, and also considerably enhances the importance of information goods in this market. As the information goods industry become among the most profitable segments of the global economy, firms in other sectors like manufacturing, begin to become increasingly dependant on them for the production of information, knowledge and symbols; moreover, they are also forced to be perpetually innovative technologically, to stay competitive. Kundnani is highly critical of arguments (such as Daniel Bell's conception of a post-industrial society, Jean-Francois Lyotard's proposal of a post modern culture, or Peter Drucker's suggestion of a post-capitalist world) that articulate the information economy as representing a historical break with industrialism, capitalism or modernity. On the contrary, he argues that these represent the failure to recognize that the defining elements of a technologically reinvented world are still capitalism, class society and imperialism.[10] As Kundnani observes,

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[9] Verzola 4.

[10] Arun Kundnani, "Where Do You Want to go Today?: The Rise of Information Capital – Part I," Institute of Race Relations, http://www.homebeats.co.uk/resources/arun.htm, accessed on 10/5/00 10:22 AM, p.4

Across most of the world, new economic activities have not replaced those of the industrial, or even the pre-industrial age. Most areas of the world are still struggling to industrialize, and around half the world's population live in rural areas, still tied to their land base, and often enough, to poverty. But the paradigm of information capitalism as it emerges out of the most developed centers of the world economy has a transformative effect on the entire world. The relationship between the wealthy and the poor is changing from one of exploitation to indifference. The role of the nation state is changing from that of mediator between the nation's labor and capital to establishing the right infrastructure for foreign investment.[11]

Kundnani's insights are extremely useful in comprehending the relational power locations between the various nodes—nation states and local economies—within the Internet-driven global economic network. The principal desire shaping the flows of capital between its nodes is clearly that of being relevant within such a network. While the peripheral nodes are never the principal destinations of the product of global capital, it is essential they remain connected for capital to flow in preordained ways—towards the dominant modes. The network's economic logic of irrelevancy ensures that they do precisely this, to themselves survive, as functioning local economies.

Yet another view on the negative impact of the information technology revolution is that of A. Sivanandan's who argues that "the technological revolution has given virtual primacy to information as the chief economic resource, freeing capital from the exigencies of labor and allowing it to roam all over the globe (in terms of production, trade, investment, currency speculation) on the back of free-market economics and neo-liberal ideology, with the State as its instrument and democracy its price."[12] Of particular concern to Sivanandan is that the information technology revolution has meant that

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[11] Kundnani 2.

[12] A. Sivanandan, "Globalism and the Left," Institute of Race Relations, http://www.homebeats.co.uk/resources/siva/htm, accessed 10/5/00 10:31 AM, p. 3.

capital is no longer dependant on labor "in the same way as before, to the same extent as before, in the same quantities as before, and in the same place as before," for now, "its assembly lines are global, its plant is movable, its workforce is flexible. It can produce ad hoc, just-in-time, and custom-build mass production, without stock piling or wastage, laying off labor as and when it pleases. And instead of importing cheap labor, it can move to the labor pools of the Third World where labor is captive and plentiful."[13] For Sivanandan this loss of labor's economic and political influence further facilitates technological innovations as well other processes of globalization, and the three facts continually feed off of each other in a closed circuit. He points out that these processes especially impact those nation states that were "born of disorganic colonial capitalism" and "have never been able to call their nations their own, except for brief periods following independence and/or bouts of revolutionary activity."[14] While these nations had a choice for a while, between state and market capitalism, they are now coerced to become active participants in globalization with most of their state or civic structures altered to provide for the play of global capital.

I propose that such debates as those outlined above, serve as an illuminating background as I go on to trace the physical contours of cyberspace in the next section of this chapter. They work to remind us that the Internet, even if it cannot be simplistically characterized as just another technology that deepens existing inequality in the experiential realities of, and power equations between, the West and the rest of the world,

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[13] Sivanandan 2-3.

[14] Sivanandan 6.

is at the very least, one that exists and evolves within radically new orbits of authority

and imagination.

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Architecture

Given the facts of its genesis in the United States, US monopoly over Internet

infrastructure and content, the voracious demand of its corporate clients (both MNCs and

TNCs as well as domestic companies), as well as the artificially high price of cross-

border capacity outside the US, it is not surprising that within any map of the Internet, the

US, until 1999, was the unilateral center of the world.[15] As the Internet gained popularity

within the US academy, non-US research institutions began to lease their own

international circuits to get 'wired.' The first research institution to link to the Internet

across international borders was the University College London (www.ucl.ac.uk), in

1973. The networks that grew after this event continued to lease bandwidth to the US

Internet in order to traffic information with both US and non-US networks wherever they

were created. A good analogy is that of the airlines industry within which it is both

economically practical and necessary to direct flights through 'hub' cities. The US

became the hub for networks everywhere and this in turn, stimulated further growth—as

bandwidth to the hub increases, the economies of scale ensures that this hub becomes a

key destination for the convergence of still more bandwidth, which leads to the flow of

more traffic and so on. This inevitable process of growth, meanwhile, is also being

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[15] Most of the figures and statistics in this section come from TeleGeography Inc.'s *Hubs and Spokes*. I owe a huge debt of gratitude to Stephan Beckert for very generously sending me a free copy of the company's publication in response to my email request.

constantly reinforced by other factors. For instance, the US currently accounts for almost half of the world's Internet users, while two-thirds of the Internet's hosts and much of the most frequently accessed content online remains within the US.[16]
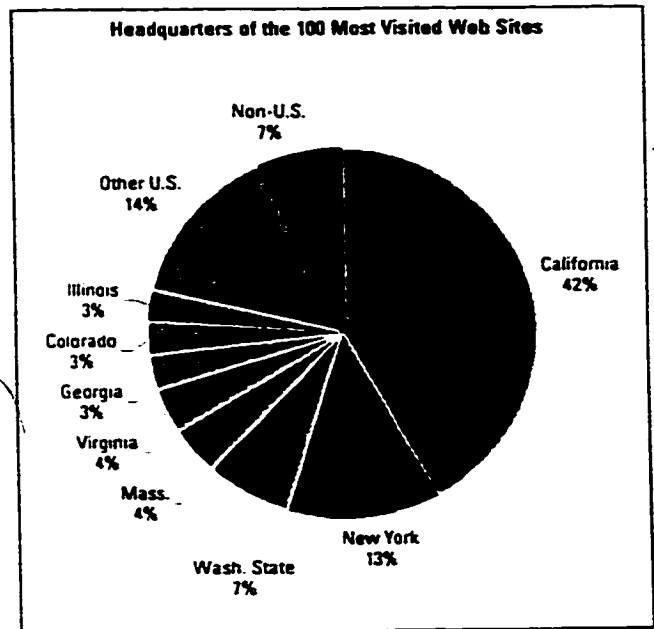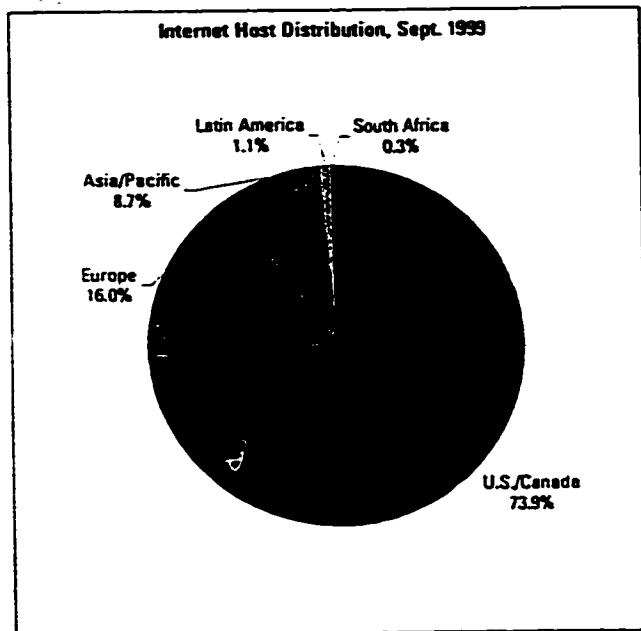
The flow of traffic on the Internet follows an identical path. Over half of Europe's Internet traffic and almost seventy percent of that of Asia's flowed through the US in 1998. Figure 4 allows for a useful view of traffic flow on the Internet using a network utility program called "tracer routes".[17] Used to trace the end-to-end path taken by a given data-package online, this example traces packets transmitted from Hong Kong to Japan via the Silicon Valley, and similarly from London to Rome via New York. In an ideal virtual environment where bandwidth is equally available and cables are of equal capacity, the distances involved in cyberspace are equal to physical distances in the sense that it would take less time (and be more efficient) for a package to flow directly from Hong Kong to Japan. It is important to realize that the current flows of traffic online are US-centric precisely because the physical infrastructure of the Internet is US-centric.[18] Thus virtual geography differs from physical geography in that it is frequently distance-insensitive.[19] Theoretically, the future of the Internet would see a truly distributed, global Internet wherein regional 'hubbing' would be a regular feature. If the historical evidence presented by the levels of saturation achieved by earlier technologies such as the television and the telephone are anything to judge by however, real world geography and that of a commerce-driven Internet will never be equivalent. It is instead probable that the

[16] See inserts that follow this page. TeleGeography Inc. 15-16.

[17] See inserts that follow this page. TeleGeography Inc. 18-19.

[18] See inserts that follow this page. TeleGeography Inc. 9-10.

Figure 1. Distribution of Internet Hosts and Content, 1999

Internet Host Distribution, Sept. 1999

- Latin America 1.1%
- South Africa 0.3%
- Asia/Pacific 8.7%
- Europe 16.0%
- U.S./Canada 73.9%

Headquarters of the 100 Most Visited Web Sites

- Non-U.S. 7%
- Other U.S. 14%
- Illinois 3%
- Colorado 3%
- Georgia 3%
- Virginia 4%
- Mass. 4%
- Wash. State 7%
- New York 13%
- California 42%

Figure 4. Internet Traceroute Maps, July 1998

From California to Washington, DC, direct

Hop 5. From Silicon Valley to the Washington, D.C. area in a single step →

```
To rs.' loc gov (140 147 248 7) 1  30 hops, 36 byte packets
1 gate 96 main sic above net (207 126 96 189) 0 917/2 72/5 30 (1 10) ms
2 oax main-oc3 pao above net (207 126 96 122) 1 97/4 64/9 2 (2 65) ms
3 oax dra net (198 32 176 40) 2 24/4 16/8 99 (1 85) ms
4 SantaClara1 s6 0 dra net (150 147 74 18) 3 34/5 18/7 54 (1 13) ms
5 MaeEasta25 dra net (150 147 25 1 7) 67 7/77 7/93 0 (9 71) ms
6 LibOfCongress T3 dra net (150 147 46 34) 73 4/83 3/95 6 (8 83) ms
```

From Israel to Lebanon via New York and Virginia

Hop 4. Across the Atlantic to White Plains, NY.

Hop 3. From Tel Aviv to the United Kingdom

*Hop 13. To Reston, Virginia, then on to Lebanon (hop 14, not shown)*

```
To zeina auo edu ib (193 198 126 14)  30 hops max  40 byte packets
1 server cisco tlv ibm net (192 115 72 15) 2 ms  2 ms  1 ms
2 te7507 tlv ibm net (192 116 177 1)  3 ms  3 ms  3 ms
3 port1br1 pt uk ibm net (152 156 16 1)  86 ms  76 ms  81 ms
4 165.87.220.34 (165 87 220 34)  166 ms  172 ms  164 ms
5 165 87 28 113 (165 87 28 113)  162 ms  166 ms  172 ms
6 165 87 230 81 (165 87 230 81)  198 ms  198 ms  207 ms
7 165 87 29 36 (165 87 29 36)  208 ms  181 ms  189 ms
8 165 87 97 225 (165 87 97 225)  166 ms  183 ms  195 ms
9 sl oc11 ny 0 1 sprintlink net (144 232 0 33)  180 ms  199 ms  202 ms
10 sl bb10 gen 7 0 sprintlink net (144 232 8 154)  182 ms  185 ms  190 ms
11 sl bb1 gen 8 0 0 sprintlink net (144 232 5 101)  206 ms  190 ms  230 ms
12 gip penn 4 idd0 0 gip net (204 59 136 200)  188 ms  190 ms  197 ms
13 204.59.194.18 (204 59 194 18)  543 ms *  432 ms
```

Source: Keynote Systems, Inc

Figure 4. Internet Traceroute Maps, July 1998 (continued)

From Hong Kong to Japan via Silicon Valley, California

Hop 6. From Hong Kong to Palo Alto.

Hop 11. Back to Asia, this time to Tokyo
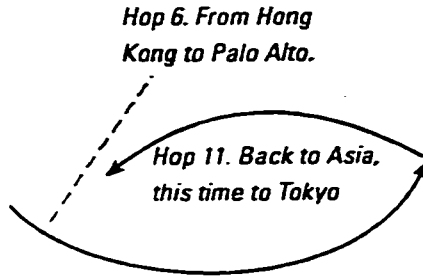
```
Tc psun231 oracle co ip (202 211 136 41). 30 hops max. 40 byte packets

 1  web-hk-rtr (203 223 0 1)  1 267 ms  0.814 ms  0.725 ms
 2  st-7a.tmn08 hkt net (202 84 224 153)  102 671 ms  285 039 ms  475.136 ms
 3  a3-0 yck06 hkt net (205 252 130 82)  297 266 ms  337 731 ms 265 526 ms
 4  f5-0 hk-f3 hkt net (205 252 130.207)  297 282 ms  313.282 ms  305.571 ms
 5  hss16-0 0 pao-f3 hkt net (202 84 128 254)  479 666 ms  234 939 ms  213 439 ms
 6  915.Hss5-0.GW1.PA01.ALTER.NET (157 130 193 133)  188.524 ms  188 033 ms
 7  119 ATM3 0 XR1 SCL1 ALTER NET (146 188 144 78)  188.976 ms  306 485 ms  189.928 ms
 8  195 ATM3-0-0 GW3 SFO1 ALTER NET (146 188 145 237)190.519 ms191 704 ms 190.722 ms
 9  att-sfo-gw customer ALTER.NET (157 130 193.62)  191.716 ms  312.471 ms  374 858 ms
10  205.174 74 250 (205 174 74 250)  395 630 ms  294 089 ms  322 915 ms
11  hsd-gate0-fddi3-2.Tokyo.InterSpin.NET (165.76.0 71547 064 ms 304 172 ms 392 646 ms
12  202 211 136 98 (202 211 136 98)  533 020 ms  624 000 ms  589 522 ms
*3  psun231 oracle co ip (202 211 136 41)  681 701 ms  714.300 ms  764 475 ms
```

From London to the Vatican via New York

Hop 5. From London to New York in 100 ms.

Hop 10. From Newark to a different London network.

Hop 13. From London to Milan, remaining within Alter.Net
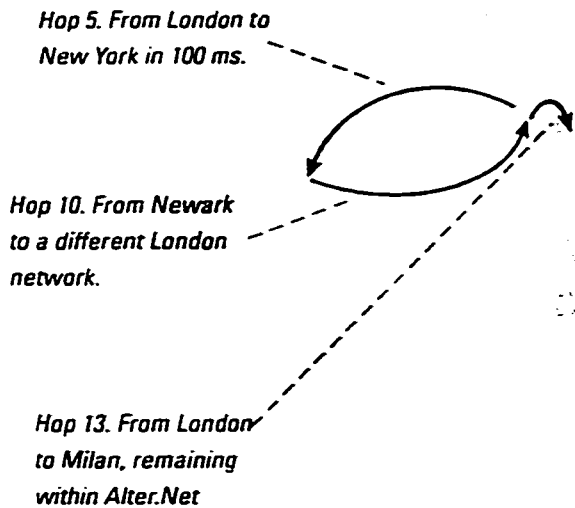
```
Tc www.vatican va (194 91 153 2471. 30 hops max. 40 byte packets

 1  ensign-1 frontier-networks.co uk (195.200 1 1)  3 ms  3 ms  3 ms
 2  central-1 frontier-networks.co uk (195 200.12 3)  6 ms  4 ms  7 ms
 3  bgp-1i frontier networks.co uk (195.200 12.13)  7 ms  17 ms  7 ms
 4  atm-1 frontier networks.co uk (195.200 12 37)  7 ms  7 ms  8 ms
 5  atm0-0-1.nyc1gw1.us.manet.net (207 181 1 65)  121 ms  112 ms  96 ms
 6  Hss2-0-0.GW2.NYC4 ALTER NET (157 130.5.229)  117 ms  101 ms  99 ms
 7  132 ATM2-0 XR1 NYC4 ALTER NET (146 188 178 134)  98 ms  101 ms  107 ms
 8  189 ATM3-0-0 XR1 EWR1 ALTER NET (146 188 178 54)  118 ms  104 ms  123 ms
 9  193 ATM11-0-0.CR2 EWR1 ALTER NET (146 188 176 25)  102 ms  103 ms  98 ms
10  105.ATM1-0-0.BR2.LND1.Alter.Net (137 39.30.77) 200 ms  246 ms  215 ms
11  432 ATM6-0-0 CR1 LND1 Alter Net (146 188 5.25) 199 ms  198 ms  218 ms
12  267 ATM6-0-0 CR1 LND2 Alter Net (146.188 4 246)  197 ms  201 ms  262 ms
13  215.Hss6-0.CR1.MLN2.Alter.Net (146 188 3 34)  278 ms  234 ms  234 ms
14  Fdd0-0 GW1 MLN2 Alter Net (146.188.31.35)  237 ms  239 ms  235 ms
15  ITnet-gw customer ALTER NET (146.188.32.50)  235 ms  242 ms  241 ms
16  Ethernet0.r5 m401 ITnet (151 1 64 250)  239 ms  273 ms  248 ms
17  f401-milano ITnet (151 1 254 61)  290 ms  248 ms  273 ms
18  roma-f401 ITnet (151 1 254 41)  258 ms  312 ms  257 ms
19  roma3 ITnet (151 1 3 252)  265 ms  288 ms
20  vatican-gw ITnet (151 1 203 26)  318 ms  271 ms  326 ms
21  dns1 vatican va (194 91 153 5)  265 ms  292 ms 298 ms
22  dns1 vatican va (194 91 153 5)  265 ms 'H  264 ms 'H 278 ms 'H
```
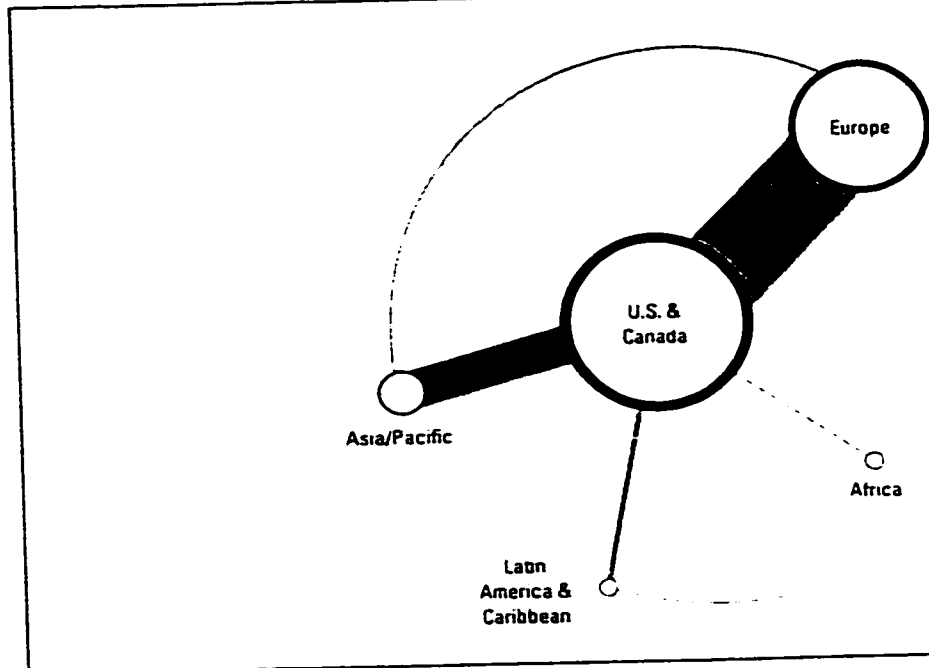
Figure 1. National Internet Connectivity, 1998
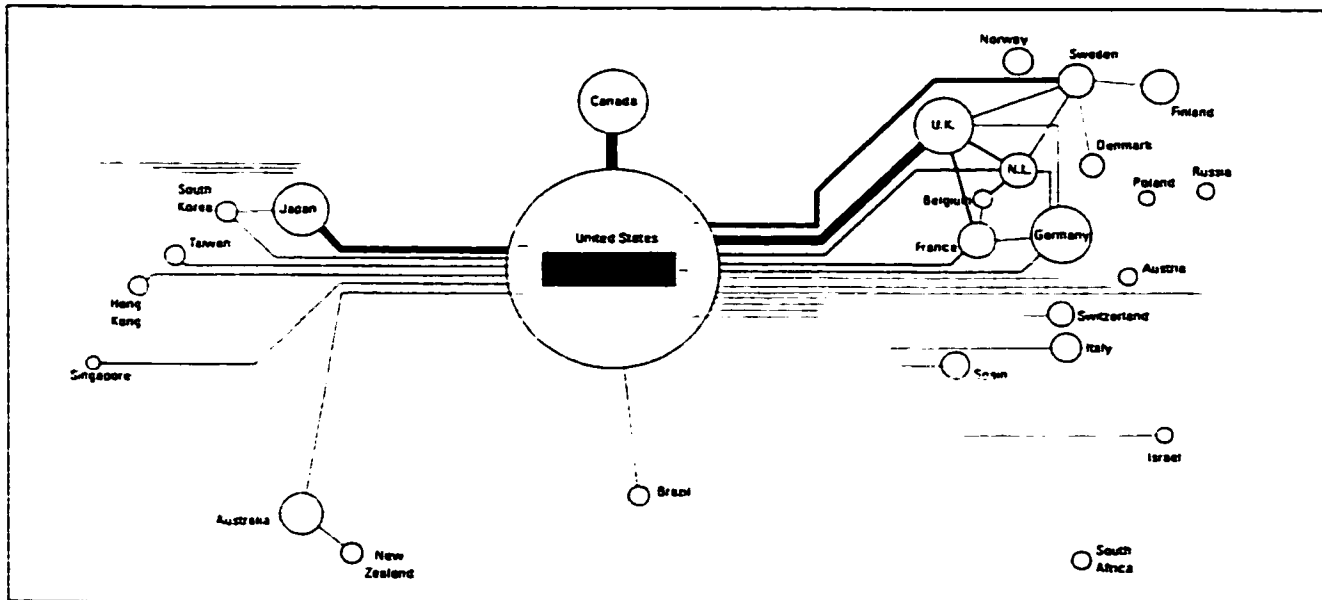
Note: Map current to mid-1998. Thickness of the lines connecting countries is proportional to the bandwidth on the route and the area of each circle is proportional to the number of Internet hosts in the country. Countries with less than 75,000 hosts and backbones at less than 45 Mbps are not shown.

© TeleGeography, Inc. 2000

Figure 2. Regional Internet Connectivity, 1999

architecture of the Internet will achieve a certain stability within which the digital 'Third

World' will remain frozen in a game of eternal catch-up with the digital 'First World.'

There is a recognizably self-sustaining industry dynamic that has accounted for

the US-centric architecture of the Internet, as we have already seen. The commercial

Internet was primarily built atop the excess bandwidth available on existent international

cables. Owned by major telecommunication carriers, most of whom were US based

MNCs, the ability to lease capacity to Internet providers meant extra profits for these

MNCs, since these cables were intended to be filled only over a decade or more given

that the annual voice traffic growth rate fluctuated between a mere thirteen and fifteen

percent. The low costs of leasing this available bandwidth from these US carriers

generated increased clientele and profits for them. This increase, in combination with

their already huge sizes and revenues, made it easier for these companies to build new

cable capacity at a pace much faster than that of non-US carriers. This in turn, in the

insidious closed circuit of a self-sustaining network of events and consequences that we

have encountered earlier, meant more capacity for these companies to sell, at more

competitive rates—which then led to more business, especially from off-shore Internet

Service Providers (ISPs) who typically operated on much slimmer profit margins, and so

on. Other factors too, continued to reinforce such a dynamic. One example of such a

factor is the practices surrounding the Domain Name System (DNS) fundamental to the

Internet. Every computer connected to the Internet is assigned a unique IP (Internet

Protocol) number. These numbers, which correspond to every domain name, form the

Internet's addressing system (when I need to access www.yahoo.com , for example, my

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[19] See inserts that follow this page. TeleGeography Inc. 20.

Figure 5. On the Net, Bandwidth Determines Distance

Packet Round-Trips from Singapore Telecom Internet Exchange (STIX)

Key
Capacity of STIX Connection

15,360 4,096 2,048 512   128   64
(Kbps)

◇ Kathmandu, Nepal

◇ Lahore, Pakistan

◇ Colombo, Sri Lanka

◇ Noumea, New Caledonia

◇ Phnom Penh, Cambodia

◇ Jahor Bahru, Malaysia

◇ Jakarta, Indonesia

◇ Beijing, China

◇ Manila, Philippines

◇ Sydney, Australia

◇ San Francisco, CA

◇ Seoul, S. Korea

◇ Tokyo, Japan

◇ Vancouver, BC

◇ Brunei

◇ Monaco

Packet Round-Trip, (0.001 sec): 0, 200, 400, 600, 800, 1,000, 1,200, 1,400, 1,600, 1,800

Distance from Singapore (km): 0, 2,000, 4,000, 6,000, 8,000, 10,000, 12,000, 14,000, 16,000

Note: Packet round-trip times are averages taken from the Singapore Telecom Internet Exchange (STIX) web site, www.stix.net, in late November to early December 1997 at different times of day.

Source: Adapted from *Internet Traffic Exchange*, OECD 1998.

computer must first send a query to the DNS to match the domain name Yahoo to its unique IP address). Presently, only three of the thirteen servers on which this DNS database is stored exist outside the United States—in Tokyo, London, and Stockholm.[20] This means that the majority of DNS traffic, which forms a not-so-insignificant portion of total traffic online flows to the United States.

Since 1999, however, it has been observed that this US centered shape of the Internet has been gradually diffusing. Western and central Europe (in part, one might speculate, because of the freshly porous trading borders of the newly created European Union) is beginning to share center stage with the United States. However, it is crucial to note that this is also a change driven by European multinational telecommunications giants such as Nokia (www.nokia.com), who have been building up global cable capacity at a frantic pace. There is little to suggest here, I would argue, that the future of the Internet's architecture will be anything other than a *virtual mirror* of the networking patterns of the global economy structured around global financial and commercial hubs, wherein a cluster of interconnected cities within the 'developed' world will constitute the Internet's core. This argument is further reinforced in the next section of my chapter where I examine the economics in, around, and surrounding the emergence of the physical Internet.

Finance

To understand the economics of the physical Internet is to understand the economics of the global market for Internet access, for the physical networks that form

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[20] See inserts that follow this page. TeleGeography Inc., fig 10.

Figure 10. The U.S. Controls the Internet's Directory System

The Internet's address books—the electronic directories and numbering systems—are still based in the U.S. Amid growing dissent, since 1996 the Internet community has looked at ways to change this, chiefly by creating an international bottom-up, private sector body.

The body created to fill that role is the Internet Corporation for Assigned Names and Numbers, or ICANN, and the process of its creation—and ongoing activities—have been hotly debated from the start. Many nations have come to recognize that names and numbers can be exercised as a central control point in the digital economy, and therefore seek positions of influence in the new entity. Likewise, large net-savvy companies understand that access to numbering affects the magnitude and type of services they can offer downstream, and jockey accordingly. See the Governance section this Primer for further details on the Internet's new governance.

ID	Organization	Status	City	Country
A	Network Solutions Inc.	Private	Herndon, VA	U.S.
B	Information Sciences Institute (USC)	Academic	Marina del Rey, CA	U.S.
C	PSINet, Inc.	Private	Troy, NY	U.S.
D	University of Maryland Computer Science Center	Academic	College Park, MD	U.S.
E	NASA Ames Research Center	Government	Moffett Field, CA	U.S.
F	Internet Software Consortium	Private	Palo Alto, CA	U.S.
G	Department of Defense Network Information Center	Military	Vienna, VA *	U.S.
H	Army Research Laboratory	Military	Aberdeen, MD *	U.S.
I	Royal Institute of Technology (NORDUnet)	Academic	Stockholm	Sweden
J	Information Sciences Institute (USC)	Academic	Marina del Rey, CA	U.S.
K	European Network Coordination Center (RIPE NCC)	Non-profit	London	U.K.
L	Network Solutions Inc.	Private	Herndon, VA	U.K.
M	University of Keio (WIDE project)	Academic	Keio	Japan

Note: The world's 13 root servers, known by the letters A to M, coordinate the domain name system data that links alphanumeric names to the IP number addresses used for routing.

* Servers maintained by the U.S. military move between undisclosed locations.

Source: www.nic.mil/DNS/root-server.html (clickable map), Internet Assigned Numbers Authority, and root server administrators. © TeleGeography, Inc. 20(

the Internet are but leased circuits from telephone carriers through which data traffic flows. The global market for Internet access had grown to over $100 billion in 2000.[21] While the generic term Internet Service Provider (ISP) is widely used to describe all the different types of firms within such an industry, it is useful for my purposes, here, to adopt a breakdown of this industry provided by TeleGeography Inc. (www.telegeography.com), who categorize ISPs as four kinds—this will allow me to distinguish for instance, between the large International ISPs (IISPs) with their well established global infrastructures (such as MCI WorldCom, www.mci.com, or PSINet, www.psinet.com), and local providers who typically lease lines from these IISPs and bundle content along with the access services they provide (such as Easy Net, www.easynet.co.uk, and Demon, www.demon.net). Such a differentiation further allows us to be aware that different types of end customers form the major markets of different ISPs, which makes a difference in the economics of their existence. The end customer of an ISP may either be an individual user who primarily requests content, or a content provider who must then pay to export data, or alternatively may be some other kind of data carrier entirely. The Internet cost-recovery mechanism, it is important to observe, differs from the model on which the telecom industry is based. Compensation, in this case, is required both for the *transportation* of content as well as for the *kind* of content being transported.

Four types of ISPs, then, may be observed as comprising the Internet access industry:

1. These are firms that focus on providing website hosting services. A rapidly growing

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[21] TeleGeography Inc. 29.

segment within the industry, these companies, such as Exodus (www.exodus.net), are characterized by the fact that their traffic flow is largely in one direction given that the flood of audio, video, image and text data flowing from these ISPs to the end user is much greater than the miniscule amount of data flow towards them in the form of end-user requests for web pages. These content hosting providers at present exist in a conflictual economic relationship with the large, backbone ISPs whose national and international infrastructures they need for their own traffic. These content hosts argue that since their end customer is already paying for the use of this infrastructure in the form of subscriptions to Internet access in the first place, for them to make another payment for the use of this very same infrastructure constitutes a "double payment." The large IISPs and ISPs contend on the other hand, that being forced to transport the data heavy traffic of these content providers on their own networks even if it is to their own end customers, warrants additional compensation, for they wouldn't need to build such investment-heavy infrastructure in the first place, if such content providers would invest in their own networks. Consequently, these large ISPs currently carry content provider traffic only for a price, although this price is highly negotiable, depending on the perceived 'value' that these content providers offer their end customers.

It is interesting to note that such content providers are also referred to sometimes as 'server farms', for they typically tend to exist in the form of large numbers of air conditioned warehouses housing nothing but rows upon rows of blinking servers on which their content is stored. Anti-globalization critics have frequently commented on the exploitative nature of such 'farms', which, requiring little infrastructure, tend to exist in areas where land is cheap—largely 'under developed regions' that are located in close

proximity to the physical borders of the core regions within the Internet's architecture, such as Mexico.

2. These are firms that may be collectively referred to as 'downstream' ISPs. These firms are Internet providers who buy most of their international connectivity from global telecommunication companies. These ISPs then provide connectivity to other ISPs, which are smaller than them, to large domestic corporate customers, as well as to individual end users. Typically, while approximately ten to thirteen percent of company costs for such firms come from customer service expenses, over thirty percent is from purchasing connectivity from the bigger ISPs. Their access to such connectivity itself varies according to their physical location as well as by the amount of data that flows through them. The economic model of interaction between these ISPs and the larger ones can once again be illuminated with a reference to the airlines industry and its frequently employed practice of 'overbooking.' These ISPs usually tend to lease a line from the larger ISPs with a great deal of additional capacity than is actually used at any given point of time, but pay a price which more accurately reflects actual usage. This ensures that should their traffic increase at any time, the leased line can still manage the additional load. The assumption, of course, is that all of their customers will not generate significantly increased loads at the same time, in which event the entire network would crawl to a halt. To understand the economics governing downstream ISPs, it may be helpful, at this juncture, to refer to an example. In late 1998, a downstream ISP in Cambridge, Massachusetts, was able to lease a 45 Mbps (Mega bytes per second) line from a bigger ISP for $2500 a month. This was, however, only the price paid for the usage of infrastructure required to reach up to the node of an 'upstream' backbone ISP.

To further connect to this backbone—which would allow the further global flow of their traffic online—the Cambridge-based ISP needed to pay a further $30,000 per month. If this appears expensive, the plight of downstream ISPs outside the United States is still worse, for they are required additionally, to lease an international private line to connect directly to the Internet's core at an extremely prohibitive cost. For instance, in 1998, trans-Pacific circuits cost as much as $60,000 to $80,000 per month for a 45 Mbps line.[22]

3. These are the firms known as online service providers, who generate revenues not by reselling access or connectivity, but by providing individual end customers with a combination of Internet access and easy-to-use specialized software content, interfaces, and other services. Besides end-user subscriptions, these firms generate further revenues from advertising and e-commerce activity. A famous example is America Online (AOL), www.aol.com, which either collects a flat monthly rate from the end customer for unlimited service, or charges additional fees after the end user exceeds a predetermined level of usage. AOL's maximum revenue comes, not from subscription charges but from the trading of 'eyeballs' and 'mouse-clicks,' i.e., from delivering their customer base to the advertising industry. These online service providers are typically customers of both downstream ISPs as well as 'upstream,' backbone ISPs (who will, depending on their size, location, and reach, also manage the entire infrastructural requirements of these online service providers). Most of AOL's networks needs, for example, are met and managed by an MCI WorldCom subsidiary, UUNet (www1.worldcom.com/uunet).

4. These are firms that may be described as 'backbone' ISPs. By providing connectivity

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[22] Cited in TeleGeography Inc. 29.

to the Internet and/or by owning and managing the physical network infrastructure on which the Internet exists, these companies are those on which every other ISP, of every type, depend on. While many of the backbone ISPs themselves exist as specialists for specific market segments (which means that these ISPs may find themselves frequently in the role of 'downstream' ISPs as they work out arrangements with other backbone ISPs to extend their global reach), at the very top of the hierarchy are a handful of backbone ISPs, who are never 'downstream' from other ISPs. These ISPs are also referred to as IISPs, because of their global presence.[23]

Thus, in the context of a global economy of Internet access, downstream ISPs, whether in Asia, Europe, or anywhere else, depend on an upstream, backbone ISP, inevitably a global telecom corporation, for Internet access. Additionally, a backbone ISP in any such region becomes a downstream ISP when they arrive in the US, needing to negotiate arrangements for connectivity with the huge US backbone ISPs. A backbone ISP outside the US can theoretically acquire its own US network, but existing monopolies as well as the inequality in the sizes and revenues of these ISPs in comparison to the US ISPs make such a possibility an impractical business proposition.

Such an economic structure of the Internet, it must be observed, is one that emerged after its privatization, which, as I've already discussed, occurred in 1992. Prior to this, when being funded by the US Department of Defense, ISPs were, for the most part, equal in size, revenues, and reach, and largely swapped traffic freely across each other's networks. This process, in industry parlance, is known as 'peering'. The commercial globalization of the Internet that saw the massive investments in building

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[23] See appendix 1 for an overview and list of global ISPs. TeleGeography Inc. 62, 66-72.

global internet infrastructure—all of which costs needed to be subsequently recovered—

is what has led to the Internet's contemporary financial architecture. At present, there are

only isolated contexts where peering is a regular feature—between the smallest local ISPs

who will freely swap traffic with each other at local exchange points, and between the

few biggest backbone ISPs, who will frequently peer among themselves.[24]

What emerges from this overview of the economics of Internet access is the

understanding that the cost of access is fundamentally inflected upon by the processes of

contemporary globalization. Access requires global networks, and these networks are

presently owned by the backbone ISPs—the global telecommunications giants. The

privatization of the Internet has meant that control over access to it depends on a small

handful of such global companies, or on global networks of such companies. As I've

already lain out, this has primarily been a result of the global emphasis on the

deregulation, in this case, of the Internet. Clearly, if Internet infrastructure were to be

reclassified as a public telecommunications system by nation states, and the US in

particular, it would at least ensure that the operators of Internet backbones be required to

provide fair, non-discriminatory terms to smaller ISPs needing to buy connectivity. At

present, it is inevitable that the high costs of Internet access percolate downwards through

the existing financial structure, until it reaches the individual end user. The

prohibitiveness of access cost is further rendered uneven based on geographical location.

For instance, unlike Americans, Australians, Canadians, Mexicans and New Zealanders,

most of the world's dial-up users not only pay for an ISP connection but also

additionally, for every minute of telephone time they use while accessing the Internet.

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[24] See inserts that follow this page. TeleGeography Inc. 27-28

Figure 1. A Primer on Peering

Peering is to the Internet what interconnection is to the telecoms world—the way in which different networks exchange their customers' traffic. That's important: if ISPs don't exchange traffic, then the customer of one ISP can't reach the customer of another.

Over the past few years, a handful of the biggest Internet service providers have refused to interconnect for free with other ISPs. Instead, they demand that smaller ISPs pay a fee to compensate for the bandwidth resources larger ISPs must expend to carry the smaller providers' traffic. Smaller ISPs claim this is discriminatory. And some regulators have shown willingness to intervene to assure a more competitive market. Australia is a case in point: in May 1998, the Australia Competition and Consumer Commission (ACCC) issued—though later revoked—a competition notice compelling Telstra to peer with neighboring ISPs. And in the fall of 1998, the U.S. Federal Communications Commission (FCC) solicited public comment on the issue (see www.fcc.gov/ccb/706), though ultimately took no action.

When the Internet first developed, networks were generally the same size and the traffic flow roughly equal—hence all were "peers." It thus made economic sense to swap traffic freely. Even if there was a slight imbalance, it was less expensive to set up a free deal than to meter and to charge, because both parties benefitted by being able to reach more users.

But as the Net became commercial, the size of networks began to differ enormously. As a result, large networks such as UUNet and Sprint began to change the rules.

Both small and large ISPs have a point. Large ISPs are not fairly compensated, even if the amount of traffic exchanged is equal, because the larger ISP is inherently forced to carry traffic a longer way over its network than the smaller ISP. This is because most ISPs use "shortest exit routing," whereby traffic is handed off at the earliest possible network juncture. A larger network has more network interconnection points, and so is constantly in the unenviable position of having to accept others' traffic and to carry it farther.

On the other hand, large ISPs do not publicly state their peering criteria, and insist that all arrangements be shrouded under non-disclosure agreements. The lack of transparency and objective yardsticks may put smaller ISPs at a disadvantage. Small ISPs or start-up companies today have little control of their costs, nor can they gauge the direction of market costs unless fair and non-discriminatory peering criteria exist.

Internationally, interconnection takes on a different hue. ISPs outside the U.S. are not considered peers by major U.S. ISPs. In addition, foreign ISPs must pay the full cost for transoceanic circuits required to connect to U.S. backbones. Off-shore ISPs thus claim they effectively subsidize U.S. Internet users. Due to claim they effectively subsidize U.S. Internet users. Due to "shortest exit routing," the foreign ISP carries the traffic to the U.S. and carries it back to the in-house region. In the U.S., the long-haul cost is shared by different ISPs, since one is able to carry traffic from one exchange point to another before handing it off to the second ISP.

Discrimination Against Foreign ISPs?

The discrimination alleged by off-shore ISPs has sparked intergovernmental controversy. The Asia Pacific Economic Cooperation forum in May 1998 agreed to study the matter, over the objections of AT&T. The International Telecommunication Union (ITU-T) Study Group 3 also examined the issue. And an Organization for Economic Cooperation and Development (OECD) report in May 1998 stated "the question of cost allocation is a valid one if the current arrangements are not equitable in terms of use made of infrastructure relative to financial contribution."

At an OECD Internet workshop in Osaka, Japan in June 1998, John Hibbard, managing director of Australian carrier Telstra's global wholesale business, presented the views of non-U.S.-based ISPs: "U.S. demand has increased such that in the case of Telstra, approximately 70 percent of the usage of the link is driven by Australian users and 30 percent by U.S. users. Yet Telstra, at the Australian end of the link, pays 100 percent of the cost.... Our action plan is to promote global awareness, try to negotiate better solutions with U.S. operators and if that fails, resort to other tactics.... One avenue is to involve the World Trade Organization (WTO) because what is happening will stunt the Internet, and hence restrict the potential for electronic commerce."

The U.S. private sector, meanwhile, cleverly seeks to capitalize on these disputes. Some companies, like InterNAP and Savvis, are trying to develop a model for metering and billing for interconnection traffic, to move the matter from barter to contract. That would bring a degree of certainty to the marketplace.

And new Net developments, like quality of service assurances, may make much of the controversy moot. To honor service level guarantees between networks, ISPs will need common metrics to meter premium-priced traffic and to charge a settlement fee for handling it. Until then, however, regulators are likely to keep an eye on the Internet's commercial structure. Moral for the industry: be fair, or be regulated.

Figure 2. Exchanging Traffic

How does peering happen in practice? With a lot of uncertainty—what Telstra engineer Geoff Huston has famously described as two networks blinking at each other in the dark: "every customer wants to be your peer, and every peer wants to be your provider." To other ISPs in its range or smaller, an ISP wants to appear big enough to command payment for exchanging traffic; to the larger of its counterparts, that same ISP want to appear so big that the counterpart is willing to exchange traffic without demanding payment.

As Huston argues, this means that acquiring other providers has two advantages, one technical—retention of more traffic within one's own network—and the other cosmetic, appearing to competitors to be large and therefore commanding their respect, and favorable traffic exchange arrangements.

So consolidation continues apace. Indeed, that's one of the ways ISPs are dealing with peering arrangements: buy up potential traffic partners. There are four other arrangements. Two are straightforward: under the classic Sender Keeps All (SKA), some form of perceived parity leads everyone to agree it's easier to neither count nor charge for traffic exchange. And under unilateral settlement (supplier-client)—sometimes referred to as "transit" for short—the downstream customer simply pays the upstream provider to carry its traffic.

The other two models are somewhat less simple. Under bilateral settlement, two providers agree on a price, measure the imbalance in traffic exchanged, and make sure the difference is accounted and paid for. Under multilateral settlement, several providers construct shared facilities, like an Internet exchange point, and share the costs involved. That makes multilateral settlement hard to follow: inevitably, it needs to be combined with other traffic exchange arrangements, ranging from a simple SKA among all providers present at the exchange, or—what is more common—a more complicated set of bilateral relationships.

Which of these four models is chosen in which circumstances has much to do with the blinking in the dark indicated above. But it also depends on the criteria which ISPs use to size each other up, including domestic and international capacity, network quality, content and customer base, and routing and interconnect topology.

An Australian Competition & Consumer Commission summary (www.accc.gov.au/telco/info_pap/zipint.html) points out that many of these criteria are measurable: ISPs can count each other's traffic flow at the point where they interface; they can look at the other ISP's share of the routing table, number of networks (Autonomous Systems) hosted; and so forth.

But that can be difficult. An alternative is demonstrated by Australian provider Connect.com.au (AAPT/Telecom New Zealand). Connect.com's Peering Settlement Policy is novel because it proposes a clear mechanism directly on its Web site (info.connect.com.au/docs/settlement/peering.html): "Internet traffic has different values depending on where it originates from and where it is being sent to. This peering settlement model considers this by allocating points to an organization according to the number of locations in which the organization has Points of Presence and whether those locations are capital cities." The model has five steps:

"(1) The points for the peer's POPs are added up.

(2) The points for Connect and the peer are factored down so that the largest becomes 1 and the smallest some fraction of one;

(3) The party with the smallest number of points then multiplies the traffic they sent to the other by this fraction, to give an adjusted traffic volume;

(4) If there is less than 20% (of the larger number) difference in the adjusted volumes then settlement for the traffic will be waived. Otherwise the smallest volume is then subtracted from the largest volume: this is the traffic that requires settlement;

(5) The required settlement becomes the difference multiplied by an agreed rate (normally Connect's standard domestic rate of 12 cents per Megabyte will apply, where a MB is defined as 1,000,000 bytes.)"

The key word is transparency, or lack thereof. The types of traffic exchange arrangements described here are intensely private, their conditions and rules subject to proprietary negotiation. For service providers who want to get a handle on their end-to-end traffic, that translates into uncertainty and a lack of performance guarantees. Case in point: a much-read Data Communications report attempted to collect data on the situation. The piece was roundly—and rightly—praised as one of the first independent attempts to show the interconnection topology of major U.S. backbone providers (www.data.com/issue/991007/peering.html). Yet the same report was also acknowledged to have missed the bulk of significant ISP interconnections: "We implement private peering/interconnection from [our main network] with more than a dozen backbone providers. This study identified two," noted the Chief Technology Officer of a large backbone operator. The mechanics of peering and transit settlements are understood, in other words, but what happens when and between whom remains a highly secretive proposition.

Such inequalities too can be directly ascribed to the economics of the existing global telecommunications landscape.

In the context of my project, it is useful to note that given the prevailing dynamics of the cost of Internet access, the only market alternative to offer zero-cost access is that of the 'free ISP model.' These have accounted for the emergence of a new breed of ISPs who offer 'free' access where the only cost for the end user is possibly the per-minute phone time, wherever it is required. These companies, such as U.K's Free Serve, www.freeserve.com, generate revenue primarily via e-commerce transactions, including the pre-arranged directing of users to specific portals for a fee from these portals, selling products and services directly to users, and by selling their user bases to the advertising industry. Such ISPs depend on economies of scale—their survival is depends on collecting ever-increasing numbers of 'eye-balls' for e-commerce activity for they need to generate enough revenue with such activity to cover both the cost of buying connectivity as well as the costs of providing minimum start-up and maintenance costs to their customers. These companies then tend to locate themselves in highly populated regions.

Such an understanding of the economics that the Internet is predicated upon makes it clear that access to the network and to its emancipatory qualities remains highly uneven, while the economic logic of its future growth is by no means oriented towards the ironing out of such unevenness. My analysis of the administrative institutions governing the Internet in the next section of this chapter, make it clear that this basic inequality in its make-up is further exacerbated by the highly uneven governing policies and practices that define the Internet's present existence and that will determine its future.

Governance

As a network of internetworking there are two critical elements that have to be managed and coordinated for the Internet to exist in its present form. The first is the management of the adoption of standards for the technologies that constitute the physical infrastructure of the Internet—this is what ensures that global networks can continue to interact with each other. The second area that needs to be managed is the allocation of the addresses online, typically in the form of IP numbers, for one only exists online when one has been assigned an IP number.

Dispelling the *romantic notion* that the Internet evolved *as an ungoverned medium of communication* in this section, I go on to establish exactly that both these elements of Internet governance have always had organized supervision. The moment of the Internet's privatization was also one that marked a change of management. The new management, unlike the old, was not only a body that was more visible, but also one that was more centralized. This explains the widespread belief that it was only with its increasing commercialization that the Internet began to be increasingly governed. From the seventies until 1983, a loosely constituted body of engineers and scientists called the Internet Configuration Control Board (ICCB), which was funded and controlled by the US Department of Defense, managed the coordination of the adoption of standards for the Internet. From 1983, the ICCB was replaced by the Internet Activities Board (IAB), www.iab.org, which later came to be known as the Internet Architecture Board. The IAB continued to be populated primarily with computer engineers who were significantly involved in the development of the modern Internet's infrastructure.

By 1989, perhaps given the sudden upsurge of public and commercial interest in the Internet, the IAB was subdivided into two committees: The Internet Engineering Task Force (IETF), www.ietf.org, and the Internet Engineering Steering Group (IESG), www.iesg.org. The IAB still remained an exclusive, private club, and interactions between the two new committees and the IAB remained highly incestuous. Twelve of the IAB's thirteen members were nominated by the IETF, which also nominated most of its own members for the IESG. In 1992, the newly created Internet Society (ISOC), www.isoc.org, gave official recognition to the IAB as the manager of all Internet engineering and standards activity, renaming it the Internet Architecture Board. The creation of the ISOC was what one may call a 'commercial break' for the Internet. A US-based 'professional membership' (read corporate) society, ISOC was the Internet's first non-governmental body and described itself as an "international organization for *global cooperation and coordination* on the Internet."[25] To this, they might as well have added, 'global commerce,' for most of the funds they raise comes in the form of gifts from the corporate sector. A lot of this funding derives from Internet companies, who, having invested billions of dollars in the construction and production of every conceivable part of the global Internet infrastructure, depend, for their very survival, on having a significant influence over the standards that the Internet does and does not adopt. ISOC, as the fund-raising umbrella group for the Internet depends, for its own survival, on these funds. This has meant that private Internet-related corporations are beginning to

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[25] TeleGeography Inc. 35.

dramatically increase their participation in the process of the adoption of new standards on and for the Internet.[26] In effect, they have become the builders of the modern Internet.

The process of the adoption of such new standards is not complicated. New standards are adopted as documents called RFCs (Requests for Comments).[27] The initial draft, called the Internet-Draft, laid out in a prescribed format, is submitted to ISOC (emailed to internet-drafts@ietf.org), circulated via a general email list, and posted for six months at an open site (ftp.ietf.org/internet-drafts). During this period anyone may comment on the draft. At the end of the six-month period, the author may revise it, resubmit a new draft, or proceed to submit the original draft as is. Prior to submission, the author categorizes this potential RFC as either a Standards-track RFC or as a Non-standards track RFC. Specially designated groups within the IESG or the IETF then review this RFC. Standards-track RFCs are judged for their utility and technical functionality, and then, based on the level of implementation they propose, as well as the professional experience of the author, the RFC is then labeled as either a Proposed Standard Draft Standard, or a full-fledged Internet Standard. This clearly implies that the more ambitious the RFC, the more global its proposed implementation and the more qualified its author(s), the more influence this RFC has in impacting the Internet's future infrastructure. Obviously, these are conditions ideally designed to favor global corporations. The approved Non-standards RFCs, are, on the other hand, rather quaintly labeled Experimental, Informational, or Historic. Once approved, the Standards-track RFC is published online as part of the Standard Track Document (STD) series. Further, there is also a third type of RFC called a Best Current Practice (BCP) RFC. This type of

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[26] TeleGeography Inc. 35.

RFC skips the first stage and may be directly reviewed and approved. These are usually RFCs created by the members of the IESG or other IAB members themselves and are approved, not as part of the STD series, but as BCP documents.
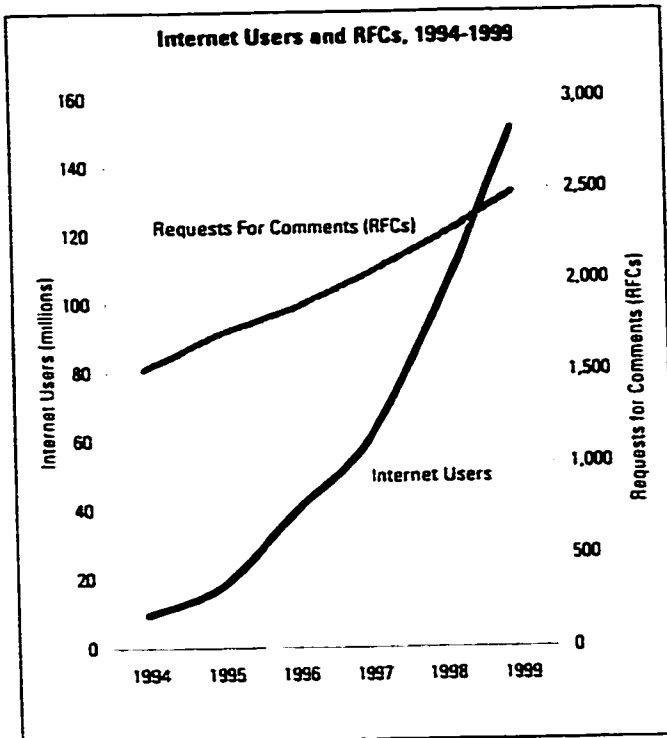
Given that these are the processes, then, that build the physical Internet, I argue that, since 1992 in any case, the building of the Internet has been *deeply imbued with the logics of the marketplace*. It is hardly surprising that an interesting statistic, measuring the ratio of the *users* of the Internet with its *builders*, presents a contemporary picture of the Internet's growth that is very different from its earlier stages. While the number of RFCs were significantly larger than the number of users at one point in the early nineties, the commercialization of the Internet, and the impact of Internet-companies on these building processes has meant that the Internet's priority has shifted from a focus on innovation, growth, and experimentation, to an environment of stability, stagnation and predictability, so that the forces of commerce may fully adopt and shape it. Today, the number of Internet users far outweigh the number of RFCs adopted, and any argument that this merely indicates a natural maturing of Internet technology is instantly rendered ineffective when one observes the myriad conflicting technologies that the Internet is still struggling to absorb, ranging from voice telephony to Internet-savvy offline devices.[28] The commercial break that we have discussed has also become a 'commercial brake' as far as the physical development of the Internet is concerned!

Examining the governing processes of the second element—the allocation of Internet addresses—reveals a similar picture. Be it a computer, a network, or an offline

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[27] For more information on this process, visit www.rfc-editor.org
[28] See insert that follows this page. TeleGeography Inc. 33

Figure 1. Growth of Internet Users and RFCs

Internet Users and RFCs, 1994-1999

Requests For Comments (RFCs)

Internet Users

Y-axis left: Internet Users (millions) — 0, 20, 40, 60, 80, 100, 120, 140, 160

Y-axis right: Requests for Comments (RFCs) — 0, 500, 1,000, 1,500, 2,000, 2,500, 3,000

X-axis: 1994, 1995, 1996, 1997, 1998, 1999

Source: Computer Industry Almanac, RFC archive

There are many ways to chart the Internet's growth. Because they can be statistically sampled, counting Internet-connected host computers is one of the more popular ones; since 1994, the worldwide Internet user population has leapt from just under 4 million to over 250 million. The Internet's routing table provides another growth indicator. A routing table is a constantly-updated road map which guides traffic between all those computers. In October 1999, the table contained as many as 70,000 routes—more than four times larger than it was in 1994. And a third handle on the expanding Internet is via the venerable USENET feed which distributes public discussion groups around the world. USENET has grown from 25 to 70 gigabytes in the last year alone, a far cry from the 700-odd megabytes (that's under 0.7 GB) that a full news feed demanded five years ago.

But this chapter is about governance. To understand the consequences of Internet scaling, take a look at who's involved: the ratio of builders to users has changed. In the 1990s, the Internet's user population appears to have been growing at a compound annual rate of 80 percent, far outstripping the Internet's working papers, called Requests For Comments (RFCs), which have accumulated at 10.8 percent annually. As a new medium, the Internet was a bubbling community of technical inventors, constantly reinventing the network. With widespread adoption, the goal for the Net's managers is to ensure a robust operating environment. © TeleGeography, Inc. 2000

'wired' device, to exist on the Internet, an address—a domain name that corresponds to a

unique 32-bit IP number—is essential. Early Internet architecture allowed for four

billion addresses, which seemed more than adequate at the time. As it grew however,

particularly in its commercial phase of the nineties, millions of such addresses were

handed out in huge blocks, to the few companies and universities who requested them, by

the Internet Assigned Numbers Authority (IANA), and its central governor, Jon Postel,

who constituted the sole governing body responsible for Internet address space until as

recently as 1998. While many if these addresses went unused, having been already

assigned, they could not be reused. This has meant that now, Internet address space had

become an extremely valuable, because limited, commodity; and as the Internet becomes

a globally commercialized billion-dollar industry, this has become a major issue. In 1998,

a new organization was created called the Internet Corporation for Assigned Names and

Numbers (ICANN), www.icann.org, which replaced the IANA (www.iana.org).[29]

ICANN, a supposedly global, non-governmental partner to ISOC, and heavily funded by

generous loans from Internet companies like IBM, www.ibm.com, and MCI WorldCom,

is currently responsible for governing, shaping, and implementing all Internet address

policy, as well as for maintaining the thirteen root servers within which all IP addresses

are stored. The allocation of Internet addresses, supervised by ICANN, now occurs

through three regional sites: for Asia at www.apnic.net, for the Americas (and including

addresses for all of Sub-Saharan Africa?!) at www.arin.net, and for Europe (including

addresses for all of North Africa and the Middle East?!) at www.ripe.net. ICANN was

immediately embroiled in political controversy. China, for example, protested against the

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[29] See inserted ICANN chart that follows this page. TeleGeography Inc. 36

Figure 3. ICANN: The Bottom Up

ICANN's Organizational Structure

Note: Diagram shows Advisory Committees mandated by ICANN by-laws, which may be modified by Board of Directors. It does not show Committees of the Board

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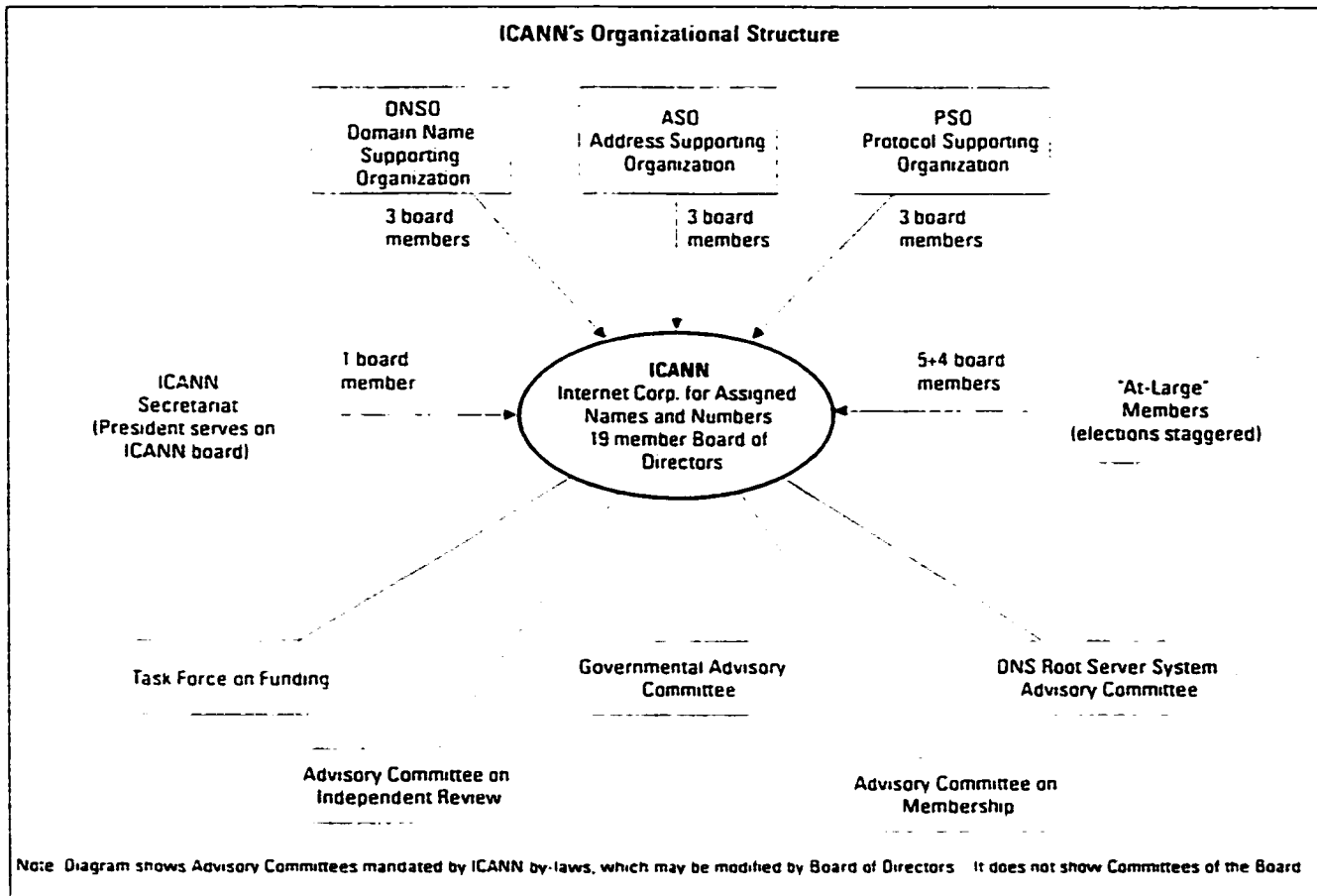
ICANN Organizational Glossary

ICANN - Internet Corporation for Assigned Names and Numbers (www.icann.org) Non-profit corporation acting as the Internet's central coordinating body: took over from the Internet Assigned Numbers Authority. Decision-making power lies with the 19-member Board of Directors. Three Supporting Organizations (SOs) provide substantive policy recommendations for specialized matters. and each sends three representatives to the Board. These SOs are:

DNSO - Domain Name Supporting Organization - Members include generic and country code domain name registries. global registrars. ISPs. trademark and intellectual property interests. business interests. and non-commercial domain name holders.

ASO - Address Supporting Organization - Members include:

ARIN - American Registry for Internet Numbers. Allocates IP addresses in the Americas and southern Africa. Based in Chantilly. Virginia (www.arin net).

RIPE NCC - Réseaux IP Européens Network Coordination Center. Allocates IP addresses in Europe. former Soviet Asia. the Middle East. and northern Africa (see list at

www.ripe.net/lir/registries; indices) Based in Amsterdam. Netherlands

APNIC - Asia-Pacific Network Information Center. Allocates IP addresses in most of Asia and Oceania. Based in Brisbane. Australia (www.apnic.net)

PSO - Protocol Supporting Organization - Members include

IETF - Internet Engineering Task Force (www.ietf.org)

W3C - World Wide Web Consortium. Develops standards for the Web. Based at Massachusetts Institute of Technology in Boston. Institut national de recherche en informatique et en automatique in France. and Keio University in Fujisawa. Japan (www.w3.org)

ITU - International Telecommunication Union. Specialized agency of the United Nations for coordination of global telecom networks and services. Based in Geneva. Switzerland (www.itu.int).

ETSI - European Telecommunication Standards Institute. Stakeholders' forum for coordinating telecommunications equipment and services standards in Europe. Based in Sophia Antipolis. France (www.etsi org)

large prevailing addressing inequity between the US and the rest of the world, as well as between the early largely US-based mega Internet corporations and the newly emerging ones, pointing out that despite their political, economic or population needs, newcomers to the Internet had fewer addressing resources. Similarly, the European Telecommunications Standards Institute (ETSI), www.etsi.org, lobbied strongly for a lead role in shaping ICANN policy. These, and other issues, remain to be resolved.

ICANN, like ISOC, is a more visible, more centralized, bureaucratic, and infinitely slower-moving governing body than the IANA was. This has effectively meant a near paralysis of growth strategy for this part of the Internet, while, inevitably, the corporate industry segments located on the advantageous end of the naming predicament (the majority of who are US based and the minority, Europe-based), grow bigger, more entrenched within the global economy, more powerful online, and therefore, more difficult to compete against. Meanwhile, the addressing issue is also changing the very shape of the Internet. A good example is the rise of various strategies and technologies such as Classless Inter-Domain Routing (CIDR), or Network Address Translators (NATs), all of which have a common goal—that of concealing entire private networks behind a single IP address. What this means is that large sections of the Internet, as a result of both addressing issues and corporate strategies, are becoming inaccessible to the Internet public.

I argue that what becomes evident from this survey of the economics, architecture, and governance of the Internet, is that the growth, commercialization, and evolutionary shaping of the Internet all flow along the lines of the traditional political and economic power geographies which were established by the emergence of the processes

of globalization. A combination of intentional and inadvertent factors have undeniably,

led to a virtual colonization of the 'new frontier' of cyberspace. Even a cursory glance at

the much-heralded growth of Internet users reveals the reflection of this phenomenon.

Most estimates in 2000 calculate the Internet user population to be between two hundred

and three hundred million people worldwide. Since this growth must be, and is, clearly

uneven across political boundaries, the flows of online traffic consequently are also

increasingly unidirectional, ironic in the light of the loudly trumpeted interactivity of the

new medium.[30] It is significant that it is the most commercially fertile component of the

Internet, the World Wide Web, which has helped double Internet growth every year since

1992. In early 1999, it is observed that the Web generated over 75% of Internet traffic.[31]

Over half of this came from corporate users. Further, the Internet/Web user of today also

consumes an exponentially increasing amount of bandwidth, since the commercialization

of the Internet has led to an explosion of bandwidth-intensive usage from complex

software applications to Napster-type music transactions online. Bandwidth, a product of

Internet infrastructure, is an obvious deterrent to equal global access to the Internet.[32]

This suggests that the type, quality, and quantity of access are all similarly unequal.
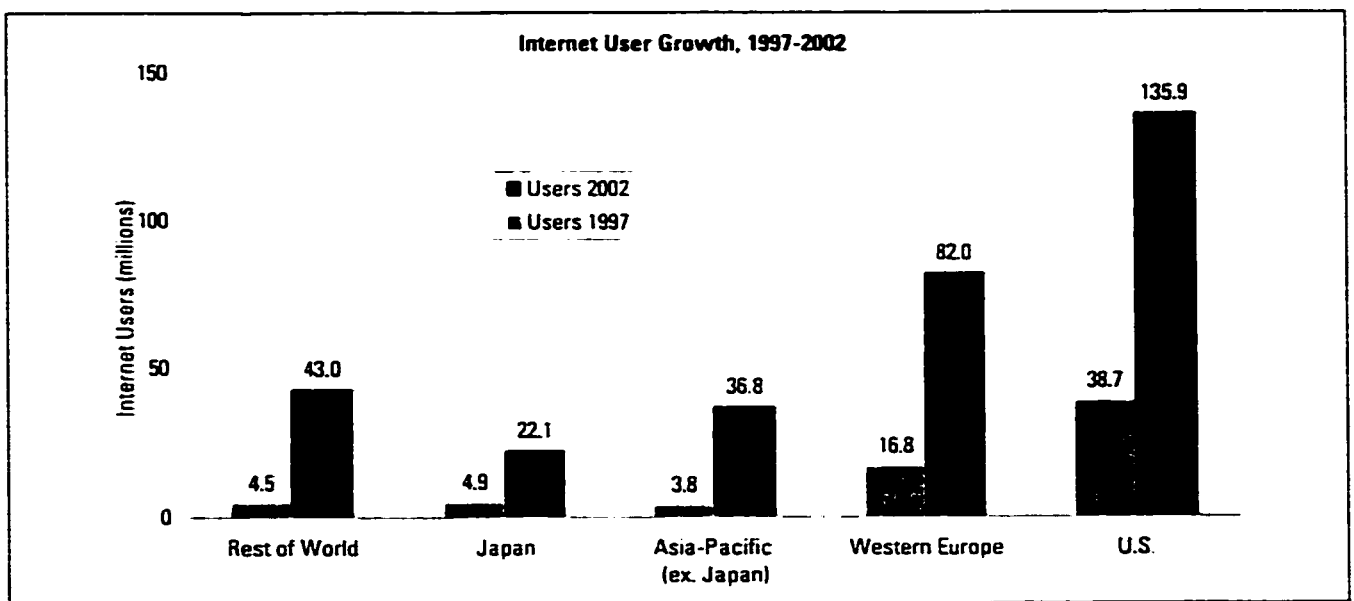
While traffic is only one indicator, no matter which index one chooses to measure

the Internet by, the same monopolies may be observed. Consider the growth of Internet

hosts (each computer connected to the Internet with a unique IP number constitutes a

host), which occurred at a rate of over 60% between 1997 and 1999. A survey of the

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[30] See inserts that follow this page. TeleGeography Inc. 40-41.

[31] TeleGeography Inc. 40.

[32] See inserted bandwidth maps following this page. TeleGeography Inc. 21-23, 84.
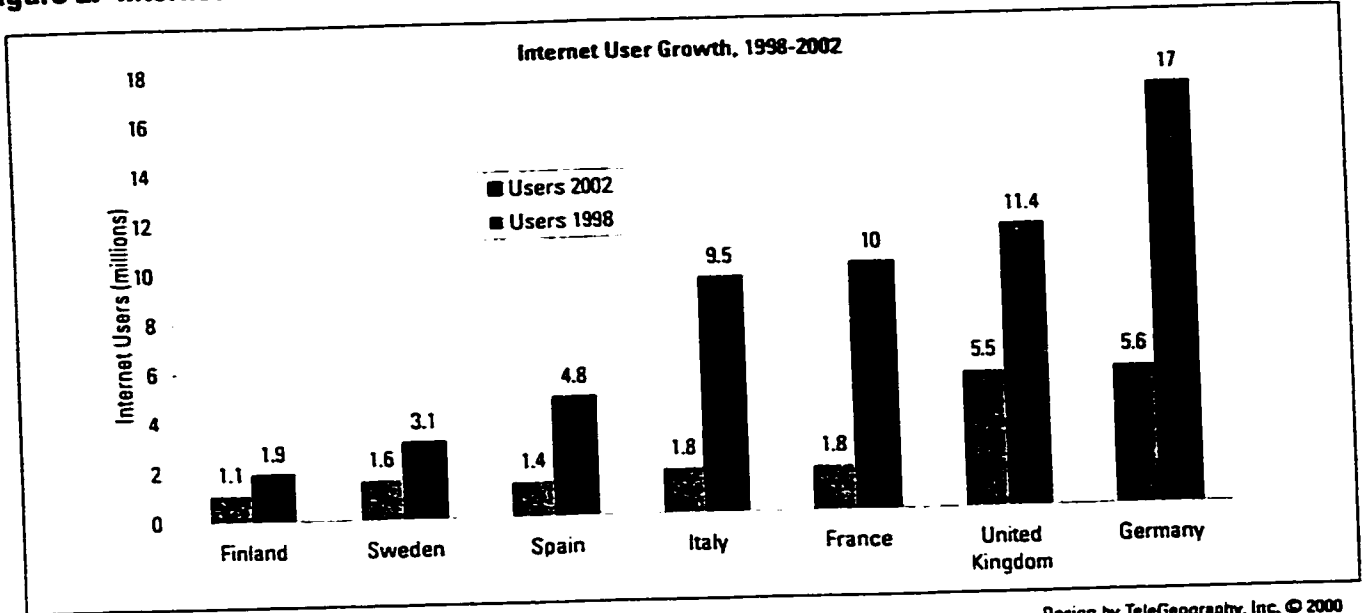
Figure 1. Regional Internet Growth

Internet User Growth, 1997-2002

- ■ Users 2002
- ■ Users 1997

Values shown (Internet Users in millions):

Region	Users 1997	Users 2002
Rest of World	4.5	43.0
Japan	4.9	22.1
Asia-Pacific (ex. Japan)	3.8	36.8
Western Europe	16.8	82.0
U.S.	38.7	135.9

Figure 2. Internet Growth in Western Europe

Internet User Growth, 1998-2002

Legend:
- Users 2002
- Users 1998

Country	Users 1998	Users 2002
Finland	1.1	1.9
Sweden	1.6	3.1
Spain	1.4	4.8
Italy	1.8	9.5
France	1.8	10
United Kingdom	5.5	11.4
Germany	5.6	17

Y-axis: Internet Users (millions) — 0, 2, 4, 6, 8, 10, 12, 14, 16, 18

© TeleGeography, Inc. 2000

Figure 12. Map of Major International Backbone Routes in the U.S. and Canada, 1999

Key

Aggregate internet backbone bandwidth

5 Gbps   2.5 Gbps   1 Gbps   250 Mbps

© TeleGeography, Inc. 2000
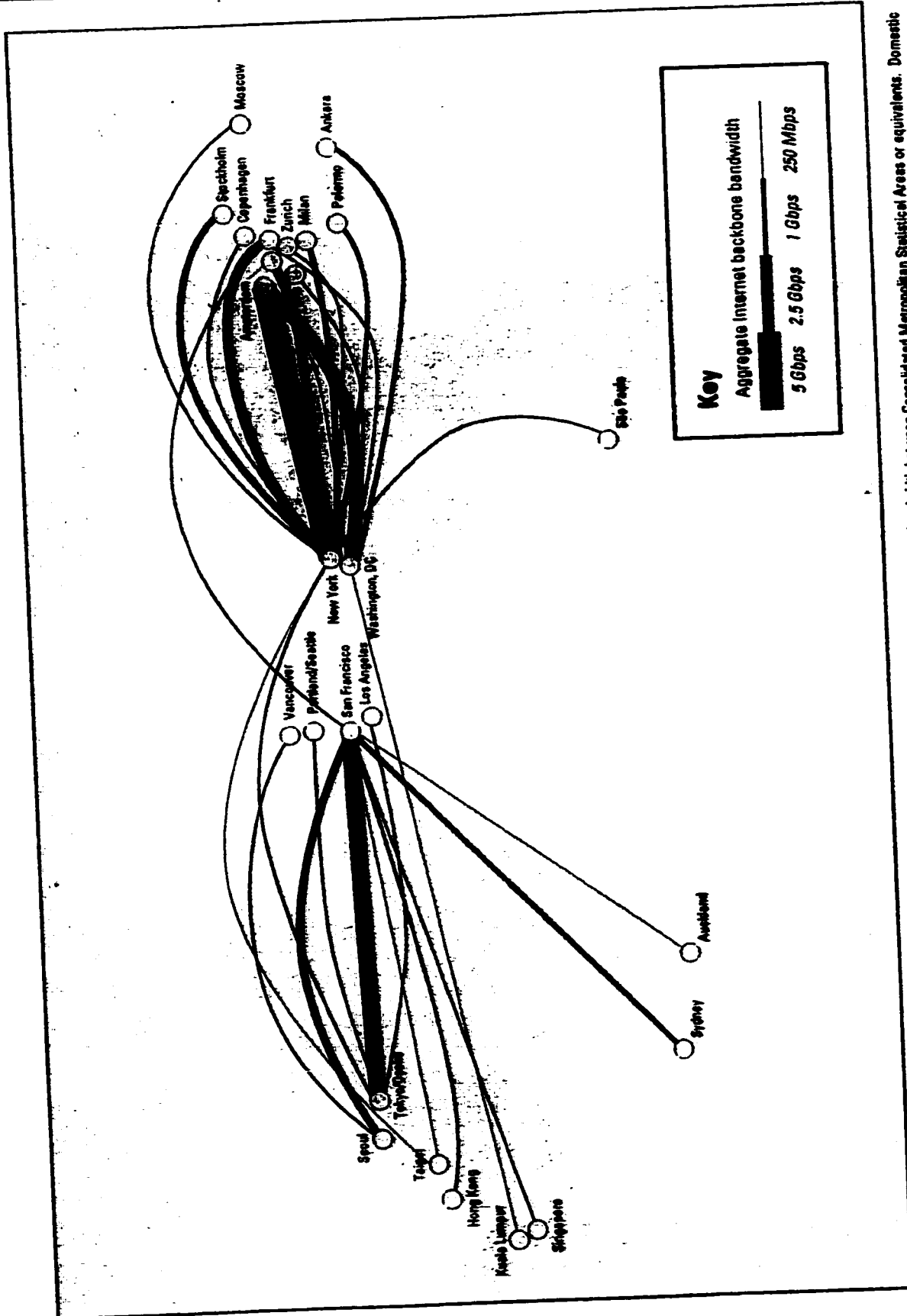
Note: Map includes overseas backbone routes with at least 125 Mbps of aggregate capacity. Figures represent estimated Internet bandwidth between Consolidated Metropolitan Statistical Areas or equivalents. Domestic backbone routes are omitted. Data as of mid-1999.

Source: TeleGeography research

Figure 7. European Internet Backbone Connectivity, 1998

Note: Table and map based on Summer 1998 survey of European ISPs with backbone connections above 2 Mbps. See bandwidth section of this book for 1999 data.
Source: Europe data from Cohen Communications Group (bcohen@mail.bway.net) Israel figures from Sharon Chan, California State University.

Map design by TeleGeography, Inc © 2000

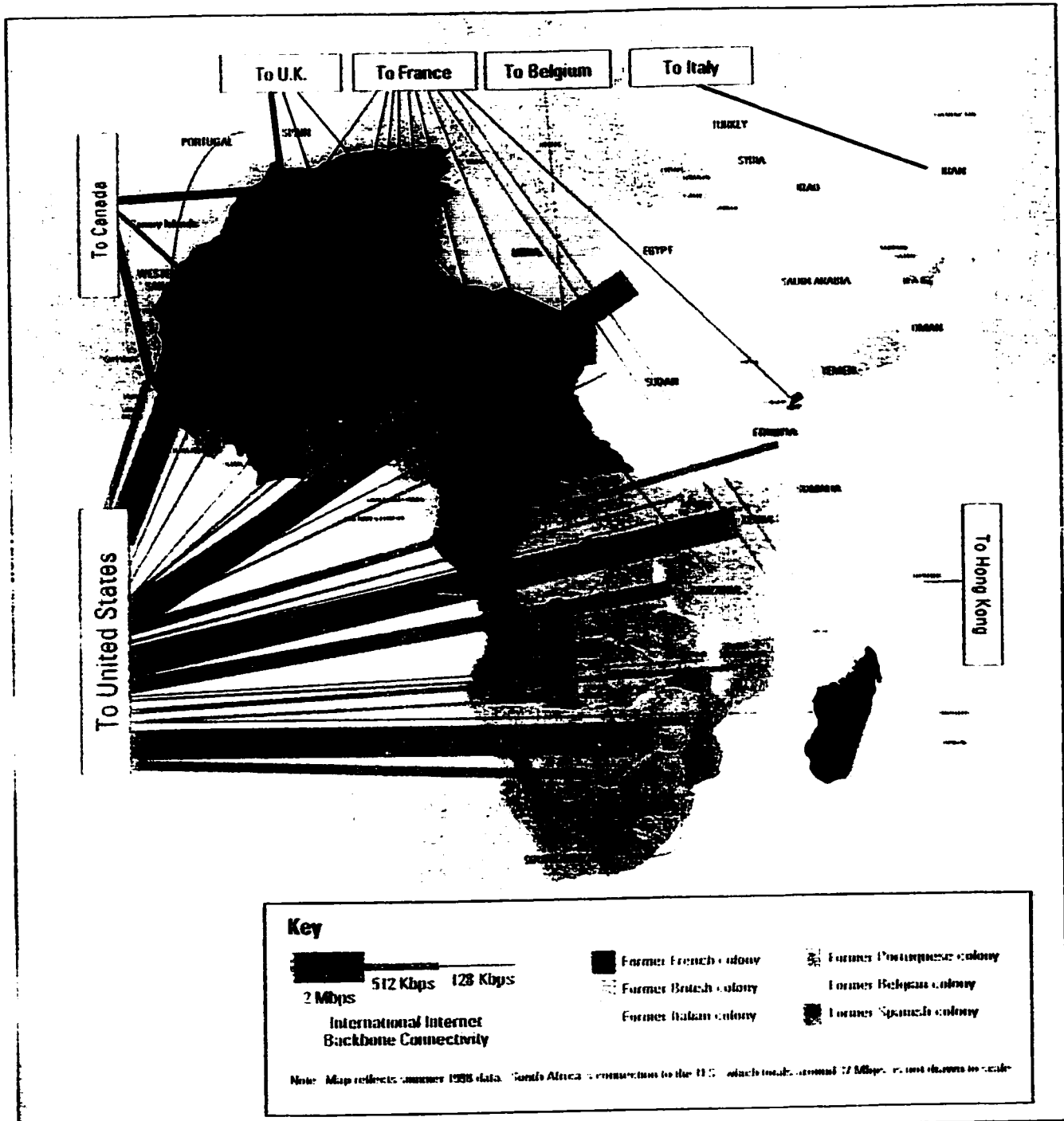## Figure 6. Asian Internet Backbone Connectivity, 1998

Figure 6. Asian Internet Backbone Connectivity, 1998

CHINA

KOREA

JAPAN

HONG KONG

TAIWAN

To USA

VIETNAM

PHILIPPINES

THAILAND

Key
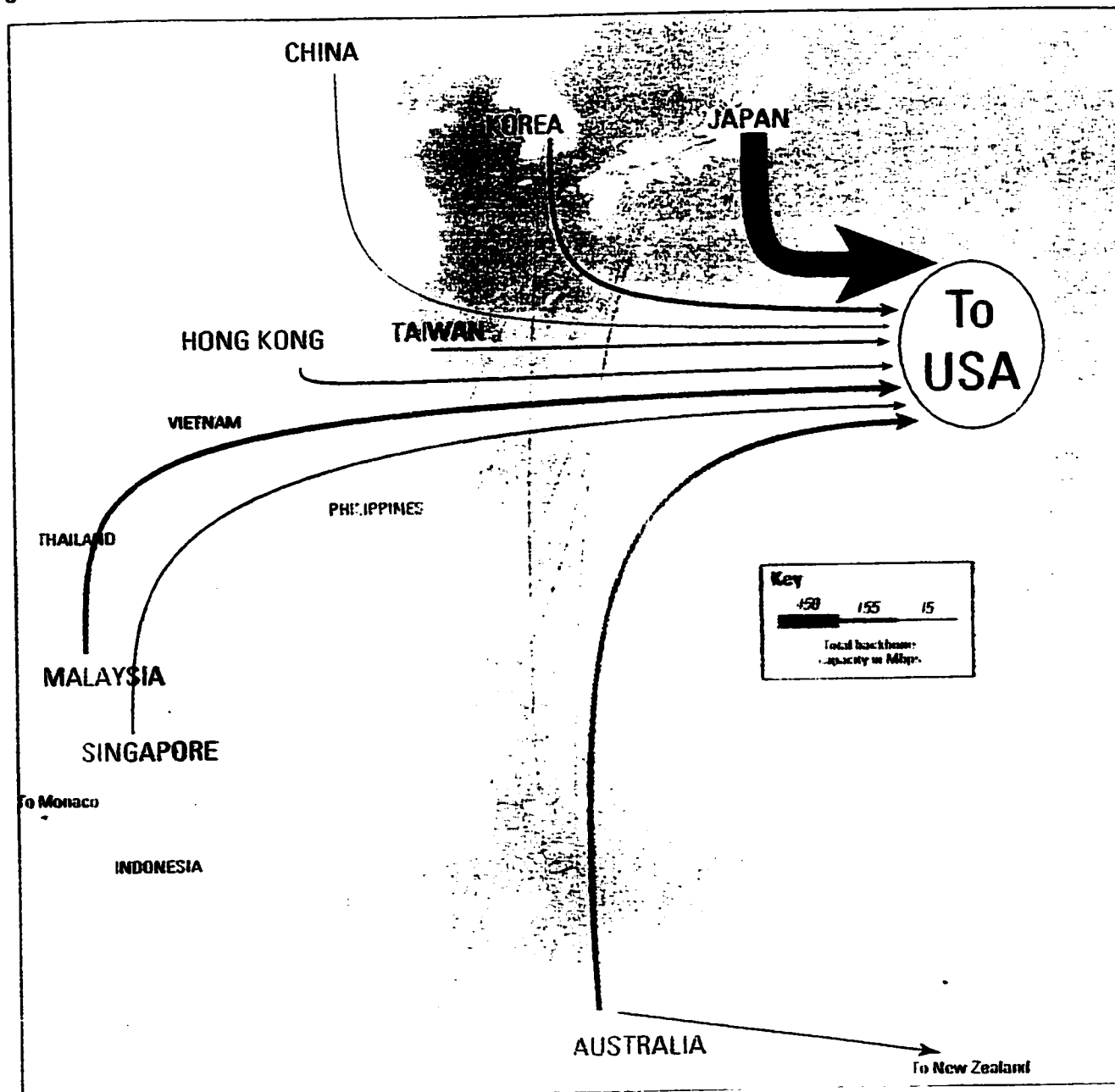
458   155   15

Total backbone
capacity in Mbps

MALAYSIA

SINGAPORE

To Monaco

INDONESIA

AUSTRALIA

To New Zealand

Trans-Pacific Backbone Capacity (Mbps)

Japan	630	Australia	90	Taiwan	80
Malaysia	180	Hong Kong	90	China	15
Korea	15	Singapore	90	TOTAL	1,550

Note: Table and map reflect Sept. 98 survey of Asian ISPs with backbone connections above 10 Mbps. See Bandwidth section of the book for 1999 data.
Source: Barry Raveendran Greene, Singapore; intra-Asian links from company data; OECD.
Map design by TeleGeography, Inc. © 2000

Figure 8. African Internet Backbone Connectivity, 1998

Key

512 Kbps   128 Kbps

2 Mbps

International Internet
Backbone Connectivity

Former French colony   Former Portuguese colony

Former British colony   Former Belgian colony

Former Italian colony   Former Spanish colony

Note: Map reflects summer 1998 data. South Africa's connection to the U.S., which totals around 27 Mbps, is not drawn to scale.

distribution of this growth speaks for itself.[33] Further, given the founding inequity in the distribution of Internet addresses, this appears to be a relatively established future monopoly. Similarly, although the number of websites grew at a rate of over 44% annually between 1993 and 1999, the bulk of the most visited websites remain US-based to an astonishing degree.[34] One could go on and on. Over 90% of the Internet's content continues to be in English, an automatic linguistic barrier for much of the global population.[35] The efforts to introduce language software, or build content in alternative languages, while ongoing, are hampered as much by issues of bandwidth, traffic flows, and addressing constraints, as they are by the commercial impulse, which primarily trades in English, and a small handful of other economically relevant languages that are, except for Japanese and Chinese, largely European.

Indeed, Internet content is undergoing an inevitable transformation as well. The interactivity of the Internet itself is increasingly becoming an illusion; physical constraints have led to the rise of bandwidth-saving content distribution techniques such as 'caching', and 'multi-casting', both of which are strategies that seek to store or 'cache' content at local points close to the user, so that this content is what is most speedily available, and therefore, what is most accessed by the individual user. Commercial forces also invest heavily to ensure that commercial content is assigned priority within online content through various corporate strategies such as massive investments in popular search engines etc. The flows of revenue from commercial content sites, from online newspapers to Internet portals, are a major source for online content distribution

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[33] See inserts following this page. TeleGeography Inc. 97.

[34] See inserts following this page. TeleGeography Inc. 15.

Figure 1. Host Growth and Distribution by Region, 1997-1999

Host Distribution by Region, Sept. 1997

U.S./Canada
69.9%

Europe
18.4%

Africa
0.5%

Latin
America
0.6%

Asia/Pacific
9.9%

Host Distribution by Region, Sept. 1999

U.S./Canada
72.6%

Europe
15.7%

Africa
0.3%

Latin America
1.1%

Asia/Pacific
8.6%
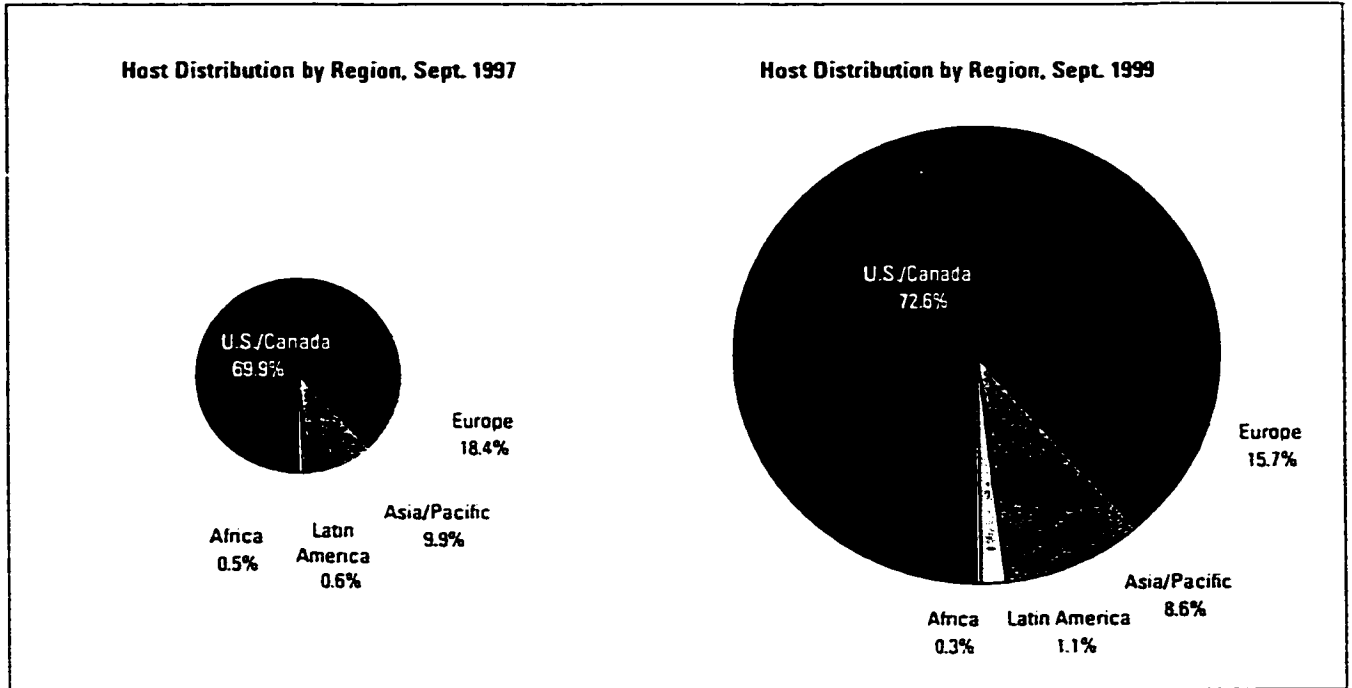
Note: Area of pies are scaled by total host population. Because some hosts cannot be satisfactorily allocated to countries, percentages may not sum to 100.
Source: Telcordia Technologies (www.netsizer.com)   Design © TeleGeography, Inc. 2000

platforms. Simultaneously, bandwidth-intensive, web-based applications, driven by electronic commerce that typically requires 'rich' content, are increasing rapidly. It becomes clear that within the contemporary, commercial Internet, the individual user and her web page cannot compete with the major corporations—as with traditional media, distribution and placement of content are fundamental to the accessibility of online content.

For cyber utopians, including critics like Sherry Turkle, Howard Rheingold, and Nicholas Negroponte, among others, the Internet is technology that is a great equalizer, resisting gender, ethnic, and class inequities, enhancing human communication and promoting democracy and community-building.[36] Opponents of such a view have argued that the very architecture of this technology perpetuates race, class, gender, and other inequities. R. Squires describes, for example, how ISPs typically locate their services in affluent communities, by bypassing inner cities and less affluent rural areas.[37] Other critics observe how a "practice of information apartheid or electronic red-lining dislocates the integration of peripheral groups into mainstream cultural interactions and creates a cyberghetto."[38] In a neo-Marxist interpretation, M. Dawson and J.B Foster, likewise, argue that the Internet is and will continue to be a monopoly of that economic elite who exists in the status quo. They conclude with a call to all the marginalized populations online to resist such domination.[39] Another such view is Alecia Wolf's who,

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[35] Kundnani, Part III, p. 6.

[36] Cited in Bosah Ebo, "Internet or Outernet?," *Cyberghetto or Cybertopia?: Race, Class, and Gender on the Internet*, ed. Bosah Ebo (Westport" Praeger, 1998), 2-3.

[37] Cited in Ebo 6.

[38] Cited in Ebo 6.

[39] James L. McQuivey, "How the Web was Won: The Commercialization of Cyberspace" in Ebo 84.

examining a host of statistics, argues that while its potential remains exciting, the Internet is anything but the Great Equalizer, for the use of such a metaphor is "based on a functionalist perspective that places all responsibility for joining the new technologically elite class squarely on the shoulders of the individual, while serving to legitimate the status-quo. This perspective assumes that rational people will invest in their human capital, but fails to consider the external social forces at work that prevent some rational people from making such investments."[40]

Such critics, observing that commercial imperatives are what define the Internet in every sense, point to how marketing and advertising incorporate "the hierarchical consumption patterns of a mass culture into the Internet."[41] Such an imbuing of cyberspace with commercial and economic imperatives would render it a mere extension of the mass consumer culture, which continues to be inflected by race, class, gender and other inequity. My effort in this chapter, through a detailed architectural analysis of the contemporary Internet serves to point to an endorsement of such points of view. To further qualify my arguments however, it is important to examine how commercial forces, particularly those of advertising, work within this insidious dynamic of the Internet; consequently, this constitutes the focus of my next chapter.

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[40] Alecia Wolf. "Exposing The Great Equalizer: Demythologizing Internet Equity," Ebo 29.

[41] Ebo in Ebo 8-9.

3. The Medium is the Market

People are going to have to realize that the Net is another medium, and it has to be sponsored commercially and it has to play by the rules of the marketplace. You're still going to have sponsorship, advertising, the rules of the game, because it's just necessary to make commerce work. I think that a lot of what some of the original Net god-utopians were thinking, is that there was just going to be this sort of huge anarchist, utopian bliss medium, where there are no rules and everything is just sort of open. That's a great thought but it's not going to work. And when the Time Warners get on the Net in a hard fashion it's going to be the people who first create the commerce and the environment, like *Wired*, that will be the market leaders.

John Battelle, Managing Editor, *Wired* magazine[1]

My central concerns in this project emerge from, what I argue, is a fundamental contradiction between the emancipatory qualities attributed to the Internet—of creating a democratic space defined by equal access to information and freedom of expression—and the reality of its contemporary commercialized form. In the previous chapters, I have explored the various utopic discourses that circulate in, around and concerning, this new medium of mass communications. In "The Medium is the Market," my objective is to demonstrate how the Internet, as an advertising-supported vehicle of global commerce, has evolved into, and presently exists in the form of a new dynamic, alternate, albeit virtual, global marketplace. Such a transformation not only has fundamental economic consequences, working as it does towards the consolidation of a new global economic system, but also crucial socio-cultural implications. Contending that the advertising-governed mass media in general, and the Internet in particular in this context, emerges as a significant site where the social power structures in the societies of the new, Internet-

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[1] Arthur Kroker, "Virtual Capitalism," *Technoscience and Cyberculture*, eds. Stanley Aronowitz et al., (New York & London: Routledge, 1996), 167.

led age are defined, my aim in this chapter is to build on some of the arguments made earlier, by studying the advertising of cyberspace.

In the first section of this chapter, I undertake a survey of some of the ways through which advertising inflects every point of the Internet. In the newly global, Internet-based economy, I argue, the medium is clearly the market, a perspective that leads to the title of this chapter. I explore the ways in which Internet users are transformed into 'eyeballs' and 'mouseclicks,' which become indices to measure advertising's effectiveness. Through advertising, in other words, the citizens of cyberspace are transformed into global consumers. I also examine some of the ways in which advertisements, and the advertising industry, have themselves evolved in order to appropriate the new medium. Exploring the deep-rooted linkages between advertising and the existential realities of the Internet—the global marketplace, I argue that the fact that the Internet's ongoing evolution is both qualitatively and quantitatively governed by the 'free market', makes it imperative that we re-evaluate, and qualify, the significance of its *interactivity* as a medium of mass communication.

The second section of this chapter subsequently, theorizes on the role and impact of the processes of advertising—through mass media in general, and the Internet in particular—on cultural envisionings of progress, development and modernity. For a variety of reasons, I situate my arguments here in the context of India. India offers an instructive site of analysis for my purposes, given that its particular history, after independence, is one wherein development and modernity—originally imagined along the lines of Nehruvian socialism—were dramatically re-visioned following the economic liberalization that took place around the same time as the collapse of the Soviet Union.

Such an economic environment saw the inevitable entry of multinational corporations, as well as multinational advertising agencies with their global accounts. This provides an illuminating context for my study of the socio-cultural impact of advertising, through mass media, on the consolidation of those specific ideological discourses that I have discussed in my previous chapters. Extending the insights I elaborate here, I go on to concern myself with why/how advertising works in the context of the Internet and is able to facilitate a new order of social and cultural imperialism.

Centrally, in this chapter, I argue that the Internet enables a global economic system which can be seen as a new mutant global derivative of capitalism, whereby social power and structures of control are consolidated within a global network of newly created, local, capitalist techno-elites. The logic of such a network ensures the appropriation of a multiplicity of local-global economic, cultural and social articulations within a globally constructed free market economy/consumer democracy framework; for the world that the Internet signifies is not merely one where information is exchanged at phenomenal speeds, it is also a global marketplace in itself. While on the one hand, advertising—both on and about the Internet, both offline and online—*universalizes* the ideology of information technology integral to establishing a specific paradigm of development, on the other, global economics concurrently ensures that local economies must adopt precisely this development paradigm in order to ensure their own survival. I argue that far from radically transforming the global public sphere in more egalitarian or democratic ways, what the Internet threatens to do is to effect a complete privatization of such a public sphere, whereby our understanding and experience of modernity are moored within the terms of reference of a techno-capitalist framework. Extending this

argument further, I suggest that these processes ensure that such essentialized, universalized visions of modernity and development become an unquestioned corollary to the march of economic globalization.

Thus, through my efforts in this chapter, I hope to demonstrate the centrality of the ways in which modern global advertising permeates the very fabric of cyberspace. This, I argue, helps us in comprehending the fundamental culpability of the emerging technologies of globalization like the Internet—through the new cultural, social and political equations they necessitate—in both establishing newly marginalized territories and populations, as well as inhibiting the authentic development of traditionally marginalized regions.

*****

I.

In theorizing around the emergence of a new Indian middle class, Arvind Rajagopal argues that as a medium of communication, television, through the genre of advertising, "promotes a libidinal economy that helps secure and reproduce the physical economy and is interwoven with it."[2] Suggesting that television does this by coalescing and mobilizing ambiguously perceived attachments and feelings in new directions, Rajagopal notes that this insight about media has been articulated by various theorists much earlier.

This argument, for our purposes may be instructively used to think about the Internet. As a mass medium of communications, while it has achieved nowhere near the

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[2] Arvind Rajagopal, "Thinking about the New Indian Middle Class: Gender, Advertising and Politics in an Age of Globalisation," *Signposts: Gender Issues in Post-Independence India*, ed. Rajeswari Sunder Rajan (New Delhi: Kali, 1999), 58.

saturation levels achieved by television, the Internet, with its ongoing commercialization, has experienced dramatically accelerated, even if uneven, growth in the nineties. While the radio took twenty-eight years and the television, thirteen, to achieve an audience of fifty million people, it took the Internet only five years to become a mass medium with about fifty million interactive users. Such rapid growth has meant that the commercial institutions of marketing, advertising, public relations etc., eager to realize the commercial potential of the Internet, have engaged in endless discussions that examine how commercial enterprise on the Web necessitates *new* economic models and new ways of working within this new 'marketplace' of information and ideas. Various management gurus, such as Evan Schwartz for example, have argued that these needs have in fact, led to the emergence of a new discipline within business management—*webonomics*—which he defines as "the study of the production, distribution and consumption of goods, services and ideas over the World Wide Web."[3]

Observing that the economics of the marketplace, prior to the advent of the Web, was based on a central premise—that demand will always exceed supply—Schwartz suggests that the economy of the Web, on the contrary, exhibits, in place of a scarcity of supply, *a scarcity of demand.* By being a source of intellectual property that *generates* to infinity further knowledge, the defining characteristic of this medium of commerce is that it is perennially overloaded with information. The main commodity in the new economy this medium creates, this line of reasoning concludes, is the attention of its users, and therefore competition in the marketplace it creates, is defined by the ability to command and sustain that attention. Successful business on the Web requires not only attracting the

consumer's attention but also the retention of her attention, in order to ensure that users

continue to return to the commercial site. Further, the Web is completely *interactive*,

which makes it fundamentally different from traditional mass media, in the context of

business. Web based commerce, Schwartz notes, has had to reconcile itself to the fact

that the conduit through which business is to be generated are the creation of on-line

communities which will provide semi-public, semi-private spaces where consumers

interact.

Marketers are, in effect, increasingly paying for such spaces. For instance, among

the most successful sites within the packaged-goods consumer industry is the website for

Ragu brand Italian food (www.eat.com) which has successfully created an Italian aura

around itself. Surfers arrive at a web page called "Mama's Cucina," where they meet

"Mama" who is the designated expert on gourmet Italian cooking and culture. While

surfers are heavily exposed to advertisements for different varieties of Ragu pasta sauces,

they may also engage in a host of activities such as learning to speak Italian. What is

significant here, for our purposes, is that the Ragu brand name, from representing a

collection of products on a shelf, is now elevated to *signifying an Italian community*

based on culturalized commodities of common interest. This example illustrates how the

marketer on the Web can continue to use the medium to promote commerce, in excess of

the impact of advertising in traditional media. Traditional advertising informs consumers

of the existence of a product and preaches its virtues. The website further extends the

impact of such efforts in multiple ways, linking it to in-depth product information and

prompting the actual *purchase* of the product. Corporate websites, then, may also

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[3] Evan L Schwartz, *Webonomics: Nine Essential Principles for Growing Your Business On the World Wide*

Mama's CUCINA

RAGÚ

Cookbook   Goodies   Talk to Mama   Find It!   Contests   Home

Sign up for Mama's Newsletters

❖

Kitchen
"Mama's Cookbook"

❖

Dining Room
"Come, Sit, Talk"

❖

Family Room
"Mama Loves Family"

❖

What's New

Food isn't a
substitute for love,
it **IS** love.

perform the role of the physical salesperson, obtaining customer preferences, providing services, retaining loyalty, and generating new sales. Another significant variation that marks off the Web from traditional mass media for business purposes lies in the fact that while traditional media are largely *broadcast* media, pushing commerce-related information toward us, within the Web, the consumer is also *pulling* information out. It can be argued that this suggests an empowerment of the online consumer, who now has the advantage in her relationship with the marketer.

A natural corollary both to the interactivity of the Web as well as the informational economy it represents is that consumer data collection becomes crucially important. While the onus for giving marketers valuable data of a personal nature remains with the consumer, there is a heavy commercial emphasis online on a myriad of strategies (many websites, for example, offer incentives on a regular basis in exchange for personal information) for the collection of such information—for it is this information that helps sell products on the Web. A further significant change that commerce faces online is the complete obliteration of geographical (as well as temporal) locations. While this allows for a borderless, seamless marketplace where any business can theoretically establish a global presence with consummate ease, it also implies that every web-based business not only faces 'worldwide' competition, but also needs to cater to a worldwide clientele. Given that part of my effort will be to examine how the forces of commerce are gradually incorporating the Internet, it is interesting to note the nine principles that Schwartz lists as essential for commercial success on the World Wide Web:

    a) The quantity of people visiting your site is less important than the quality of their experience.

Web (New York: Broadway Books, 1997) vi.

b) Marketers shouldn't be on the Web for exposure, but for results.
c) Consumers must be compensated for disclosing data about themselves
d) Consumers will shop online only for information-rich products.
e) Self-service provides for the highest level of customer support.
f) "Value-based currencies" enable you to create your own monetary system.
g) Trusted brand names matter even more on the web.
h) Even the smallest business can compete in the Web's global "marketspace".
i) Agility rules—web sites must continually adapt to the market.[4]

It is evident from our discussion that the commercialization of the Web leads to the establishing of new economic rules, new equations and relationships between the producer and the consumer (as also a blurring of the two categories), and perhaps even new forms of currency.

On February 18, 1997, Intelliquest Information Group Incorporated (www.intelliquest.com), released the results of its latest survey, which estimated that some 47 million adults in the United States in the Fourth Quarter of 1996 had been on the World Wide Web, as opposed to an estimated 35 million in the First Quarter of 1996, which represented a 34% growth in the on-line population. Intelliquest CEO Peter Zandan was quoted the next day in USA Today as declaring; "It [the Web] is now at the point where so many people have access to it that it is a mass media."[5] In many ways this moment represented the its emergence as a mass medium within the corporate world, stirring up great interest in accessing the potential of the Internet for commerce, specifically, in its use as a medium of *advertising*. The objectives of corporate advertising had now to be redefined and a great deal of corporate energies began to be deployed towards the Web. It was evident that websites were not merely advertisements; they were

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[4] Schwartz viii.

also market spaces wherein product information could be delivered, consumer relationships established, and commercial transactions could actually occur. In the following section, we take a look at some of the ways in which such advertising is now manifesting itself on the Web.

Paid advertising was first introduced to the Web by HotWired (www.hotwired.com) on October 27, 1994.[6] Prior to HotWired's acceptance of cash payments for placing advertising *banners* on their website, links were established on the basis of common interests or in a barter deal. At the time, there were only fourteen advertisers prepared to invest in on-line advertising on an experimental basis. Today, a large majority of the Fortune 500 companies purchase ad-space on the Web. In 1997, HotWired was charging $15,000 per 100,000 advertising impressions per month while Yahoo!, www.yahoo.com, demanded over $15,000 per 500,000 impressions per month for a banner on its home page.[7] A survey of current advertising on the Web reveals a rapidly growing industry, where the biggest recipients of advertising revenue have also been the biggest advertisers. Jupiter Communications, www.jmm.com, has estimated that $13 million in Web-based advertising revenue was generated in the Fourth Quarter of 1995, $24 million in the First Quarter of 1996, $43 million in the Second Quarter and $66 million in the Third—which amounts to an average sequential growth of 72%. They have also determined that the most conservative estimate would place Web-related advertising spending/revenue at approximately $1.4 billion in 2000.

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[5] Cited in Jim Sterne, *What Makes People Click: Advertising on the Web* (Indianapolis: Que Corporation, 1997) 37.
[6] Sterne 14.

[7] Mary Meeker, *The Internet Advertising Report* (New York: Harper Collins, 1997) 14-3

HOTWIRED *Search:* | Wired News ▾ | *for* | | **go**

Get email updates from HotWired

Archives
Seven years of HotWired

- - - - - - - - - - - - - - - - - -

<advertisement>

 The Minority Report Philip K. Dick was born in Chicago in 1928 and lived most of his life in California. The...

- - - - - - - - - - - - - - - - - -

 Sign up for a free Harvard Business School Publishing newsletter

< advertisement >
- - - - - - - - - - - - - - - - - -

***Wired* Magazine**
Browse by issue or topic

HotBot
The Web's #1 Search Engine

Cocktail
The best in music

Need help?
Send us feedback
Wired Digital staff

» Lycos Worldwide

Wired News

Continuous Updates from the Digital Front

02.00 am **The Push to Expose Quacks Online**
You can get more information about a car mechanic online than a doctor with malpractice history, says a patient who backs a bill to force physicians to make full disclosures. By Julia Scheeres.

02:00 am **There's Big Money in Fear**
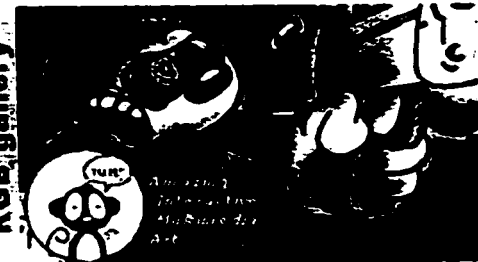
Animation

dogshitter wants©3
at Animation Express

The Web Developer's Resource

Webmonkey

Open Source Reality Check
Think burying your head in the sand helps open-source software compete in the commercial world? Jay has something he'd like to tell you.

Learn about:
| Authoring ▾ | ▪ |

RGB gallery

Current Hoo-Ha:
U.S. v. Microsoft
Cult of Mac
U.S. vs. Them
MP3 Rocks the Web
IS/IT Infostructure
Unwired News
Gadgets and Gizmos
Games

Animations and More
Browse All Animations
Plug-in Tester
Submission Guidelines
Animation Newsletter
Viva la Revolution
Robokopf
Lexi
Ugly Mean Chickie: 7
Crash Courses in:
Animation
Info. Architecture
Web Design
Beginning JavaScript
Advanced JavaScript
Site Optimization
Dynamic HTML
Dreamweaver
Additional Stuff
TEXT.URE
Site of Hours
Location, Location...
Relisten: Please!
Impulse Freak
Prototype 19
[dendrite]
49,682,923 stories ...

Yahoo! Real Estate
Homes, Apartments, Agents

Challenge your friends with
YAHOO! Messenger

Yahoo! Travel
Air, Hotel, Vacations, Cruises

| Search | advanced search

❤ **Yahoo! Health** - Asthma & Allergy, Parenting, Lose Weight, Stop Smoking, Ask th

Shop Auctions · Autos · Classifieds · **Real Estate** · Shopping · Travel · Yellow Pgs · Maps **Media** Finance · News · Sp
Connect Careers · Chat · GeoCities · Greetings · Groups/Clubs · Mail · Members · Messenger · Mobile · Personals · People
Personal Addr Book · Briefcase · Calendar · My Yahoo! · PayDirect **Fun** Games · Horoscopes · Kids · Movies · Music

Yahoo! Shopping   Computers - Electronics - Apparel - More

Shop by

Dept: [Computers ▾] Go

Store: [Sony ▾] Go

**Sony VAIO Digital Studio
PC. Only $22/month**

Search: [   ] Go

Barnes & Noble - Free Shipping on 2 Items or More

Arts & Humanities
Literature, Photography...

News & Media
Full Coverage, Newspapers, TV...

Business & Economy
B2B, Finance, Shopping, Jobs...

Recreation & Sports
Sports, Travel, Autos, Outdoors...

Computers & Internet
Internet, WWW, Software, Games...

Reference
Libraries, Dictionaries, Quotations...

Education
College and University, K-12...

Regional
Countries, Regions, US States...

Entertainment
Picks, Movies, Humor, Music...

Science
Animals, Astronomy, Engineering...

Government
Elections, Military, Law, Taxes...

Social Science
Archaeology, Economics, Languages...

Health
Medicine, Diseases, Drugs, Fitness...

Society & Culture
People, Environment, Religion...

In the News
- FBI: Suicide bombers likely in U.S.
- Bush refuses to lift Cuba embargo
- Israel hit by two suicide bombers
- East Timor declares independence
- 'Clones' grosses $116M at box office
- Markets: S&P ✦ 0.9% · Nasdaq ✦ 2.0%

more...

Marketplace
- Playstation 2 and Xbox - new price $199.94
- Digital camera and binoculars in one - $99.99 plus free shipping

Broadcast Events
- Britney Spears - watch music videos

Not Yet A Woman. Overprotected. Last To Know. I'm A Slave 4 U. and more

- Artist of the Month - Eminem
- Watch FIFA World Cup video archives

Inside Yahoo!
- Star Wars - Showtimes & Tickets, Critics Reviews, Premiere Photos, more
- FIFA World Cup - official match schedule
- Eagles Summer 2002 Tour - exclusive ticket pre-sale, order now
- Hot Jobs - find your dream

Banners still dominate the advertising landscape of the Web. These are the rectangular shaped graphics that appear at the top of web pages. Easy to create and transmit, they appear to have taken over the role of the standard ad format for the web. Until recently, these banners would appear in a wide variety of shapes and sizes, but in the last few years, there has been a great standardization in the banner format. Such standardization serves the interests of both advertisers as well as those selling space on-line. It is particularly useful when thousands of ads (banners) have to be served up by network advertising companies, such as Doubleclick (www.doubleclick.com). Animated banners, increasingly in vogue, are designed to be more eye-catching than the rest of the page. They are also usually the first image to load so that they can be the first to be viewed. The positioning of these banners, within the web page, has been the subject of much Internet advertising discussions. The optimum position, at this time, has been found to be either the top center, or the bottom right, but banners may even show up in the middle of a web page. The limitations of the banner as an effective format for advertising can be attributed to a variety of factors including the scarcity of visible space within it, the technological restrictions in terms of file size etc, for reasons of bandwidth, and the fact that the consumer retains the ability to by-pass them entirely. A new trend is the emergence of interactive banners where the banner itself becomes a brief detour in the consumer's cyber-travels. Finally, I have also come across banners that actually allow the consumer to conclude entire sales transactions without leaving the website where the banner was clicked. The banner promises to evolve further in radically new ways with the advent of technologies such as Real Audio, Streaming Audio and Video, and so on. A comprehensive overview of emerging banner-related marketing and advertising strategies

can be found at TurboAds, www.turboads.com, which also offers a collection of brand-specific case studies of banner usage.

Sponsorships, a legacy of advertising strategies in more traditional media, have translated very well online, becoming a successful Web advertising method as well. The relatively cheaper costs of advertising on the Web, in contrast to media such as television, allow corporations to easily establish permanent associations with relevant content sites. One example is the Microsoft Network's (MSN) sponsorship of *The Tonight Show* at www.nbc.com/tonightshow.

Offline, sweepstakes and contests have remained popular strategies both for gathering commercially relevant personal consumer data as well as for attracting consumer attention. This is true online as well, with the added advantage that such contests can be instantaneously conducted online without the time delays or inconveniences of using physical mailing systems. Thus there are several sites online that act as portals, listing dozens on sweepstakes, contests and so on, in many different product categories. Good examples of sites like these are www.sweepstakesonline.com, and www.onlinesweeps.com.

Another interesting form of online advertising may be seen in the advertisements that appear as *interstitial* pages between one web page and another. The interstitial advertising method has reportedly been very effective when used in innovative ways. Sterne relates the example of Mind's Eye Fiction at www.tale.com that uses such ads in the middle of fictional narratives.[8] Another specialized form of interstitial advertisements are called superstitials, which present rich content to users in a new pop-up window after

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[8] Sterne 123.

case study #7:

msn.

aol ☑ ChannelSeven com ☐ TurboAds com ☐ WirelessAdWatch ☐ internet com

internet.com

Rich Media News

Questions for EyeWonder's John Vincent

Marketers beware. **EyeWonder** CEO **John Vincent** is gunning for your television budget. In this interview, Vincent discusses his efforts to get marketers to cough up their TV creative. his opinions on Java-supported wireless devices and his belief that broadband will never completely take over. **more:**

eSecurity
CONFERENCE & EXPO

TurboAds

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Rich Media

News

Case Studies

Broadband
- News
- Case Studies

- Stats

Contact Us

ChannelSeven.com

WirelessAdWatch.com

Rich Media News

Breaking Into the Big Time

Israel-based agency **Oak Interactive** has stuck mainly to its local clients. despite rich media product launches that have kept pace with industry heavies such as **EyeBlaster** and **Ad4Ever.** In another one for the "slow and steady wins the race" files. CEO **Alon Melschner** stresses the creative over the technology. even as his firm prepares to launch a new Flash product and picks up its first global clients. **more:**

CH7 Newsletters
NarrowCast delivers news. research. and commentary.

HTML ☑ TEXT ☐

TurboAds delivers broadband and rich media

WEBTRENDS.

Flash Factory: Nikon Brings the Eye Candy In-House

When building a new Flash site for every new product launch got too expensive for Nikon, the company turned to Concentric Visions. The rich media technology firm promised to bring Nikon's Flash management in-house. Is it time for the second coming of XML? **more**

Digital Media News

When B2B Gets Tough, Rich Media Gets Going

POPstick's recent ads for Microsoft events have done more than just introduce a better breed of performance metrics into the marketing mix. They've created a new breed of campaign that gathers ultra-specific info on customer behavior. But is there such a thing as campaign over-management? **more**

Inventing the Clickless Ad

As the industry wearily shifts its focus from measurement- and sales-driven ads to simple branding, alternative formats like **Point.Roll** are getting more attention. A recent campaign Point.Roll created for **A&E** has earned it some repeat business from the TV network provider. But how does a clickless banner work? **more**

Digital Media News

Is a Rich Media Holiday Greeting Worth It?

With marketing budgets tight in many sectors, launching a rich media holiday greeting campaign may seem like an odd idea. However, some marketers have discovered that a little animation and even less of a sales pitch are just the thing to get customers' attention. more »

Standing Out: Rich Media for the Holidays

E-mail marketing efforts are expected to skyrocket this holiday season, flooding inboxes and making it harder than ever to stand out in the crowd. Harder, but not impossible. **VisionPoint Media's Diane Kuehn** talks with **TurboAds** about the true meaning of targeted rich media. more »

Max Headroom for the 21st Century

In its latest campaign, **Rock the Vote** combines its connections in the recording industry with a gaming style interface provided by rich media and animation firm **Brilliant Digital**. The result allows young people to interact with the animated 3D heads of today's top rock and rap artists, and hopefully engages them in the important issues of the day. more »

Questions for Bluestreak CEO Peter Corrao

serving, a treacherous space for even the established players. So what makes him think he can succeed? Bluestreak's infrastructure is founded on rich media, he says, and rich media is the standard of the future. more

Rich Media News

The State of Rich Media

Ever since the **Interactive Advertising Bureau** began to measure rich media as a separate category in the industry, these ads have only garnered two percent of online ad spending in the U.S. But recent anecdotal evidence suggests that 2001's third quarter may change all that. more
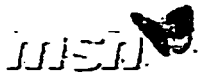
The Fastest Way Between Two Points

Search the Web

Explore MSN

MSN Home
Auctions
Auto Price Quote
Business

monster   Boost your earning power

City Guides
Downloads
Entertainment
Find Friends & Colleagues
Games
Greeting Cards
Health
Horoscopes
Hole Deals
House & Home
Love & Relationships
Movies
Music & Radio
News
e nt Shopping
Shopping
en s Careers
Travel
White Pages
Women
Yellow Pages

Tonight Show

Tonight
SHOW   with
JAY LENO

Home

Monologue

Headlines

Jay Walking

Correspondents

Show Tickets

Guests

Freddie Prinze Jr.
Bill O'Reilly
Bryan Adams

Upcoming Guests

More...

QUICK POLL

Who is your favorite "Tonight Show" correspondent?

○

○

○

○

○

○

○

○
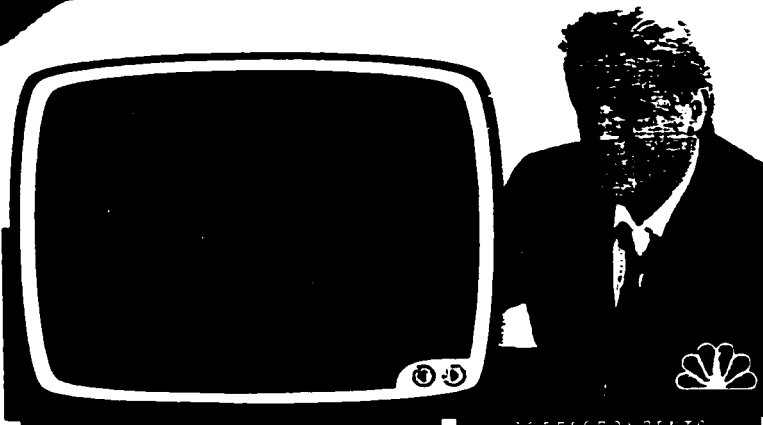
MONOLOGUE

Jay's trouble in England...
...and how they're having a devil of a time making a new version of *The Exorcist*

More Monologues...

HEADLINES

OIL OF OILY COSMETICS
Move-in specials...
...and cosmetics for people with VERY dry skin, plus the complexities of archery carts

The secret lives of cats...
...and how that perky Canadian pair will not be forgotten in any way, shape or form

More Headlines...

Have a funny headline for the show? Click Here

JAY WALKING

What do you know about religion?
Jay finds that the Pope no longer lives in Rome and...

Bachelors & Bachelorettes
Jay clues into what people find attractive   Good personalities, Porsches and large panty sizes

More Jay Walking...

CORRESPONDENTS

Ross the Intern, Kevin Smith, Chris & Kim and more...

TONIGHT SHOW MUSIC

Celine Dion

In-depth coverage of the music of *The Tonight Show* at

msn Music

TONIGHT SHOW BOARDS

Talk about Jay!

MSN Celebrity Chat

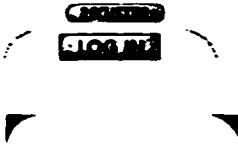Find out who we're chatting with next...

CELEBRITY CHAT

Sweepstakes Online

spa resort

Nature Made

›Click Here to Enter

| Prizes ▾ | | Search |

New Prizes
Feature Prizes

Apparel
At Work
At Home
Cars
Cash
Computers
Electronics
Entertainment
Family Fun
Food
Health
Houses
Lifestyle
On the Road
Seasonal
Sports
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- Automatically fills and submits entry forms!
- Send billions of entries with ONE click!
- Easy-to-Use Organizer stores thousands!
- Schedule your Submissions!
- Add Your Own Links!
- Don't Search - Sweepstakes sent to you!

SunFun GIVEAWAY

◀ **Winners Cafe!** ▶

Latest SweepReward Winners!

TBA
Microsoft Greetings 2000

J. Jones, TX
Microsoft Mouse

J. Sweeney, FL
Microsoft Natural Keyboard

Submit your Win to the Cafe!

Latest Instant Winners!

Dorothy, Blue Mountain, MS
5 SweepPoints

Mark, Miami, FL
5 SweepPoints

Nicole, National Park, NJ
5 SweepPoints

More Winners

◀ ▶

Free Sweepstakes and Freebies Content for your Web Site
Get Sweepstakes Headlines! - Refreshes every 5 minutes
Play our Instant Win Scratchticket to win SweepPoints for
great prizes!

just mail
Stop SPAM Dead!
Click for more
info.

MySweep™ **Sweepstakes Online Launches MySweep Service!**
Track Sweepstakes Your Way!

Canada

Add a Sweepstakes | Privacy Policy | Site Map | Media Kit
Sweepstakes Promotion & Development Services | Advertising | Contact Us

United Kingdom

all data has loaded into that window. These resemble short television commercials within the space of the banner. A whole gallery of entertaining superstitials can be viewed at www.unicast.com/superstitial/index.asp.

There are also some successful instances of ads that have been designed and created as games. Games have emerged as an extremely popular genre on the Web. Some excellent examples of such games, and how they are integrated into a company's marketing mix can be found at www.wildtangent.com/solutions/ddc/casestudies.html. Another site that provides a good example of game-based advertising and marketing is www2.station.sony.com/en/.

Still another widely used approach for attracting attention to the corporate brand name online, is the strategy of product placement. Currently, one can observe the emergence of several advertising-supported *content sites*. These are not the same as sponsorships in the ways that they provide greater flexibility to the advertiser. Moreover, a whole set of advertising strategies widely used before the advent of the banner, still exist on the Web in different, adapted, forms. Some such examples are 'solicited' mass email advertising, newsgroup advertising, advertising through newsletters, list servers, through classified advertisements etc.

The Web has traditionally been based on a 'pull' model wherein the user actively seeks online content. Push technologies are, however, becoming increasingly popular on the Web. Within the online advertising industry, contemporary 'push' technologies are termed 'solicited pushes' wherein the consumer's permission is obtained prior to the pushing of the relevant online content. This is corporate vocabulary that seeks to differentiate these technologies and methodologies from earlier, unfavorably received,

efforts to apply the 'push' model on the Web in the forms of newsgroup 'spamming,' unsolicited email, and so on. 'Push' technology is used for example, by the on-line bookstore, www.amazon.com, which, uses specialized profiling software to build an individual profile of the kinds of books or authors you have expressed an interest in, and sends you an email every time a new book or author that 'fits' your profile becomes available. Among the first Internet companies to generate a lot of interest in 'push' technologies and strategies, was PointCast Inc. A wholly advertising-supported service, which broadcasts a user-customized selection of news and information to the user's desktop at regular intervals at no cost to the user; PointCast became one of the Web's early commercial success stories.[9] Ever since, 'push' technologies have become widely used on the Web.

Advertising on the Web is still in its infancy, and proof of this is the fact that among the most intense discussions in Internet advertising forums center on the technologies, ways, and means of measuring the effectiveness of Web advertising. Being computer based, the Internet represents the most measurable mass medium of advertising till date. Various models, strategies, and software technologies are being used in measuring and tracking ad responses. The system of 'Cost-per-Thousand Impressions'(CPMs) is one such method that has been adapted from traditional media for usage on the Web. 'Clickthroughs,' which involve payment based on the number of times the user clicks through to the buyer's site in response to the ad, is another such method introduced by Yahoo! upon the insistence of Procter & Gamble Ltd. who were looking for a results-oriented model of payment prior to their initial entry into Web advertising.

Further the use of independent sources and firms to verify and validate measurement data

through such practices such as audits, are becoming mandatory practices for Web

advertising sellers, Web-solution providers, and content providers. This development is

similar to long established practices in traditional media. The difference, of course, is that

any measurement that is web-based can be generated almost instantaneously. This is an

extremely important fact that distinguishes the Web from old order media, for it allows

for the immediate processing of all data collected; market testing of ads, sampling,

consumer reaction testing etc can now be performed in real time. The corporate

perspective on the use of the Internet for the purposes of marketing and advertising is

perhaps best summed up in the words of Denis Carter, Vice President & Director of the

Corporate Marketing Group, Intel, who, in 1996, said: "Marketers should keep three

things in mind when considering using the Internet in any form as part of their marketing

mix. First, using it requires the same goal setting clarity as using any other marketing

technique. Second the dynamics of the Internet are changing daily, and therefore today's

perfect solution will be out dated tomorrow. Third, because of the rate of change, merely

reading about this stuff is useless, you have to be a pioneer."[10]

One of the most significant consequences of the ways in which advertising occurs

online is that along with other e-commerce activity, it fosters the partnering of businesses

with sites that build online communities. By mid-1999, the combined membership of

such online communities, if one were to include the approximately sixteen million

America Online subscribers, exceeded twenty-five million.[11] *Business Week* has

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[9] A comprehensive account of the rise and fall of PointCast Inc. is available at
www.businessweek.com/1999/99_17/b3626167.htm.

[10] Denis Carter in *Harvard Business Review*, Nov/Dec, 1996, as cited in Sterne 404.

catalogued how companies competed with each other in a race to partner with such online communities during this period, even though few of these community sites were actually profitable.[12]The corporate logic was simple: on the one hand such online communities provided global pools of supposedly like-minded consumers, while on the other, they created an environment that functioned as an incubator to both test and gauge consumer reaction to newly evolving trends in e-business, as well as to better understand, and garner more information about the real-world consumer. Thus while virtual communities like Geocities, http://geocities.yahoo.com, and Tripod, www.tripod.lycos.com, were already permeated with advertising in the various forms I have examined earlier, their very existence online now became predicated on their partnerships with companies offline. *Business Week* details the endless array of such corporate-community partnerships in the mid-nineties such as that of Warner with a London-based online community called FortuneCity, www.fortunecity.com, which saw 150,000 members register in only two months; the merger of Tripod's owner Lycos, with USA Network to create an online community called Angelfire, http://angelfire.lycos.com/; and so on.

Significantly, *Business Week* also describes the many new ways in which such efforts convert these communities into consumers. In return for freebies such as film previews or online chats with actors and actresses from TV shows such as NBC's *Friends*, Warner gets access to substantial amounts of personal consumer information. This process worked as follows: sites that offer free online 'community building' services such as free email facility, free content hosting for creating individual web sites etc.,

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[11] Neil Gros, "Building Global Communities: How Business is Partnering with Sites that Draw Together Like-Minded Consumers," *Business Week* March 22 (1999): EB 42-43.

[12] Gros pps. EB 42-43

Yahoo! GeoCities

Sign in to Yahoo!

Yahoo! ID: [   ]

Password: [   ]

□ Remember my ID & Password

[Sign in]

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Sign up for a **free** web site and join the largest home page community on the Web. As your web site grows, you can easily upgrade to any of our premium packages. Learn more

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- Domain (e.g., **www.your-name.com**)
- 25MB disk space
- 10GB of data transfer/month (bandwidth)
- 5 email accounts (e.g., you@your-name.com)
- 5 subdomains (e.g., **music**.your-name.com)
- FTP access, ad-free pages, and more

Sign up now!　Learn More　　　**$8.95/mo**

plus one-time setup fee $15

GeoCities Plus

Share photos and more with family and friends.

- 25MB Web site
- No advertisements
- 5GB of data transfer/mo
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- Remote loading
- Tools to build web pages

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plus one-time setup fee $10

Sign up now!　Learn More

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- 20GB of data transfer/mo
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- 10 subdomains
- Customizable site search
- Password protection
- 20 pro-design SiteWizards and more

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plus one-time setup fee $15

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- 25GB of data trans
- Business Edition en your domain (e.g., you@your-na
- 15 subdomains
- Customizable site s
- 20 pro-design SiteW
- PHP support, passv protection, snapsho backups, access lo much more!

$19.95/mo
plus one-time setup fee $

Sign up now!　Learr

Compare all Web Hosting Packages

Member Pages Directory

Search or browse interesting web sites created by Yahoo! GeoCities
members.

| Search | Advanced Search |

Business & Finance
Investing. Industry

Computers & Internet
Internet. User Groups

Cultures & Community
Issues. Seniors. LGB

Entertainment & Arts
Movies. TV. Books

Family & Home
Genealogy. Parenting. Pets

Games
Computer. RPG

Government & Politics
Military. Parties

Health & Wellness
Fitness. Support

Hobbies & Crafts
Antiques. Collectibles

Music
Rock & Pop. Rap. Country

Recreation & Sports
Travel. Cars. Wrestling

Regional
U S States. Countries

Religion & Beliefs
Christianity. Spirituality

Schools & Education
High Schools. Colleges

Science
Astronomy. Biology

Music & Movies

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tripod Home Build · Promote and Earn $ · Site Add-ons · My Account

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BMW Gallery

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M-Roadster and beyond.
Tim has the BMW of your
dreams. *Read more..*

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Cars & Trucks	Business
Digital Life	Shopping
Entertainment	Society &
Fun & Games	Culture
Health &	Sports
Fitness	Teens
Home & Family	Travel
	Women's Issues

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- Search for a better job today'
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Build your homepage ... your way.

Looking to build your website without boundaries? Plus has everything you need ... and more! Easy to use tools for all levels of experience. All the room you need for images, MP3s, and video clips. No pesky banner ads to get in the way. Ready to call the shots? **Step up to Tripod Plus! ONLY $4.95 a month!**

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Sign Up   Learn More   Upgrade

Need a new home for your site? Move to Tripod!

What's happening on Tripod

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typically require user registration by means of which some basic user information is gathered. This makes for the 'first layer' of information. Such information is then used to target users with advertising, contests etc., all of which act together to provide deeper and deeper layers of member information. This is the data that erstwhile corporate partners and advertisers are allowed access to, and subsequently use to create increasingly large bodies of potential, highly targetable, consumers. The 'advertising' of such communities transpires in several other ways as well. For example, fee-based providers of online services may waive subscriber fees for subscribers who spend a predetermined amount of money on e-commerce transactions. Similarly other community sites such as the now defunct CyberSites Inc., invented new models of commerce online. CyberSites negotiated group discounts on products sold online, and even allowed its individual members to edit their online profiles thus accommodating their evolving consumer desires.

Community marketers online also procure access to the community's chat rooms, bulletin boards, private photo galleries, music rooms, and other such facilities. Using special software tools, they can rummage through these for tips on consumer trends. In some cases, the site owners themselves provide such categorized data. For example Tripod, in mid-1999, had managed to classify over eighty-five percent of its web pages into various consumer categories. Further, online advertisements themselves evolved to fit into such communities. Consider, for example, the advertisements that appeared on a 3D-site called Worlds Away, established in 1995 and owned by Japan's Fujitsu Ltd., www.fujitsu.com. *Business Week* details how these advertisements were disguised as virtual 3D objects wherein clicking on a flowerpot on the site, for instance, would transport the surfer to www.pcflower.com. Indeed, if one were to regard the content on

the Web as a primary defining component of what we understand by the term 'Web culture', it is obvious that online, the balance of power between the distributors and the creators of culture is radically changing—the creators of such a culture are rapidly becoming its very distributors. Given that such communities, to a great extent, constitute the supposedly democratic, egalitarian spaces for public discourse—in other words create a global public sphere—I would argue that such a space is created and completely mediated by the forces of commerce. While public discourse may occur in directly unmediated forms, the fact that the forum for such discourse is completely colonized by the profit motive is a deeply disturbing one, for the simple fact is that these spaces can then be created, shaped, or closed off for public consumption, depending on the needs of the market forces who have constructed them, and who are already unregulated by the State, for the most part. The authenticity of communities built within such spaces become automatically suspect—are these populated by freely interacting global citizens? Or are these community members, rather, a group of global shoppers discussing their purchases at the food court of a global mall—a community formed of loosely attached consumers who can detach and re-attach themselves to the group whenever they like; who have access to this space to discuss whatever they want, whenever they want, *except when the mall is closed*?

Advertising, shaped by the technological possibilities of traditional media, has been traditionally defined by several characteristics. It has usually been a *one-way* communication process, a monologue, catering to a largely 'captive' audience in the sense that the audience needed to actively work to avoid engaging with the advertisement (by changing TV channels, for example). Advertisements themselves have tended to be

standardized, simple, messages catering to the largest possible spectrum of preconceived

consumer types. Additionally, such advertisements have needed to be brief, given the

high costs of advertising placement within traditional media. [13] The Internet, however, is

significantly altering such notions of advertising and advertisements. The Web, as we

have already seen offers advertisers the opportunity to integrate a host of commercial

activities with(in) their advertising strategies that was inconceivable earlier—information

and transaction processing, for instance, would earlier have been required to be

performed by a company's sales force. An overview of the characteristics of the Web

versus traditional media in this context makes clear that in many ways, the Web becomes

the perfect medium of advertising. [14]

Given the US-centric structure of the Web that I have laid out in the previous

chapter, it is no surprise that the world's most developed online advertising industry

exists in the United States. Additionally, the US advertising industry is also the largest in

the world, with a forty-nine percent share of global advertising revenues. [15] Mary

Meeker's *Internet Advertising Report* of 1997, a comprehensive corporate survey of the

online advertising industry, provides some useful insights. [16] Trying to estimate the value

of 'eyeballs' and 'mouse-clicks' online, Meeker, then an analyst at Morgan Stanley who

was known as the "queen of the Net" due to her specialized knowledge of the Internet

industry, argues that in the context of advertising, the Internet "potentially represents the

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[13] For a more complete account of the differences between advertising via traditional media, and advertising on the Web, see Christian Barker and Peter Gronne, *Advertising on the World Wide Web*. unpub. thesis (Copenhagen Business School: 1996).

[14] See inserted table following this page. Barker and Gronne 71.

[15] Ibid 6.

[16] Mary Meeker, *The Internet Advertising Report* (New York: Harper Collins, 1997).

Table 4.1 - Characteristics of the main advertising media

	Reach	Selectivity	Feedback	Information capacity	Cost[a]
Newspapers	High	Moderate	Low	Moderate	High
TV	Very high	Very low	Very low	Low	Low
Radio	High	Low	Very low	Very low	Very low
Direct Mail	Very low	Very high	Low	Moderate	Very high
Magazines	Moderate	Moderate	Low	Moderate	High
World Wide Web	Low	High	Very high	Very high	Potentially very low

Source: Of own make

creation of the greatest, most efficient distribution vehicle in the history of the planet,"

allowing the activity of advertising to transform itself into one characterized by a

multitude of transactions—which for her marks the creation of a tremendous business

opportunity enabled by the Web.[17] "Advertising", Meeker continues, "will buy

eyeballs... through any conduit or distribution vehicle that delivers a desirable audience,

... and the direct interactive marketing capability of the Web is very intriguing to

advertisers, compared to the hit-or-miss nature of broadcast marketing."[18] Noting that

advertising online is much more than about advertising and distributing messages—it is

about "building customer relationships, building "cyber"-brands, providing customer

services, generating electronic sales of goods and services, efficiently delivering

marketing messages to appropriate audiences, and creating mass customization, and

interactive/direct marketing"—Meeker concludes that the onus for delivering such

audiences (eyeballs) "with compelling demographics to advertisers," rests firmly on the

creators of web sites. The data Meeker provides (obtained largely from the offices of the

global advertising firm McCann Erickson,) makes it clear that the rapid (projected)

growth of Web advertising revenue compares very favorably to that of traditional media.

Further, it also establishes that the Web represents an extremely potent advertising

medium given the advertising objectives of various media.[19]

    I would also like to point to another important facet of the advertising of the

Internet, even though I cannot discuss it in much detail here, given the scope of my

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[17] Meeker iv.

[18] Meeker iv.

[19] See appendix 2. Meeker 1.6-1.8, 1.10, 2.4, 3.16, 12.1-12.3, 13.3-13.4, 14.1-14.3.

thesis. The commercialization and advertising of cyberspace is also fundamentally

impacted by the advertising-governed traditional media, which not only promotes the

commercial content *within* the Internet, but also *the Internet itself* in terms that I have

outlined in my first chapter. Thus while the ubiquitous "www"s, which appear on

television, radio and the press, drive much initial traffic to commercial sites within the

Internet, continually reinforcing this flow of offline traffic online, advertisements within

the traditional media continue to transmit and consolidate the ideology of information

technology. For example, AT&T's advertisement for the 1996 Olympics tells us that

"when people communicate, there is no limit to what they can do," in contrast to the

company's 1997 message "it's all within your reach."[20] Similarly, the 1998 television

commercial for the newly merged global telecommunications giant, MCI WorldCom,

from where I derive the title of my project, grandly proclaimed: "the globe is now

officially open for business!"[21]

From our discussions above, it becomes evident that *the processes of advertising*

impose themselves on all points of the compass as far as the commercial Internet is

concerned. In the Internet economy, *the medium is clearly, the market.* To comprehend

the processes of cultural formation in such a context (which itself, as I argue in Chapter 1,

is in turn, the attempt to understand the cultures of globalization and modernity), it is

necessary to examine the fundamental role of advertising, for "it is through advertising

that economy and culture come together, in narratives that help accumulate surplus by

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[20] "The Cyber Have-Nots," *The Hindu* May 31 (1998),
http://www.hinduonline.com/hindu/today/08/08310001.htm, accessed 05-31-98 1:40 PM.

[21] This was a commercial that I viewed at Montreal in 1998.

representations of desired values."[22] This is a view reinforced by the fact that the

globalization of the advertising industry and advertisements themselves, occurred

concurrent to the development of the Internet. The next section of this chapter explores

the insidious ideological role of advertising in the shaping of the Internet, as well as in

those of economic, cultural and social formations in the newly inter connected world it

ushers in.

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II.

It is useful for my purposes to begin with the socio-cultural insights provided by

Benedict Anderson in his influential treatise *Imagined Communities*. Anderson has

observed that nations are not merely the determinate products of given sociological

conditions such as race, language or religion, but are also imagined into existence.[23] He

describes some of the major institutional flows through which such imagined

communities come to acquire concreteness and specificity, particularly the institutions of

what he calls "print capitalism." His analysis considers the basic structure of primarily

two forms of imaginings that first rose to prominence in the Europe of the eighteenth

century, the novel and the newspaper, which provided the technology for representing the

kind of imagined community that is the nation.

The information technology boom in our contemporary world has succeeded in

effecting a revolution that far exceeds the implications of Anderson's print capitalism.

Today's unprecedented flows of capital, commodities, information, knowledge, and

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[22] Rajagopal 57.

peoples have become, as I state in the introduction to this project, the basis for theoretical

articulations of a new global imperative by various theorists including Stuart Hall, Ien

Ang, Arjun Appadurai, Manuel Castells, and Arvind Rajagopal, among others. The

spatial proximity of heterogeneous cultures in such a world, achieved primarily by

technological breakthroughs such as the Internet, is fundamentally networked with the

establishment of a global cultural economy; the media, in such a network, regulated by

the processes of advertising, becomes among the most valuable currencies in the

exchange of flows between nation states. The most visible manifestation of such a

change, as I've established earlier, is the Internet. In this chapter, my central argument is

that the Internet, and the information-based cyber-age it is seen as ushering in, needs to

be rearticulated as a mutation within the evolution of a global e-capitalism, or newer

forms of global capitalism. Such capitalism, working through masking ideologies such as

the democracy of cyberspace and the myth of the 'free citizen-consumer,' works either to

consolidate power and control over the social structures of this new age to a central,

traditional capitalist elite, or to redistribute it amongst a newly created capitalist techno-

elite. The universalizing tendencies to view the Internet and other emergent

communications technologies as signposts of modernity and development must be read as

a reorganization of capitalism in a postmodern world whereby the capitalist framework

expands to cannibalize imaginings of democracy, freedom, and thereby, narratives of

progress and modernity, while simultaneously undermining any struggle related to

political, cultural, and social autonomy.

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[23] Bendict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London: Verso, 1991), 12.

By effecting, in essence, a complete privatization of the global public sphere, the world that the Internet creates allows for a multiplicity of local-global articulations to be contained within the free market economy/consumer democracy framework; for this world, is not merely a virtual space where information flows at blinding speeds, it is also a global marketplace in itself. The 'free world' from signifying a network of 'democratic, capitalist societies' is now rendered a system of 'capitalist democracies/alternatively constituted societies', from which emerges both a new global network of nationalistic elites, as well as a new digital, global 'Third World'. Thus the various transformations wrought in the socio-cultural and economic spheres by the Internet, "while radical in their ability to establish new power dichotomies and configurations which are simultaneously liberatory and enslaving, unifying and divisive, are but changes ushered in along new lines that emerge from older structures; these changes never really succeed in transgressing the older, established boundaries of power."[24]

To begin with, in our discussion, an important distinction must be made between the terms 'advertising' and 'advertisements'. Advertising is simply one of the many existing channels of communication, which is freely available to anyone who can afford it. Through advertising, people may establish contact with other people toward an infinite variety of ends. Advertisements are the specific messages created and promoted by advertising, to achieve these ends. Jeremy Bullmore of the J. Walter Thompson advertising firm defines advertising as "any paid for communication intended to inform and/or influence one or more people."[25] To justify itself then, advertising has to be

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[24] Ziauddin Sardar and Jerome R. Ravetz, "Introduction: Reaping the Technological Whirlwind," *Cyberfutures* ed by Sardar and Jerome R. Ravetz (New York: New York UP, 1996) 8

[25] Jeremy Bullmore, *Behind the Scenes in Advertising* (Oxford: NTC, 1991) 13.

functional and generate more returns than its cost to the advertiser who invests in it. At work in advertising, as in the functioning of most democratic institutions (I establish this earlier in my first chapter, through a discussion of Willett's work, which links the processes of mythmaking about the act of communicating itself, to the evolution of such concepts as 'persuasion' within the discourses of rhetoric,) is the principle of competitive persuasion. The operating axiom is that the principle of competitive persuasion leads to a discriminating, alert and intelligent society, wherein each member arrives at his/her own decisions. An illuminating example is that of the Indian advertisement for advertising which claims: "advertising gives you the right to choose." In such a perspective, consumers are posited, not as cultural dupes—the subject of much academic inquiry into the influence of advertising on modern mass media—but as discriminating and sophisticated in their ability to comprehend that the essence of competitive persuasion comprises of promise, hyperbole, emotion, and all the other time-tested techniques of rhetoric. In this conception, advertisers and the advertising industry market the principles of competition and competitive persuasion, as being intrinsic to the public interest and essential to development.

James Webb Young, another well-known J. Walter Thompson executive, observes that advertisements work in five fundamental ways: a) by the process of *familiarizing*, through which something is made known or brought into the public informational sphere b) by continual reiteration c) via the processes of the dissemination of news: new car, new product launch etc. d) by overcoming economic and non-economic inertias; the process of overcoming cultural boundaries while introducing a

new category of products for example and e) by adding invisible value to the product

through the assertion of the validity of subjective values over tangible ones.[26]

Thus the advertiser's effort is to exert control over consumers by converting them

to accomplices. Regardless of intentionality, the ideological baggage that advertisements

carry, clearly work in similar ways to persuade consumers to a particular worldview. In a

world *shrinking* with the impact of new technologies of communications and the global

multinational economic imperative that drive them, advertising, I argue, emerges as a

central channel for the communication and dissemination of information. From my

discussions in the first section of this chapter it emerges that, in the context of the Web,

advertising has become a locus of power that decides what information is transmitted and

what is withheld from public consumption—by shaping both the representation of

information as well as the access to it. Advertisements, the actual paid-for messages that

are conceived and designed to persuade consumers to consume, work by appropriating

liberal democratic abstractions such as 'freedom' and reducing them to a simplistic,

materialistic notion of the individual's right to consume; this, among other things, also

results in the reinforcement of the simplistic equation of 'development' with the

establishment of a capitalist free-market economy.

The role of mass media in the formulation of the discourse of development has

been studied in great detail. In *Culture and Imperialism*, Tomlinson, for example,

outlines various development theories analyzing the relationship of mass media to issues

of development. Paradigmatic of the broadly neo-Marxist approach—one that offers

some useful insights towards formulating my own arguments—in development studies

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[26] James Webb Young, *How to Become an Advertising Man* (Delhi: Advertising Publications Inc., 1963).

are the notions of a world system and a core-periphery model of global economic power. The central thesis underlying these theories, in which I would include the works of theorists such as Schiller and Matellart, is a conviction in the pervasive, integrated, and systematic nature of modern global capitalism, with multinational corporations occupying the primarily significant apex in such a model.[27] In this formulation, media, regulated by advertising, fits into the world system of capitalism by providing the supportive ideological and informational infrastructure to the core, or economic base—the multinationals. Advertising agencies, both domestic and multinational—and in most newly liberalized national economies, reputed domestic agencies will typically have multinational partners—act as agents who protect, promote and extend this global capitalist framework. The media's role is that of a manipulating force which creates 'good consumers' of capitalist production. Accordingly, H.I.Schiller writes: "the apparent saturation through every medium of the advertising message has been to create audiences whose loyalties are tied to brand named products and whose understanding of social reality is mediated through a scale of commodity satisfaction."[28] The conclusion that these perspectives almost uniformly come to, are that in the capitalist road to development, the media, far more powerful than ever before, are the means that instruct and entice their audiences along this path of consumerism and commodity fetishism.

Even critics suspicious of claims of the overwhelming, ideological prowess attributed to advertisements within such perspectives, have noted the influencing capabilities of the institution of advertising itself. For example, Michael Schudson, in *Advertising, the Uneasy Persuasion*, though beginning his thesis with the observation that

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[27] John Tomlinson, *Cultural Imperialism: A Critical Introduction* (Baltimore: Johns Hopkins UP, 1991).

advertisements are ineffective because they regularly *mis*communicate, and therefore become irrelevant to their audience (who, in any case, is most likely *not* the same audience they are designed to communicate to), argues that advertising itself merits serious consideration at various levels; "advertising as an institution that plays a role in the marketing of consumer goods, advertising as an industry that manufactures the cultural products called advertisements and commercials, and advertising as an *omnipresent system of symbols*, a pervasive and bald propaganda for consumer culture"(my emphasis.)[29] From my examination of the Internet, I would argue that to such a view one could easily add: 'advertising as a source of revenue for facilitating the new 'will to virtuality' of nation states and nationalist elites', and 'advertising as a vehicle for creating 'the right conditions' for the expansion of global trade!

Schudson's dismissal of the ideological work that advertisements themselves do is open to question, especially in the context of the socio-cultural impact of such advertisements on less advertisement-savvy audiences within newly liberalized, or less developed national economies. Sevanti Ninan, for example, in a rare study of the impact of such advertisements within rural Indian societies, has comprehensively pointed to their disruptive ideological functioning. [30] While this is again a discussion I cannot engage in detail here, I would venture to speculate that the uneven influences of the commercial practices of persuasive competition within such various audiences may perhaps be a consequence of the fact that the post-Enlightenment evolution of the principles of

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[28] Cited in Tomlinson 38.

[29] Michael Schudson, *Advertising, The Uneasy Persuasion: Its Dubious Impact on American Society* (New York: Basic Books, 1984), 5.

persuasion and rhetoric within the mythology of communicating itself, emerged within,

and primarily impacted *the Western world.*

Nevertheless, Schudson is right to recognize that the institution of advertising

itself plays a significant role within social shapings and cultural imaginings. Using the

cigarette industry as an example, Schudson describes the evolution of the processes of the

democratization of goods, and within the social order, the democratization of both a

consumer vision, and of envy. These are processes that are visible in the Internet

economy as well, wherein information becomes the new commodity. Unlike much

Marxist-based criticism which has argued that advertising establishes a whole alternate

reality, Schudson argues that the world of advertising is deliberately flat and abstract—

such an "abstraction is essential to the aesthetic and intention of contemporary national

consumer-goods advertising. It does not represent reality, nor does it build a fully fictive

world. It exists, instead, on its own plane of reality, a plane I will call capitalist realism.

By this term, I mean to label a set of aesthetic conventions, but I mean also to link them

to the political economy whose values they celebrate and promote."[31] Thus Schudson

suggests that similar to earlier socialist, realist art, American advertising (and by global

extension, much of the world's advertising) through the dual processes of simplification

and typification, constructs a reality "as it should be—life and lives worth emulating. ... it

shows people only as incarnations of larger social categories. It always assumes that there

is progress. It is thoroughly optimistic, providing for any troubles that it identifies a

solution in a particular product or style of life. It focuses, of course, on the new, and if it

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[30] See Sevanti Ninan, *Through the Magic Window: Television and Change in India,* (New Delhi: Penguin, 1995) especially Chapters 4, 5, 7 &8.

[31] Schudson 214.

shows some signs of respect for tradition, this is only to help in the assimilation of some new commercial creation."[32]

I would argue, in conjunction with Schudson, that advertising thus works through the glorification of the notions of freedoms of consumer choice, which in turn, become the most ardent defense of the virtues of material ambitions. In this process, as Schudson notes, advertising is both explicitly and implicitly supported by the State. The registering of patents and trademarks, for example, promotes advertising by fuelling product innovation that needs to be advertised; the State not only generates large revenues for the advertising industry by itself being a large advertiser, but also provides subsidies for the advertising industry. Schudson concludes that governments, like the rest of society, approves of, and supports advertising, unofficially.

Arvind Rajagopal offers similar arguments. Deriving the notion of 'electronic capitalism', from Anderson's 'print capitalism' (proposed in a different context), Rajagopal argues that the electronic media, fundamentally inflected upon by the processes of advertising, accounts for the institutionalized production and circulation of images and symbols. These act to displace and redefine the boundaries of the political sphere, and reshape the flows of information that society depends on. While recognizing that this derives partly from the unique technological characteristic of such electronic media, Rajagopal also sees it as a feature that confirms certain principles of modern democratic society. Using the work of theorists such as Pierre Bourdieu and Stuart Hall, Rajagopal contends that electronic media "stitches together a plurality of fields through a currency of images, instituting a system of representation that cuts across society. Within

it, the distinct symbols of each social field can be "realistically" portrayed in all their

uniqueness, while ignoring their constitution in a newly hegemonized system of

representation. It thus permits the unobtrusive accumulation of economic as well as

symbolic capital on an unprecedented scale."[33] For him, e-capitalism emphasizes the

multiplicity of worldviews that coexist in the new global economy, even while speedily

establishing circuits of communication between them. In such a context, he observes,

advertisements relate to the economy as the sphere of ideology and the two exist in a

symbiotic relationship—the economy is a product of ideology's effects, while in turn,

"the kinds of subject positions, the narratives of economic and political actions, the

relationship of classes one to the other and to authority, that are portrayed in ideology,

turn out to influence and impel events in the economy."[34] The state slogan 'Be Indian,

Buy Indian' from the days of Nehruvian socialism in India, for instance, can, in a newly

liberalized Indian economy, be rearticulated in terms of fulfillment through

consumption—'To Buy is Indian'. Further, Rajagopal points out that while advertisers

see themselves as fulfilling a modernizing function, it is in fact, an unquestioned

normative commitment to an idealized upper class aesthetic that is reproduced as a

'virtual' fantasy of modern middle class India.[35]

The ideological ability of advertising is, of course, not a new subject of

discussion. In her influential study *Decoding Advertisements*, Judith Williamson, for

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[32] Ibid, 215.

[33] Arvind Rajagopal, *Politics after Television: Hindu Nationalism and the Reshaping of the Public in India* (Cambridge: Cambridge UP, 2001) 7. While Rajagopal makes his arguments in the context of television, I believe that this argument can be effectively appropriated for my discussions on the Internet.

[34] Rajagopal, *Signposts*, 73.

[35] Rajagopal, *Signposts*, 90.

example, has posited that advertising is ideological in that it facilitates an imaginary relationship to our real conditions of existence.[36] Using Althusser's work, she has argued that by emphasizing the class distinctions that arise from an individual's role in the production process, advertising continually reinforces the idea that the distinctions that really matter are ones based on the cultural consumption of specific goods. What is new in later theoretical works, such as Matellart's, is the notion that globalized advertising networks also help resolve the fundamental contradiction between the local and the global, in the newly interconnected world; that "a permanent, daily and generalized connection is developed between particular societies and cultures, local, regional and national".[37] Proponents of the view that the emergent electronic media facilitates an emerging e-capitalism, including Arvind Rajagopal, Arthur Kroker, Arun Kundnani, and Ziauddin Sardar, among others, usually point to this feature of modern globalization as a significant one, that is, "the ability of such a newly mutated capitalism to absorb local-global cultural ruptures within an overarching framework of global consumption."[38]

It is my argument that a fundamental weakness of such perspectives as those discussed above, lie in their denial of agency to the consumer/audience. Such an insight is well articulated in Ien Ang's study *Watching Dallas*, through the juxtaposition of the evident popularity of *Dallas*, a widely transmitted television serial, together with its hostile critical reception among "professional intellectuals" and the related accusations of

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[36] John Storey, *Cultural Consumption and Everyday Life* (London &Sydney: Arnold, 1999) 130.

[37] Refer to quote at the beginning of my first chapter, "Networked Histories."

[38] Arthur Kroker, "Virtual Capitalism," *Technoscience and Cyberculture*, p.167.
See also Rajagopal in *Signposts*, Sardar in *Cyberfutures*, and Kundnani, "Where do you want to go today?"

media imperialism.[39] The crucial question here (one that must be asked about the Internet) Ang points out, is one which cultural critics often overlook—why do so many people *enjoy* watching *Dallas*? For what must be accepted is that *Dallas* is popular precisely *because* a lot of people enjoy watching it. Ang uses Foucault's insights on the nature of 'discourse' to analyze the audience. For Foucault, discourses are specific ways of organizing knowledge in order to serve specific types of power relationships. Ang's analysis focuses upon institutional discourses about television audiences. She argues that these audiences neither exist naturally, nor can they be taken for granted. They are, on the other hand, constructed by particular discourses, which seek to know them in order to exert power over them. Thus for instance, advertisers define audiences as consumers ('eyeballs' and 'mouse-clicks' in the case of the Internet), and research their purchasing patterns driven by a desire to sell to them. However, such an achieved construction of knowledge and power within these discourses in no way guarantees that actual audience behavior will take place as predicted. Even as Ang concedes elsewhere that "audiences may be active in myriad ways, in using and interpreting media, but it would be totally out of perspective to cheerfully equate 'active' with 'powerful' in the sense of "taking control" at an enduring structural or institutional level," she argues that audiences may also, *must also*, be characterized by the ways in which they *defy* being constructed in specific, predictable ways.[40] Ang's understanding of the functioning of commercial media organizations is in explicit contrast to Marxist perspectives that construct them as

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[39] Ien Ang, *Watching Dallas: Soap Opera and the Melodramatic Imagination* (London: Methuen, 1985).
[40] Storey 159.

either "channels for a dominant ideology or expressions of the demand for profitability."[41]

If we are to accept in this debate the notion that the audience cannot be constructed as cultural dupes, if we are to accord agency to the individual, we are immediately confronted with other important questions: why does advertising work? Why, for example, has the Internet as a potent symbol of the global search for new 'consumers audiences' become such a sought-after medium? And why and how does cultural imperialism manifest itself?

James L. McQuivey, who undertakes a theoretical explanation for the commercialization of the media in the context of the Web, advances an intriguing theory in this context. Suggesting that users develop normative images, or 'sets of expectations,' which are mentally deployed in their use of the Web, McQuivey argues that the commercialization of the Web occurs simply because users are "too conditioned to expect less from the Web than it is technically able to provide."[42] Concluding that such a commercialization is driven primarily by the "habits of the mass audience," McQuivey worries that these normative symbols restrict users from fully harnessing the Web's "technological capacity for great diversity and engaging interactivity."[43] While this is an interesting theory, the unasked, unanswered question in such a perspective that urgently reveals itself through its absence is: why/how are the processes of commercialization, fuelled by advertising, able to establish normative audience habits in the first place?

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[41] Dominic Strinati, *An Introduction to Theories of Popular Culture* (London: Routledge, 1995), 251.

[42] James L. McQuivey, "How the Web was Won: The Commercialization of Cyberspace," *Cyberghetto or Cybertopia: Race, Class, and Gender on the Internet*, ed. Bosah Ebo (Westport: Praeger, 1998), 83.

[43] Ibid 83.

It is from Stuart Hall's analysis of the media-culture nexus that I derive my own answers to this puzzle. Hall suggests that the sheer magnitude and scale of modern mass media has rendered marginal, other older means of social communication in modern societies where members live lives that are becoming increasingly fragmented and sectionally fragmented. In such massified socially fragmented societies, the media becomes the primary channel through which people leading atomized lives obtain a sense of social totality and of their relationship to it. Accordingly, he writes, "this is the first of the great cultural functions of the modern media: the provision and the selective construction of social knowledge, of social imagery, through which we perceive the "worlds", "the lived realities", of others and imaginarily reconstruct their lives and ours into some intelligible world of the whole."[44] What Hall's model proposes is the existence of a nexus between Culture, in the Bourdieunian sense of habitus, that is, as a tacit realm of reproducible practices and dispositions, and Culture that is codified and created by its representation in the media.[45] Both these Cultures exist in a deeply dialectical, symbiotic relationship where each is constantly informed by mediations and interventions by the other. Hall thus argues that mass media is a central site in modern capitalist culture for it is here that human experiences are shaped into meaningful patterns. Hall's model leads to a question which is crucial in the context of this project—In the Living Culture – Represented Culture nexus, *whose* is the culture being considered as *lived experience*, whose habitus is being considered and subsequently being 're-presented'?

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[44] Cited in Tomlinson 60.

[45] See Pierre Bourdieu, *Distinction: A Social Critique of the Judgement of Taste* (Cambridge, MA: Harvard UP, 1984). Stuart Hall's formulation that I refer to here may be found in "Culture, the Media and the 'Ideological Effect'" (1977), cited in Tomlinson 60-63.

At this juncture, it is instructive to consider the case of India as an example, and the impact of traditional media in the Indian context. India offers a fascinating site for analysis, given its recent implementation of liberal economic policies and the instituting of a free-market economy that profess to put India on the road to development. Within the Indian context, it is exactly the culture of a homogenized middle class (itself imagined into existence, in great part, by national and multinational advertisers) that finds representation in mass media. Various estimates using divergent parameters have achieve a consensus that calculates the approximate number of people constituting middle class India, at two hundred to three hundred million. Hall's model, that I agree with in part, may be applied, but only to a group of slightly over three hundred million Indians—this, from a total population of over one billion people. A further, important argument to be made here is that this marginalized population, which I refer to as *invisible India*, has access to the habitus of middle class India only through the representation of the *latter* in the media. Its *desire for access* to images of a rapidly developing progressive India, which finds representation in media projections of a pan-Indian middle class fantasy is what sustains this model in the face of vast numerical inequity. It is also important to note, in this formulation, the disjuncture in the locations of the *State*, India, and the product of the imagined community, the *Nation*, India. While the Indian State, constituted by middle and upper class Indians, is clearly located within the middle class habitus; India, the nation, is created at the site of media representations of the middle class habitus, for this is the imagined (progressive, developing) pan-Indian community that both *invisible India* and middle class India subscribe to. Thus the collective desire of *invisible India* aspires to the culture of middle class India largely because it is a

homogenized version of this culture that finds representation in the media as *the* culture

of a progressive Indian nation state. Such a collective desire may be read firstly as the

desire for access to the State, its institutions and to the legitimized power they offer.

Secondly, it is also a consequence of invisible India's internalization and acceptance of

the linear model of development that has come to be institutionalized—one which

equates and collapses the notions of commodification, material surplus, advanced

technology, modern capitalism, a free market economy and globalization represented by

the entry of multinationals into the local economy with both the vision of development,

as well as with the imagining of a modern dynamic democracy.

The great Indian market that came into being with the recently implemented

liberal economy model of development is in essence comprised by the Indian middle

class; a consequence of the fact that firstly these are the peoples who can financially

afford, to whatever degree, to be consumers, and secondly because they possess, in

whatsoever degree, access to the State and to its institutions. Indeed, the very distinction

of the rest of the Indian population from invisible India is not merely in terms of spatial

distance from the poverty line but also in terms of spatial proximity to the State and its

structures of power. This is the class that Colleen Roach refers to as 'nationalist elites.'[46]

Thus *invisible India* is a group that comprises not only people marginalized in terms of

class, which aspect has been emphasized here, but also in terms of caste, gender, and that

of every other parameter of discrimination embedded in the practices of the State.

In the rapidly growing advertising industry in India, the print media holds top

position with billings ranging from around Rs.2000 crores of a total Rs.3500 crores. In

the electronic media excluding the Internet, it is the state-funded television organization, Doordarshan that still tops with Rs.400 to Rs.500 crores of annual advertising revenue.[47] (It is also interesting to note, in this context, that Indian access to the Internet, until recently, was similarly State-controlled via the state-funded Videsh Sanchar Nigam Ltd (VSNL)).

These facts are significant because both the print media and the Doordarshan in India are largely indigenously controlled and operated. This implies that the construction of the imagined nation, India, through the media, can be attributed to not just global nodes of control, such as the multinationals, but also to local nationalist elites. The advertisements themselves that emerge from within such a context, however, are consumed by practically all of the Indian populace, whenever, however, they obtain access to this media. While the entry of multinational corporations in India signals the reinforcement of the uni-dimensional view of 'development' discussed earlier, the entry of multinational advertising agencies is even more significant because they usually bring with them, global accounts. This ensures that their primary effort is to effect the homogenization of diverse local worldviews into one grand narrative of commodity fetishization, modernity, development and progress, on the one hand, and the indigenization of the product's image on the other.

It is the success of such processes of indigenization (this is a term I borrow from Appadurai) that explains why *invisible India* subscribes to an *imagined India* that is so far removed from their own reality. The easy acceptance of such an imagining of India is a

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[46] See Colleen Roach, "The Movement for a New World Information and Communication Order: A second wave?" *Media, Culture and Society* (London: Sage, Vol. 12, 1990) 283-307.

direct consequence of the internalization of the belief that it (imagined India) represents a developed India of material abundance and socio-economic equity. Television, for example, becomes a crucial medium for access to this imagined community. Commercials starring film actors, cricketers, etc. become a premier source of entertainment; more importantly however, they become a trusted source of information about this progressive, progressing, India, irrespective of the multiple ways their meanings may be negotiated by the Indians who view them. This explains why an urban poor with no permanent home or access to electricity, still purchase small television sets and run them on batteries, which I propose may be read as an expression of the desire to access the Indian dream of a rapidly developing India. Further, the *reach* of advertising is *all pervasive, and not limited to urban locations*. Accordingly, one finds marketing innovations such as vans fitted with videos that roam across the rural India, packaging innovations such as small hundred gram sachets of products designed for rural markets, etc. Research conducted by the Indian Market Bureau in 1990 found that more than sixty percent of India's villages had shops that stocked national brands of toilet soaps, detergents, washing powder, tea, batteries and other such products.[48]

The formation of a pan-Indian identity may consequently be observed as greatly influenced by the nation-wide reach of commercial advertising. Although Indian manufacturers and advertising agencies periodically acknowledge the need to have more region-specific advertising, the tendency among the established players within the advertising industry, apart from some perfunctory attempts at 'dubbing' or translating advertisements and commercials, continues to be to develop and project a homogenized

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[47] See Alok Mukherjee, "Selling Space and Time", *The Hindu*, February 18, 1996. Also see Arvind Singhal

message across the country. Within the cultures of the urban professional middle class throughout India, a certain westernized uniformity, a legacy of a colonial history, already prevails, which easily lends itself to further homogenization. The constitutional status of English and Hindi as the official languages of the Indian State, have further given the cultures coalesced around them, the force of a pan-Indianness, which irons out all kinds of regional, linguistic, religious, class and gender-based differences. The regional can now be reformulated as the more fashionably middle class 'ethnic.' The consolidation of a national identity free of regional markers is, of course, an almost global aspiration of states everywhere, and the Indian state too, is imbricated within this desire to monopolize a homogenized conception of nationhood.

The attribution of such a transforming cultural effect to advertising has been implied in much recent critical work. Rajagopal, for instance argues that the television, as a mass medium of, and through, advertising is key in understanding the political rise to contemporary power, of the fundamentalist Hindu Right. Examining the state-run television's decision to broadcast the television adaptation of the Ramayana (an ancient Hindu epic) as a nationwide weekly television serial—a deliberate violation of what he describes to be an unwritten post-independence media ethic against religious partisanship—Rajagopal suggests that it was directly responsible for the successful political campaign woven around the symbol of the Hindu deity, Lord Ram, which was led by the Hindu Right. The weekly invocation of a national nostalgia for a golden Hindu past was able to successfully coexist with the Hindu Right's simultaneous adoption of the development rhetoric of neo-liberalism and economic globalization. For Rajagopal, it was

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and Everett M. Rogers, *India's Information Revolution* (New Delhi: Sage, 1989).

advertising via television, which worked to repeatedly emphasize the new possibilities of politics, at once more inclusive and authoritarian, resulting in the Hindu rightwing political party, the Bharatiya Janata Party (BJP) becoming the ruling national Indian political party, for the first time ever.[49] Rajeswari Sunder Rajan offers a similar argument from a feminist perspective. She argues that Indian advertisements in general, in negotiating the seeming impasse between tradition and modernity, have successfully constructed an image of the new Indian middle class woman who, while being an important earning member of the family, also remains the site for the preservation of perceived 'Indian' values.[50]

Poverty is relative; development is relative. Hence the measurement of the degree of both categories occurs by their being defined through points of socio-cultural reference. Advertisements, at least within traditional media, constitute a central part of the Indian mediascape in being image centered, narrative based, strips of fantasized realities. However, while such realities extrapolate from within a particular segment of Indian society (even as it claims to be representative of the Indian nation in its entirety), from these strips simultaneously, coalesces a fantasy of an Indianness, which is in synchrony with the forces of global capital. The internalization of this largely bourgeois Indian dream by the vast majority of its population, while admittedly uneven, nevertheless ensures that the point of reference (culture as the lived reality of the middle class) remains unchanged and constantly reinforced.

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[48] Ninan 139-150.

[49] See Arvind Rajagopal, *Politics after Television.*

[50] Rajeswari Sunder Rajan, *Real and Imagined Women: Gender, Culture and Postcolonialism* (London: Routledge, 1993) 139-140.

This internalization of what Ashish Nandy refers to, as "the philosophy of Coca Cola" constitutes the central problem for envisioning alternative models of development. John Vilanilam, for instance, has offered a dependency perspective while examining the discourse of development, within which advertising facilitates the development and spread of a global corporate culture—this undermines the cultural roots of politically independent nation states. He argues that the Indian middle class is complicit in the adoption of such a model of development that is shaped by transnational corporations and promotes a transnational corporate culture.[51] Even the dissociation model proposed by Colleen Roach that proposes delinkage from both the institutions of global capitalism as well as from that of domestic national elites, through community activism and the establishment of grassroots initiatives, must contend with the fact that "those rejecting Coca Cola on ideological grounds have to fight against a part of their own self... [for] the philosophy of Coca Cola is an epistemological, not ontological statement. It is a way of thinking rather than thought, perhaps even a way of dreaming that subverts other kinds of dreams."[52]

I argue that the new medium of mass communications, the Internet, *is a technology of the transmission of precisely such an exploitative way of dreaming*, and envisioning utopian futures. While the Internet itself, in terms of access to it, becomes a signpost of an inequity-ridden modernity, the processes of its commercialization ensure that once accessed, it impacts social and cultural formations in the same exploitative ways that we have discussed above. While the existing unevenness of its development

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[51] Cited in Geoffrey Reeves, *Communications and the 'Third World'*. (London and New York: Routledge, 1993), 166.

[52] Ashish Nandy, "The Philosophy of Coca Cola," *The Statesman Festival Number* (New Delhi, 1995): 154.

means that in much of the 'developing' world, the Web as a communications medium, is not yet as influential as traditional media such as television, there is nothing in its ongoing evolution to suggest that it will, in the course of its emergence within such regions, impact them differently. Consider the similarities in the very origins of the Internet's popularity and usage within such 'developing' nations to illustrate this point. In Brazil, for example, high-cost access to the Internet was measurably boosted by an episode in a popular soap opera wherein a young boy heeds the pleas of a girl online, rescues her and subsequently falls in love with her. Subsequently, the Brazilian network affiliated to the Association for Progressive Communication (APC), www.apc.org, saw a dramatic increase in subscription, from eight hundred members to six thousand members in six months in 1994.[53] Similarly, in India, the earliest cyber promoters, and a majority of the initial subscribers to the Internet, came not from within the institutions of the state or the academy as in the case of the United States, but were film stars, socialites, models, and wealthy businessmen. One of the earliest was film actor Shammi Kapoor, who, in 1995 when the Internet became officially available in India, stated: " I felt as thrilled as a wide-eyed kid with a new toy. And I still feel that way. The first time I got on the Internet, I visited the White House and heard Clinton say "I am glad to have you here." Further illuminating the user-priorities of these newly-wired Indians, he said: "If somebody needs immediate information about, say, the satin underwear available at Bloomingdale's, or about current real estate prices in New York, all he has to do is to go across to the nearest Internet access booths and log in."[54]

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[53] "The Cyber Have-Nots" p. 5.

[54] Ibid 6.

Similarly, it is not a mere coincidence that one of the earliest Web portals of

information and commerce to establish a brand name in India was rediff.com

(www.rediff.com), a Web reinvention of what was formerly Rediff Communication Pvt.

Ltd., one of India's well-known advertising agencies. Espousing primarily right wing

political views in the time that I have been visiting the site, rediff.com now also owns a

well-known Indian newspaper in the United States, called *India Abroad*, that caters to the

large North American Indian diasporic population.

I have no doubt that such examples can be found in the context of other

economically impoverished nations who were late entrants into the cyber age. Several

critics, including Olu Oguibe and Ravi Sundaram, have commented upon the social

power structures that accompany and shape the Internet's permeation into such societies,

which differs significantly from the emergence of the Internet in those societies located in

nodes of dominance within the global economy. Oguibe details how the Internet

continues to be a medium limited to an exclusive elite within nations such as Argentina,

Brazil, and Mexico, who, ironically, together possess close to ninety percent of the

world's computer technology and fiber optics.[55] Sundaram similarly describes how an

exclusive Indian elite is reinventing the notion of a journey through the Web to be one of

instantaneous access to popular images of the West and to other icons of Western power:

> for the Web traveler, a typical member of the displaced elite public in
> India, the West is recreated/simulated as a simultaneous presence.
> ...cyberculture also came to India within the framework of a new package
> of globalization, which contained within, a potent mixture of pleasures and
> dangers. If on the one hand globalization has unleashed a new discourse of

[55] Olu Oguibe, "Forsaken Geographies: Cyberspace and the New World 'Other,'"
http: //arts.usf.edu/~ooguibe/madrid.htm, accessed 9/6/1998 5:29 p.m., p.12, originally delivered at the 5th
International Cyberspace Conference, Madrid, June 1996.

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consumption which unsettled the old Marxist/Nationalist denial of the consuming public, the global also came on the backs of transnational corporations with this tremendous power and contempt for popular participation.[56]

On the other hand, there are many who argue that the Internet allows India the opportunity to transform itself into an 'information society.' In a country where approximately sixty-five percent of the population is illiterate, where approximately sixty percent of the workforce is comprised of farmers, and a mere ten percent of the population function as 'white-collar' workers, critics such as Arvind Singhal and Everett M. Rogers argue that the new techno-elite class, while quantitatively miniscule at the present moment, are growing in number and importance, and the changes they usher in may revolutionize Indian society.[57]

While it is true that various new industries in India continue to arise in and around the Internet (the manufacture of software, the newly formed medical transcription industry as well as the other industries that are emerging as a result of the offloading of customer service and other activity by corporations in the United States and other advanced economies to those geographical territories where labor is cheaper and more plentiful, the industry of 'bodyshopping' whereby information workers are exported to the economically and technologically advanced nations from India, and so on), it is highly doubtful as to what degree these industries constitute anything other than the rise of a new techno sub-elite in India. Given the inbuilt barriers to access and participation in the Internet economy, such as those of language and resources, this new elite must naturally derive from the ranks of the Indian middle class. Invisible India consequently, is

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[56] "The Cyber Have-Nots" 5-6.

rendered a population further marginalized by this new technology, while its coexistent *desire* for access to this new medium continues to be fuelled by the desire to the culture of middle class India (or more accurately, to the culture that finds representation within the Internet and other mass media), as the culture of a progressive Indian nation.

However, I would argue that the cultural impact of the Internet goes further than that of traditional media, in this context. The Internet also becomes a crucial shaper of middle class India's own fantasy of progress and development, for it becomes a window to the 'advanced', 'developed' consumer societies of the West, a window which is greatly wider, more powerful, and much more instantaneous than that provided by earlier media. Thus the economic globalization that the Internet facilitates also becomes a cultural one wherein the most dominant influence on national and local cultures, while translated and absorbed in different ways, is still of those cultures (of those economies that comprise the network of dominant nodes on the Internet's architecture) that have already 'willed' themselves to virtuality. Advertising, both on and about the Internet, both offline and online, performs the crucial role of establishing the universality of the ideology of information technology, as an integral part of any vision of development, while global economics concurrently ensures that national economies adopt precisely such a development paradigm. I would then concur with critics such as Carstarphen and Lambiase who conclude: "Headlines in the majority press herald the emerging Information Society as a bonanza of publicly accessible information, as well as a new barrier-free terrain. However, the rhetoric of cyberspace instead, may be emulating the

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[57] See Singhal and Rogers, *India's Information Revolution.*

power structures and hierarchies of the dominant discourse in the "outernet", making the

Internet a domain far from free of built-in bias."[58]

Yet an important question that remains un-addressed is: what of the Internet's

powers of interactivity? Does not its potential ability to allow a multiplicity of discourses

allow for greater equality? The emancipatory potential of the Internet undeniably derives

precisely from its interactive nature as a medium of communications, as I will argue in

detail in the next chapter. Meanwhile, given the current circumstances of differential and

hierarchical access to the Internet, the power of global corporations to dominate the

creation of content within it as well as to ensure that such commercial content is assigned

priority over any/all other content online, it is clear that for now, "in many ways the hype

surrounding Gates, computer technology and the Internet determines the kinds of

discourse found in cyberspace, for much computer-mediated discourse relies on a rhetoric

of domination and power... with much of its communication overseen by webmasters,

dungeon masters, list owners of electronic discussions and hackers."[59]

The Internet's interactivity, wherein discourse online is supposedly "accessible to

anyone with a computer, a modem, and an "account" on a computer system that is

networked", has led to much critical discussion about questions of agency and

intentionality.[60] Ananda Mitra, for example, suggests that while much recent scholarship

have ensured a "rethinking of the site of the audience" within media studies, the Internet

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[58] Meta G. Carstarphen and Jacqueline Johnson Lambiase, "Domination and Democracy in Cyberspace: Reports from the Majority Media and Ethnic/Gender Margins" in Bosah Ebo, 121.

[59] Carstarphen and Lambiase, Ebo, 123.

[60] Ananda Mitra, "Virtual Commonality: Looking for India on the Internet," *Virtual Culture: Identity and Communication in Cybersociety*, ed. Steven G. Jones (London and New Delhi, 1997) 61.

"poses a different situation because there is no Internet audience who is also not

empowered to become an agent to mould the space as he or she wishes."[61] Undertaking

an examination of all the postings on soc.culture.Indian (sci), a subdivision of the

"soc.culture" Usenet group up until March 25, 1995, Mitra attempts to "locate India on

the Internet."[62] He discovers that the predominant view of India that emerges is an

overwhelmingly negative one that paints a picture scarred by divisions and differences.

Mitra observes that this is an issue of concern since it is through such discourses that the

Indian diasporic community both reimagines itself as well as represents India in

cyberspace. Arguing that there are two building blocks to a national Indian image, one

"produced by organized sources such as national media, international news flow and

other mediated forums where a monolithic image is constructed for specific political and

ideological purposes," and the other, "non-naturalized images…shared by the people

most involved with the consequences of the image", for example, "the immigrants who

have to constantly negotiate their existence based on the public memory of the country

they came from."[63] For Mitra, the Internet becomes a safe environment for debate

between members who, while they share no geographical connection with the diasporic

space, bring online all the cultural, religious and political baggage that citizens would

possess in the real world. Arguing that what is made possible online is a real dialogue,

Mitra suggests that Gramsci's notion of hegemony, seminal to arguments about media

dominance, becomes inapplicable in cyberspace where "every textual utterance is open to

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[61] Mitra 60.

[62] Mitra 61.

[63] Mitra 71.

challenge and questioning and ultimately no dominant, unquestioned national image

emerges because the very nature of the Internet space does not allow for the permanence

of images."[64]

Implicit in most critical claims about the emancipatory and liberatory potential of

the Internet, including that of Mitra's, is the presumed creation, within cyberspace, of an

alternate public sphere, similar to the Habermasian conception of a 'bourgeois public

sphere' and of existing 'lifeworlds' that influence the constitution of such a public sphere.

Peter Hohendahl has suggested that the model proposed by Habermas is one of norms

and modes of behavior through which the very functioning of public opinion may be

facilitated. These modes and norms of behavior create a discursive space that is

characterized by general accessibility, the elimination of all privileges, and the discovery

of general norms and rational legitimizations.[65]

Without attempting to engage with the enormously complex theoretical debates

set into motion by Habermas' insights, given my examination of the processes of

economic globalization and its socio-cultural inflections via advertising, I would argue

that the very creation, evolution, and access to, any such Habermassian space is *deeply

imbued by a replication of the inequities that exist offline*. The construction of spaces of

public discourse in cyberspace, as we have already noted, is enabled by online

monopolistic corporations such as Yahoo, Geocity, or rediff.com and their partners, who

create such spaces by offering a variety of free online consumer services such as email,

chat-rooms, email discussion lists, online communities etc., with the explicit objective of

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[64] Mitra 76.

converting their subscribers into consumers. The virtual public sphere, characterized as

Mitra himself points out, by the impermanence of the debates/images/textual utterances

occurring therein, and therefore, I would argue, by their utter irrelevancy, is a space

completely *colonized* by the imperatives of a founding institution of contemporary

capitalist modernity—the global economy/marketplace.

It also follows that the participants of debates occurring in such a virtual public

sphere, given the fact of their very *ability* to participate are largely those who are already

predisposed to the processes of globalization and to the specific envisioning of

development, modernity and democracy that these processes allow. I argue thus that

cyberspace does not as much promise to dramatically transform the public sphere or

render it more equally and democratically accessible, as much as it threatens to effect *a*

complete privatization of the public sphere. One example that illustrates my point is the

way in which *both* the utopian and dystopian discussions around the Internet, while

oppositional, implicitly endorse the conflating of the experience of the Internet and other

emergent technologies that help breed an increasingly global e-capitalist system, *with the*

experience of modernity itself. This ensures that the ways in which we understand,

experience and engage with modernity become firmly entrenched within the techno-

capitalist framework. Through such processes, these visions of modernity and

development are universalized, becoming unquestioningly synonymous to the processes

of globalization. The debate, within global institutions of power and influence is thus

cleverly rearticulated from a questioning of the abilities of the processes of globalization

to effect real development, to one which questions the conditions that need to be achieved

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[65] See Jurgen Habermas, "The Public Sphere: An Encyclopedia Article," *Critical Theory And Society: A*

in order to secure the success of globalization as a doctrine. Such a re-articulation is

perfectly illustrated in the ways that the head of the United Nations, Kofi Annan, for

example, talks about globalization:

> If globalization is to succeed, it must succeed for poor and rich alike. It must
> deliver rights no less than riches. It must provide social justice and equity no less
> than economic prosperity and enhanced communication. It must be harnessed to
> the cause, not of capital alone, but of development and prosperity for the poorest
> of the world. It must address the reactions of nationalism, illeberalism and
> populism with political answers expressed in political terms. Political liberty must
> be seen, once and for all, as a necessary condition for lasting economic growth,
> even if not a sufficient one. Democracy must be accepted as the midwife of
> development, and political and human rights must be recognized as key pillars of
> any architecture of economic progress. This is undoubtedly a tall order. But it is
> one that must be met, if globalization is not to be recalled in years hence as
> simply an illusion of the power of trade over politics, and human riches over
> human rights. As the sole international organization with universal legitimacy and
> scope, the United Nations has an interest—indeed an obligation—to help secure
> the equitable and lasting success of globalization.[66]

It is evident that these insights as I have outlined in this chapter, become critical if

the Internet is to be used to mobilize efforts to imagine more inclusive alternatives to the

existing hegemonic visions of development and modernity. In the concluding chapter of

my thesis, I go on to discuss some examples of how the Internet is being used to enable

precisely such resistance.

Reader, eds. Stephen Eric Bronner and Douglas MacKay Kellner (New York and London: Routledge,
1989) 136-142. I refer to the useful notes provided by Peter Hohendahl at the end of this article.

[66] Kofi Annan, "The Politics of Globalization," Address to Harvard University, Cambridge, 17 September
1998, http://hdc-www.harvard.edu/cfia/annan.htm, 10-04-98, 19:47, p.6.

Conclusion: Networking Resistance

This project has emanated from a concern with the ways in which the Internet—the first technological medium of interactive mass communication—is becoming a technology that facilitates the consolidation of a new global economic system. My endeavor, consequently, has been to explore the urgent, contemporary, multi-dimensional cultural and social implications of such a reality, and to argue that an alternative envisioning of development and modernity must be forged not only in terms of state policy or political ideology, but also in terms of a broader recognition that such imaginings must enable the sharing of social and cultural space with the widest possible variety of "others". It is in aid of this pressing task that I have attempted to respond to two related but different sets of intellectual debates on the contemporary commercial Internet: the first, which has been concerned with addressing the range of prevailing theoretical considerations about the Internet, and the second which engages with the context of the ideological functioning of the processes of advertising that I have found to be pervasive within this medium. The Internet, in this project, has constituted a site of theoretical analysis that has allowed me to network these various debates together. In this concluding chapter, I attempt not only to bring together the multiple and diverse strands of *The Advertising of Cyberspace: Globalization and the Politics of Cyberculture*, but also, by examining some exemplary sites, to gesture to some of the ways that the Internet can enable precisely such alternative envisioning.

As Castells has pointed out, it becomes evident that any attempt at comprehending the complex relationship between the ongoing processes of globalization

and the Internet must take into account two fundamental manifestations of change: the sweeping technological revolution currently under way; and the establishment of a global, information-informed, economy. The contemporary technological revolution—as I have established in my project—is characterized by two integral features. First, it implies a change in process; it is defined by a horizontality of character wherein the changes it effects are all pervasive and run across almost all major spheres of human activity. Secondly, it operates on as well as produces *information*.

While all new technology involves the use of new information, this is a rare instance where new information is applied as much towards the production of newer knowledge, and crucially, to newer ways of processing such new knowledge, as it is to new ways of interpreting, emphasizing, and organizing existing knowledge. If we are to accept, as we do—not that social change is always determined by the onslaught of new technology—but that technology, new and old, is always socially determined, that it arises from a unique conjunction of social circumstances and that it is another set of social circumstances that determine its application and impact on the world, then we must examine the unique effects of this revolution if we are to understand the social changes it creates. Its first effect is that since information and knowledge have been traditionally constitutive of the cultural sphere, their becoming an integral force of production marks a shift in the generation and transmission of culture and cultural symbols from being *consequences* of the ways of production and consumption to also becoming a *means* of production and consumption. This suggests an inextricable intertwining of the economic, political, and socio-cultural spheres in the new information-age that disallows any easy theoretical speculations of one *wholly* influencing the other. Secondly, the inherently

horizontal character of new Internet-based technologies allows a flexibility that facilitates a whole new diversity in organizational structures. Thus, the industrial hierarchies of primary, secondary and tertiary industry—as well as the consequent division of the world, particularly within development discourses, into the First, Second, and Third Worlds—become much less rigid and far more fluid. For the interactivity that the Internet provides as a medium of mass communication and action is not confined to one or the other tier of human industry, it permeates agriculture, manufacturing as well as services industries. The third effect of this revolution is that it significantly empowers mass media and the processes of advertising that empower such media, reinforcing the impact of media constituted images, opinions and representations. Given the symbiotic relationship between such media and culture, this in turn, dramatically enhances the role of such images and representation in the constituting of a global, contemporary culture. Finally, in being tools of production, these new informational technologies substantially influence social power equations. The rise of new social sub-elite, like the technologues for example, coincides with a weakening in the authority of the State, leading to disturbances in older, established equations of power between the State on one hand and the political, the economic, the social and the cultural spheres on the other.

The other fundamental change to be noted is the emergence and establishment of a new, Internet-enabled global economy. I have already observed how the contemporary economy is information-based. With the Internet, this economy and all of its diverse elements is able to operate simultaneously and instantaneously across the globe. Many critics pointing to examples such as the existence of the system of world markets during the colonial period, and so on, to argue that there is nothing new about a global economy.

However, I have argued that the contemporary global economy is new, both in the simultaneity of the exchanges of capital within it as well as in the consequent immediacy of the impact of any node within the system of capital, on the other nodes. Obviously some nodes are much more affected than others. However, for a national economy to be invulnerable in such a system—far from being an independence that allows it to decide its own future—is to be irrelevant to the flow of global capital, and a threat to its very survival. In fact, it is ironical that while the creation of a decentralized, invulnerable system of communications is central to the founding myths that surround the Internet, the global economy it enables is vulnerable precisely because of its decentralized, networked structure wherein it becomes difficult to control the impact of fluctuations in it within the boundaries of nation-states and national economies.

Within such a world, power for each nation becomes defined to a large extent by its ability to use and manipulate these information technologies, as well as in the ways it positions itself in terms of access and adaptation to these technologies. The 'network of networks' that emerges is a highly uneven one affecting the societies of economically developed nations and the developing ones in radically different ways. Thus Castells, among others, observes that "the process of historical transition to the informational economy, is likely to be dominated by the fundamental disjunction between, on the one hand, a global economy and on the other, nationalistic civil societies, communal cultures and increasingly powerless states."[1]

Given the backdrop of these changes, my effort in this project has been to argue that critical theorizing around the Internet and the processes of commercialization that

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[1] Manuel Castells, *The Rise of the Network* Society (Oxford: Blackwell, 1996) 28.

inflect its growth must move beyond the easy Utopian versus Dystopian, techno-celebratory versus techno-phobic debates that prevail. One of my central concerns has been to respond to the question of whether the Internet is really ushering in a radically new age or whether it represents a late twentieth century extension of capitalism. The answer, perhaps, is that it does neither of these, but is "rather a mutation, ... not so much a break, as an intensification, and therefore a mutation of a widespread economic and cultural logic."[2]

Writing at a time prior to the Internet's 'arrival' as a commercial, interactive mass medium, Geoffrey Reeves, in an effort to summarize the prevailing theoretical discourses around communications and culture in 'Third World' contexts (and their relationships with those of 'First World' societies), notes how such discourse closely paralleled theoretical analyses of economic development. He suggests that these theories and analyses were part of certain basic changes in the dominant methods/assumptions of media and cultural theories within advanced capitalistic societies. Reeves observes that while still providing a basic framework for the analysis of transnational flows communications and cultural commodities, particularly in a 'Third World' context, such views—what he labels 'dependency perspectives'—were being increasingly challenged and modified by theorists such as Oliver Boyd-Barrett. Boyd-Barrett proposed what Reeves describes as a 'media imperialism' thesis where the focus, unlike in earlier dependency perspectives was not so much on the unquestioned importance of inequalities in the capacity of nation-states to produce and distribute these media commodities and technologies, as on the questions of how they are transformed within the boundaries of

specific nation-states. Boyd-Barrett's examination thus focused on tracing in great detail, the specific processes through which the nature and character of communications in 'Third World' countries were influenced by 'First World' media. Reeves argues that later however, media imperialist analyses lost this attention to detail, becoming nothing more than a concern with the unevenness in international flows of communication. Reeves concludes that "with the impact of such uneven flow assumed, rather than subjected to rigorous, theoretically informed analysis, little attention was given to the importance of internal factors in both the reception and use of imported media products and in local media and cultural production."[3]

In my own attempt to theorize relationships between the media and culture in the context of the Internet and accompanying issues of economic globalization, the perspective I try to offer is similar and yet different from, the media imperialism thesis.

I have argued that the Internet needs to be viewed as a technology that has evolved as a mutation of a certain globally inflected logic that is equally and simultaneously economic and cultural. It is economic in that it has allowed the establishment of a new global economy that affects, advantageously or otherwise, every individual of every nation irrespective of the degree of access (or non-access) they have to such an economy. It is cultural in that it evolves from, and transmits, a 'future – envisioning' cocktail of discourses of democracy, freedom, modernity, material, social and cultural development, and of human progress, among others. The processes and institutions of modern advertising, as I have discussed earlier, are crucial to both of these formations, which grow in strength by virtue of the fact that each continually nourishes

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[2] Tiziana Terranova offers this description in a similar yet different context. See "Free Labor: Producing

the other. The Internet therefore, I have argued, is a medium that becomes, as a whole, much more than a sum of its abilities to remarkably transform human communications. I have also established the globally occurring inequities that mark such a medium, be in terms of physical access to the medium, the information it circulates (skewed by the differing abilities of different populations to will themselves to virtuality), the global economy it enables, or the socio-cultural influences it effects on a global scale. Contemporary cyberspace, I have proposed, may be more accurately viewed as the creation of an imperial, colonizing Web, whose key networked nodes economically, socially, and culturally dominate the marginal nodes *while still requiring that these peripheral nodes—equally integral to the construction and architectural construction of such a Web—be connected.* These marginal nodes, local economies, cultures, and populations, are seen as becoming increasingly dependant, both for survival and for global relevancy, to the dominant modes.

Thus my thesis, in parts, is both 'dependency' and a 'imperialist'. At the same time it differs in that I also argue that it is *in such a Web's very architecture—of a global network of 'locals'*—lies its potential for forging, globally, resistance to existing inequities. For the Internet's unique interactivity as a medium also enables a global networking of local resistance(s).

In this concluding section of my project then, I examine some illuminating examples of emerging resistance, arguing that the sites of such resistance lie as much within the logic of the commercial globalization of the Internet, as much as outside of it. For ease of analysis, I categorize such alternative uses of the Internet into struggles being

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Culture for the Digital Economy." *Social Text* 18.2 (2000): 13.

waged in two 'networked' spheres: the first are those that occur in the material and economic spheres, and the second, those that occur within the political and ideological spheres. My examination is not intended to be, by any means, comprehensive. All I aim to do is study a few isolated sites where various constituencies—both formerly and newly marginalized—are resisting becoming the casualties of the ongoing processes of globalization, and using the Internet to do so. This brief study then completes my examination of the Internet—the history of its evolution and the ongoing processes of its commercialization, specifically via advertising—whereby I have explored some of the ways in which different societies are adapting to this uniquely transforming mediascape.

My examination of the architecture and growth of the commercial Internet has already testified to the truth of Oguibe's observation that "cyberspace, much as it may provide multiple routes of interzonality to many, nevertheless remains the preserve of a statistically negligible fraction of the world, unable yet, and indeed unwilling, to undermine the fundamental boundaries, within and without, that separate the powerful and privileged, from the less powerfully disposed."[4] Oguibe sees the greatest shortcoming of cyberculture as being its inability to provide such facilities of participation and fulfillment to the majority, which he describes as its "foreclosure to certain geographies."[5]

The Internet's interactivity has been widely acknowledged as offering great *potential* for the transformation of such 'deprived geographies.' Indian computer wizard

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[3] Geoffrey Reeves, *Communications and the 'Third World'*, (London and New York: Routledge, 1993) 69.
[4] Olu Oguibe, "Forsaken Geographies: Cyberspace and the New World 'Other,'" p.12.
http: //arts.usf.edu/~ooguibe/madrid.htm, accessed 9/6/1998 5:29 p.m., p.12, originally delivered at the 5th International Cyberspace Conference, Madrid, June 1996.

[5] Ibid 12.

Sam Pitroda, for example, speaks of how the Web can be used for the professional

training of specific local working populations such as the 'dais' (midwives), who are an

important part of rural economies; similarly, Indian agricultural scientist Dr. M.S.

Swaminathan has created a working model of a 'networked society,' whereby the Web

will be able to transform the lives of the rural populations of entire villages in

Pondicherry, India. Indeed, the advantages of real-time networking through the Web have

been widely endorsed by academic, medical, scientific and other communities

worldwide.[6] It is obvious that for such visions to bear fruit, *access* to the Internet,

presently hindered by factors such as location and language for example, *needs to be*

created. To truly effect such a revolution *however*, the role of the state cannot be

sufficiently overstated. This would entail the state's resistance to the overt and covert

pressures of the global economic system—such as the economic strategies of

privatization and deregularization—which invariably requires a greater amount of

political will, than is usually available.

However, while state-supported efforts to enable ease of technological access are

typically aimed at creating newer, and more, consumers, such efforts may also be

appropriated towards alternative purposes, depending on who gains access as a result of

these efforts and who they are aimed at. In India, for example, while the private-school

educated, English-speaking middle class constitutes the largest consumer bloc, there are

many ongoing efforts, particularly within the academy, to make the Internet accessible to

those totally outside the circuits of international capitalism. The Department of Computer

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[6] See "The Cyber Have-Nots," *The Hindu* May 31 (1998),
http://www.hinduonline.com/hindu/today/08/08310001.htm, accessed 05-31-98 1:40 PM.

Science and Engineering at the Indian Institute of Technology, Mumbai (a highly rated

school funded heavily by both the federal government as well as by the corporate sector)

is busy developing a software that can translate from any Indian language (included in the

Indian Constitution's list of official languages) to English and vice versa. This is quite

evidently an effort towards the furthering of the global economy; it is an effort partially

funded by the United Nations as part of a project called the Universal Networking

Language Program (UNLP) being developed by the United Nations University, Tokyo,

along with other premier research organizations worldwide. The UNLP's initial goal is to

develop digital inter-convertibility between 17 languages—Arabic, Chinese, English,

French, German, Russian, Spanish, Hindi, Greek, Italian, Indonesian, Japanese, Latvian,

Korean, Mongolian, Portugese, and Thai—and the eventual goal is to incorporate the

languages of all 189 member states. However, it is equally evident that such an effort, by

enhancing access to the Internet, also creates immense possibilities for the mobilizing of

peoples and resources towards political resistances.[7] Indeed, I believe that even though

the motives of participating states are suspect, it is critically important that they be used

in efforts to imagine resistance.

Less suspect initiatives also come from the global networks that non-

governmental, non-profit organizations (NGOs) have been able to establish, due in great

measure to technologies like the Internet. A good example is the case of a remote tribal

region of India called Chattisgarh. In August 2001, a group called the Rainbow

Partnership, part of a New Delhi based NGO, the South Asia Foundation (SAF),

www.rainbowsaarc.org/rpo.asp, signed an agreement with two other non profit

organizations—the Worldspace Foundation, www.worldspace.org, and the Simputer

Trust, www.simputer.org. The objective is to promote education in areas such as

Chattisgarh by enabling Internet access through a newly developed stripped-down-to-the-

essentials computer appropriately named the Simputer. The three NGOs bring their

respective resources to this project. Worldspace, which owns three satellite networks—

Afristar, Asiastar, and Ameristar—is to provide use of Asiastar enabling access to the

Internet, even while bypassing telephone and ISP services. Rainbow Partnership is to

provide the Internet content that Chattisgarh could then access, while Simputer Trust

provides the all important end component—the Simputer. Vijay Chandru, Founder and

Director of the Pico Peta Simputers Pvt. Ltd. describes the Simputer thus:

> To begin with, it provides natural user-friendly interfaces based on sight, touch
> and sound [the Simputer incorporates four different languages—three Indian and
> English, offers email capabilities, and plays MP3 files]. The next point on which
> it scores over the conventional PC is its low cost. But at Rs. 9000 (aprox $180US)
> it still remains out of reach for most. Precisely, for this reason, the makers of this
> PC have given the option of a smart card, ... a plastic card with some storage
> facility and some processing power. This implies that at least one organization
> (such as the village Panchayat, village school, village post-office etc.) actually
> buys the instrument and lends it to individuals. So realistically, people have to
> invest only in smart cards. The browser [specially created for the Simputer,] is
> useful in that it does away with complicated browser applications such as
> Windows etc.,...and being text-to-speech enabled, it reads the text aloud.[8]

Rainbow Partnership plans to launch its own portal by November 2002 with interactive

content that includes educational material on sustainable development, health and family

planning, human rights and civic duties, environment, arts and culture, online education

rural market information, scholarships on South Asian Studies, and career advise for

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[7] See "New Internet Software for Non-English Speakers," *The Hindustan Times*,
http://167.216.192.98/goodearth/offcat5.shtml, accessed on 04-09-02.
[8] For this example, I draw on Nivedita Mishra's "Education, the Great Leveler" in *The Hindustan Times*,
http://167.216.192.98/goodearth/education.shtml, accessed on 04-09-02.

South Asians. There are probably several similar stories worldwide, of efforts by people

denied access due to commercial imperatives governing the growth of the Internet, to

forge a resistance at the material site of access to the new technology. One such example

is the efforts of the Association of Progressive Communication (APC), www.apc.org, a

global network of NGOs who work towards peace, human rights, development, and

protection of the environment. The APC works towards such goals by both facilitating a

more egalitarian access to technologies such as the Internet, particularly within the

nations of the "Third World" where they are often the pioneering Internet providers; as

well as strategically using these technologies to network their own global efforts. This

allows them to make an impact on a global stage. The APC's mission statement, as

articulated on their website reads: "The Association for Progressive Communications is a

global network of non-governmental organisations whose mission is to empower and

support organisations, social movements and individuals in and through the use of

information and communication technologies to build strategic communities and

initiatives for the purpose of making meaningful contributions to equitable human

development, social justice, participatory political processes and environmental

sustainability."[9] From such examples, what becomes clear is that for such efforts to

succeed, there needs to be a mobilization of both political and social will, and resources,

on a *global level.*

The economics that govern the flows of capital within the newly emerging global

system itself may also offer ways to resist being marginalized by it. Consider for

example, the internationalization of labor facilitated by the Internet within such a global

South Asia Foundation

The Seven Colours of South Asia's Unity in Diversity

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Economy

Education

Environment & Sustainable Development

Health & Family Planning

Human Rights & Civic Duties

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SAARC Documentation & Information Centres

Science & Technology

South Asian Studies

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Youth Cooperation

ASEAN SAARC EUROPA | Info Development Youth Gateway | ADB | World Intellectual Property Organization

WorldSpace Foundation

2002 GALA

WorldSpace Foundation works with international, national, and local civil society organizations to produce and deliver vital and relevant social development and education programs to disadvantaged communities in Africa and the Asia-Pacific region, using innovative information and communications technologies.

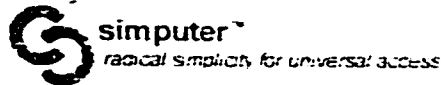*We are helping to close the information gap...*

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The Simputer meets these demands through a browser for the Information Markup Language (IML). IML has been created to provide a uniform experience to users and to allow rapid development of solutions on any platform.
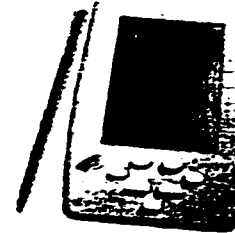
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Strengthening information networks around the world:
APC brings together social justice content specialists from over twenty countries

Building on the needs expressed by APC members and partners using the Internet to promote development and social justice in an online consultation undertaken in early 2001, APC brought together twenty six information specialists from around the world to a meeting in South Africa to strengthen the information community within and beyond APC, and identify and develop resources to promote effective online content work.

"The most valuable thing for me was learning about the kinds of work in the field of ICT development being done the world over and finding answers to some specific questions I had," said Ambika Sharma of Development Alternatives, India, a non-profit that sets up multimedia kiosks and content projects with communities in rural areas in three states in India. The experience was echoed by Graciela Selaimen, information coordinator at Brazil's popular Third Sector Information Network (RITS), "I learned that although we were people from all over the world, with different realities and cultures, we have much to share and collaborate with each other". More >>

Almost half a million Barcelonans march against the war on terrorism and the domination of capital

On March 16, 2002, in Barcelona, the Campaign against a Europe for Capital and War, a coalition of over a hundred local organizations, led a demonstration against the European Union Heads of Government Summit being held in the city. Despite extraordinary security measures, warnings of violence, and attempts to sully the demonstration by linking it to terrorism, the march was peaceful and attended by 400,000-500,000 people. Pangea, APC member in Spain, was part of the coalition, and contributed the creation of a Website and a special online calendar.

APC member in Senegal

ENDA Tiers Monde - wishes to express their profound grief at the death of their Executive Director, Jacques Bugnicourt, who died in France on April 16, 2002.

Documenting Ten Years of Challenge and Innovation: The APC Annual Report 2000

APC celebrated our 10th anniversary in 2000. The APC Annual Report 2000 documents APC's work in 2000 and takes a look back at our history, through over sixty pages of specially commissioned stories. The report is the start of an online collection that will be developed by people who been part of APC over the years.

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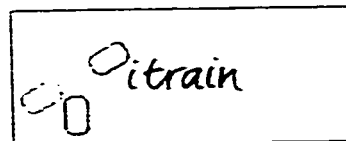
itrain

APC, Bellanet, IICD, IISD, INASP and OneWorld have joined forces to create itrainOnline

www.itrainonline.org

A technology resource centre for people who want to learn how to use the Internet effectively for social justice and sustainable development Find out more about itrainOnline

economy, and specifically by the Information Technology (IT) industry. It is instructive

at this point to refer to the work of Gayatri Chakravorty Spivak in her widely cited essay,

Can the Subaltern Speak? Spivak proposes that we view the contemporary international

division of labor as a replacement of the labor processes of nineteenth-century territorial

imperialism, which, for her, worked in the following way:" ... put simply, a group of

countries, generally first-world, are in the position of investing capital; another group,

generally third-world, provide the field for investment, both through the comprador,

indigenous capitalists and through their ill-protected and shifting labor force. In the

interest of maintaining the circulation and growth of industrial capital and of the

concomitant task of administration within nineteenth-century territorial imperialism,

transportation, law and standardized education systems were developed – even as local

industries were destroyed, land distribution was rearranged, and raw material was

transferred to the colonizing country."[10] Spivak argues that following the historical

process of "so-called decolonization, the growth of multinational capital, and the relief of

the administrative charge, *'development'* does not now involve wholesale legislation and

establishing educational systems in a comparable way. This impedes the growth of

consumerism in the comprador countries. With modern telecommunications and the

emergence of advanced capitalist economies at the two edges of Asia, maintaining the

international division of labor serves to keep the supply of cheap labor in the comprador

countries." (my emphasis)[11]

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[9] *Association for Progressive Communication*, http://www.apc.org/english/about/index.shtml, accessed on 15 May 2002, at 03:47 A.M.
[10] Gayatri Chakravorty Spivak, "Can the Subaltern Speak?" *Colonial Discourse and Postcolonial Theory: A Reader* eds. Patrick Williams and Laura Chrisman (New York: Columbia UP, 1994), 66-111, p. 83.

[11] Spivak 83.

Spivak—who claims to derive her insights from Foucault's work on coalition

politics—offers a sophisticated formulation where she argues that the internationalization

of labor leads to a marginalization, wherein local societies are denied participation in an

"ideology of consumerism," precisely because such an ideology fosters resistance.

Spivak's analysis, like mine, is driven to comprehending the consequences of an

emergent global economic system—where the strategies of multinational corporations

play a significant role—with the objective of identifying the ways in which resistance

may be enabled. Thus she states:

> Human labor is not, of course, intrinsically 'cheap' or 'expensive'. An absence of
> labor laws (or a discriminatory enforcement of them), a totalitarian state (often
> entailed by development and modernization in the periphery), and minimal
> subsistence requirements on the part of the worker will ensure it. To keep this
> crucial item intact, the urban proletariat in comprador countries must not be
> systematically trained in the ideology of consumerism (parading as the philosophy
> of a classless society) that, against all odds, prepares the ground for resistance
> through the coalition politics Foucault mentions... This separation from the
> ideology of consumerism is increasingly exacerbated by the proliferating
> phenomena of international subcontracting. 'Under this strategy, manufacturers
> based in developed countries subcontract the most labor intensive stages of
> production, for example, sewing or assembly, to the Third World nations where
> labor is cheap. Once assembled, the multinational re-imports – under generous
> tariff exemptions – to the developed country *instead of selling them to the local
> market.*' Here the link to consumerism is almost snapped.' 'While global recession
> has markedly slowed trade and investment worldwide since 1979, international
> subcontracting has boomed. ... In these cases, multinationals are freer to resist
> militant workers, revolutionary upheavals, and even economic downturns.'[12]

I do not subscribe to the arguments that Spivak makes through her discussions about an

"ideology of consumerism." Spivak's proposal, for instance, does not account for the fact

that while commodities are re-imported by multinationals to developed markets, they are

also subsequently distributed back to the local economies within which they are

produced, once the developed markets are themselves saturated, or when the prevailing

consumer tastes in these developed markets have changed. In addition, the consumer, in such markets, is often made to pay the same cost as the consumer in the developed market (which emerges as a disproportionately greater price after currency exchange values are factored in). In effect, this is a double price for the consumer in the 'developing market,' for the costs of all the distribution that the product has been subject to ultimately boils down to the consumer, while the globally homogenized messages delivered by the advertising of these products continually reinforce the desire of these customers towards these products.

This is clearly illustrated in the aggressive marketing of contemporary consumer products such as tobacco, or even carbonated drinks like Coca-Cola, within the very local economies that Spivak describes. It is no accident that the greater part of Coca Cola's revenues are generated from precisely such economies, while their original market in the United States is marked by consumer preference for non-carbonated drinks such as 'Gatorade' and 'PowerAde'. Neither can one assume that the strict anti-tobacco regulations enacted within the developed economies—in contrast to the lax regulations existing in 'developing' markets—has nothing to do with the fact that the tobacco industry has turned to such markets to sustain their profit margins. My own personal encounters with the various categories of branded goods available in the Indian market— ranging from branded shoes (Nike, Reebok and so on), to branded garments (Tommy Hillfiger, Benetton and other such brands)—reinforces my view.

Admittedly, the people who do have access to these products and who constitute the 'new' market, deriving as they do from within the ranks of the local elite, are not, in

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[12] Spivak 83.

all likelihood, those who have helped produce it, within these 'developing' economies. In other words, the local economies do not share in the consumption of these commodities *in the same way* as the 'developed' economies do. Thus, while I do not—given the scope of my project—fully engage with her arguments, I would suggest Spivak fails to recognize the relevance of the fact that the new global economic system is as much governed by the logic of the multinational search for new markets—provided by the nationalist elites within local economies, as by its desire to preserve its pools of cheap labor and raw material through the strategies of the internationalization of labor. However, Spivak's arguments are interesting for my purposes, precisely for the terms of references within which they are made; she rightly recognizes the fundamental importance of the processes of internationalization of labor—enabled by the emergence of globally networking technologies like the Internet—that need to be comprehended in order to envision any resistance.

Ali Mir and Maya Yajnik, focusing on the software industry, describe three typical ways in which such an internationalization occurs. The first is a process of importing labor from suitable—English-speaking, for example—'developing' countries to the 'developed' ones. Within the IT industry this process is called 'bodyshopping'; it is the process by which Indian software programmers, for example, are exported en-masse to 'advanced,' 'liberal-democratic,' capitalist countries such as the United States, Canada, the United Kingdom and Germany, among others—all countries constituting key nodes within the architectures of both the Internet itself, as well as the global system of finance and capital. Here those 'bodyshopped,' are able to earn wages, which, although substandard in comparison to those paid to their American, English, Canadian, or

German counterparts, are much more than what they would earn at home, thanks to

existing currency exchange values. The second process that contributes to the current

internationalization of labor within the software industry is one that involves the

transportation of the software work itself to cheaper sites of labor. Thus software giants

in countries like the US set up subsidiaries and partnerships in India, who are responsible

for much of the software production. Another illustration of such a process can be seen in

the establishments of the *maquilladoras* in Mexico. This is a much cheaper prospect in

comparison to getting that work done by much higher paid employees working in the US.

The third is an ingenuous process that utilizes the time difference between the physical,

geographical locations of countries—for example between India and the United States.

This difference is used to create a twenty-four hour 'virtual' assembly line of software

production. Mir and Yajnik describe this as a process wherein "'work' remains in the

bowels of the computer architectures of the US while labor is circumscribed by the

boundaries of its nation-state. The two meet in a virtual space created by satellite links

and fiber-optic lines."[13] A perfect illustration of such a process was reported in a

computer trade publication called *PC Week* in April 1995:

> It is 9:45 a.m. in Secunderabad, India, as Systems Analyst Satya Subbalakshmi
> settles in front of a PC in her gray cubicle to start editing a screen on a main-
> frame based insurance application. Every keystroke flies through a LAN [Local
> Area Network], a gateway and a multiplexer to a satellite station three miles
> away. From there, the code is beamed to an IntelStat communications satellite
> over the Indian Ocean, down to an earth station in Amsterdam, across the Atlantic
> on fiber-optic lines and finally to an IBM 300J Mainframe at Selective Insurance
> Company in Branchville, New Jersey, USA. In Branchville, it is 11:15 the
> previous night, and the dayshift is long gone. Subbalakshmi, who actually works
> for Satyam Computer Services Ltd., a contract programming firm, has become a

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[13] This example is taken from Ali Mir and Maya Yajnik, "The Uneven Development of Places: From Bodyshopping to Global Assembly Lines," http://www.solinet.org/THIRDWORLD/maya1.htm, accessed on 09-06-98, 2:48 PM, p.5.

virtual member of Selective's staff. She barely sees a drop in response time as her work circles the planet, and she even sees the Selective logo, as she logs on to her PC.[14]

Such a restructuring of spatial work relationships caused by the Internet leads to a clearly uneven process of development, globally, which has resulted in "new market forms, new infrastructures, new forms of resource extraction, new patterns of production (and consumption), and new divisions of labor in the Third World."[15] Mir and Yajnik, drawing on the work of Henri Lefebvre, argue that since "class struggle is everywhere inscribed in space through the uneven development of the qualities of places," such an unevenness provides a space for "successful resistances and struggles of indigenous movements across the world."[16] Given the relative power accorded to labor within such equations, it emerges that such unevenness between the flow of capital and the reverse flow of labor may provide for potential sites of resistance; it is, however, obvious that any such resistance would require the active support of the State. The Indian government, for example, would need to create new regulations and policies for ensuring less exploitative arrangements for Indian workers within the international systems of software production. As we have already seen, this would also involve the unrealistic possibility of the Indian State resisting the global imposition of processes such as economic deregulation. Such a resistance then, where the less powerful nodes of the Internet economy can write a script of resistance within the global play of capital, remains but a distant possibility.

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[14] Mir and Yajnik 5-6.

[15] Mir and Yajnik 5-6.

[16] Mir and Yajnik 6.

A space for resistance may also be located within the Internet-driven globalization of consumption. As we have already seen in Chapter Three, every surfer in a commercialized cyberspace is also a potential consumer. John Storey, adopting a Gramscian cultural studies perspective on popular culture, endorses the work of several cultural critics including John Fiske and Paul Willis, who have sought to emphasize the power of the consumer. Fiske suggests that consumers derive power from the fact that meanings in a cultural economy circulate differently from the way that wealth does in the financial economy. Meanings "are harder to possess (and thus to exclude others from possessing), they are harder to control because the production of meaning and pleasure is not the same as production of the cultural commodity, or of other goods, for in the cultural economy, the role of the consumer does not exist as the end point of a linear economic transaction. Meanings and pleasures circulate within it without any real distinction between producers and consumers."[17] Willis similarly argues:

> people find on the market incentives and possibilities not simply for their own confinement but also for their own development and growth. Though turned inside out, alienated and working through exploitation at every turn, these incentives and possibilities promise more than any visible alternative. ... nor will it suffice any longer to say that modern 'consumer identities' simply repeat 'inscribed positions' within market provided texts and artifacts. Of course the market does not provide cultural empowerment in anything like a full sense. There are choices, but not choices over choices—the power to set the cultural agenda. Nevertheless, the market offers a contradictory empowerment which has not been offered elsewhere. It may not be the best way to cultural emancipation for the majority, but it may open up the way to a better way.[18]

Drawing on these propositions, Storey emphasizes that while examining how cultural commodities are provided by commercial culture-industries, what must be kept in mind are the ways through which these cultural commodities are *appropriated* in acts of

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[17] John Storey, *Cultural Consumption and Everyday Life* (London &Sydney: Arnold, 1999) 153.

cultural consumption. For popular culture is "neither an 'authentic' working-class culture nor a culture imposed by the culture industries, but what Gramsci would call a 'compromise equilibrium between the two; a contradictory mix of forces from both 'below' and 'above'; both 'commercial' and 'authentic'; marked by both 'resistance' and 'incorporation', 'structure' and 'agency'."[19]

In the contemporary economy, the use of consumer power to force change has been widely attempted, from the boycotting of multinational commodities produced in the 'sweatshops' of the economically irrelevant regions of the world, to the offering of 'alternative' portfolios of investments by banks and financial institutions where one can ensure that one's money is invested only in the stocks of 'politically-correct,' 'environment-friendly,' companies, and so on. A good example of consumer-driven change, for our purposes, is the successes of the anti-tobacco struggle through the nineties that many studies have testified to. One such study conducted in California that analyzes the effectiveness of anti-tobacco advertising in the nineties, for example, conclusively establishes that the use of aggressive billboard, television, and radio advertisements led to rapid drops in cigarette smoking in the state, while stopping or toning down these media campaigns led to a consequent increase in the prevalence of smoking.[20]

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[18] Storey 154.

[19] Storey 150.

[20] *UCSF's Electronic Daily: Daybreak News* 16 February 1999. http: //www.ucsf.edu/daybreak/1999/02/16_glantz.html, accessed on 04-30-02, 1-2.

Similarly, new advertising strategies adopted by groups such as Campus Invasion

(www.campusinvasion.com) have achieved dramatically new levels of success by linking

the anti-smoking agenda to anti-globalization efforts; indeed, as I will go on to elaborate,

the anti-globalization movement has brought together several groups with differing

agendas—environmentalists, feminists, anti-war protesters, Marxists, and libertarians, for

example.[21] Thus Campus Invasion's latest advertising campaign across radio, television

and on their websites suggests that university students should adopt a tobacco-free

lifestyle by foregrounding the plight of children laboring in foreign tobacco farms, as

well as by pointing to the environmental damage that results from tobacco cultivation.

Other anti-tobacco groups such as the Iowa-based Just Eliminate Lies (JEL),

www.JELiowa.org, have adopted the Web as a large part of their efforts. A web page on

JEL's site, for example, exhorts the various "delightfully devious counter tobacco recipes

you can create from the convenience of your own community," which includes such

suggestions as mobilizing an audience against film celebrities who smoke on-screen.

JEL, whose site even offers anti-tobacco computer games to attract the huge population

of gamers online, is only one of a number of organizations that have discovered the Web

to be an easy, affordable way to globally disseminate their message. Another example of

such a site is called www.thetruth.com whose Web offerings include free online services

such as email to attract a sizable audience. Significantly, the success of the anti-tobacco

movement can be attributed to both the legitimization of the cause within the 'rational'

discourse of science (wherein smoking has been medically proven to be harmful to

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[21] Bryan Auchterlonie, "Campus Invasion: Where the Anti-Smoking Campaign Turned Left," *FrontPage Magazine.com*, April 12 2002, http://www.frontpagemag.com/guestcolumnisits2002/auchterlonie04-12-02.htm, accessed on 04-30-02, pps. 2-3.

Register to Win!

Somebody in San Diego County is guaranteed to win on June 30th, 2002. You can't win if you don't enter

Hey, it worked! We knew that one of the best ways to get you to our site was if we gave away a HUGE prize. So, we got a brand new laptop computer from Laptop Training Solutions "San Diego's #1 Computer Training Company" and a new stereo system that will make your pad sound great

So here's the deal: You can register to win right here by filling out this form. Or you can visit us at one of our campus events.   One entry per person.

Full Name	[ ]	Age	[Select ▾]
Address	[ ]	City, CA	[Select ▾]
Zip Code	[ ]	Email	[ ]
How did you hear about this?	[Select ▾]	Phone	([Select ▾]) [ ]

| **Oops! Start Over** | | **Register to Win!** |

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Soccer: Kickin' Butts
More...

Youth Advocacy Day
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SWAT of Clinton County
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FOR HELP QUITTING CALL
1-866-U CAN TRY

YOU'VE ALREADY SEEN THE ADS,
NOW SEE WHAT'S BEHIND THEM.

CLICK HERE

SEARCH [   ] [GO!]

Welcome to thetruth.com

HIGHLIGHTS

Smoke and Mirrors
Finally, after years of
battles in court, the truth
about how the cigarette
industry operates has
been uncovered and the
secret knowledge,
evidence, and documents
they possessed are being
revealed.

Smoker's Body
Every 10 seconds,
someone dies from
tobacco use, says the
World Health
Organization. What you'll
see here is an overall look
at the real physical
impacts smoking can
have.

the little orange book
just say "no" to "just say
no"

Infect truth tv
Knowledge is contagious

Take the Voice Survey
Click here to take the
voice survey

LINKS

**Check your truth email
account**
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**High school smoking way
down, says CDC**
AP

**Nicotine stops new brain
cells forming**
New Scientist

**Higher incidence of cancer
seen in young adults:
Report - CBC: Cancer Rate
Falls but Numbers Set to
Rise**
Reuters

POLLS   MORE POLLS

What do you think of the new design of
the site?

- ○ I love you guys and anything
  you do is great.
- ○ I like the html side but the flash
  side is awful.
- ○ Like that flash side, the html
  side sucks like a vacuum
  cleaner
- ○ This beats the old version
- ○ Old version was better
- ○ Fire everyone immediately

VOTE NOW

THE NUMBERS AND FACTS

Fact: One in five
Their product causes nearly 1 out of 5 deaths in this country. Can you name
any other industry that gets away with that?
- Nearly 1 in 5 deaths caused by tobacco: American Cancer Society

health) and the successful use of advertising and the commercial media towards the

transmission of this message as well as the establishment of normative anti-tobacco

socio-cultural images.[22] Further, in the context of the Internet such causes are helped by

the contemporary remnants of what originally was the anti-market hacker ethic.

Resistance deriving from consumer power, however, can only achieve so much

for it is only effective in a context *where consumption is plentiful*. Such a caveat, of

course, excludes most of humanity who exist in societies and economies, which although

exploited as sources of raw material and cheap labor, and as sites of production of

commodities, do not share in the consumption of these commodities *in the same way*.

Some of the unequal patterns of consumption that emerge in a recent Human

Development Report of the United Nations Development Program (UNDP) are shocking

in their starkness. Globally, "20% of people in the highest income countries account for

86% of the total private consumption expenditure, while the poorest 20% of the world

population account for only 1.3%."[23] Further, in the context of the Internet, consumer

resistance is circumscribed by the framework of what I have earlier referred to as the

ideology of information technology. Such an effort can therefore be likened to the hacker

ethic wherein the dream of democratic enfranchisement—desires for free interactive

communication, free access to information and social participation etc.—becomes

inevitably grounded within the desire for freely interactive and capitalistic commerce as

we've seen; "what is particularly dangerous about the contemporary electronic 'guerilla'

is this conflated notion of democracy in which a deep phenomenological ambivalence

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[22] See inserts of JEL and truth.com web pages following this page.

[23] Jayati Ghosh, "Greed and Human Destiny," *Frontline* 15.20 (September 26-October 09, 1998), http://www.the-hindu.com/fline/fl1520/15201030.htm, accessed on 09-26-98, 11:30 PM, p.1.

towards technology and towards capitalism goes unrecognized, if not completely

'disavowed'."[24]

On a similar note, anthropologist Murli Natrajan, noting that advertisements

constitute the ultimate fantasies expressing the desires of advertisers who constitute

crucial players in shaping the content of globalization, uses Indian television

advertisements to argue that, contemporarily, "globalization if spoken of as non-coercive

performs the same function as ideology—it reproduces power by naturalizing it. ...The

naturalization is done in two simultaneous moments: one disguises power as a 'freely'

available *value* (independence, mobility, commodity choice), and the other makes

adoption of that value (i.e., power in disguise) appear *inevitable* or *natural* (non-coercive,

non-imposed, and deriving from laws of social change)."[25] Natrajan further notes that the

history of globalization—whether the short one dating from the emergence of

multinational capital or the longer one that can be traced back to the emergence of a one-

world system and subsequently, monopoly capital—can also be seen as a history of

protests—from the earlier forms of Dickens' novels to the latest demonstrations in

Prague, Genoa, Seattle, La Paz, and other places. Drawing upon these insights, I argue

that resistance against globalization of capital and culture, using technologies like the

Web, must clearly occur in the ideological and political spheres as well, where it must

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[24] Vivian Sobchack, "Democratic Franchise and the Electronic Frontier," *Cyberfutures: Culture and Politics on the Information Superhighway* ed. Ziauddin Sardar and Jerome R. Ravetz (New York: New York UP, 1996) 87.

[25] Murli Natrajan, "Legitimating Globalization: An Ad, a Concept, its Argument and its Protestors." http://www/widernet.org/globalstudies/globalizationseminar?Murhlipaper.htm, 01-24-02, p.3. Many thanks to Murli for sharing his paper with me.

work towards 'unnaturalizing' such globalization by providing a forum for alternative visions of democracy, development, and progress.

We have already seen how the real-time interactivity of the Internet makes it a technology that encourages an 'e-capitalism' wherein its dominant modes mirror the controlling nodes offline—of a global economic and cultural hegemonic order. As Dan Heath, President of the Internet Society (ISOC) observes, in another context: "If the United States government had tried to come up with a scheme to spread its brand of capitalism and its emphasis on political liberalism across the world, it couldn't have invented a better model than the Internet."[26] At the same time, I would argue that it is precisely the interactivity of the Internet that can be harnessed towards the mobilization of resistance; it can quickly become a disruptive technology threatening the institutions of both repressive nationalist regimes and of global commerce. Within the boundaries of the nation-state in particular, the Internet, a medium of mass interactivity difficult to bring under State control, can act as a potent mobilizer of political dissent. The Indonesian example is a case in point. Thus in 1998, Indonesia's student-based pro-democracy movement (in a process reminiscent of the famous radio- and-telephone-spearheaded Iranian revolution), used the Internet to 'network' their impatience with the Suharto regime into a powerful political force. The subsequent Internet-organized political street demonstrations led to Suharto's departure after thirty-two unchallenged years of political rule. The covertness of a political force that coalesced principally via the Internet meant that there was no specific target for Suharto to silence or attack.

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[26] Steve Lohr, "Welcome to the Internet, the First Global Colony," *The New York Times* January 9 2000, http://www.nytimes.com/library/review/010900internet-review.html, accessed on 03-10-02, p.2.

Interestingly, it was the global commercialization of the Internet itself that created

an environment, which allowed such a cyber-mobilization of people and opinion.

Suharto's government, recognizing the immense financial potential of television and

satellite communications, and determined to tap into global business markets, had built a

comprehensive satellite network across Indonesia wherein even the smallest and remote

of Indonesian islands were wired. Moreover, the national language of Indonesia, Bhasha

Indonesia—since it uses the same Roman script as English does—needed no special

translation software to communicate globally, online. Clearly in the Indonesian contest,

"the most powerful role of this technology [the Internet] has not been to introduce outside

ideas, but to provide a tool to an Indonesian middle-class increasingly fed up with

corruption and other abuses of power."[27] The student movement that the Internet helped

create in this instance was possible precisely because it successfully replicated the

decentralized architecture of the Internet within the architecture of its own political

mobilization. As Seth Mydans observed in *The New York Times*, "the student movement

is a curious political force, headless and leaderless, without a central organizing force."[28]

The Indonesian student movement is only one powerful example of the ways in which the

Internet is being actively used towards political struggles and movements of all kinds. In

as much as I recognize that the Internet, perhaps like all existing mass media, remains

elitist as a site of "speaking for" the subaltern—in that those who may utilize it are

already a more privileged populace than those who don't—I would argue that it offers

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[27] Margaret Cohen, cited in Bertil Lintner and Ashley Craddock, "Indonesia's Net War," *Wired News* 29 May 1998, http://www.wired.com/news/news.politics/story/12609.html, accessed on 06/02/98, 1:24 PM, p.2.

[28] Ibid 1.

much greater potential than other media towards the mobilizing of dissent to existing

hegemonic ideologies and repressive regimes.

We have already seen how the Internet, as a rapidly evolving convergence of

technologies of global commercialization, is proving to be one of the most fundamental

tools that enable global financial institutions like the World Economic Forum (WEF), to

force the collusion of the various nation-states of the world in shaping the emerging

global economy in the corporate interest. Economically, governments are forced, first to

deregulate and privatize—a policy that has been aggressively pursued in over ninety

countries through structural adjustment policies of organizations such as the World Bank

and the International Monetary Fund (IMF)—and second, to allow their businesses to

regulate themselves. In this sense, free trade both dissolves geographical boundaries that

may inhibit it, as well as substantially undermines the power of nation-states to introduce

domestic regulation.

In the context of examining the possibilities for political and socio-cultural

resistance in such a global economy, Arun Kundnani writes:

> without leadership from either a political party or a class of intellectuals nurtured
> in an *active civil society*, opposition to information capital takes a variety of
> forms. These range from reactionary flights into ethnic and religious
> nationalisms, ... to local campaigns using the Internet to coordinate globally on
> parallel issues. Contests over the ownership of culture are emerging as a major
> arena of struggle. This is because a central aspect of information capitalism is the
> accumulation of hitherto socially-owned knowledge, culture and information in
> the hands of private corporations, whence they are repackaged as informational
> goods and sent around the world through the networks of information flow. These
> struggles do not simply involve an opposition between 'Third World' tradition on
> the one hand and western modernity on the other. The key issue is between social
> ownership of cultures and their development versus private ownership (my
> emphasis).[29]

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[29] Arun Kundnani, Arun Kundnani, "Where Do You Want to go Today?: The Rise of Information Capital –
Part I," Institute of Race Relations, http://www.homebeats.co.uk/resources/arun.htm, accessed on 10/5/00
10:22 AM, pps. 6-7.

The most visible ideological opposition that has emerged in recent times to such processes is the anti-globalization movement, which provides a forum from wherein such a unilateral model of 'development' is being challenged. It is important to note that this movement has also become an umbrella within which various other resistance movements with differing agendas, coalesce. For such a 'networked' movement, the Internet provides a uniquely cost-effective and efficient way to globally disseminate its message. Consider, for example, the 'Media Summaries', that the World Development Movement (WDM), www.wdm.org.uk, provides through its website. These are essentially advertisement-type data bytes designed for the use of the global press seeking information about the movement.[30] Such sites also become important portals, or online gateways, providing collections of links to other websites that share similar concerns. At the same time, several older offline 'protest' organizations, have quickly adopted the Web as a unique tool for the global transmission of their messages. Websites such as www.greenpeace.org and www.amnestyinternational.org are interesting examples of how such organizations are using the Internet to further their cause.[31]

Besides silencing the violent minorities that inevitably exist within movements such as the WDM, the biggest struggle for anti-globalization movements is to fashion a central, defining agenda that is able to accommodate all of its various constituencies with their various individual agendas. Many anti-globalists, for example, argue that rather than 'anti-globalization' or 'anti-capitalist,' such movements be defined as being 'pro-

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[30] See inserts from WDM web site following this page.

[31] See inserts from these websites following this page.

Welcome to WDM

- Latest news and actions
- Our campaigns
- About WDM
- Our local group network
- How you can support us
- Jobs and volunteering at WDM
- WDM Scotland

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Media Summary

States of Unrest II
Resistance to IMF and World Bank policies in poor countries in 2001

States of Unrest II documents protests in 23 countries, charting 77 separate incidents of civil unrest involving millions of people. Estimates indicate that 18 of these incidents ended with the deployment of riot police or the army, with 76 documented fatalities, and arrests and injuries running into thousands. Over a third of these countries experienced protests directed specifically at the IMF and World Bank as institutions.

The protesters include: peasant farmers, indigenous peoples. the unemployed, teachers, civil servants, priests. doctors, public-sector workers, trade-union activists and owners of small businesses. Typically the protests are against cuts in government expenditure, privatisation of state-run industries, and the removal of price controls and subsidies.

Of the 23 countries documented, nearly three-quarters have IMF-sponsored privatisation programmes, and over half of these have experienced anti-privatisation demonstrations Half of the countries have had protests by civil service and public sector workers, including teachers, doctors and the police, aimed at policies that either cut or freeze wages or lead to redundancies. Over a third of countries have had demonstrations against the rising prices of basic goods and services because public subsidies have been removed

Selected examples from States of Unrest II country reports:

ANGOLA
The IMF "stressed the importance of adhering to a prudent wage policy, keeping overall public spending in check " In January public sector workers across Angola take part in a four-day general strike over government proposals to reduce the minimum wage.

ARGENTINA
As a condition for a $21bn loan in September the IMF demands "primary spending will be cut... [including] an across-the board cut of 13 per cent in unprotected primary spending, including wages and pensions". Earlier in the year the General Workers Confederation, calls a two-day strike at proposals to cut public salaries by 13 per cent and cut pension benefits. Police were deployed as tens of thousands of workers take to the streets. blocking roads, shutting banks and Government offices and marching on Congress. A spokesperson, representing the Argentinean Confederation of Education Workers said: "We are all in the same situation. The people are all affected by these cutbacks and by exclusion, misery and poverty. Nobody escapes." President Fernando De La Rue admits the country's sovereignty is "limited" due its US$128 billion debt.

ECUADOR

Through out 2001 massive protests continue in response to extreme structural adjustment and IMF-agreed austerity measures including a 60 per cent increase in cooking gas, plans for eighteen privatisations in the electricity sector, an end to state monopoly for telecommunications, and the granting of a 30-year concession to a foreign company for the supply of water and sewage services to the city of Guayaquil. A peaceful march of ten thousand people in Quito is dispersed by police and army using teargas and rubber bullets, hunger strikes occur on University campuses, a state of emergency is declared, and a fourteen year old boy is one of four shot and killed as troops break up a demonstration of five thousand indigenous people. In an occupation of IMF offices in Quito one protester says: "We want to expose the real culprits. The IMF-imposed policies, carried out by the Ecuadorian Government in exchange for more loans."

INDIA

Ten million state employees go on general strike against privatisation plans and call for a halt to IMF, World Bank and WTO policies, as the IMF urges that, "power sector reform was a particular priority [along with] the privatisation of Government enterprises, and liberalisation of labour laws."

NEPAL

In July more than 500 protesters denounce a 40 per cent price hike in electricity prices by the Nepalese Government. According to a news report, the Nepal Electricity Authority was put under pressure from the Asian Development Bank and the World Bank to raise prices as a precondition for fresh loans on water resource development. The IMF announces it is "encouraged by the recent policy initiatives to adjust public sector prices and tariffs"

PAKISTAN

In May, Pakistani Non-Governmental Organisations protest outside the World Bank building in Islamabad with banners saying: "IMF International Monetary Fraud", and, "World Bank policies: poverty elevation or alleviation?" The IMF continues to demand "the restructuring of public enterprises [and] accelerated privatisation"

SOUTH AFRICA

Thousands of protesters descend on Johannesburg to demonstrate against the privatisation of the city's water supply to French water multinational, Suez Lyonnaise des Eaux as advocated by the IMF. The South African Municipal Workers Union (SAMWU) complains the deal, "has not come up with any plan to extend running water to Johannesburg's poor."

TURKEY

Economic crisis in Turkey continues as government agrees a massive adjustment package with the IMF including "restructuring the banking sector, improving budget transparency, and preparing the privatisation of state-owned enterprises [including steel, electricity, airline and telecom companies]." In March, unions and civil society groups organise a protest, with thousands of protesters taking to the streets

shouting, "IMF go home!". Bayram Meral, President of Turkeys largest union confederation said: "The policies of the IMF and the World Bank do not aim to help Turkey but to assure that Turkey can pay its debts on time and in full." In November thousands attend demonstration calling for an end to "the Governments subservience to IMF policies"

ZAMBIA
Thousands of Lusaka City Council workers strike over non-payment of salaries as IMF makes "firm control on public wages" a condition of $64m loan.

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Debt Campaign

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STATES OF UNREST II: RESISTANCE TO IMF AND WORLD BANK POLICIES IN POOR COUNTRIES

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of Russian
plutonium
production
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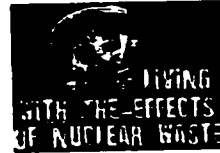
Climate
Protests against
Exxon continue
around the world.

Nuclear
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transport ship
transits Panama
Canal en route to
Japan. Stop Plutonium Terror'

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Privacy Policy

democracy.'[32] Implicit in such statements, is the suggestion that theirs is also a struggle to recover notions such as 'democracy' from the ideological grasp of the ideologies of globalization. It is, at the very least, conceivable, that the mobilizing and communicative global prowess of the Internet can be significantly employed in such attempts to revision 'democracy' and 'development' and retrieve these discourses from the epistemological straitjacket of economic globalization. In fact, such attempts are already achieving some degree of success. It is no accident or coincidence, for example, that issues such as global warming and climate change have become foregrounded in the debates occurring within the global institutions of high finance such as in G8-nation summits and at the IMF. Further, the globalization of such resistances have also made a visible impact within the commercial media—the press, television, and the Internet—in noisily questioning and exposing the supposedly universal legitimacy of such institutions as the World Bank, the WTO, and the IMF.

Answers to the predicament of how the anti-globalization movement can *concertedly globalize their various agendas together and still remain viable as a united forum of resistance*, I suggest, may perhaps be found within the global-local logic of the processes of economic and cultural globalization itself. While these movements need to continue to vertically enhance their own struggles, they also need to simultaneously expand horizontally by networking with each other within the broader anti-globalization agenda. This process, towards which technologies like the Internet can prove fundamentally useful, may ensure the establishment of a multi-issue, multi-strategied

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[32] Andrew Hay, "What if there were a Mass Anti-Globalization Movement." *Worldlink: The Magazine of the World Economic Forum*, http://www.worldlink.co.uk/stories/storyReader$855, accessed on 04-29-02, p.2.

movement wherein different agendas and constituencies preserve their own individual identities, and yet are able to establish solidarities across their differences. The Internet, then, is a technology that the anti-globalization movement can use to "create a project/process that is the greatest common sum of its components, rather than being the imposition of a few peoples' priorities or the least common denominator of everyone's," which allows "different strokes for different folks in such a way that permits each constituency to act on the ideals and logic, but without diminishing or confusing the actions of others, much less usurping the zones others occupy."[33]

In proclaiming a vision for the Internet-enabled future of the world, the Progress and Freedom Foundation, www.pff.org, described both an utopian possibility wherein cyberspace becomes "one of the main forms of glue holding together an increasingly free and diverse society", and a dystopian one wherein the promise of "cyberspace democracy will be confined to the computer industry, where it will arise from the Internet over the years, led by corporate and suburban/exurban interests."[34] *The Advertising of Cyberspace: Globalization and the Politics of Cyberculture* has sought to establish that while the former vision remains a utopian ideal, the latter imagines a real, not-so-distant, nightmarish possibility. If we are to avoid forging a cyber-democracy "with the same qualifications as its Athenian example: a highly exclusive arena in which actors as

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[33] Michael Albert, "Who owns the Movement," http://www.zmag.org/who_owns.htm, accessed on 04-29-02, p. 5.

[34] Progress and Freedom Foundation, "Cyberspace and the American Dream: A Magna Carta for the Knowledge Age," Release 1.2, August 22, 1994, http://www.pff.org:80/position.html, accessed on 09-06-98, 3:27 PM, pps.12 &15.

women or slaves had no place," we need to create an alternative global Web woven from

many, many more such networked nodes of resistance.[35]

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[35] Cees J. Hamelink, "The Democratic Ideal and Its Enemies," *The Democratization of Communication*, ed. Philip Lee (Cardiff: U of Wales P, 1995) 16.

Works Cited

Acosta, Leonardo. "Mass Media and Imperialist Ideology (Cuba 1973)." *Communication and Class Struggle.* Ed. Armand Matellart and Seth Siegelaub. New York: International General, 1979. 141-157.

Albert, Michael. "Who Owns The Movement?" http://www.zmag.org/who_owns.htm accessed on 04-29-02.

Anderson, Benedict. *Imagined Communities: Reflections on the Origin and Spread of Nationalism.* London: Verso, 1991.

Ang, Ien. *Watching Dallas: Soap Opera and the Melodramatic Imagination.* London: Metheun, 1985.

Annan, Kofi. "The Politics of Globalization." Address to Harvard University, Cambridge, 17 September 1998. http://hdc-www.harvard.edu/cfia/annan.htm, accessed on 10-04-98 at 19:47.

Appadurai, Arjun. "Disjuncture and Difference in the Global Cultural Economy." *Global Culture: Nationalism, Globalization and Modernity.* Ed. Mike Featherstone. London: Sage, 1990.

Association for Progressive Communication. http://www.apc.org/english/about/index.shtml, accessed on 15 May 2002, at 03:47 A.M.

Auchterlonie, Bryan. "Campus Invasion: Where the Anti-Smoking Campaign Turned Left." *FrontPage Magazine.com,* April 12 2002. http://www.frontpagemag.com/guestcolumnisits2002/auchterlonie04-12-02.htm, accessed on 04-30-02.

Barker, Christian and Peter Gronnes. *Advertising on the World Wide Web*, Master's

Thesis submitted to the Department of Management, Politics and Philosophy and

Department of Intercultural Communication and Management. Supervised by

Stephen Rance Hesketh, Copenhagen: Copenhagen Business School, April 1996.

http://www.samkurser.dk/advertising.

Bell, Daniel. *The Coming of Post-Industrial Society: A Venture in Social Forecasting*.

New York: Basic Books, 1973.

Birdsall, William F. *The Internet and the Ideology of Information Technology*.

Dalhousie University, Canada, accessed 02:42PM, 98/06/09 at

http://www.isoc.org/isoc/whatis/conferences/inet/96/proceedings/e3/e3_2.htm.

Bourdieu, Pierre. "Public Opinion Does Not Exist (France 1972)." *Communication and

Class Struggle*. Ed. Armand Matellart and Seth Siegelaub. New York: International

General, 1979. 124-29.

---. *Distinction: A Social Critique of the Judgement of Taste*. Cambridge, MA:

Harvard University Press, 1984.

Branscomb, Anne Wells. *Who Owns Information: From Privacy to Public Access*. New

York: Basic Books, 1994.

Bullmore, Jeremy. *Behind the Scenes in Advertising*. Oxford: NTC, 1991.

Carnoy, Martin, Manuel Castells, Stephen Cohen and Fernando Henrique Cardoso. *The

New Global Economy in the Information Age*. University Park, PA: Penn State

University, 1993.

Carstarphen, Meta G, and Jacqueline Johnson Lambiase. "Domination and Democracy in

Cyberspace: Reports from the Majority Media and Ethnic/Gender Margins."

Cyberghetto or Cybertopia? Race, Class, and Gender on the Internet. Ed. Bosah

Ebo. Westport, CT: Praeger, 1998. 121-136.

Castells, Manuel. "The Net and the Self." *Critique of Anthropology*. London, Thousand

Oaks, New Delhi: Sage, 1996.

---. *The Rise of the Network Society*. Oxford: Blackwell, 1996.

Chatterjee, Partha. *The Nation and its Fragments: Colonial and Postcolonial Histories*.

Princeton: Princeton UP, 1993.

Chesher, Chris. "Colonizing Virtual Reality: Construction of the Discourse of Virtual

Reality 1984-1992." *Cultronix* 1.1. Accessible at http://english-

www.hss.emu.edu/cultronix.

Craddock, Ashley, and Bertil Lintner. "Indonesia's Net War." *Wired News*, 29 May

1998. http://www.wired.com/news/news.politics/story/12609.html, accessed on

06/02/98 at 1:24 PM.

Crowley, David. "Doing Things Electronically." *Canadian Journal of Communication*.

1.19 (1994): 5-22.

December, John, and Neil Randall. *The World Wide Web Unleashed*. Indianapolis:

Sams.net Publishing, 1996.

De Landa, Manuel. "Markets and Anti-Markets in the World Economy." *Technoscience

And Cyberculture*. Ed. Stanley Aronowitz et al. New York and London:

Routledge, 1996. 181-194.

Ebo, Bosah. "Internet or Outernet?" *Cyberghetto or Cybertopia? Race, Class,

and Gender on the Internet*. Ed. Bosah Ebo. Westport, CT: Praeger, 1998. 1-14.

Escobar, Arturo. "Welcome to Cyberia: Notes on the Anthropology of Cyberculture."

Cyberfutures: Culture and Politics on the Information Superhighway Ziauddin

Sardar and Jerome.R.Ravetz. New York: New York University Press, 1996. 111-

137.

---. Encountering Development: The Making and Unmaking of the Third World

Princeton, New Jersey: Princeton UP, 1995.

Ewen, Stuart. "Advertising as Social Production (USA 1969)." Communication and Class

Struggle. Volume 1. Ed. Armand Matellart and Seth Siegelaub. New York:

International General, 1979): 232-240.

Finkelstein, Sidney. "McLuhan's Totalitarianism and Human Resilience (USA 1968)."

Communication and Class Struggle. Volume 1. Ed. Armand Matellart and Seth

Siegelaub. New York: International General, 1979: 176-184.

Ghosh, Jayati. "Greed and Human Destiny: The United Nations Human Development

Report, 1998." Frontline 15.20, Madras, India: Sept 26-Oct 09, 1998.

http://www.the-hindu.com/fline/fl1520/15201030.htm, accessed on 98/09/26 at

11:30 P.M.

Giese, Mark. "From ARPAnet to the Internet: A Cultural Clash and Its Implications in

Framing the Debate on the Information Superhighway." Communication and

Cyberspace: Social Interaction in an Electronic Environment. Cresskill, New

Jersey: Hampton Press, 1996.

Roth, Lorna. Reader: Media and Development. Department of Communication Studies,

Concordia University, Montreal: Concordia Bookstore, 1996.

Gros, Neil. "Building Global Communities: How Business is Partnering with Sites that

Draw Together Like-Minded Consumers." *Business Week* March 22 (1999): EB 42-43.

Habermas, Jurgen. "The Public Sphere: An Encyclopaedia Article." *Critical Theory and Society: A Reader*. Ed. Stephen Eric Bronner and Douglas MacKay Kellner. New York and London: Routledge, 1989. 136-144.

Hall, Stuart. "Culture, the Media and the Ideological Effect." *Mass Communication and Society*. Ed. J. Curran et al. London: Arnold, 1977.

Hall, Stuart. "Notes on Deconstructing 'the Popular'", *Cultural Theory and Popular Culture: A Reader*. Ed. John Storey. Cambridge: Harvester Wheatsheaf, 1994.

Hamelink, Cees. J. " The Democratic Ideal and its Enemies." *The Democratization of Communication*. Ed. Philip Lee. Cardiff: U of Wales P, 1995. 15-37.

Hay, Andrew. "What if there were a Mass Anti-Globalization Movement." *Worldlink: The Magazine of the World Economic Forum*. http://www.worldlink.co.uk/stories/storyReader$855, accessed on 04-29-02.

Heffner, Katie and Mathew Lyon. *Where Wizards Stay Up Late*. New York: Simon and Schuster Inc., 1996.

Hindu, The. "The Cyber have-nots." *Science & Tech*, May 31, 1998. http://www.hinduonline.com/hindu/today/08/08310001.htm accessed on 98/05/31 at 13:40 P.M.

Hindustan Times, The. "New Internet Software for Non-English Speakers," http://167.216.192.98/goodearth/offeat5.shtml, accessed on 04-09-02.

Hine, Christine. *Virtual Ethnography*. London: Sage, 2000.

Howes, David. *Cross-Cultural Consumption: Global Markets, Local Realities*. London

and New York: Routledge, 1996.

Imken, Otto. "The Convergence of Virtual and Actual in the Global Matrix: Artificial

Life, Geo-Economics and Psychogeography." *Virtual Geographies: Bodies,*

Space and Relations. Ed. Mike Crang, Phil Crang and Jon May. London & New

York: Routledge, 1999. 92-106.

Kinney, Jay. "Is There a New Political Paradigm Lurking in Cyberspace?"

Cyberfutures: Culture and Politics on the Information Superhighway. Ed.

Ziauddin Sardar and Jerome R.Ravetz. New York: New York University Press,

1996. 138-153.

Krekhovetsky, Luba. "From Military Strategy to Mass Medium: A Historiographical

Analysis of Internet History." Unpublished paper presented on November 26,

1997, *History of Media* (COMS 608, Professor William Buxton, Department of

Communication Studies, Concordia University, Montreal).

Kroker, Arthur. "Virtual Capitalism." *Technoscience and Cyberculture.* Ed. Stanley

Aronowitz. New York and London: Routledge, 1996. 167-180.

Kundnani, Arun. "Where Do You Want To Go Today? The Rise of Information Capital

– Part I." *Institute of Race Relations,*

http://www.homebeats.co.uk/resources/arun.htm, accessed on 10/5/00 at 10:22

A.M.

Levinson, Paul. *The Soft Edge: A Natural History and Future of the Information*

Revolution. London, New York: Routledge, 1997.

Levy, Steven. *Hackers.* New York: Anchor Press/Doubleday, 1994.

Loader, Brian D ed. *The Governance of Cyberspace.* London: Routledge, 1997.

Lohr, Steve. "Welcome to the Internet, the First Global Colony." *The New York Times*,

January 9 2000, http://www.nytimes.com/library/review/010900internet-

review.html, accessed on 03-10-02.

McQuivey, James. L. "How the Web was Won: The Commercialization of Cyberspace."

Cyberghetto or Cybertopia? Race, Class, and Gender on the Internet. Ed Bosah

Ebo. Westport, CT: Praeger, 1998. 83-102.

Margherio, Lynn. *The Emerging Digital Economy* (Washington DC 20230: Secretariat on

Electronic Commerce, US Department of Commerce, 1998). Accessible at

http://www.ecommerce.gov.

Marlow, Eugene. *Web Visions: An Inside Look at Successful Business Strategies On the

Net*. New York: Media Enterprises inc., 1997.

Matellart, Armand. "For A Class Analysis of Communication." *Communication and

Class Struggle*. Volume 1. Ed. Armand Matellart and Seth Siegelaub. New York:

International General, 1979: 23-72.

—. "Communication Ideology and Class Practice (Chile, 1971)." *Communication and

Class Struggle*. Volume 1. Ed. Armand Matellart and Seth Siegelaub. New York:

International General, 1979): 115-123.

—. "The Geopolitics of Paper (France 1997)." *Communication and Class Struggle*. Volume

1. Ed. Armand Matellart and Seth Siegelaub. New York: International General,

1979: 305-307.

—. *Advertising International: The Privatisation of Public Space*. London: Routledge,

1991.

—. *Multinational Corporations and the Control of Culture*. Brighton: Harvester Press,

1979.

McLuhan, Marshall. *Understanding Media: The Extensions of Man*. New York: Signet,

1964.

Meeker, Mary, and Chris DePuy. *The Internet Report*. Morgan and Stanley, New York:

Harper Business, 1996.

Meeker, Mary. *The Internet Advertising Report*. New York: Harper Business, 1997.

Menser, Michael, and Stanley Aronowitz. " On Cultural Studies, Science and

Technology." Stanley Aronowitz et al ed. *Technoscience and Cyberculture*. New

York and London: Routledge, 1996. 7-30.

Mir, Ali and Maya Yajnik. "The Uneven Development of Places: From Bodyshopping to

Global Assembly Lines." http://www.solinet.org/THIRDWORLD/maya1.htm,

accessed on 98/06/09 at 02:48 P.M.

Mishra, Nivedita. "Education, the Great Leveler." *The Hindustan Times*.

http://167.216.192.98/goodearth/education.shtml, accessed on 04-09-02.

Mitra, Ananda. "Virtual Commonality: Looking for India on the Internet." *Virtual

Culture: Identity and Communication in Cybersociety*. Ed. Steven G. Jones.

London: Sage, 1997. 55-79.

Mukherjee, Alok. "Selling Space and Time." *The Hindu*, February 18, 1996.

Nandy, Ashis. "The Philosophy of Coca Cola", *The Statesmen Festival Number*. Delhi:

The Statesman, 1995.

Natrajan, Murli. "Legitimating Globalization: An Ad, a Concept, its Argument and its

Protestors."http://www/widernet.org/globalstudies/globalizationseminar?Murhlipa

per.htm, accessed on 01-24-02.

Ninan, Sevanti. *Through the Magic Window: Television and Change in India*. Delhi:

    Penguin, 1995.

Negroponte, Nicholas. *Being Digital*. New York: Vintage Books, 1995.

Oguibe, Olu. "Forsaken Geographies: Cyberspace and the New World 'Other.'"

    accessible online at http://arts.usf.edu/~ooguibe/madrid.htm.

Pavlik, John. V. *New Media Technology: Cultural and Commercial Perspectives*.

    Boston: Allyn and Bacon, 1996.

Postman, Neil. *Amusing Ourselves to Death*. New York: Penguin Books, 1986.

Rajagopal, Arvind. *Politics after Television: Hindu Nationalism and the Reshaping of*

    the Public in India. Cambridge: Cambridge UP, 2001.

Rajagopal, Arvind. "Thinking about the New Indian Middle Class: Gender, Advertising

    and Politics in an Age of Globalisation." *Signposts: Gender Issues in Post-*

    Independence India. Ed. Rajeswari Sunder Rajan. New Delhi: Kali, 1999. 57-

    100.

Reeves, Geoffrey. *Communications and the 'Third World.'* London and New York:

    Routledge, 1993.

Rheingold, Howard. *The Virtual Community: Homesteading on the Electronic Frontier*.

    accessible at http://www.well.com.

Roach, Colleen. "The Movement for a New World Information and Communication

    Order: A Second Wave?" *Media, Culture and Society*. Volume 12. London:

    Sage, 1990.

Ross, Andrew. "Earth to Gore, Earth to Gore." *Technoscience and Cyberculture*. Ed.

    Stanley Aronowitz. New York and London: Routledge, 1996. 111-122.

Said, Edward W. *Culture and Imperialism*. London: Vintage Press, 1993.

Samarajiwa, R. " Third World Entry to the World Market in News: Problems and

Possible Solutions." *Media Culture and Society* 6.2 (1984): 119-136.

Sardar, Ziauddin. "alt.civilizations.faq: Cyberspace as the Darker Side of the West."

Cyberfutures: Culture and Politics on the Information Superhighway. Ed.

Ziauddin Sardar and Jerome.R.Ravetz. New York: New York UP, 1996. 14-41.

Sardar, Ziauddin, and Jerome R. Ravetz. "Introduction: Reaping the Technological

Whirlwind." *Cyberfutures: Culture and Politics on the Information*

Superhighway. Ed. Ziauddin Sardar and Jerome.R.Ravetz. New York: New York

UP, 1996. 1-13.

Schiller, Herbert I. "Genesis of the Free Flow of Information Principles (USA 1975)."

Communication and Class Struggle Volume 1. Ed. Armand Matellart and Seth

Siegelaub. New York: International General, 1979: 345-352.

Schudson, Michael. *Advertising, The Uneasy Persuasion: Its Dubious Impact on*

American Society. New York: Basic Books, 1984.

Schwartz, Evan I. *Webonomics: Nine Essential Principles for Growing Your Business on*

the World Wide Web. New York: Broadway Books, 1997.

Shepard, Stephen B ed. *BusinessWeek* (special double issue titled "The 21st Century

Economy"). New York: McGraw Hill, August 24-31, 1998.

Sivanandan, A. "Globalism and the Left," *Institute of Race Relations*.

http://www.homebeats.co.uk/resources/siva/htm, accessed on 10/5/00 at 10:31

A.M.

Sobchack, Vivian. "Democratic Franchise and the Electronic Frontier." *Cyberfutures:*

Culture and Politics on the Information Superhighway Ziauddin Sardar and Jerome.R.Ravetz. New York: New York UP, 1996. 77-89.

Spivak, Gayatri Chakravorty. "Can the Subaltern Speak?" *Colonial Discourse and Postcolonial Theory: A Reader*. Ed. Patrick Williams and Laura Chrisman. New York: Columbia UP, 1994. 66-111.

Stefik, M. *Internet Dreams: Archetypes, Myths and Metaphors*. Cambridge, MA: MIT Press, 1997.

Sterling, Bruce. *Hacker Crackdown: Law and Disorder on the Electronic Frontier*. New York: Bantam Books, 1992.

Sterne, Jim. *What Makes People Click: Advertising on the Web*. Indianapolis: Que Corporation, 1997.

Storey, John. *Cultural Consumption and Everyday Life*. London & Sydney: Arnold, 1999.

SunderRajan, Rajeswari. *Real and Imagined Women: Gender, Culture and Postcolonialism* London: Routledge, 1993.

Sundaram, Ravi. "Beyond the Nationalist Panopticon: The Experience of Cyberpublics in India," *5th International Conference on Cyberspace*, Madrid, 1996. Accessible online at http://www.telefonica.es/fat/esundra.html.

Singhal, Arvind. *India's Information Revolution*. Delhi: Sage, 1989.

Strinati, Dominic. *An Introduction to Theories of Popular Culture*. London: Routledge, 1995.

Tehranian, Majid, and Katharine Kia Tehranian. "That Recurrent Suspicion:

Democratization in a Global Perspective." *The Democratization of Communication*. Ed. Philip Lee. Cardiff: U of Wales P, 1995. 38-74.

TeleGeography Inc. *Hubs and Spokes: A TeleGeography Internet Reader*. Washington: TeleGeography Inc., 2000.

Terranova, Tiziana. "Free Labor: Producing Culture for the Digital Economy. *Social Text* 18.2 (2000): 33-58.

Toffler, Alvin. *Future Shock*. New York: Bantam Books Inc., 1970.

—. *The Third Wave*. New York: Bantam Books Inc., 1980.

Toffler, Alvin et al. *Cyberspace and the American Dream: A Magna Carta for the Knowledge Age* (August 22, 1994). Accessible at http://www.pff.org:80/position.html.

Tomlinson, John. *Cultural Imperialism*. Baltimore: Johns Hopkins UP, 1991.

Tuckle, Sherry. *Life on the Screen: Identity in the Age of the Internet*. New York: Simon & Shuster, 1995.

UCSF's Electronic Daily: Daybreak News. 16 February 1999, http://www.ucsf.edu/daybreak/1999/02/16_glantz.html, accessed on 04-30-02.

Verzola, Roberto. *Towards a Political Economy of Information*, November 1995. http://www.solinet.org/THIRDWORLD/obet1.htm, accessed on 98/06/09.

Webb Young, James. *How to Become an Advertising Man*. Delhi: Advertising Publications Inc, 1963.

Warrier, Vinu Govind. "Advertising in India: The Nationalism in Multinationalism."

Interfacing Nations: Indo/Pakistani/Canadian Reflections on the 50th *Anniversary of India's Independence.* Ed. Reeta Chowdhari Tremblay. Delhi: B.R. Publication, 1998. 117-128.

Willett, Gilles. *Global Communication: a Modern Myth?* http://www.unisa.ac.za/dept/press/comca/212/willet.html, accessed on 98/06/09.

Wired News Report. "House Panel OKs Net Tax Bill," (Wired Ventures Inc., 12:21PM, 14 May 1998). http://www.wired.com/news/news/politics/story/12318.html, accessed on 98-05-28.

Wolf, Alecia. "Exposing The Great Equalizer: Demythologizing Internet Equity." *Cyberghetto or Cybertopia? Race, Class, and Gender on the Internet.* Ed. Bosah Ebo. Westport, CT: Praeger, 1998. 15-32.

Wresch, William. *Disconnected: Haves and Have-Nots in the Information Age.* New Jersey: Rutgers UP, 1996.

APPENDIX 1.

Figure 1. Grasping at Market Shares

ISP market share estimates often focus on the Internet access segment, comparing service providers according to number of subscriptions. While there is some logic to the metric—ISPs tend to have a good sense of how many customers they've signed up—the introduction of free ISPs and of virtual (co-branded) ISPs have muddied the waters considerably. Free ISPs have helped fragment the market to a point where per-subscriber acquisition costs in America. S70 several years ago. have shot up to more than S400, reported the *Industry Standard* (www.thestandard.com/article/display/0,1151, 12590,00.html). But free ISPs have made the market share counts difficult. Because they don't have to pay, subscribers to free ISPs stand a good chance of having subscribed elsewhere, so they may be double counted. That makes it even harder for market watchers to accurately gauge market size—a challenging task to begin with.

Estimates looking at backbone market share according to revenue are similarly problematic. And, like the subscriber market shares where

everything from 14.4 Kbps to DSL subscribers may well be counted together, the risk of having to combine apples and oranges in a single count—backbone transit mixed in with dial-up access, for example—remains. A U.S. Department of Justice official charged with evaluating 1998's MCI-WorldCom merger, for example, lamented the use of "market share based on a percentage of revenue" to size up U.S. Internet backbone players (www.usdoj.gov/attr/public/ speeches/3889.htm): "They included all revenues related to the Internet, which means that they included revenue from sources other than their backbone sources, and double counted other revenue, such as revenues for ISPs who buy connectivity from others."

That doesn't stop analysts from trying. The following chart was submitted by MCI WorldCom and Sprint to the FCC during hearings on the carriers' proposed merger. It lumps together wholesale with business dial-up and dedicated access:

Selected Countries: Top Domestic ISPs, Late 1999

Country	ISP	Subscriptions	Market Share
Australia	OzEmail	400,000	24% (6/99)
Brazil	Universo OnLine	600,000	35% (9/99)
France	Wanadoo*	1,000,000	36% (10/99)
Germany	T-Online*	4,200,000	60% (10/99)
Japan	@Nifty	3,500,000	21% (12/99)
Spain	Terra Networks*	500,000	34% (9/99)
Sweden	Passagen, Telia*	650,000	33% (9/99)
U.K.	Freeserve (Dixons)	1,700,000	25% (7/99)
U.S.	AOL	20,000,000	57% (3/99)

* ISP owned by incumbent telecom operator or PTT
Source: IDATE (www.idate.fr). Nikkei. Newsbytes. company reports

U.S. Backbone: Market Shares by Revenue

ISP	1997		1998	
	Revenue	Share	Revenue	Share
MCI WorldCom	S1,151,000	43%	S3,090,000	38%
GTEI (BBN)	S346,000	13%	S1,207,000	15%
AT&T	S322,000	12%	S924,000	11%
Sprint	S325,000	12%	S728,000	9%
Cable & Wireless	S233,000	9%	S459,000	6%
Others	S287,000	11%	S1,677,000	21%

Source: Hearing on the MCI WorldCom-Sprint Merger Before the Senate Committee on the Judiciary. Exhibit 3. November 4, 1999. Testimony of Tod A. Jacobs. Senior Telecommunications Analyst. Sanford C. Bernstein & Co., Inc. (www.bernstein.com)

The bi-annual *Boardwatch* survey has become one of the Internet's best known indices for gauging relative backbone sizes, for a very good reason: they have aggressively published their U.S.-Canada backbone ratings in a widely-available format and on a consistent basis, even providing market share figures that can easily be ordered and ranked. The numbers are obtained by surveying most U.S. and Canadian Internet providers and asking them from whom they purchase Internet transit. By aggregating those responses, Boardwatch is able to obtain a rough count of total upstream interconnections and individual providers' share of that total—resulting in backbone market shares by percentage of downstream ISPs.

For those attempting to get a sense of the Internet's bandwidth geopolitics, there is often little else to go on. But the numbers are prone to reporting errors, and don't take into account the size of each ISP interconnected, the capacity of the interconnection, or the amount of traffic carried over that capacity.

An interesting alternative was proposed by *Data Communications* in June 1999. They started with a list of what Media Metrix thought were the 500 most trafficked Web sites on the Internet, based on the responses returned by the metering software installed on "tens of thousands" of computers at home and at work. Using that list as a more manageable stand-in for the Internet at large, the magazine then looked at routing tables to determine which ISPs probably routed the traffic bound for the 500 sites, and tallied up the results as percentages—providing a look at ISP-host provider interconnects, rather than interprovider topologies.

These types of measurement are rough ones at best. And, as usual, they favor certain variables at the expense of others. The indices are skewed toward providers with many small downstream customers rather than a few large ones, and again toward providers who route content hosts rather than other transit providers.

U.S. Backbone: Market Shares by Interconnect Topology

| ISP | Boardwatch | | | Data Communications | |
	Rank	Market Share	Connections	Rank	Market Share
MCI WorldCom	1	21.15%	1784	1	37%
Sprint	2	13.15%	1109	6	12%
Cable & Wireless	3	8.08%	681	2	13%
AT&T	4	6.08%	513	5	12%
Verio	5	5.29%	446	9	3%
GTE Internetworking	6	4.97%	419	4	12%
PSINet	7	4.25%	358	11	2%
SAVVIS	8	3.83%	323	11	2%
Intermedia	9	3.51%	296	13	2%
Qwest	10	3.36%	283	8	4%

International ISPs by Country

IISP	City	Type	URL
Argentina			
IMPSAT	Buenos Aires	R	www.netsys.hn/Oed/ www.impsat.com
Keytech LD	Buenos Aires	N	www.ktld.net.ar/ktld/ENGLISH/soluc.html
Telecom Argentina (TA-FT-TI)	Buenos Aires	N	www.telecom.com.ar
Armenia			
Armentel	Yerevyan	N	www.armentel.com www.arminco.com/aboutus.html
ARMINCO Global Telecommunication	Yerevyan	N	menua.aic.net
Australia			
AAPT (SatTel InternetDirect, Connect.com.au; TNZ)	Melbourne	N	info.connect.com.au/docs/network/netmap.html www.aaptsattel.com.au/internet.htm
C&W Optus	Sydney	R	spinnaker.optus.net.au/spinnaker/html/network.html
Paradox Digital	Belmont	N	www.paradox.net.au
Telstra	Sydney	R	www.direct.bigpond.com/summary/aboutnet.cfm
Bahrein			
Batelco Internet Services (Inet)	Manama	N	www.batelco.net/profile.htm
Belarus			
Belpak	Minsk	N	www.belpak.by
Unibel	Minsk	N	www.unibel.by/eng/home.htm
Belgium			
Belgacom Skynet (Belcast, BelBone)	Brussels	N	www.skynet.be/en/professional/network.html
Infonet (AUCS, eqip.net)	Brussels	R	www.infonet-europe.com/services_internet.html
Belize			
Belize Telecom (BelizeWeb)	Belmopan	N	www.btl.net/history.html
Bermuda			
Logic Communications	Hamilton	N	www.logic.bm/products/prod-network-1.shtml
Bolivia			
Entelnet	La Paz	N	www.entelnet.bo
Bosnia			
Unilink Project	Sarajevo	N	ohrid.cca.vu.nl/~vusus/unilink.html
Brazil			
ANSP-FAPESP (Academic Network at São Paulo)	São Paulo	A	www.ansp.br/mapa.html
Embratel	Rio de Janeiro	N	www.embratel.net.br/ingles/tecnologia/
Rede Nacional de Pesquisa	Rio de Janeiro	A	www.rnp.br/backbone/bkb-mapa.html
Brunei Darussalam			
Brunet	Brunei Darussalam	N	www.brunet.bn/telecom/rtb/serv.htm

Note on IISP Types

The "Type" column refers to the framework outlined in the preceding pages (62-65). Briefly, it works like this:

G   Global IISPs have significant international connectivity and connect to multiple downstream customers in at least two global regions.

R   Regional IISPs have a significant international presence and connect to multiple downstream customers within their primary region. They may nonetheless operate international Internet bandwidth between two points outside their primary region.

N   National IISPs specialize in providing backbone Internet access within their country of service. They may nonetheless operate international Internet bandwidth between two points outside their country of service.

A   Academic and Research IISPs were commissioned for research and educational purposes, though operations may have been outsourced to a third party. The Acceptable Use Policies (AUPs) which govern what kinds of traffic should be carried over their networks vary, however.

ISP	City	Type	URL
Bulgaria			
Digital SystemS (EUnet Bulgaria)	Varna	N	www.digsys.bg/navbar/bottom22.html
GOCIS (Global One, BTS)	Sofia	N	www.gocis.bg/en/docs/tcpip.html
Cambodia			
CamNet	Phnom Penh	N	www.camnet.com.kh/1aboutus.htm
Canada			
Bell Nexxia (Bell Canada, BCE)	Toronto	N	www.bellnexxia.com/en/network/ip/
CA*net (CANARIE)	Ottawa	N	www.canarie.ca/eng/networks/networks_e.html
Teleglobe	Montreal	G	www.teleglobe.net/networkmap.htm
TELUS (BCT.TELUS, BCTel)	Burnaby	N	www.telus.ca/cgi-bin/main.cgi?product=207&province=
Chile			
Americatel (Entel Chile)	Miami, FL	R	www.americatel.net/servicio/inter.htm
	Santiago	R	www.entelchile.net/entelcorp/infocorp/mintern.htm
China			
CERnet	Beijing	A	www.cernet.net/cernet/structure/index.html/topo
ChinaNet (China Telecom)	Beijing	N	www.chinanet.cn.net
CSTnet (China Science & Technology)	Beijing	A	www.cstnet.net.cn
Golden Bridge (JiTong)	Beijing	N	www.gb.com.cn/English/lease/leaseline.htm
Colombia			
Americatel Colombia	Bogota	N	www.americatel.net.co/htm/quines.htm
Empresas de Telecomunicaciones de Santa Fe de Bogota (ETB)	Bogota	N	www.etb.com.co
InterneTTelecom (Colombia Telecom)	Bogota	N	internet.telecom.com.co/servicios/porque.asp
Costa Rica			
CRnet (Red Nacional de Investigacion de Costa Rica)	San Jose	A	www.crnet.cr
ICETEL (Instituto Costarricense de Electricidad)	San Jose	N	www.icetel.co.cr
Croatia			
CARNet (Croatian Academic & Research Network)	Zagreb	A	www.carnet.hr/network/backbone_eng.html
HiNet (Croatian Telecom)	Zagreb	N	www.hinet.hr/english/services/usluge-hinet.html
Cyprus			
CYTAnet (Cyprus Telecommunications Authority)	Nicosia	N	www.cytanet.com.cy/net.html
SpiderNet	Nicosia	N	www.spidernet.net/company/about/profile.htm
Czech Republic			
Czech Telecom	Prague	N	www.spt.cz/sluzby_business_e/index.html
Globe Internet	Prague	N	www.globe.cz
Video On Line (VOL)	Prague	N	www.vol.cz
Denmark			
GTS (E-Bone)	Copenhagen	R	www.ebone.net/structure/backbone.html
Tele Danmark (Opasia.dk)	Copenhagen	R	www.inet.tele.dk
Egypt			
Egypt Information Highway Project	Cairo	N	www.idsc.gov.eg/
Internet Egypt (Bahgat Group)	Cairo	N	brainy1.ie-eg.com/html/profile.htm
Estonia			
EEnet	Tartu	N	www.eenet.ee/englishEENet/webstr.html
Uninet	Tallinn	N	web.uninet.ee
Finland			
Saunalahti Oy	Helsinki	N	www.saunalahti.net
Sonera iNet	Helsinki	R	www.sonera.fi/english/solutions/datavoice/inet/connectivity.html
France			
C&W ISDnet	Paris	R	www.isdnet.net/html/pages/infra.htm#2
Cegetel (Esplanade3000.net)	Paris	N	www.cegetel.fr/corporate/groupe/f_reseau2.htm
Eutelsat	Paris	R	www.eutelsat.com
France Telecom (Transpac, Opentransit, FCR, Oleane, Global One)	Paris	G	www.oleane.com/english/Oleane/ineteo/international.html www.opentransit.net/offre_fr.htm
Renater2	Paris	A	www.renater.fr/Projets/Renater2/RII_presentation-ucard/sld004.htm
Germany			
C&W ECRC GmbH	Frankfurt	N	www.ecrc.de/netzwerk/netzwerk_backbone.html
Deutsche Telekom (T-Online)	Munster	N	www.telekom.de/dtag/ipl1/cda/level4s_a/0,3682,1437,00.html
Deutsches Forschungsnetz (DFN)	Berlin	A	www.dfn.de/welcome/worldwide.html
Gigabell (IPf)	Frankfurt	R	gigabell.net/netz/s_netz_backbone.html

IISP	City	Type	URL
Global Access Telecommunications	Frankfurt	N	www.ga-telecom.net/grafik/backbone.jpg
ISAR Netzwerke	Munich	N	www.schliersee.isar.net/anbindun.htm
ISION (IS Internet, IS-Bone, IS-Europe)	Hamburg	N	www.ision.net/kunde/backbone/
mediaWays (Bertelsmann-Systemhaus)	Gütersloh	N	www.mediaways.net/profil/profil_netz.html
Nacamar Data Communication	Dreieich	R	www.nacamar.net/v3/connectivity/index_en.fhtml
Profinet	Augsburg	N	www.profinet.de/english/technik/tec-2.htm
TalkLine	Frankfurt	N	www.tli.de/netzwerk/pop.htm
Via Net.Works (ExpressoWeb, U-Net)	Duisberg	R	www.via-net-works.co.uk/globalnetwork.htm
Greece			
FORTHnet	Athens	N	www.forthnet.gr/en/network/index.html
Greenland			
Tele Greenland	Godthab	N	www.tele.gl/uk/tele_greenland/frameset.html
Guyana			
Guyana OnLine (Guyana T&T)	Georgetown	N	www.gol.net.gy
Haiti			
Hintelfocus (Haitifocus)	Petionville	N	www.haitifocus.com
Kanet (Computec SA)	Port-au-Prince	N	www.kanet.net/kanet.htm
Honduras			
HonduTel	Tegucigalpa	N	www.hondutel.hn/informa/internet1.1/servicios_telematicos.htm
Hong Kong			
AUNET	Hong Kong	R	www.aunet.net
C&W HKT (NetPlus, HKT IMS, Netvigator) *	Hong Kong	R	www.cwhkt.net/nw1.htm
HARNET (Hong Kong Academic Research Network)	Hong Kong	A	www.hku.hk/jucc/harnet.html www.cwhkt.com/ABOUT/press/pressrel98/980303.html
Hungary			
C3 (Centre for Culture & Communication; Soros)	Budapest	A	tech.c3.hu/index02.html
MATÁVnet	Budapest	N	www.matav.net
Iceland			
ISnet (Internet Iceland, INTIS)	Reykjavik	N	www.isnet.is/en/line.html
India			
Software Technology Parks India (STPI)	Bangalore	N	www.soft.net
Videsh Sanchar Nigam Ltd (VSNL)	Mumbai	N	www.vsnl.net.in/english/finance/vsnl199/index.htm isp.vsnl.net.in
Indonesia			
AI3 (Asia Interconnection Initiatives)	Bandung	A	netmon.nb.ac.id
INDOSATnet	Jakarta	N	www.indosat.net.id
Satelindo	Jakarta	N	www.satelindo.co.id/palapa/plpframe.htm
Iran			
Data Communications Company	Tehran	N	www.dci.co.ir
Institute for Studies in Theoretical Physics & Mathematics (IPM)	Tehran	A	www.nic.ir
Ireland			
Eircom Net (Telecom Eireann)	Dublin	N	www.eircom.com/other/international.html
Israel			
ACTCOM	Haifa	N	www.actcom.co.il www.iguide.co.il/maps/4.htm
AquaNet	Yehud	N	www.aquanet.co.il/english.html www.iguide.co.il/maps/3.htm
Barak	Rosh ha Ayin	N	www.barak-online.net/HTML/abouteng.asp www.iguide.co.il/maps/3.htm
Internet Zahav (EuroCom)	Rosh ha Ayin	N	www.zahav.net.il www.iguide.co.il/maps/6.htm
Israeli Academic Network (ILAN)	Tel Aviv	A	www.tau.ac.il/israel-faq www.iguide.co.il/maps/1.htm
Netvision	Haifa	N	new.netvision.net.il/network.asp www.iguide.co.il/maps/2.htm
Trendline (Kav-Mankhe, Bezeq International)	Petah Tiqva	N	www.trendline.co.il www.iguide.co.il/maps/4.htm
Italy			
Telecom Italia (Seabone)	Milan	G	www.sea-bone.net/sea2/connect.html
Japan			
A-Bone (Asia Internet Holdings, AIH)	Tokyo	R	www.aih.com/networkcov/netcov.htm

IISP	City	Type	URL
AI3 (Asia Interconnection Initiatives)	Tokyo	A	www.ai3.net/traffic/
APAN (Asia-Pacific Advanced Networking)	Tokyo	A	www.apan.net/documents/topology.html
Arcstar IPBS (NTT Communications)	Tokyo	R	www.ntt.net/soli_e/stracture/index.html
C&W IDC	Tokyo	R	www.idc.co.jp/english/business/internet/bb_map/
CSK Network Services	Tokyo	N	www.csknet.co.jp/network
Internet Initiative Japan (IIJ)	Tokyo	N	www.iij.ad.jp/network/backbone-e.html
Japan Telecom	Tokyo	N	www.japan-telecom.co.jp/PRdepte.co_profile/global/glob.html
KDD Corp.	Tokyo	G	www.neweb.ne.jp/guide/network/
MIND (Mitsubishi Electric Information Network)	Tokyo	N	www.mind.ad.jp/kaisya_e/network.html
Science Information Network (Sinet/NACSIS/KEK / IMnet	Tokyo	A	www.sinet.ad.jp/images/sinet-j-ns.gif
Jordan			
Firstnet	Amman	N	www.firstnet.co.jo
INDEX (International Data Exchange)	Amman	N	www.index.com.jo/about.htm
NETS (National Equipment & Technical Services)	Amman	N	www.nets.com.jo/Profile/history.html
Kazakhstan			
Relcom SL	Semipalatinsk	N	www.relcom.kz/comp/linestat.shtml
Kenya			
Africa OnLine	Nairobi	R	www.africaonline.co.ke
NairobiNet	Nairobi	N	www.nbnet.co.ke/corporate.htm
Telcom Kenya	Nairobi	N	www.eafix.net/zz0048.htm
Korea, South			
APAN (Asia-Pacific Advanced Networking)	Seoul	A	noc.kr.apan.net
APII	Seoul	A	www.apii.or.kr/cc/document/tel_tp/bed_3.html
BoraNet (DACOM)	Seoul	R	www.bora.net/eng/network/network_c.html
HanaNet (Hanaro Telecom)	Seoul	N	www.hananet.net
HanQ (Hansol)	Seoul	N	www.hanq.net/rhanq/e-smain.html
KORNET (Korea Telecom, HiTel, KolNet)	Seoul	N	www.kornet.net/serv/eng_m/new-.html
NCA-KOSInet	Seoul	A	www.kosinet.ne.kr/nic.html
			www.pubnet.ne.kr/
NETSGO (SK Telecom)	Seoul	N	www.netsgo.com
PSInet Korea (Inet, NuriNet)	Seoul	N	www.nuri.net/network/index.php
Shinbiro (Onse Telecom)	Seoul	N	www.shinbiro.com/@english/r1.htm
ThruNet	Seoul	N	www.thrunet.co.kr/eng/company/over.htm
UniTel (Samsung)	Seoul	N	www.corp.unitel.co.kr/aboutus/aboutus_1.htm
Kuwait			
GulfSat (GulfNet/Hughes)	Safat	N	www.gulfsat.com/services.html
			www.kuwait.net/service.html
			www.moc.kw
QualityNet	Kefan	N	www.qualitynet.net
Laos			
LaoNet (GlobeNet, GlobeCom)	Vientiane	N	www.laonet.net
Latvia			
Apollo (Lattelekom)	Riga	N	www.apollo.lv
Latnet	Riga	N	www.latnet.lv/LATNET/English/Why/intlinks.htm
Lebanon			
Sodetel (Société de développement des telecoms)	Beirut	N	www.sodetel.net.lb/activities/activities.htm
Madagascar			
Telecom Malagasy	Antananarivo	N	www.telma.net/pad.htm
Malaysia			
Jaring (MIMOS, SuperJARING)	Kuala Lumpur	N	www.jaring.com.my/about.html
TMnet (Jabatan Telekom Malaysia)	Kuala Lumpur	N	www.tm.net.my/about.htm
Malta			
Global Net	Santa Venera	N	www.global.net.mt
maltaNET (Terranetcom)	Balzan	N	www.terranet.com.mt/service/service.html
Waldonet Ltd.	Balzan	N	www.waldonet.com.mt
Mexico			
Avantel	Mexico City	N	www.avantel.net.mx/empresa/quien.html
Telmex (Prodigy Mexico)	Mexico City	N	www.telmex.net

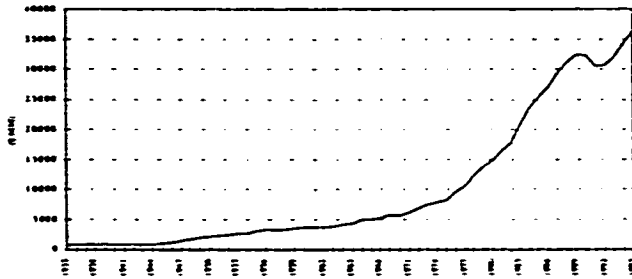| IISP	City	Type	URL
Mongolia			
Telecom Mongolia	Ulaanbaatar	N	www.mtcone.net/
Morocco			
Alakhawayn University	Ifrane	A	www.alakhawayn.ma/its/
Telecom Maroc (IAM, ONPT)	Rabat	N	www.onpt.net.ma/internet.htm
Nepal			
Computerland Communications Services	Kathmandu	K	www.ccsl.com.np
Mercantile Communications	Kathmandu	N	www.mos.com.np
WorldLink	Kathmandu	N	www.wlink.com.np
Netherlands			
EuroNet Internet	Amsterdam	R	www.euronet.nl/eng/connectivity/
ipulsys (Mannesmann)	The Hague	R	www.ipulsys.com
KPNQwest (EUnet)	Amsterdam	R	www.kpnqwest.com/products/products_iptransit.asp?choice=iptransit www.kpnqwest.com/pressroom/press_illustrations.asp?choice=illustrations
New Skies Satellites	The Hague	G	www.newskiessat.com/dynamic/sales/data.htm
SURFnet	Utrecht	A	www.surfnet.nl/en/organisation/network/
Thus (Demon Internet)	Amsterdam	N	www.demon.net
Versatel	Amsterdam	R	www.versatel.nl/network.htm
Wirehub!	Amsterdam	N	doema.wirehub.nl/wirehub/
New Zealand			
CLEARnet (Clix)	Auckland	N	www.clear.net.nz
Netgate (TNZ, AAPT SatTel InternetDirect, Connect.com.au)	Auckland	N	www.netgate.net.nz
The Internet Group (IHUG)	Auckland	N	www.ihug.net/bandwidth.html
Norway			
Nextbone (Nextra, Telenor)	Oslo	R	www.nextbone.net
Powertech	Oslo	N	www.powertech.no
Taide Network	Nittedal	R	www.taide.net/backbone.html
Oman			
GTO	Mascate	N	oml.gto.net.om/new/about.html
Pakistan			
COMSATS Internet Services	Islamabad	N	www.comsats.net.pk
CyberNet	Karachi	N	www.cyber.net.pk
PakNet (PTCL)	Islamabad	N	www.ptc.pk/facts.html
Satnet	Karachi	N	www.sat.net.pk
Philippines			
BayanTel	Pasig City	N	www.bayantel.com.ph/pages/main/noc.htm
Gnet (Globe Telecom)	Mandaluyong City	N	www.globe.com.ph/gnet/default.htm
INFOCOM Technologies (PLDT)	Makati City	N	www4.info.com.ph/home/sitemap.html
MosCom (Mosaic Communications, MozCom)	Manila	N	www.mozcom.com/news/press/satlink.html
PhilComSat	Pinugay (Rizal)	N	www.philcomsat.com.ph/internet.html
Poland			
NASK (National Computerization Academy)	Warsaw	A	www.man.torun.pl/TORMAN/l/jz.html www.nask.pl/english/firma_eng.html
TP Internet (TPSA, Telekomunikacja Polska)	Warsaw	N	www.tpnet.pl
Portugal			
Marconi Internet Direct (CPRM, Portugal Telecom)	Lisbon	G	www.marconi.pt/or/l-pr-smi-mid.html
Qatar			
Internet Qatar (Q-Tel)	Doha	N	www.qatar.net.qa/about_isp.htm
Russia			
Comstar	Moscow	N	www.comstar.ru
Demos	Moscow	N	www.demos.su
Elvis Telekom	Moscow	N	www.telekom.ru/elvis-telecom/eng/et-company/et-comp-our.html
MacomNet	Moscow	N	www.macomnet.com/en/service/page3-81.html
PeterLink	St. Petersburg	N	www.infopro.spb.su:8001/news/10MB.html
Radio MSU	Moscow	A	www.radio-msu.net/ab_map.htm
Relcom BN	Moscow	N	www.relcom.eu.net/English/Channels/
Rostelecom	Moscow	N	www.rt.ru/eng/inet/inet-3.html

IISP	City	Type	URL
RUNnet	St. Petersburg	A	www.runnet.ru/map_.htm
Teleport PT (Portal)	Moscow	N	www.portal.ru
Singapore			
Pacific Internet	Singapore	R	corporate.pacific.net.sg/pimap1.html
SingAREN (Singapore Advanced Research and Education Network)	Singapore	A	www.singaren.net.sg/html/body_about_singaren.html
SingNet (SingTel, STIX, ConnectPlus)	Singapore	R	www.stix.net/network.html www.stix.net/services4.html
Slovenia			
Slovenija Online (Telekom Slovenia)	Ljubljana	N	www.siol.si
South Africa			
Internet Solutions	Johannesburg	N	www.is.co.za/solution/access/topology.html
SAIX (Telkom South Africa)	Pretoria	N	www.saix.net/business/network.html
Satellite Data Networks (Logistic)	Johannesburg	N	www.sdn.co.za/networkfrm.html
Spain			
RedIRIS	Madrid	A	www.rediris.es/red/index.es.html
Telefónica	Madrid	G	www.telefonica-data.com/esp/html/servicios/frame-familias.htm
Sri Lanka			
Lanka Internet	Colombo	N	www.lanka.net/internet/main.html
Sri Lanka Telecom (SLT)	Colombo	N	www.slt.lk/network.html
Sweden			
NORDUnet	Stockholm	R	www.nordu.net/connectivity/
TeliaNet	Stockholm	R	www.telia.net/service=telianet/owner=sys/action=network_map_flash
Switzerland			
CERN	Geneva	A	cs.cern.ch/public/status/status.html cs.cern.ch/public/services/cixp/cixp_presentation/index.htm
Energis Carrier Services (Energis-ECS, Planet Online)	Zurich	R	www.ecs-ip.net/
Energis Carrier Services (Energis-ECS, Planet Online)	Zurich	R	www.energis.com/groupframe.htm
IP-Plus (Swisscom)	Berne	R	www.ip-plus.net/backbone/europe.htm
SWITCH (Swiss Academic & Research Network)	Zurich	A	www.switch.ch/lan/national.html
Taiwan			
ERANet	Taipei	N	www.eranet.net/htm/explain.htm
GCNet	Taipei	N	www.gcnnet.tw
HiNet (Chunghwa)	Taipei	R	www.hinet.net/english/network/main-2.htm www.twnic.net/english/reports/taiwan/sld003.htm
ISNet (InfoServe)	Taipei	N	www.infoserve.com.tw/main1.html
SEEDNet (Digital United)	Taipei	N	www.twnic.net/english/reports/taiwan/sld004.htm colocation.seed.net.tw
TANet (Taiwan Academic Network)	Taipei	A	www.tanet2.net.tw/doc_sub.htm
Thailand			
Communications Authority of Thailand (CAT) (THIX)	Bangkok	N	www.cat.net.th/new/Services/services.html
Loxley Information Services (CAT)	Bangkok	N	gb.loxinfo.co.th/cgi-bin/checklink/linkcheck/
Siam Global Access	Bangkok	N	www.sga.net.th
World Net & Services	Bangkok	N	www.wnet.co.th
Tunisia			
Agence tunisienne d'Internet (ATI)	Tunis	N	www.ati.tn/internet.htm
Turkey			
ERE Group	Ankara	N	www.ere.com.tr/html/telecom.html
Satko Unicast	Istanbul	N	www.satko.com.tr/internet.htm
TTnet (Turnet, Turksat, Turk Telecom)	Istanbul	N	www.telekom.gov.tr/english/ttnet/genel.html
Tuvaka (Turkish Universities & Research Institutions Network)	Ankara	A	www.telstra.net/gih/t4/turkey/sld014.htm
Turkmenistan			
Turkmentelecom	Ashkhabad	N	www.telecom.tm
United Kingdom			
BT plc (BTnet, BT Wholesale)	St. Albans	G	www.bt.net/network.htm www.btwholesale.com/m_solutions_6.htm
C&W INS (Internet Network Services)	Coventry	R	www.insnet.net/network/html/world.asp
Cable Internet	Surrey	N	www.cableinet.co.uk
Carrier1	London	R	www.carrier1.net/carrier1-networktopology.shtml
COLT Internet	London	R	www.colt.net/uk/services/internet/main2.html

IISP	City	Type	URL
Concentric Network (GX Network, Xara)	London	R	www.gxn.net/main_popworld.html
Concert Communications (AT&T-BT JV)	London	G	www.concert.com/concertnet/ibs.asp
DANTE (TEN-155)	Cambridge	A	www.dante.net/ten-155.html
EasyNet (Technocom)	London	N	about.easynet.net/corporate/framesets/network_diagram.html
Global Crossing	London	G	www.globalcrossing.com/network.asp
iAxis (iAxisCore)	London	R	www.iaxis.com/pages/9-core.htm
Netkonect Communications	London	N	https://www.netkonect.net/netkonect/content/permanentframes.htm
Nildram	Buckinghamshire	N	www.nildram.co.uk/network/
NTL (CableOnLine)	Gwent	N	www.ntl.com/telecoms/network/default.asp
Thus (Demon Internet)	London	N	www.demon.net
VAS-NET (I-Nap)	London	N	www.vas-net.net/content99/press_release.html
United States			
AboveNet (MFN, PAIX)	San Jose, CA	G	www.above.net/network/network.html
			stats.sjc.above.net/traffic/
AGIS	Dearborn, MI	N	www.agis.net/AGISnet/maps.htm
AT&T (WorldNet, Business, CERFnet, Disc, IBM-GN)	St Louis, MO	G	www.att.ne.jp/net/indexe.html
			www.ipservices.att.com/backbone/
ATC Teleports	Fairfax, VA	G	www.atcteleports.com/html/internet.htm
Cable & Wireless (MCI)	Cary, NC	G	www.inoc.cw.net/n3_contacts.html
Cignal Global	Cambridge, MA	G	www.cignal.com/cignal/network/novemape/internetpg.htm
DirectNet	Newport Beach, CA	R	www.directnet.com/network.html
ESnet (Energy Sciences Network)	Berkeley, CA	A	www.es.net/hypertext/welcome/pr/topology.html
Exodus Communications (Global OnLine)	Santa Clara, CA	G	www.exodus.net/network/network_map.html
GE Americom (IPConnect)	Vernon Valley, NJ	G	www.geamericom.com/services/broadband_scpc.html
			www.geamericom.com/satellite/gs4.html
Genurty (GTE, BBNplanet)	Cambridge, MA	G	www.genurty.com/infrastructure/index.htm?hp
Globix	New York, NY	G	www.globix.net/network.html
ICG Satellite	Miami, FL	N	www.icgcomm.com/products/telecom/prodserv/expdedicated/default.asp
Intelsat (@intelsat, IOS)	Washington, DC	G	www.intelsat.int/products/internet/faqs.htm
Interpacket	Santa Monica, CA	G	www.interpacket.net/k-company/network.html
Level 3	Broomfield, CO	G	www.level3.com.hk/Content/1.1233.en_HKInetworkinetworkplan.00.html
Loral Cyberstar	Rockville, MD	G	209.239.66.33/products/ourNetwork.jsp
MCI WorldCom (UUnet, Alternet, ANS)	Fairfax, VA	G	www.uu.net/network/maps/
Onyx Networks (Pacific Gateway Exchange)	Burlingame, CA	N	www.onyx.net/network/maps.html
PanAmSat (Spotbytes Backbone, SpotCast Net/36)	Greenwich, CT	G	www.panamsat.com/serv/backb.htm
			www.panamsat.com/serv/internet.htm
PSINet	Herndon, VA	G	www.psi.net/network/connectivitymaps.html
Qwest	Denver, CO	N	www.qwest.com/about/inside/network/index.html
SprintLink (ICPnet)	Kansas City, MO	G	www.sprint.net
			www.ncne.nlanr.net/news/workshop/990307/Talks1/lothoerg/sprint-i2/
Ukraine			
UARnet	Lviv	N	www.uar.net/connections
United Arab Emirates			
Emirates Internet (EMIX, Etisalat)	Abu Dhabi	R	www.emix.net.ae/network.html
Uruguay			
ADINET (Antel Uruguay)	Montevideo	N	www.adinet.com.uv
Venezuela			
REACCIUN	Caracas	A	www.reacciun.ve/Noticia33.html
Yugoslavia			
Telekom Srbija	Belgrade	N	www.telekom.yu
yubc.net	Belgrade	N	www.yubc.net

APPENDIX 2.

U.S. Newspapers

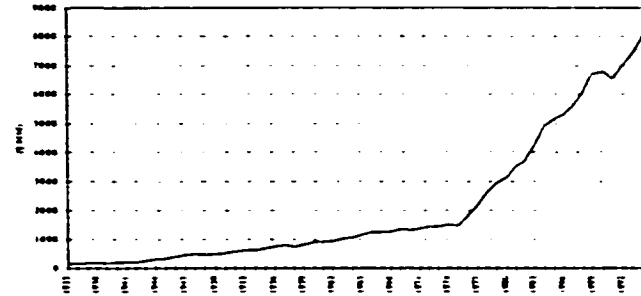Figure 1-1
U.S. Newspaper Advertising Revenue, 1935–95*

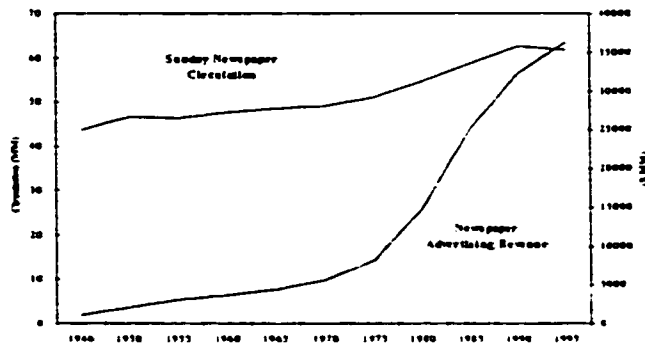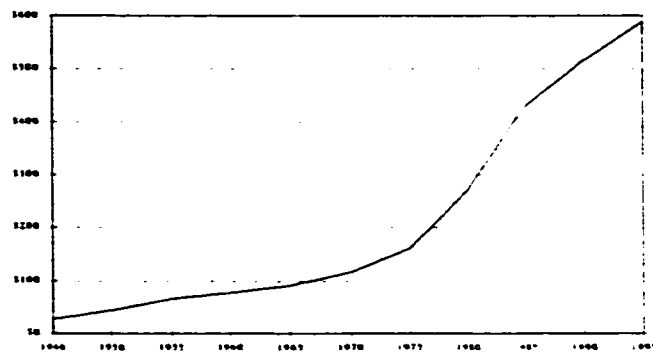Source: McCann-Erickson.
* Data not adjusted for inflation.

Figure 1-2
U.S. Sunday Newspaper Circulation
Vs. Advertising Revenue, 1946–95*

Source: McCann-Erickson, Newspaper Association of America
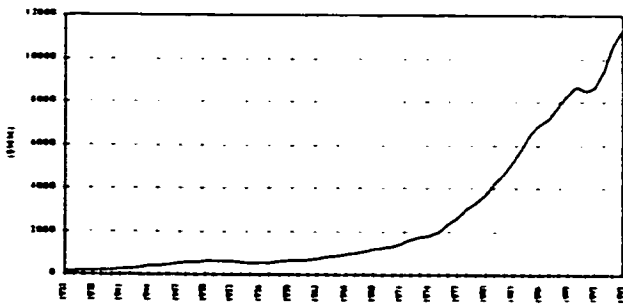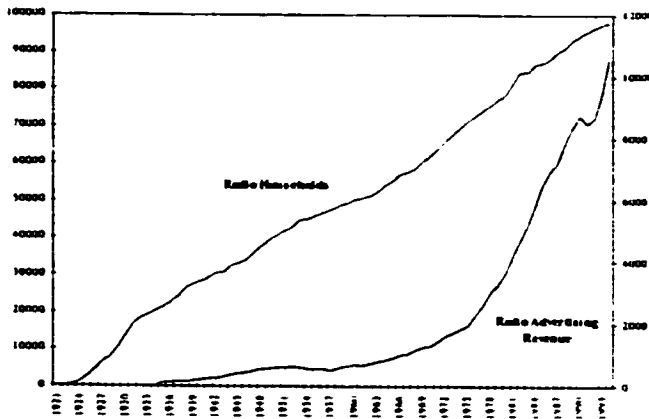* Data not adjusted for inflation.

Figure 1-3
U.S. Newspaper Advertising Revenue
## Per Sunday Newspaper Circulated, 1946–95*

Source: McCann-Erickson, Newspaper Association of America.
* Data not adjusted for inflation.

U.S. Magazines

Figure 1-4
U.S. Magazine Advertising Revenue, 1935–95*

Source: McCann-Erickson.
* Data not adjusted for inflation.

U.S. Radio

U.S. Radio Advertising Revenue, 1935–95*

Source: McCann-Erickson.
* Data not adjusted for inflation.

U.S. Radio Households (1921–95)
Vs. Advertising Revenue (1935–95)*

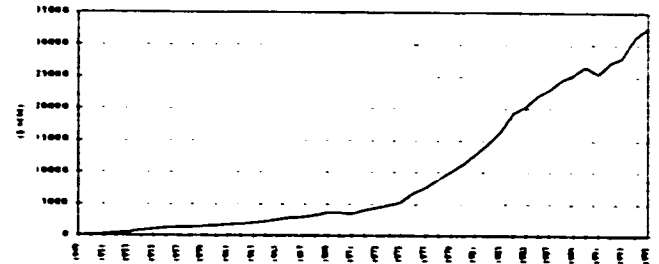
Source: McCann-Erickson.
* Data not adjusted for inflation.

U.S. Radio Advertising Revenue
Per Household, 1935–95*
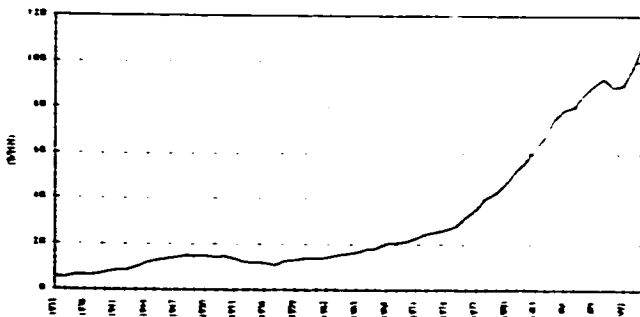
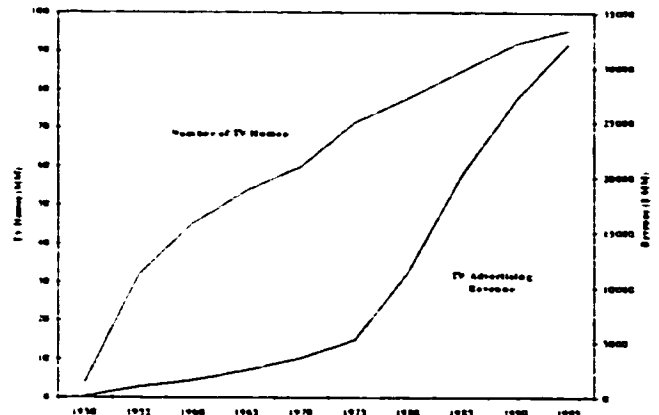Source: McCann-Erickson. TV Dimensions '96.
* Data not adjusted for inflation.

U.S. Broadcast Television
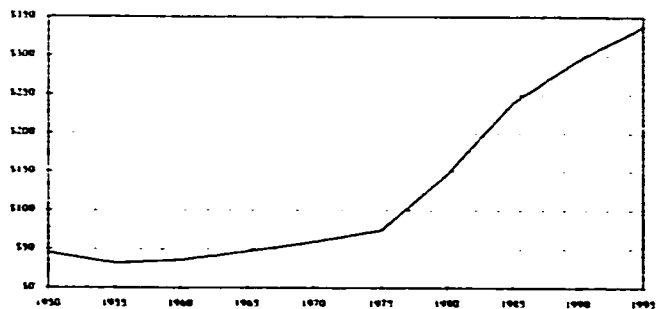
U.S. Broadcast Television Advertising Revenue, 1949–95*

Source: McCann-Erickson.
* Data not adjusted for inflation.

U.S. Broadcast Television Households
Vs. Advertising Revenue, 1950–95*

Source: McCann-Erickson. TV Dimensions '96.
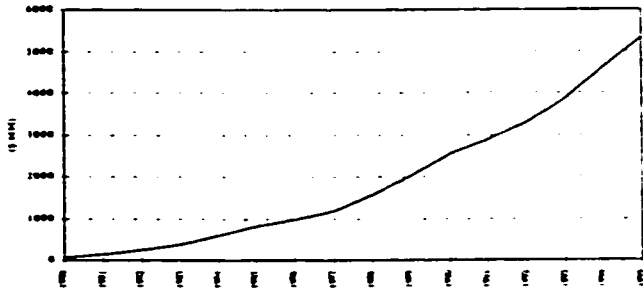* Data not adjusted for inflation.

U.S. Broadcast Television Advertising Revenue
Per Household, 1950–95*

Source: McCann-Erickson. TV Dimensions '96.
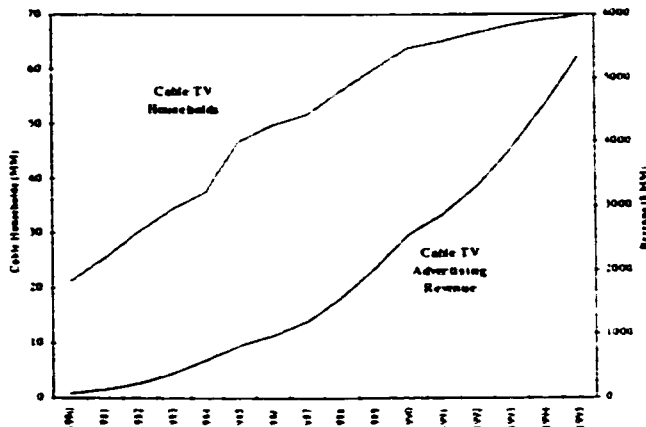* Data not adjusted for inflation.

U.S. Cable Television

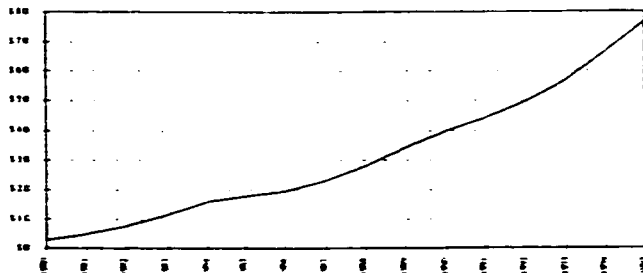## U.S. Cable Television Advertising Revenue, 1980-95*

Source: Paul Kagan Associates.
* Data not adjusted for inflation.

Figure 1-12
U.S. Cable Television Households Vs. Advertising Revenue, 1985-95*

Source: Paul Kagan Associates.
* Data not adjusted for inflation.

Figure 1-13
U.S. Cable Advertising Revenue Per Subscribing Household, 1980-95*


Source: Paul Kagan Associates.
* Data not adjusted for inflation.

Each Medium has Pros and Cons for Advertisers

Advertisers define objectives for their campaigns and the overlay the particular strengths and weaknesses of each medium in deciding which, and how much of each, medium to buy (Figure 1-14). Television, for example, offe strong image advertising (through its ability to deliver lit like audio and video) and brand awareness (through its extensive reach). However, other media are more effecti, in educating and disseminating information about a new product (such as print) or generating direct user response (direct mail). Thus, when introducing a major product, a advertiser might choose TV to build awareness and a seri of newspaper ads to provide additional product informati details on where and how to purchase the product, any promotions or discounts, and the like. Other media can t used to supplement and reinforce these messages, such as outdoor billboard ads or radio.

To accomplish the particular objectives of each campaigr advertisers must consider the appropriate level of reach (: percentage of an audience exposed to at least one ad impression over a give period of time) and frequency (how often each person or home is exposed to a message). Fig 1-15 charts the effectiveness of traditional media in deliv, ing each. Due to limited Internet penetration (relative to TV, radio, and so forth) and the large and growing numb of online "channels," Internet advertising cannot yet provide the reach of these other media. It can, however, deliver a high degree of frequency, especially on sites with repeat/habitual users.

Figure 1-14
Advertising Objectives of Various Media
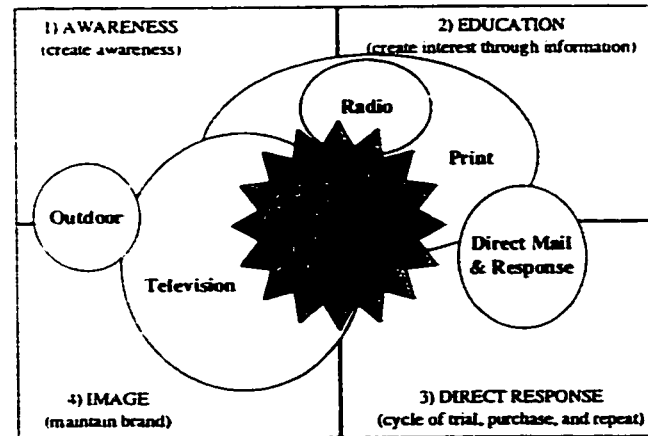
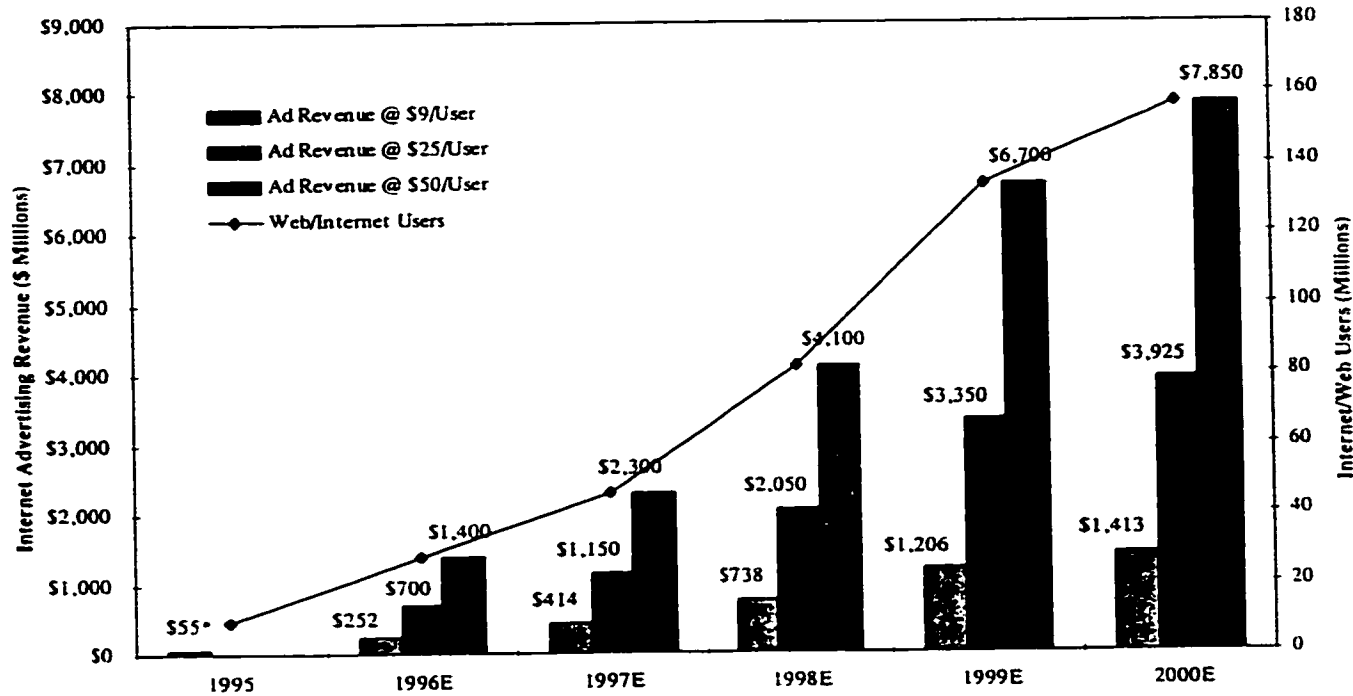Source: Steve Goldberg. Microsoft Advertising Business Unit.

Table 1-1
Selected Advertiser Pros and Cons for the Major Media and the Internet

Medium	Pros for Generating Advertising Revenue	Cons for Generating Advertising Revenue
TV	• Intrusive impact — high awareness getter. • Ability to demonstrate product and feature "slice of life" situations. • Very "merchandisable" with media buyers.	• Ratings fragmenting, rising costs, "clutter." • Heavy "downscale" audience skew. • Time is sold in multi-program packages. Networks often require major up-front commitments. Both limit the advertiser's flexibility.
Radio	• Highly selective by station format. • Allows advertisers to employ time-of-day or time-of-week to exploit timing factors. • Copy can rely on the listener's mood or imagination.	• Audience surveys are limited in scope, do not provide socio-economic demographics. • Difficult to buy with so many stations to consider. • Copy testing is difficult, few statistical guidelines.
Magazines	• Offer unique opportunities to segment markets, demographically and psychographically. • Ads can be studied, reviewed at leisure. High impact can be attained with good graphics and literate, informative copy.	• Reader controls ad exposure, can ignore campaign, especially for new products. • Difficult to exploit "timing" aspects.
Newspapers	• High single-day reach opportunity to exploit immediacy, especially on key shopping days. • Reader often shops for specific information when ready to buy. • Portable format.	• Lack of demographic selectivity, despite increased zoning — many markets have only one paper. • High cost for large-size units. • Presumes lack of creative opportunities for "emotional" selling campaigns. • Low-quality reproduction, lack of color.
Internet	• Internet advertisements are accessed on demand 24 hours a day, 365 days a year, and costs are the same regardless of audience location. • Accessed primarily because of interest in the content, so market segmentation opportunity is large. • Opportunity to create one-to-one direct marketing relationship with consumer. • Multimedia will increasingly make creative more attractive and compelling. • Distribution costs are low (just technology costs), so the millions of consumers reached cost the same as one. • Advertising and content can be updated, supplemented, or changed at any time, and are therefore always up-to-date. Response (click-through rate) and results (page views) of advertising are immediately measurable. • Ease of logical navigation — you click when and where you want, and spend as much time as desired there.	• No clear standard or language of measurement. • Immature measurement tools and metrics. • Although the variety of ad content format and style that the Internet allows can be considered a positive in some respects, it also makes apples-to-apples comparisons difficult for media buyers. • Difficult to measure size of market, therefore difficult to estimate rating, share, or reach and frequency. • Audience is still small.

Source: TV Dimensions '96, Morgan Stanley Technology Research.

Figure 2-2
Estimated Web Users vs. Advertising Revenue Using Various Steady-State Assumptions, 1995–2000E

Legend:
- Ad Revenue @ $9/User
- Ad Revenue @ $25/User
- Ad Revenue @ $50/User
- Web/Internet Users

Data labels: $55*, $252, $700, $1,400, $414, $1,150, $2,300, $738, $2,050, $4,100, $1,206, $3,350, $6,700, $1,413, $3,925, $7,850

Source: Morgan Stanley Technology Research.
* 1995 contains actual revenue, as reported by Jupiter Communications.
*E = Morgan Stanley Research Estimate*

Table 2-3
Estimated Web Users vs. Advertising Revenue, Using Various Steady-State Assumptions, 1995–2000E

(S Million)	1995	1996E	1997E	1998E	1999E	20
Estimated Worldwide Web Users (MM)	9	28	46	82	134	
Annual Advertising Spending per User Assumption ($)						
$50	–	$1,400	$2,300	$4,100	$6,700	$7
25	–	700	1,150	2,050	3,350	3
9	55*	252	414	738	1,206	1

Source: Morgan Stanley Technology Research. Note: Steady-state assumptions are used for directional purposes only — it's likely that if Web advertising well accepted, spending will likely rise steadily over time.
* 1995 contains actual revenue, as reported by Jupiter Communications.
E = Morgan Stanley Research Estimate.

Figure 3-4
Forrester's View of Percentage of the Traditional Advertising Revenue to be Lost to Internet Advertising
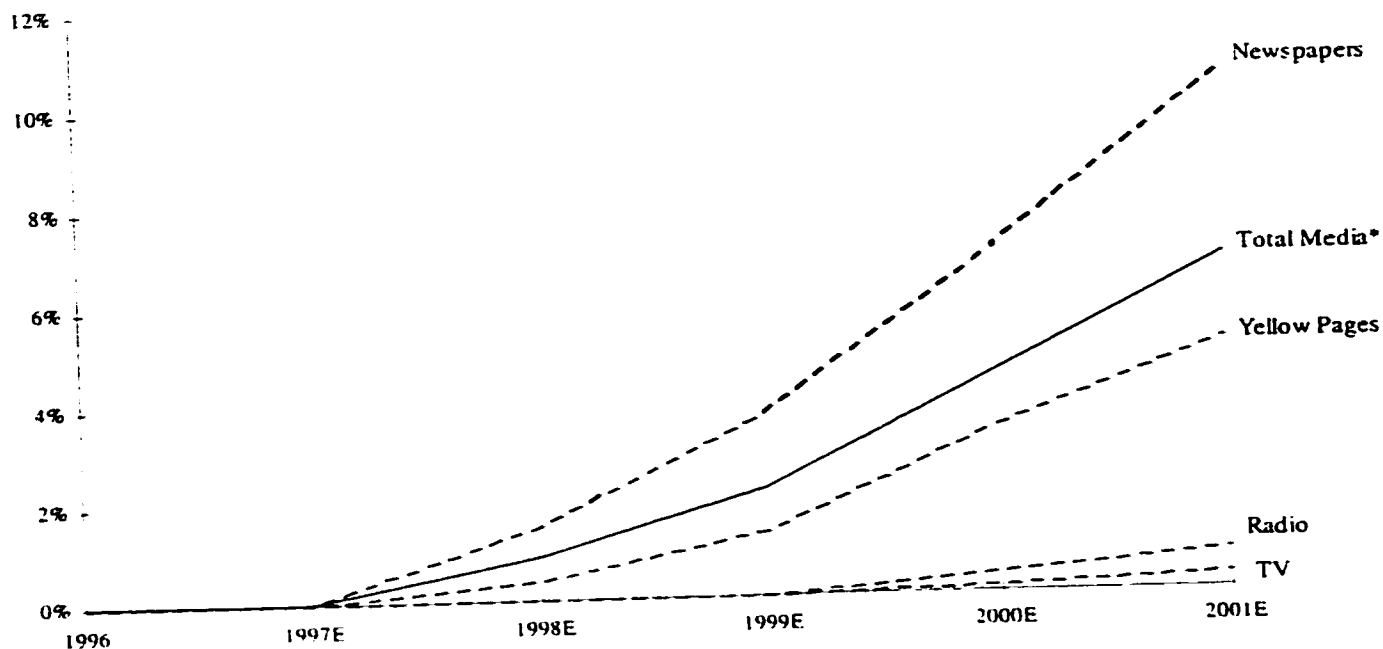
Source: Forrester Research   * Includes other media not explicitly listed. E = Estimate

Table 3-17
Forrester's View of Percentage of the Traditional Advertising Revenue to be Lost to Internet Advertising

	1996	1997E	1998E	1999E	2000E	2001E
Newspapers	–	–	1.5%	3.7%	7.0%	10.5%
TV	–	–	–	–	0.1	0.3
Radio	–	–	–	–	0.4	0.8
Yellow Pages	–	–	0.4	1.3	3.4	5.1
Total Media*	–	–	0.9	2.2	4.5	6.8

Source: Forrester Research   * Includes other media not explicitly listed. E = Estimate

Chapter 12: A Time Line of Internet Advertising 1993–96*

Summary

▶ On the second anniversary of the first Web advertisement on *HotWired* (Halloween 1994), *Advertising Age* printed a time line of the history of Internet Advertising. It is reproduced here, with permission, along with some early Internet advertising/marketing events.

November 1993

▶ GNN introduces advertising to the Internet at its launch. Some early advertisers included: Lonely Planet, Mountain Travel Sobek, The Company Corporation, Lens Crafters, and Nordic Track.

September 1994

▶ GNN introduced GNN Direct, offering the sale of merchandise via the Internet. Initial merchants included Nolo Press, Thanksgiving Coffee, American Youth Hostels, and O'Reilly Books.

October 1994

▶ HotWired site launches with ads from AT&T, Sprint, MCI, Volvo and others.

▶ Mecklermedia launches, then pulls, MecklerWeb service.

▶ Time Warner opens **Pathfinder** service with test ads from AT&T; Ziff Davis launches **ZD Net** on the Web.

▶ Hotel chains Hampton Inn, Embassy Suites and Hyatt Hotels Corp. open on the Web.

November 1994

▶ Only 3 million U.S. households have access to the Internet, Find/SVP reports.

▶ The NCSA Mosaic What's New Page on the Net says it's seeking sponsors.

▶ CMP Publications launches **TechWeb** with ads from AT&T, MCI and Tandem Computers.

- Mosaic Communications Corp. changes its name to **Netscape Communications Corp.**

January 1995

- Prodigy becomes the first online service to offer Internet access to its subscribers.

- Five advertisers — MCI, Saturn, Timex, Jim Beam and AirWalk — join Vibe Online in deals ranging in price from $40,000 for 6 months.

February 1995

- Procter & Gamble names **Grey Interactive** its interactive agency of record.

- **CBS** launches its Web site.

- **ESPN** Starts pitching advertisers on $1 million charter sponsorship of its upcoming Web site and other online properties.

March 1995

- **Yahoo!**, a Web directory created by two Stanford grad students, goes commercial.

- **Ragu** becomes one of the first package-good marketers to open a Web site

- AT&T picks **Modem Media** to be its interactive agency of record.

April 1995

- Time Warner's **Pathfinder** signs first advertisers, AT&T and Saturn. Ads cost $30,000 per quarter. **ZD Net** also starts taking ads.

- Internet Profiles Corp. and NetCount launch competing Web tracking services.

- ESPN launches **ESPNET SportsZone** via Starwave Corp.

- **Interactive Traffic** opens to help marketers with online media planning.

- Interactive Imaginations launches **Riddler**, a gaming site that incorporates marketer sites as clues.

May 1995

- Conde Nast forms **CondeNet** new-media unit.

- Sun introduces **Java** programming language.

July 1995

- **Forrester Research** reports that online ad spending will total $37 million for the year.

- InfoSeek and Netscape shift to a **CPM model** to sell Web Ads. HotWired, Pathfinder, and ZD Net resist the change.

- **Agency Poppe Tyson** starts selling ad space for Netscape, *Playboy*, and others.

August 1995

- Microsoft launches **MSN** online service.

- Kraft and P&G register a combined **184 domain names** on the Net, ranging from hotdogconstructionco.com to luvs.com.

September 1995

- CNN launches a Web site; **Hachette** opens Web versions of *Elle* and *Car and Driver*.

- ESPNET SportsZone, one of the Web's most expensive sites at $100,000 per quarter, signs **eight advertisers** to contracts totaling more than $1 million.

October 1995

- **Audit Bureau of Circulations** starts testing audits of Web sites.

- **Conde Net** nabs eight charter advertisers for Epicuriou: and *Conde Nast Traveler* Web sites, including AT&T, American Airlines, and Westin.

- Intel unveils **Intercast** technology to deliver Web content and TV programming simultaneously.

- Poppe Tyson spins off its Web ad sales unit as **DoubleClick**.

- Some **24 million** adults in the U.S. and Canada have access to the Internet, according to a report from CommerceNet and Nielsen Media Research.

January 1996

- Microsoft pays **$200,000** to sponsor the Super Bowl Web site.

- **The New York Times** launches on the Web with ads from $120,0000-per-year "partners" Toyota and Chei cal Bank.

- NetGravity introduces the **AdServer** ad management system for web sites.

February 1996

- **Focalink Communications** introduces SmartBanner media planning services.

- PointCast launches an offline news and information network featuring animated ads.

March 1996

- Sony Corp. of America says it's seeking partners for upcoming **Sony Station** Web site. Price: $500,000 million.

April 1996

- **Juno** Online Services launches a free, ad-supported mail service. Freemark Communications follows a similar product.

May 1996

- Content developer **iVillage** nets $800,000 in ad commitments on an ad model that intermingles editori with marketing.

- FocalLink Communications introduces **Market Match** Web media planning tool.

June 1996

- Microsoft zine *Slate* debuts on the Web.

- HotWired taps Levi's Dockers for one-year sponsorship of the Dream Jobs channel.

July 1996

- AT&T breaks its "intermercial" ad campaign featuring animated banners.

- Intelliquest reports that 35 million U.S. residents 16 and over accessed the Internet or online services in the past three months.

August 1996

- Poppe Tyson, boosted by Internet work, files for an **IPO**.

- Major sites agree to provide free content to users of **Microsoft's Web browser.**

- @Home Corp. starts to pitch marketers on the @Home high-speed online network.

September 1996

- **GM** doubles its Web site content to more than 38,000 pages, making it one of the largest marketer sites.

- **BackWeb Technologies** introduces a private online broadcast system, with GM as one of the first users.

October 1996

- CASIE issues proposed Web ad banner **guidelines.**

Table 13-3

20 Largest Advertising Organizations in the World

1995 Rank	Company	Headquarters	Revenue ($MM)
1	WPP Group	London	$3.130
2	Omnicom Group	New York	2,577
3	Interpublic Group of Companies	New York	2,337
4	Dentsu	Tokyo	1,999
5	Cordiant	London	1,378
6	Young & Rubicam	New York	1,198
7	Hakuhodo	Tokyo	959
8	Havas Advertising	Levallois-Perret, France	909
9	Grey Advertising	New York	897
10	Leo Burnett Co.	Chicago	804
11	True North Communications	Chicago	759
12	D'Arcy Masius Benton & Bowles	New York	646
13	Publicis Communication	Paris	606
14	Bozell, Jacobs, Kenyon & Eckhardt	New York	405
15	BDDP Group	Paris	279
16	Asatsu Inc.	Tokyo	254
17	Tokyu Agency	Tokyo	239
18	Daiko Advertising	Tokyo	211
19	Dai-Ichi Kikaku Co.	Tokyo	168
20	Dentsu, Young & Rubicam Partnerships	Tokyo/Singapore	161

Source: Advertising Age; January 22, 1996.

Table 13-4

Top 50 Megabrands in U.S. by 1995 Ad Spending

Rank	Brand, Product, or Service	Company	Total ($000:
		AT&T Corp.	$673.38
1	AT&T telephone services	Ford Motor Co.	564.86
2	Ford cars & trucks	Sears, Roebuck & Co	540.05
3	Sears stores	McDonalds Corp.	490.55
4	McDonald's restaurants	Kellogg Co.	488.20
5	Kellogg breakfast foods	General Motors Corp.	477.60
6	Chevrolet cars & trucks	Chrysler Corp.	414.53
7	Dodge cars & trucks	Toyota Motor Co.	384.07
8	Toyota cars & trucks	MCI Communications Corp.	320.95
9	MCI telephone services	Time Warner	294.00
10	Warner Bros. movies	Circuit City Stores	291.55
11	Circuit City electronic stores	Sony Corp.	289.66
12	Columbia entertainment	Nissan Motor Co.	281.96
13	Nissan cars & trucks	Honda Motor Co.	278.82
14	Honda cars & trucks	Walt Disney Co	269.49
15	Disney entertainment	J.C. Penney Co.	268.74
16	J.C. Penney stores	IBM Corp.	257.91
17	IBM computers	General Mills	253.07
18	General Mills cereals	Grand Metropolitan	251.93
19	Burger King restaurants	Mazda Motor Corp.	241.21
20	Mazda cars & trucks	Chrysler Corp.	240.1
21	Chrysler cars & trucks	Viacom	221.3
22	Paramount entertainment	Johnson & Johnson	213.7
23	Tylenol remedies	Sprint Corp.	212.9
24	Sprint telephone services.	American Express Co	207.3
25	American Express financial services.	Seagram Co.	206.8
26	Universal Studios movies	Anheuser-Busch Cos.	201.0
27	Budweiser beers	General Motors Corp	193.3
28	Buick cars	Phillip Morris Cos.	192.1
29	Kraft foods	Phillip Morris Cos.	173.0
30	Post cereals	Walt Disney Co.	172.0
31	Buena Vista movies	PepsiCo	172.0
32	Taco Bell restaurants	General Motors Corp	169.8
33	Saturn cars	Kmart Corp	167.9
34	Kmart stores	PepsiCo	164.3
35	Pizza Hut restaurants	Phillip Morris Cos.	161.3
36	Miller beers	Wendys International	161.
37	Wendy's restaurants	Visa International	154.3
38	Visa credit cards	PepsiCo	149.
39	KFC restaurants	Ford Motor Co.	149
40	Mercury cars & trucks	Microsoft Corp.	147.
41	Microsoft software	Federated Department Stores	144.
42	Macy's stores	Nike Inc.	142.
43	Nike footwear & apparel	Wal-Mart Stores	141.
44	Wal-Mart stores	Chrysler Corp.	141.
45	Jeep vehicles	L'Oreal	137.
46	L'Oreal cosmetics	News Corp.	137.
47	20th Century Fox movies	General Motors Corp	135.
48	Cadillac cars	General Motors Corp.	134
49	Pontiac cars & trucks	Mitsubishi Motor Corp.	130
50	Mitsubishi cars & trucks		

Note: Sources for ad spending include consumer magazines, local and national papers, outdoor, network, spot, syndicated, and cable TV, and national spot and network radio.

Source: Advertising Age, May 6, 1996

Chapter 14: Rate Card Data

◆ We have collected rate-card data from several sites to show how different publishers go about packaging and pricing their product.

CNET (www.cnet.com)

The computer network on-air and online interactive showcase for computers, multimedia, and digital technologies

CNET online serves 12MM pages of original content each month
830,000+ members
Average response rates across all advertising banners range between 3% and 4%.
Well-developed and executed banner campaigns have generated response rates of over 25%
All rates are gross and are based on a three-month minimum contract
Premium ad rates include, but are not limited to the following technologies: Java, Shockwave, server-push, Real Audio
Premium ad rates for SHAREWARE.COM, DOWNLOAD.COM, and NEWS.COM are calculated using a 15% markup

CNET online
$15,000/month per 200K impressions
$28,500/month per 400K impressions
$38,475/month per 600Kimpressions
$57,873/month per 1MM impressions

Premium Program for CNET online
$17,250/month per 200K impressions
$32,775/month per 400K impressions
$44,246/month per 600K impressions
$56,045/month per 800K impressions
$66,554/month per 1MM impressions

SHAREWARE.COM/DOWNLOAD.COM
$15,000/month per 500K impressions
$28,500/month per 1MM impressions
$38,475/month per 1.5 MM impressions

NEWS.COM
$15,000/month per 150K impressions
$28,500/month per 300K impressions
$38,475/month per 450K impressions

ESPNET SportsZone (espnet.sportszone.com)

A full sponsorship package on ESPNET has three components:

1) A sponsorship rotation across a minimum of 1,000 non-franchise pages
2) A targeted sport rotation
3) A listing in the Sponsor Index

Sponsorship (Rates) of One Sport Rotation:
One Month: $25K per 1MM guaranteed impressions
Three Months: $72K per 1MM guaranteed impressions each month

Traffic:
110MM qualified pages views/week
19MM HTML pages/week
An average of 2.5 MM visits/week
An average of 11.75 MM visits/month

Full Sponsorship General Rotation:
One Month: $15K per 500K impressions
Three Months: $43K per 500K impressions each month

GeoCities (www.geocities.com)

A builder and operator for themed, virtual communities on the Web where individuals, businesses, and advertisers interact

Average CPM $30

Traffic:
15 MM+ visits per/month
70 MM page views/month

Rates:
Platinum
Gold
Silver
Targeted
Custom activities and events

Cost per month:
$15,000/month per 500K impressions
$10,500/month per 350K impressions
$8,750/month per 250K impressions
$3,500/month per 100K impressions
$1MM plus

Happy Puppy (happypuppy.com)

Customized advertising programs are offered

Traffic:
1.7 MM visits/month
An average of 70K visits/day

Open CPM rate is $30
Inventory sold from 100K to 1.5MM per month,
in increments of 100K impressions

lotWired (www.hotwired.com)

inline cyberstation whose editorial content is developed entirely for this medium

00K+ registered subscribers
8% of readers request information from advertisers
4% bookmark advertiser's home page

HotWired guarantees 100K page views
with a combination of banners in top
level and content level areas.

Rates:
$15,000/month per 100K impressions

international Data Group (IDG) (www.idg.com)

nformation specified is for PC World Online

iites include:
Computerworld. Infoworld.
Macworld, PC World, NetworkWorld

Traffic:
1MM page views/month

CPM Range $40-70

Volume Sponsor Blocks:
$18,240/Quarter for 2MM impressions
$14,535/Quarter for 1.5MM impressions
$10,260/Quarter for 1MM impressions
$5,700/Quarter for < 500K impressions

Gross Rates:
$58,800/Quarter for 1MM impressions
$43,890/Quarter for 750K impressions
$30,590/Quarter for 500K impressions
$15,960/Quarter for 250K impressions
$6,650/Quarter for < 100K impressions

Lycos (www.lycos.com)

Navigational tool and search engine

Traffic:
5MM page views/day

Rates:
$6K/month for 200K impressions
$12K/month for 500K impressions
$20K/month for 1MM impressions
$1,750 for Quick-start 60K impressions

Home Page Sponsored Button:
$128K/month per 14MM impressions
Targeted Domain: $32-40 CPM

Target Country or Company:
$8K/month for 200K impressions
$18K/month for 500K impressions
$32K/month for 1MM impression

CPM Range $20-30

Nando Times (www.4nando.net)

News & Observer of Raleigh. N.C.

Traffic:
Approximately 7MM hits/week

Rates:
General (Run of Server)
Nando Times (ROS)
Sports Server (ROS)
Entertainment (Special Section)
Travel (Special Section)
Business (Section)

$26-29 CPM
$30-38 CPM
$27-34 CPM
$34-42 CPM
$36-45 CPM
$34-42 CPM

Netscape (www.netscape.com)

Millions of Internet users begin each session on Netscape's home page

CPM Range $17-25

Total Coverage:
$46,000/month per 2.25MM impressions for
all pages in Platinum, Gold, or Silver

Fixed Pages $12,750/month

Platinum: $20,400/month for 1MM impressions
Gold: $17,000/month for 750K impressions
Silver: $12,750/month for 500K impressions
Banner Ads on Destinations: $8,500/month for 500K impressions

Pages included with each program

Platinum
Net Search
Company & Products
Assistance, Netscape Products
Windows Helper, Applications

Silver
Net Search, What's Cool?
Helper, Applications
Destinations
Home Page, People

Gold
Net Search
What's New?
About the Internet
Table of Contents
Yellow Pages

Banner Ads on Destinations
Hardware/Software
General & Technology News
Finance, Marketplace
Sports, Travel
Entertainment

Pathfinder   (www.pathfinder.com)

Time Warner home page includes

People Online.
Sports Illustrated SI online.
Money & Personal Finance.
CNNfn, Fortune Business & Investing
Entertainment Weekly Online.
Techwatch with The Netly News.
Fitness & thrive@

Traffic:
40MM hits/week
9MM page views/week

Rates:
$19 CPM — 1 month
$22 CPM — 2 months
$25 CPM — 3 months

CPM Range $19-25

Catalog Select — Promote a retail catalog
$0.50 per qualified lead

$1,000/months buys an ad directory link

United Media   (The Dilbert Zone)   (www.unitedmedia.com/comics/dilbert/)

An electronic comic strip featuring the trials and tribulations of a beleaguered corporate employee and his canine companion

Average CPM $70
Traffic:
778K+ unique visitors in October
3MM+ ad exposures delivered in October

Rates:
Masthead — $15,500/week for 310K impressions
Archive — $6,000/week for 120K impressions
Sunday Strips — $1,750/week for 35K impressions

USA Today Online   (www.usatoday.com)

Graphically oriented online paper

Eight-week minimum ad run
Headlines — ad located in front lead story on main section and next to lead story on special section front (section and special section fronts)
Ribbons — ad located in title of contents page (content pages)
Floating strips — ad located on bottom of middle of pages (all)
Sponsor units — button logo on chart of map (section fronts)

Traffic:
53 MM page views/month
8MM+ visitors/month
Average pages accessed per visit 6.5

Rates:
$30 CPM for any type and placement ad
Free overdeliveries ($0.03 per exposure)

Sampling of Ad buys
Fixed Graphics Space
General Life Headline
Money Headline

Floating Graphic Space
General USA TODAY Index Page
Life Front Page
Crossword Puzzle Page

8/96 Estimated Exposures
534K exposures/month — $16K
900K exposures/month — $27

7/96 Estimated Exposures
734K exposures — $22K
549K exposures — $16
86K exposures — $2.5K

Yahoo!   (www.yahoo.com)

Contains organized information on tens of thousands of computers linked to the Web

CPM Range $20-50

Rates:
$10-15K/month per 500K impressions
$5K/month per 100K impressions
$20 CPM — Run of Yahoo!
$20 CPM — Run of category
$30+ CPM Fixed category

Traffic:
1MM individual visitors/day

Search Keywords Rates:
Top 100 keywords are $60 CPM
10,000+ impressions/month $50 CPM
Up to 10,000/month $500 flat fee

"Weblaunch" rate for new Web sites:
$1,000/week to share rotation on 60-80K impressions
(All keywords are single words)

Interactive promotions with giveaways — $50-75K