The Internet in developing countries: a medium of economic, cultural and political domination

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ABSTRACT

The last decade has witnessed an unprecedented diffusion of network technologies into developing countries. The technological discourse attending this diffusion has presented the new media as a utopian, egalitarian and empowering tool with the potential of ushering in a new era of development, democracy, and positive cultural change. This paper examines the economic, cultural, and political effects of the Internet within the historical context of developing countries. The paper traces the politically-inspired evolution of the Internet, its transfer into developing countries, and the economic, cultural, and political consequences of this transfer. Existing data indicate that the implementation of the Internet in most developing countries has served as a drain to the local resources, thus exacerbating their economic dependency on foreign nations. On a cultural level, the Internet's predominantly Western design, content, and language have facilitated the proliferation of alien cultural patterns at the expense of the social experiences of the local cultures. Lastly, the Internet's build-in tracking capabilities and its current manipulation for political purposes on international and national levels serves to empower the existing ruling elites in developing countries and perpetuates the disempowerment of the rest of the society. The paper proposes alternative approaches to internet adoption, where Internet initiatives are embedded and placed in the service of the general development goals of developing countries.

INTRODUCTION

The last decade has witnessed an unprecedented diffusion of network technologies into developing countries. The technological discourse attending and encouraging the adoption of the new media, particularly the Internet, has centered on their potential to accelerate national development efforts, bring about favorable socio-cultural changes, and open up public spheres for free and democratic discourse (Hudson, 2000; Huff, 2001; Wei & Kolko, 2005; Gher & Amin, 1999; Fandy, 2000). Huff (2001, p.43), for example, suggests that "the presence of the Internet can be expected to transform politics and commerce, and will have a major impact on the conduct of government and economic affairs in developing countries."

Apparently, this optimism echoes and extends the prevalent image of the Internet as a utopian, egalitarian and empowering medium. However, it fails to contextualize the role of the Internet in the world's economic, political and cultural arena. An examination of the current status of the Internet in most developing countries reveals that it has introduced little tangible change in terms of sociopolitical or economic structures or even communication patterns. Rather, the Internet has aligned with other mass media in reinforcing the current sociopolitical status quo in most developing countries as well as their economic dependency on foreign nations.

To put the Internet experience of developing countries in perspective, I would like to examine the evolution of Internet, its transfer into developing countries, and its current function, usage, and place in these countries. This paper seeks in part to problematize the current idealization of the Internet as a medium of democracy, development and diversity, and in part to examine the different factors that have helped shape the Internet's current status in technologically less

advanced nations. The paper will focus on the collective experience of developing countries not only because it seems analogous across the majority of these nations but also because it is situated within similar sociopolitical and economic contexts.

THE EVOLUTION OF INTERNET

The evolution of the Internet is part and a continuation of the development ideologies that evolved in the West after World War II. These ideologies have focused on technology and science to enhance "large scale industrialization, militarization, and national political power" (Shahidullah, 1991, p. 55). The development of such tenets was a reaction to the fear on the part of the main Western powers to lose their political and economic edge in the aftermath of the War and as a result of the national liberation movements across the "Third World." It was also part of the staging of the Cold War between the two emergent superpowers, the United States and the Soviet Union.

The historical era that gave birth to the Internet witnessed similar technological advances, such as space shuttles, nuclear power, computers, and satellite television, which all originate in political and economic interests (Nicholas, 2003; Bromley, 1998). The Internet itself was developed in the late 1960s to provide "a secure and survivable communication network for organizations engaged in defense-related research" (Internet Society, 2006). In its evolution over the following two decades, the Internet remained under the control of a few politicians and scientists assembled mostly in North America and Europe. In this initial phase, the new medium served primarily as a new channel of communication and information sharing, particularly among different academic communities, featuring many aspects of earlier communication media and adding to them interconnectivity, interactivity, and efficiency.

In the early 1990s the Internet was commercialized under corporate economic pressures. The previously "regulated" environment of the internet became completely uncontrollable with the development of spam and virus traffic. Interestingly, however, because of its "uncontrollable" nature, the Internet fits within and supports the free market system within which most Western corporations operate. Corporations aimed at harnessing the Internet to create "an infinitely expanding cybermarket" (Scolve, 1998, p. 9). The technology industries (computers, electronics, cables, microprocessors, etc.) were first to capitalize on the new medium. Through supporting the spread of the Internet, the computer industry was inducing a new culture of technological consumerism, which automatically necessitates "an endless series of upgrades" to satisfy the industry's desire to increase its share of the market (Bowers, 1998, p.113).

The commercialization of the Internet has allowed the corporate to shift emphasis from producing and controlling material goods to controlling information. Information became "something produced, exchanged, and used within the framework of a market economy" (Agre, 2003, p. 755). This shift to an information-based economy has necessitated new information-based domains and new markets. This explains the intense competition among major technology industries to extend their control over universities, schools, libraries and other public spheres. The ensuing information revolution has generated a dynamic economic sector, incorporating web-based companies, virtual universities, cyber-stores, and so on. Even industries that do not rely heavily on information have utilized the Internet to propagate their merchandize, attract more clientele, reduce secretarial labor, and gain more profit through online sale activities. Commercial undertakings have become a characteristic feature of the World Wide Web in particular, shaping its design, tone, content, language, and usage.

The economic boom introduced by the Internet in terms of flow of money, job creation and increased efficiency has given Western industries and business a competition advantage in the

regional and global marketplace. In fact, the Internet has helped renew Western economic hegemony through controlling the information capital, the lifeblood of the new information-based industries (Noble, 1998). These advantages have prompted the technology industries to internationalize the new medium, extending its reach to more than 1.24 billion international users within less than fifteen years (Internet World Stats, 2007). This technological explosion did not happen by chance, especially if we consider the huge profits that the electronic corporate giants (Google, Yahoo, Ebay, Amazon, etc.) have reaped from online business. According to the Silicon Valley Investment Indicators (2006), the net profit of each of the top ten electronic companies was above \$ 1 billion in 2005. The internationalization of the Internet not only helped Western corporations extend their marketplace worldwide but also facilitated the world's shift to a more open and global society. Because international business and economy is controlled by the same countries and forces that nurtured the Internet culture, the adoption of the Internet and other network technologies became not only an option, but a must dictated by "international standards" in business, communication, and global labor.

Technology corporations have taken a proactive role in the diffusion of the Internet in developing countries. These corporations have offered various incentives and initiated several projects in Africa, Asia and Latin America to ensure their "connectivity" to the Internet and to the rest of the world. Examples of these projects include Information and Communications Technologies for Development in the Middle East and North Africa, Science and Technology programme in developing countries, and ICT R&D Grants Programme for Asia and the Pacific Region. As chairman and chief executive of Hewlett-Packard Carly Fiorina asserts, computer companies were bringing the network technologies into developing countries "in their own self-interest rather than as philanthropy because today's poor countries are potential growth markets of tomorrow" (cited in Bu-Hulaiga, 2001).

Interestingly, the dissemination of the Internet in developing countries was associated with promises of economic development opportunities, positive social change, and political participation chances for disenfranchised groups (Wheeler, 2004). It was argued that the Internet and related network technologies support economic growth, contribute to human resource advancement, and make possible leapfrogging over certain development constraints. Moreover, they empower individuals in the exercise of their right to receive, produce, and circulate information and ideas beyond national borders. Further, they facilitate intercultural communication where differences of race, ethnicity, and class disappear. In fact, industrial and corporate forces were often behind this technological idealization (Watson, 1998; Noble, 1998; De Castell et al, 2002). Such images have been propagated throughout the globe mainly for industrial and corporate profit.

THE INTERNET AS A TOOL OF ECONOMIC DOMINATION

The current emphasis on the Internet and information technology as means of development and positive social change has a historical parallel in the past century. The five decades that followed the end of World War II witnessed a similar thrust by Western powers to spread mass media as a way to boost development efforts in developing countries (Fagerlind & Saha, 1989). The idea of mass media as a propeller and index of development was closely tied with the Modernization Theory, which was so dominant at the time. Modernization theorists maintained that the proliferation of the mass media will facilitate the spread of "modern" values and attitudes, the death of old traditions and beliefs, and consequently the development of a modern society, as is exemplified by Western countries.

A pioneering Modernization theorist, Lerner (1958) set out a US-government-funded project to determine the causes of underdevelopment in the Middle East, conditions which facilitate the transition to the state of development, and role of mass media in this transition. In his renowned book *The Passing of Traditional Society: Modernizing the Middle East* (1958), Lerner argued that:

Modernization, then, is the unifying principle in this study of the varied Middle East. The term is imposed by recent history. Earlier one spoke of Europeanization, to denote the common elements underlying French influence in Syria-Lebanon and British influence in Egypt and Jordan. More recently, following a century of educational and missionary activity, Americanization became a specific force and the common stimuli of the Atlantic civilization came to be called Westernization. (p. 45)

A core premise in Lerner's book is that underdeveloped countries should model their Western sisters, particularly the USA, to become properly modern. However, to attain this, individuals in these societies have to show "symptoms" of modernity in the form of *psychic empathy*, that is, "the capacity to see oneself in the other fellow's situation" (p.50). Mass media is to play a central role in this modernization process by providing enough exposure to what another and *better* life would look like. Eventually, "the infusion of rationalist and positivist spirit" (p.102) through the mass media will lead to modernization. Several similar studies have assigned major importance to mass media in the development of Third World countries (e.g., Hudson, 1978; Bujra, 1991).

While the Modernization Theory has been criticized on several accounts, a major criticism concerned the dubiousness of the very notion of "modernity" as a Western construct permeated with dependency implications. Because it is a "uniquely Western process" (Inglehart and Baker, 2000, p. 19), modernization is not so much about development per se as dependency on the West. Moreover, as Inglehart and Baker note, the modernization experience of the majority of developing countries has been neither rewarding nor productive. Although Western approaches to industrialization, urbanization, health care, literacy, social institutions, political organizations, and mass media outlets have pervaded many developing countries since the 1950s, these changes yielded no positive effects on the overall development of these countries or on the quality of life for their populations (see Khiabany, 1999). More importantly, the Westernization process with its focus on urbanization and industrialization proved destructive to agriculture, the main economic produce of most developing countries (Khiabany, 1999). Instead of inducing development, modernization has thus exacerbated the Third World's economic dependency on the West.

Another criticism was leveled at the role of mass media, which, within the modernization framework, served as a propeller of social, cultural, economic, and political changes that converge with Western economic interests in the developing countries. The mass media's dissemination of values incompatible with the needs of developing communities, such as commercialism and consumerism, meant that development communication was more or less "persuasive marketing" (Melkote & Steeves, 2001, p. 38). Moreover, media content was dominated by imported Western, particularly American, materials (Barney, 2004; Khiabany, 1999). The fact that the media and messages available to the "modern" citizen in developing countries are borrowed from the West helped in producing a troubled local identity that neither belongs to its country of origin nor fits within the alien system (Khiabany, 1999). Far from being an aid to development, "the modern personality would be one oriented on escaping the backwardness of their country of origin either by personal consumption or by emigration" (Ibid).

To many observers, indeed, the Internet and other communication technologies are extending the role of the mass media in the current world's socioeconomic arena. Like their communication predecessors, the Internet and other information technologies "have been utilized by large political and corporate institutions to bring about global cultural change supportive of Western economic, political, and ideological values" (Melkote & Steeves, 2001, p. 33). Barney (2004) argues that the Internet is dominated by the same interests and institutions that have historically

manipulated mass media, and hence it resembles an extension of Western, particularly American, consumer culture into every corner of life in every corner of the globe.

Decisions to introduce the Internet into many developing countries, whether for government or public use, follow from the unquestioned assumption that network technologies are a prerequisite for bridging the technical and scientific gap with industrialized countries and, consequently, for "development." The implementation of the Internet was also stimulated by fears of exclusion from the global ICT world (Hudson, 2000; Anderson, 2000; Huff, 2001). The general sentiment for computerization among decision makers in developing country is reflected in Allotey's speech to top decision makers in Ghana: "we paid the price of not taking part of the industrial revolution of the late eighteenth century because we did not have the opportunity to see what was taking place in Europe. Now we see that information technology has become an indispensable tool. We can no longer sit down and watch passively" (cited in Sagahyroon, 1995, p. 164).

Unsurprisingly, the guest of many developing countries for national development has resonated with the technology manufacturers' search for international markets. Developing countries in general have been a competition hotspot for many producers of the network hardware, software and content. Hardware and software companies linked to transnational corporations (e.g., Apple, IBM, HP, Intel, Microsoft, etc.) have established plants and consultation offices, created software suitable to the local market, and organized conferences and exhibitions in different parts of the Third World (Hallouda & Ghonaimy, 2000; Gher & Amin, 1999). For their part, most Third World governments have committed large financial and human resources to accommodate the new tools. For example, investment in ICT in many developing countries doubled between 2000 and 2004 (Rohozinski, 2004). ICT expenditure in 2005 reached 7.32 of the overall Gross Domestic Product (GDP) of developing nations compared to 7.03 for the world average expenditure (World Bank, 2006).

While huge amounts of foreign exchange money are spent on technology equipment, ICT networks have made little contribution to the economy of most developing countries. In fact, several analysts have suggested that ICT networks have indeed had a negative impact on the economy of many developing countries in terms of job creation and outflow of foreign exchange (Marzui & Ostergard, 2002). Because it requires unending upgrades of equipment and expertise, ICT implementation perpetuates the Third World's reliance on the technology industry and serves as a drain to local resources. Likewise, most developing countries are relying on foreign expertise to plan, run, and oversee their networks (Hallouda & Ghonaimy, 2000). Added to this is the "wasting [of] human capital" as a result of the failure on the part of the ICT infrastructure planners to provide decent career opportunities to local technical talent in developing countries (Anderson, 2000; Marzui & Ostergard, 2002). It should be noted that the expansion of ICT often occurs at the expense of other more pressing social and economic needs in developing societies (see Albirini, 2006).

More importantly, the main goal of bridging the "digital gap" with the technologically advanced countries has hardly been realized. Although the quantitative disparities between the West and developing countries in terms of Internet diffusion seem to be converging, the relative experiences of the two groups in terms of Internet uses are qualitatively poles apart. As Hoffman (2004, p. 247) argues:

The dominant discourse tends to address the development issues associated with the NICT [New Information and Communication Technologies] under the concept of the 'digital divide,' focusing on the quantitative disparities between North and South in the diffusion and use of the Internet and other NICT. These inequalities are indeed staggering. Moreover, although some observers proclaim a gradual closing of the gap, this is so only superficially. The number of NICT users in Third World countries has in fact increased rapidly in recent years, but a closer look at the data shows the qualitative differences between in NICT use between the 'information rich' and the 'information poor' have been growing even stronger.

Several studies have shown that the new wave of information and communication technologies has indeed helped widen the wealth gap between technologically advanced nations and developing countries (Hoffman, 2004; Lucas and Sylla, 2003; Mansell, 2001). Lucas and Sylla (2003), for example, examined Internet diffusion and use in developed versus developing countries through economic and technological indicators. The researchers found that in terms of both Internet diffusion and use, developing countries are still lagging behind their developed counterparts. In addition, the findings showed a strong correlation between the diffusion of the Internet and economic growth. Thus, the wealth gap between technologically advanced countries, such as the US, and most developing countries has risen from a ratio of 1 to 6 in the early twentieth century to almost 1 to 13 by the end of the past century. They concluded that "If this trend continues, it may have dire consequences for world economic inequality and political stability, as did great innovations of earlier eras" (p. 3).

Mansell (2001) asserts that developing countries may gain little benefit from the emerging international electronic commerce system, irrespective of their wide implementation of the Internet. His analysis shows that the capacity to gain from the availability of the Internet involves more than a reduction of the technological divide between countries. For example, the institutional foundations for building capabilities that absorb the new technological systems and facilitate the entry of local firms into international markets must also be in place. Moreover, broader technological leap-frogging strategies should be embedded within the framework of appropriate development goals. Given the absence of these prerequisites, Mansell concludes, the economic enclaves generated by the new information media may hardly be bridged in the foreseen future.

It is not surprising then that the current uses of the Internet and other communication technologies in most developing countries are often restricted to gaming, chatting, emailing, and sometimes information retrieval (Teitelbaum, 2002; Rohozinski, 2004). The Internet in developing countries is therefore used primarily as "an entertainment" tool. This stands in sharp contrast to its uses in the West as a means of production. That is, the Internet in the West is used not only for communication and information dissemination, but also for electronic business and commerce. Networked economy and technology products have a substantial share of the GDP in most technologically advanced countries (Norris, 2001). Besides, network technologies have contributed to the production of other innovations in different fields, such as education and medicine (Hudson, 2000). In fact, because of the multiple functions to which it was put in many industrialized societies, the Internet came to be conceived as "general purpose technologies" (Brynjolfsson & Hitt, 2000). It is worth noting that the extent of business Internet use in a technologically advanced country like the United States was nearly six times as that for most developing nations in 2006 (World Bank, 2006).

In short, even though it has been built on its Western counterpart, the Internet experience of developing countries seems to be lacking in planning and vision about the place, function, and cost-effectiveness of network technologies within their economies. The discrepancy in developing countries lies in that, while lacking in financial and human resources to invest in network technologies, they still need to face the greater demand of keeping pace with the technologically advanced countries (Modum, 1998). According to Harvey (1983, p. 266), "there is a rapid extension of information and data dissemination processes in the industrialized nations that threatens to push the Third World countries even further behind their more developed sister states..." Contrastingly, however, the implementation of the Internet in most developing countries has brought huge economic profits to the predominantly Western technology industry at the

expense of the local economies. Moreover, it helped reinforce the dependency relationship between the Western economic system and its counterparts in developing countries.

THE INTERNET AS A TOOL OF CULTURAL DOMINATION

While the Internet diffusion into developing countries is highly profitable to the computer industry, "it is also an experiment with the basic symbolic and moral foundations of mainstream Western culture—and how these foundations are intergenerationally renewed" (Bowers, 1998, p. 112). Obviously, the Internet and other information technologies carry the values and ideas of the Eurocentric society, which has played a critical role in the design and development of the media. It is important to note that from its inception the Internet was not designed to be used by "peripheral" cultures, nor were such cultures influential in its design, evolution, or functionality (Wei & Kolko, 2005, p. 206).

As early as 1964, McLuhan argued that media influence the society in which they diffuse not merely by the content delivered over the medium, but also by the characteristics of the medium itself. In The Media Is the Message, McLuhan demonstrates how historically the adoption of new media, such as the print, phones and computers, has changed man's views of the world and interaction with his surroundings. Hence, he convincingly argued that "The spiritual and cultural reservations that the oriental peoples may have toward our technology will avail them not at all. The effects of technology do not occur at the level of opinions or concepts, but alter sense ratios or patterns of perceptions steadily and without any resistance" (p.207). Central to McLuhan's argument is the fact that network technologies are not mere machines but also social agents of change in the society that adopts them.

The paradox in the rush to embrace the network technologies by developing countries is that ICT importers hardly understand the culturally mediating characteristics of the technology (Bowers, 1998). Bowers asserts that computer technologies select Western cultural patterns for amplification, while other cultural experiences are reduced or eliminated altogether. He further contends that socializing non-Western people into the patterns of thinking amplified through the use of computer technologies "is a form of cultural domination" (p. 115). Because their structures reflect the culturally specific thinking ways of their developers, many Internet applications require users to adjust their normal ways of doing things in their local cultures (e.g., writing from left to right; relying more on symbols and sounds than on contextual clues and gestures in online interactions; linear progression in web reading, email writing, and other online activities; etc.).

The changes brought forth by the Internet and other network technologies may eventually lead to the global homogenization of culture, that is, the erosion of local cultural traditions and the simultaneous domination of Western cultural patterns in every other place on the globe. As the new technology culture diffuses, local cultural norms become outdated and are replaced with more "promising" projections of social behavior and customs (e.g., individualism, consumerism, competitiveness, etc.). Harvey (1983, p. 269) warns that, "computerization cannot be allowed to become a new form of cultural imposition — neocolonialism is not acceptable even in an automated package." The uncritical espousal of the network technologies therefore facilitates the circulation of Western cultural norms in an electronic camouflage.

Interestingly, network technologies are often conceptualized in terms of "exchange" of ideas and tools between different groups on equal basis, where in fact developing countries often serve in the capacity of consumer within this technology-based exchange. The Third World's consumption is indeed not limited to technology products, which themselves carry the worldviews of their designers, but also to the culturally and ideologically laden content that comes with these products. As Wei and Kolko (2005, p. 206) suggest, "Internet content and interface metaphors have largely been dominated by Western perspectives." Thus, the Internet does not serve as an information-exchange medium as many technology idealists have argued; rather it is a channel of one-way flow of Western content and cultural patterns into the rest of the world.

The cultural bias of Internet content is also manifest in the issue of representation. Contemporary theorists in cultural studies have drawn attention to "practices of representation that reproduce a logic of subordination that endures even after former colonies gain independence" (Kohn, 2006). A 2002 survey of 2,024 million web pages showed that the bulk of web content was in English (56.4%); next were pages in German (7.7%) and French (5.6%) (Ebbert, 2002). The survey showed that over 82.7% of the World Wide Web was occupied by Western content. These estimates may reflect similar Western domination over other Internet applications (such as email, chatrooms, etc.). On the other hand, non-dominant languages occupy less than 8.3% of the web content. In many cases, the under-representation of the local languages on the web generates negative attitudes toward the Internet and discourages many individuals in developing countries against taking advantage of the promising aspects of the medium (see Albirini, 2006).

The mere fact that the Internet is dominated by Western content forces users in developing countries to rely more and more on European languages. Albirini (2007) reports of an emerging English technological jargon that seems to be replacing computer-related vocabulary in the Arabic language. He notes that, such statements as "cancel almawdoo" (cancel the topic), "arsillak message" (shall I send you a message?), "systemu mu'attal" (his system is broken), to mention few, are commonly used even though Arabic equivalents are available. Sociolinguists often argue that the emergence of new vocabulary in a given speech community often lead to the construction of new social realities (Seelye, 1974; Kramsch, 1995). The emergent linguistic forms therefore foreshadow larger socio-cultural changes that might in the long run obliterate any sense of cultural identity or affiliation.

The uninvited cultural effects of the Internet and other network technologies have currently drawn a growing public attention concerning the media's cultural non-neutrality as well as attempts to resist their projection onto the Third World peoples. Albirini (2006) found that participants in his study were cautious about using the Internet for its inattentiveness to their cultural and language needs and its growing primacy at the expense of other societal needs. Participants tried to safeguard their local identity by abandoning the use of the Internet altogether or using it circumspectly. Likewise, Al-Oteawi (2002) found that his participants were apprehensive about Internet use because they looked at much of the material on the Internet as inappropriate for the Saudi culture. Similar conclusions have been reported by several researchers in other parts of the Third World (Loch, Straub & Kamel, 2003; Straub, Keil & Brenner, 1997; Hill, Loch, Straub, & El-Sheshai, 1998).

THE INTERNET AS A TOOL OF POLITICAL DOMINATION

As in much of the current development literature worldwide, discussions of the introduction of the Internet have focused extensively on the promise of the technology to bring about democratic transitions to developing countries (Huff, 2001; Hudson, 2000; Anderson, 2000; Ghareeb, 2000). Because it permits easy, inexpensive, and rapid exchange of information, the Internet, it is argued, empowers ordinary people to receive, produce, and circulate information and ideas, and thus helps to break up state monopoly of information and creates new public political spheres (Ghareeb, 2000; Fandy, 2000). In many cases, the common wisdom that the Internet will lead to positive political changes lacks any specification of the mechanisms through which the change might occur (Khalathil & Boas, 2003). Rather, as Khalathil and Boas note, "popular assumptions often rest on anecdotal evidence drawing primarily on isolated examples of Internet-facilitated political protests."

The implicit starting point in the current discussions on the Internet's democratic potential is that the increased availability of information automatically leads to greater political participation. As Winner (2003, p. 594) puts it, a "serious misconception among computer enthusiasts is the belief that democracy is first and foremost a matter of distributing information." However, neither the mounting exposure to network technologies nor the notable surge in the flow of information through them has led to higher levels of political participation in the past decade. In fact, several scholars have argued that network technologies are counterproductive insofar as political participation is concerned. Winner (2003), for example, cites the recent decline in American public participation in voting as evidence of the negative impact of network technologies on the democratic process.

A related misconception is that the availability of information grants the ability to act on it. In reality, however, passive access to information just leaves one with the impression of political participation "while dampening the desire to take an active part" (Winner, 2003: p. 594). In other words, cybernetic communication can be a form of escape from the physical, real-life activism (Nichols, 2005). Hence, it merely offers the illusion of political participation, freedom and democracy. Information by itself might be of little use without well-organized civic political organizations and institutions that might translate online political activity into actions in the physical world. In most developing countries, such organizations and institutions are either absent or dysfunctional due to direct government control.

More importantly, while the Internet may facilitate the circulation of alternative political discourses, it simultaneously presents the means necessary to suppress them. The growing sophistication of surveillance software allows easy collection and analysis of information on individuals regardless of frontiers. According to Netlingo (2006), "Information traveling on the Internet usually takes a circuitous route to its destination computer, through several intermediary computers. The actual route is not under your control. As your information travels, each intermediary computer presents the risk that someone will eavesdrop and make copies." The monitoring of online activities may also take the form of data interception in real time through either blocking or filtering. Further, certain software can inspect stored data on personal computers and "report" them to a third party (see Schulman, 2001).

Internet censorship often occurs at multiple levels and by different agencies. According to a 2000 report by Privacy International, some countries, such as the U.S. and Britain, are engaged in systematic policing of information traffic on a global level. In fact, the U.S. government has promoted laws that make it mandatory for all communication technology manufacturers to build in surveillance capabilities and simultaneously limit hardware and software that provide encryption, "a technique that allows people to scramble their communications and files to prevent others from reading them" (Privacy International, 2000). In addition, technologically advanced countries, including the U.S., Britain, and the European Union, have led a concerted effort to establish a worldwide network for surveillance and privacy violation. These efforts have resulted in a number of international standards and systems for surveillance, such as "International Requirement for Interception" and "Echelon."

These global surveillance systems were often transferred to and implemented locally by governments in periphery countries, following the lead of their industrialized counterparts. Many governments in the Third World saw in the Internet a new means to push their own political agendas (Kalathil & Boas, 2003). Yet, the surveillance policies found in the majority of developing states do not always work independently from those implemented globally by several industrialized nations. The industrialized world supplies most developing states with different surveillance equipment (personal ID systems, computer intercept systems, tracking equipment, etc.) (Rohozinski, 2004; Eid, 2003; Privacy International). In return, the political elites of the poor countries who share the same values or interests of the more technologically advanced countries facilitate the surveillance of their own citizens. Individuals in developing countries may therefore undergo multi-level censorship from within and without their respective countries.

While most technologically advanced countries have various laws and regulations that limit the negative effects of the surveillance policies within their national borders, the absence of such laws and regulations from the "international" arena makes it easy for politically dominant powers to police any views that may challenge their prevailing political discourse. Likewise, within the authoritarian structure of most developing countries, the political elites can enforce these policies unchecked. This explains the fact that censorship practices have become a characteristic feature of Internet diffusion and use in developing countries (Kalathil & Boas, 2001; Goldstein, 1999; Zarwan et al, 2005). In fact, several authors suggest that Internet implementation in developing countries falls within larger schemes for promoting particular images of national governments as well as for maintaining their legitimacy within regional and global settings (Wilkins, 2004; Teitelbaum, 2002). Though essentially implemented for "progressive" purposes, the Internet, like other mass media, has become another means for augmenting the political power of the ruling elites to the detriment of the rest of the society.

With its built-in capabilities for surveillance and privacy violation, the Internet has allowed the traditional authority in developing countries to re-locates itself in the electronic sphere. Government-sponsored newspapers, supporting organizations, and other propaganda channels have secured their place online. Not only do authorities put the media in service of their political agendas, but they also implement strict censorship procedures to suppress dissident voices or even exclude them from cyberspace. Since both the media and the communications going through are under the direct control of the governments, it is an illusion to assume that the Internet by itself can circumvent the realities of the authoritarian structure of most developing societies.

The current *undemocratic* uses of the Internet have played a major role in minimally reducing *true* access to the new media. True media access involves participation in information production and dissemination and entails practices that give the media user a voice in the functions of the media (Khiabany, 1999). This type of access is conceptually and experientially different from "connectivity" to information which is produced by a few people for others to consume. Access has always been regarded as an essential part of the democratic process and indeed a structural prerequisite of any form of democracy (Khiabany, 1999). More importantly, access is a crucial condition of informed citizenry, providing grounds for conscious decision-making, freedom of expression, and intellectual development.

Internet use across the Third World has been characterized by disproportionate access. Although current estimates indicate that between 20% (Latin America) and 4% (Africa) of the Third World populations have connection to the Internet (Internet World Stats, 2007), only a few of these have real access to the media in the political sense that they have the chance to articulate their political perspectives and share them with others. The majority of the public are either deprived of this tool altogether or unable to shape their own political discourse due to different censorship constraints. The disparity in people's ability to present their own political discourse aggravates the power imbalance between the two groups. As Scolve (1998, p. 10) notes, "the Internet and related network technology help in creating new forms of class division in society and further disempowering already disadvantaged groups." Thus, the Internet supplements the physical sociopolitical divisions with an online political gap, thus further empowering the existing elites and perpetuating the disempowerment of the rest of the society.

Governments in the majority of developing countries have been successful in finding various mechanisms to limit true access to the Internet. Some countries, including China, Singapore and

Iran, impose censorship via centralized filtering systems that block particular content (Kalathil & Boas, 2001; Goldstein, 1999; Zarwan et al, 2005). Other countries, such as Tunisia and Cuba, have enacted Internet-specific laws to regulate online communications according to certain 'national standards' (Goldstein, 1999). In the majority of countries where Internet-specific legislations have not been enacted, "legal or de facto constraints on freedom of speech and of the press have a chilling effect on what is expressed online, especially in public forums like open bulletin boards and chat-rooms" (Goldstein, 1999). It is worth emphasizing that governments' measures to control the Internet are meant not so much to limit the flow of online information, but restrict it to areas that do not conflict with their political agendas.

To justify their Internet policies, several governments in developing countries subsume Internet manipulation under such maxims as "protecting national integrity," "preserving local traditions," and "avoiding chaos" (Teitelbaum, 2002; Kalathil & Boas, 2001; Zarwan et al, 2005). While in a few cases governments' control of the Internet falls within wider proactive measures against external threats (e.g. Cuba), governments more often block access to messages coming from opposition groups (Khalathil & Boas, 2003). For example, the number of websites banned by the Saudi authorities alone was approximately 400,000 in 2001, about 95% of which were political (Teitelbaum, 2002). In some developing countries even email messaging and online activities are policed, and sometimes state-governed courts rest criminal liability on nothing more than evidence of visiting certain websites or sending a "politically provocative email" (Zarwan et al, 2005). Obviously, governments' censorship practices seek to cultivate a particular type of Internet users, one that does not pose a threat to the local governments.

In sum, the emphasis on the Internet as a democracy agent in and by itself ignores the fact that network technologies have facilitated more than ever before the tracking of individuals' online activities. While the Internet allows the political elites, on international and national levels, to be so mobile and resilient in dealing with different opposition groups, its open nature simultaneously leaves no room for resistant voices to hide in cyberspace (Critical Art Ensemble, 2003). In effect, the internet has aligned with other mass media in reinforcing the political status quo in the world and in developing countries in particular.

CONCLUSION

As the above overview demonstrates, the spread of the Internet in developing countries has been neither economically productive nor socio-politically relevant. From an economic perspective, the introduction of ICT into many developing countries has put more strain over their economies in terms of outflow of foreign exchange and job creation. In addition, the Internet has been characterized by its cultural and language bias as well as its uneven distribution and representation among different communities. Given its predominantly Western design and content, the Internet facilitates the proliferation of Western cultural patterns at the expense of the social experiences of the local cultures.

Politically speaking, the Internet has reinforced the current political divisions worldwide and locally in developing countries. On a global level, the internet has allowed the politically dominant powers to track different nonconformist groups beyond national borders. On a local level, the Internet has been used primarily as a propaganda channel to augment the political power of many Third World governments. Contrastingly, the various constraints on Internet usage seem to curtail the populace's political participation opportunities in cyberspace and further alienate them from important decisions, political or otherwise, that have direct impact on their daily lives. Thus, instead of being a tool for free circulation of information, the Internet has become another tool of political domination.

The main challenge for progressive developing countries is less about how to bridge the "digital gap" with technologically advanced countries, and more about how the Internet and other network technologies contribute to enhancing development. Therefore, before increasing the number of Internet hosts or users, policy-makers in developing countries should consider how the new media can fit within and serve the development goals. It should be remembered that network technologies may not necessarily bring about economic advantages to developing countries similar to those attained by industrialized societies. As Ingelhart and Baker (2000, p.22) note, different societies follow different development paths, even when they implement the same strategies of economic growth because situation-specific factors shape how a particular society develops. This means that developing countries need to create their own models of development and find some formula to put network technologies in service of their own needs, purposes and circumstances.

To put the new technologies in service of their economies, development-oriented governments should devise plans about the possible applications and benefits of the Internet within their local settings (e.g., encouraging independent e-firms to appear, improving social welfare by providing a means for the transfer of knowledge to rural areas, improving health care delivery through telemedicine, facilitating citizen-state affairs, etc.). Internet-driven development initiatives should initially focus less on individual access to the Internet and more on creating business and commerce opportunities through the Internet. For example, policy-makers can initiate national intranets that allow local e-markets to emerge, using local resources, technical expertise, and languages. Such national portals may provide incentives for local businesses to avail the new media, and simultaneously facilitate the growth of small e-firms away from the global corporate competition. Country-specific regulations can then be implemented to link these national portals to the global Internet.

Internet initiatives in developing countries should include a cultural component that focus on ways of protecting the local cultures without necessarily blocking non-harmful "alien" material. Moreover, developing countries need to develop Internet hardware, software, and content that are congruent with the local identity, values, and customs. Part of the funds spent on importing foreign technologies should be allocated for the creation of Internet applications that are pertinent to the local population. It is widely accepted that a prerequisite for transferring any new technology is its "cultural suitability," that is, how well the proposed innovation fits within the importing culture (see Thomas, 1987). The transfer of ready-made products and content into developing countries irrespective of the notable differences in cultural context, history, tradition, needs, and infrastructure may prove culturally "inauthentic" (Freire, 1992, p. 121). Even if developing countries are not technically capable of producing local technologies, they should at least be culturally prepared to indigenize these tools.

Lastly, since the political problems of the developing societies are not related to information shortage, access to the online information may not by itself bring favorable democratic changes to these societies. Third World populations have to go beyond online information-sharing and create the physical conditions that make the transition toward political reform possible. In other words, online political communication should not be an end in itself but rather a means toward attaining some real-life political gains.

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