A Presentation of Development Communication Theory and the Various Uses of Radio in Community Development: A Historical Perspective and Review of Current Trends

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By:
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Introduction

Radio is one of the oldest and most relied on sources of media for information exchange. Over time nations and community groups have utilized the radio as a tool for national development. Its uses are broad, spanning literacy gaps, geographic distances and language barriers; and it remains an affordable source of information that reaches the masses. These are some of the basic reasons the radio has been adopted as a medium for communication as well as for information transfer to incite social change, to impart knowledge, and to exchange ideas. Its varied uses have enabled radio’s sustainability even through explosions in information technology, such as the advent of advanced two-way communication systems and the Internet.

This paper begins by presenting an overview of development communication theory to provide a framework in which to discuss the old and new uses of radio, with a specific emphasis on how community radio is used as a tool to promote social change and community/national development. The later part of the presentation explores the emerging political climate in Africa and its effects on media technology. A review of the implications of globalization is presented by looking at various UN programs, such as UNESCO and the UNDP Human Development Reports, to explore further the links among media systems, people and their needs, political environments, and the larger impacts on human development. It is impossible to discuss concepts of media development without looking at theoretical constructs provided by communication development scholars to understand how information systems and technologies impact the people that utilize them. This analysis appears in the beginning of the presentation in order to frame the argument that radio, in original form and considering its modern
advances, is still an effective medium for communication. The broader purpose of communication technology is to enable the sharing of information, knowledge, and to promote greater access to resources to ensure survival and to foster development so that people will be empowered to reach their full capacities as human beings.

**Theoretical approaches to development communication:**

The topic of development communication has been explored for over half a decade by academics in communication studies, political science, sociology, and anthropology, among other fields. The literature is extensive and diverse, yet over time scholars still do not share many common perspectives on how to approach development communication as an academic area of study, including its theoretical application to field settings. This section will explore chronologically the breadth of literature in communication and development, focusing on major dominant and alternative perspectives that have had the most influence over time.

Following the innovation of radio and its wide spread use in the beginning of the 20th century, scholars began to study the role of communication in development in an attempt to figure out how technology and mass media could be used to advance less developed countries. Over time, researchers have realized that the introduction of media technology alone was not sufficient to help integrate such systems into everyday life, and this changed the focus to the content of the message. As the perspective offered by participatory development theories has became more widely accepted and adopted, more attention has been given to the importance of a bottom-up approach where people in developing countries are determining their needs and setting project agendas.
The Early Period (1950s-1970s):

The dominant paradigm perspective characterized this time period where the Western benefits of mass media (print, radio and TV broadcasting) and the communication technology used in this medium prevailed in development approaches. The concept of modernization of society vis-à-vis media was viewed through the dominant society lens, in other words, from a western point of view. Schramm and Lerner were proponents of the dominant group of academics, and shared the view of bringing modern technology to developing countries as a way to open the door to further development, otherwise thought of as advancement. Lerner emphasized the need to bring ideas of democracy and modernity to the developing world by adopting the following approach: increase urbanization which would lead to higher rates of literacy, then disseminate information via the media, which leads to political participation and economic growth (Singh, 2002, p. 483-484).

Schramm was largely influenced by Lerner’s works and expanded on his views of modernizing less developed nations through the media, emphasizing that knowledge is power and productivity is the key to achieving economic development. Schramm’s (1964) belief in media technology is confirmed in the following statement, “There is little doubt that modern communication can be influential in a developing culture” (p. 20). He considered communication tasks to be utilized in order to realize social change. First, the people must be provided with information about national development and why changes are needed; second, there must be opportunities for people to participate in decision-making where leaders can lead and people can voice their opinions; and third, skills that are needed must be taught (Schramm, 1964, p. 125). This process and Schramm’s overall
perspective focused on the flow of information. On the surface this sounds participatory in nature, however, Schramm had high hopes for the ability of mass media to achieve many of these functions independently or as a support system to “help to bridge the transition between the traditional and modern society” (1964, p. 129), as well as raise aspirations, create a climate for development, feed interpersonal channels, and enforce social norms. Nonetheless, Schramm’s *Mass Media and National Development* was highly influential “in recommending and planning mass media programs in the developing world during the 1960s” and he understood the need to consider local conditions for mass media efforts to be efficacious (Singh, 2002, p. 484, 485).

Scholars who formed the alternative perspective of development communication theory at this time responded to the Eurocentric views presented by Lerner and Schramm, and other proponents of the dominant perspective (such as McClelland, Pool, and Pye). The major academics that critiqued the dominant perspective were Schiller and Smythe, who warned against the application of Western-based models and programs without accounting for the political economy of developing nations and how it would influence the acceptance of mass media information and technological systems. Schiller was critical of the market-driven emphasis of the media and how the emerging global communication system reacted to the political climate and ambitions of the government in the US, therefore he attempted to warn developing countries away from adopting this system (Singh, 2002). Smythe began critiquing theories of communication development in the 1960s from a political economy perspective. He participated widely in the formation of policy in broadcasting and telecommunications in North America and in the international arena, and maintained that academic research should aim to improve the
human condition, particularly for “the disenfranchised and powerless” (Smythe, 1994, p. 1). His writing from 1994 indicates his ideological viewpoint clearly: “Communications hardware, of course, is a carrier of the ideology and class structure of capitalism” (p. 255). These early scholars paved the way for expansion of development communication theory and their presentation of alternative perspectives established a precedent of dominant-alternative proposals surrounding this expansive field of study.

A current critique of modernization theory can be found in Nain’s (2001) summary of the dominant paradigm. The author states how Schramm and Lerner’s theories were applied to projects in the developing world where “the emphasis certainly was on a top-down flow of information, very often paying little attention to the needs of people at the grassroots level, the marginalized, and the disenfranchised” (p. 211). This top-down perspective may have been more a product of the time when a pro-Capitalist fervor pervaded the country, and thus was reflected in the international policies and programs. Nain’s international viewpoint within a developing country is a most valuable contribution to the development communication debate and broadens its theoretical framework. A senior lecturer from the School of Communication Studies at the University of Ghana, Ansu-Kyeremeh (1997) reviews the dominant perspective (the Pragmatic Modernization Perspective as he refers to this theoretical period) and how the scholars of this era approached communication development:

They visualized a positive functional role for Western mass media in education and development in countries such as those of Africa. But in doing so, they consistently prescribed the transplantation of Western communication media systems into the developing environment. In fact, from various modernization positions, the pragmatists’ definition of media is always in terms of the Western mass media, which exclude indigenous communication systems (p. 13).
The Middle Period (1970s-1990s):

This era in development communication is largely characterized by the formation of the New World Information Communication Order (NWICO) perspective. The technological advances made during this time period were in the form of satellites for television and in telecommunications. Hudson and Parker were two scholars that focused their research efforts on the benefits of such technology due to the increasing flow of information, with a specific emphasis on socioeconomic gains (Singh, 2002). The latter part of this era was characterized by a realization that communication development was being stunted by political and societal barriers as the world order changed drastically during the late 1980s and throughout the 1990s. Rogers (1993) made a similar assessment of the political instability prevailing in Third World countries, and stated “most ‘development’ efforts had brought further stagnation, polarization of income and power, high unemployment, overurbanization, and food shortages in these nations” (p. 39). Scholars realized that there could be numerous pathways to development, even in large, poor countries like China; and determinants of development depend largely on each country’s political, historical, and social forces. The concept of local participation in development efforts formed by looking at examples of villagers in China and Indonesia making organized group decisions. Rogers (1993) cites examples of successful radio campaigns that were implemented across the globe, such as the formation of radio groups gathering weekly to listen to health-oriented programs in Tanzania in the 1970s, much like the rural radio forums in India and Latin America (p. 40). As a result of transformations taking place around the world during this time, the view of development shifted from one of imposing Western ideas onto underdeveloped nations to looking at
the processes of participatory efforts by local people as the key to achieving social change.

The academics offering alternative, radical critiques of development communication theory at this time focused on the imbalance of power structures relating to information technology, and the subsequent unidirectional flow of global information from North to South. The concept of the communication gap was born during this era and the United Nations Educational, Scientific and Cultural Organization (UNESCO) made the call for a NWICO (Singh, 2002). Cees Hamelink was with UNESCO during the 1980s and compared the communication gap to cultural imperialism (Singh, 2002, p. 489). His views remained radical and he presented theories about the growing trend of world communication used as a form of social control, resulting in people’s disempowerment. In his work from 1995, Hamelink proposes a draft of the People’s Communication Charter at the end of the book to encourage worldwide adoption of this global initiative to prevent communication technology from being abused. Paulo Freire largely influenced the shift toward a community-based development approach, focusing on grassroots efforts. His hallmark work, *Pedagogy of the Oppressed*, remains a key manuscript for social change activists across the globe due to its humanist approach to development based on the understanding that people have the ability to recognize their own oppression, which will incite revolutionary change to overcome power differentials. Sussman and Lent (1991) present their view of the most important result of NWICO debates as having been, “the elevation of consciousness about the relationship of information power to political, economic, and cultural domination on both the global and
the intranational levels, leading to more sophisticated understandings of how states perpetuate their power and legitimacy” (p. 13).

The Present Period (1990s to present):

The recent trends in theory continue to emphasize participatory approaches toward communication development by focusing on networking and more NGO involvement due largely to the explosion of the Internet in global communications and the rise of satellite radio technology. The flow of communication has changed based on two-way and interactive patterns, which are enhanced by increasing networks across the globe. The essence of this movement according to Singh (2002) can be defined by the following statement:

The diverse and contingent ways in which networks functions are perhaps best appreciated by approaches that embed and contextualize networks in sociopolitical institutions, in new conceptions of power, and possible uses of network strategy. At their core, however, they are concerned with how marginalized and excluded groups in the developing world may or may not benefit from information networks linking computers and the Internet (p. 490).

It is unknown who will emerge as dominant versus alternative proponents of this period. Karin Wilkins has influenced the emerging paradigm shift toward focusing on the concept of power and how technological advances will be used to disseminate information that will be most effective for local people in producing social change. She argues that power should be the central focus in reconceptualizing development communication theory and practice, and recognizes how information networks that are interactive may assist the underprivileged gain a voice and access to other individuals and groups who share their point of view on a local, national and/or international level (Wilkins, 2000). Her intent is described best in the following statement: “Seeing development as a practice within a global economic and political system, we may
illuminate the conditions through which certain problems and groups attract visibility and become reconstituted for the purpose of intervention” (Wilkins, 2000, p. 198). Previous intervention methods used by well-intentioned agencies be they American non profits, international agencies such as UNDP programs, or local NGOs, tended to bring in concepts of development and change based on ethnocentric ideas of societal advancement. The participatory approach resounded with many scholars studying development communication as well as with change agents working in the field, as it encourages local perspectives to determine appropriate interventions, and ones that can address imbalances in power.

Andrew Moemeka’s name continues to come up in every academic work and his fundamental view of communication differences across societies is something that earlier theorists such as Schramm, Lerner, and Pye, among others, neglected to understand due to their mid 20th century individualistic, Western mindset. Moemeka (2000) reinforces the differentiation in communication technique by saying that:

> The people use accumulated knowledge to assess incoming messages and take action on the basis of individual differences. But in the tradition-conscious world, where the culture is communalistic, to *inform* is never to *communicate*, and to *talk to* is not to *talk with*. In communalistic communities, whether in the developed or the developing world, communication is a matter of interrelationship; and reaction to messages is predicated on how it would affect existing and/or future relationships (p. 101, emphasis in the original text).

This framework of understanding human relationships and interactions may sound basic and oversimplified to some and idealistic to others, but this is the pervading theoretical approach in community development work in the field; therefore, it only follows that it should be reflected in the development communication literature. Mansell and Wehn prepared a report for the UN Commission on Science and Technology in which they
expressed concern over the potential exclusion of the underprivileged from having access to advanced information and communication technologies (ICTs) and the lack of strategic planning being implemented to address this issue (Singh, 2002, p. 492). The UNDP focused on the digital divide in the 2001 Human Development Report, and other UN sponsored programs, such as those supported by UNESCO, are focusing technology development initiatives in underserved, rural areas across Africa, among other developing areas. Some of these programs will be examined in this presentation.

The participatory approach embodies multiple levels of entry regarding intervention and communication in order to involve all key figures involved in the social change process. This approach starts from the bottom-up and establishes open forms of communication based on trust in order to mobilize and organize participants based on common goals for change. There are numerous problems with this method that cannot be ignored. This process takes time, so that trust can be established first, and then it relies on the ability to break down and recreate methods of communication if different cultures are involved. These challenges are not impossible to overcome, but must be addressed in theory and in practice to maintain awareness of barriers that arise in global development. This is where the new forms of communication technology can be effective and widely adopted, by helping equalize access to the vast amounts of information available through such networks. If a more balanced knowledge base can be attained, there is hope for dealing with persistent economic disparities. Research has shown that there are enough resources available in the world to end poverty, hunger and homelessness. As our world becomes more connected through communication technology, these global issues become harder to ignore. It is possible to envision a world where communication networks and
participatory approaches to development can help close the gap between the haves and have-nots so that most all of the world’s citizens can benefit from products of human development.

Radio, an old invention turned new - Community based programs and initiatives

Radio has been cited over and over as the ideal medium for communication, especially in developing nations, because it transcends literacy and geographic barriers and its relative low cost in comparison to other technologies makes it most accessible to people. Moemeka (1981) explains the benefits of radio in saying that it is “the only medium that reaches every corner of the country…Radio also has an immediacy. Messages can get to the furthest parts of the country just as the event is happening….radio has that personal touch that lends urgency to change” (p. 33-34).

In his overview of the spread of mass media, Demers (2002) notes the explosion of radio across the globe in the 1920s, where in 1921 there were five licensed radio stations in the US and five years later there were 528; elsewhere, Radio Argentina began broadcasting in 1920 and by 1926 there were stations all over Latin America; furthermore, experimental stations cropped up during the 1920s in China, Indonesia, Australia, and the Philippines (p. 17). As radio continued to be used as a main form of communication across underserved areas, five techniques were commonly used, including open broadcasting, instructional radio, rural radio forum, radio schools, and radio and animation (Moemeka, 1994, pp.124-140). In the 1950s and 1960s, radio farm forums were founded in a number of countries across Africa, Asia, and Latin America, most of them sponsored by UNESCO, where there would be discussions following the weekly broadcast featuring agricultural information and new technologies, then a
selected individual conveyed participants’ feedback to the central station (Hornik, 1988, p. 78). Moemeka (1981) points out the problem encountered with radio centers in Nigeria and the lack of response to the well-researched programs was due to the fact that there was little contact between the staff preparing the programs and the audience, and a lack of local involvement to identify needs (p. 5). Bogue (1979) presents a pragmatic view of radio use that must be considered by those creating and implementing radio programs in the developing world. The author reminds the reader that despite the fact that the quality and affordability of radio favors its wide dissemination, “The radio has a long history of disappointing those who want to use it primarily for public education, social progress, or promoting the common good” (Bogue, 1979, p. 1). Numerous examples of radio as a development tool could be cited, but it must be sufficient to note that radio has continued to increase in use and availability over the latter part of the 20th century.

To put this form of technology in perspective regarding the global age of communication technology, Hendy (2000) notes that radio does not appear to be facing extinction due to the advent of TV, and in fact, there are many more radio stations across the world than television stations, it’s conveniently cheap and portable (p. 2). There are two sides to the issue of radio’s advantage just as there opposing views of development communication theory. Hendy (2000) points out these divergent values in saying that, “The tradition of radio as both the agent of crude propaganda and, simultaneously, the chosen medium of alternative voices, is probably at its strongest in the developing world” (p. 196). Majid Tehranian (1999) notes the dual processes of global communication and
localization of global entities have made isolationism impossible even for countries that have resisted global networking such as China and Saudi Arabia, where

The agents of transnationalization are the global hard and soft networks facilitated primarily by the nonstate actors…the localization processes are working through their own hard and soft networks, at times employing the core networks and at others times developing their own independent periphery systems” (p. 45).

These periphery systems include low-powered radios and computer networking systems, among others. The author indicates how NGOs are playing a central role in converging computer networks and providing access to affordable information technologies for “social movements to develop their own news services and information dissemination systems” (Tehranian, 1999, p. 50). Finally he expressed that the NWICO can be utilized best by developing communication channels that allow for underrepresented voices to be heard through information systems that are managed by NGOs (Tehranian, 1999, p. 56).

The discussion of what has occurred in the past and various theories scholars have posited to explain the usefulness of radio as an effective medium for national and global communication, including its disadvantages, has set the stage for a presentation of new technology and refined uses of old mediums. Fairchild (2001) discusses the possibilities of the future of community radio and its place in the arena of global media, in saying that

The key for developing community radio requires that institutions be created that empower local community members to create and control their own organizations. The opportunities for this kind of empowerment lie in two areas: adequate and diverse financing and the inclusion of a representative collection of interested constituencies (p. 277).

This advice reflects that offered by scholars in nonprofit management, which seems practical and attainable in its application toward community development programs as well. It is crucial for any community-based venture to ensure its funding base is diversified to sustain the project, as well as verifying there is adequate interest among
community members to keep people involved and engaged in its endeavors. Fairchild (2001) confirms the increasingly important role of community radio in global communication.

Community radio is fast becoming the most important form of grassroots communication in the world and this is due in large part to the strong reactions by many people to the aggressive expansion of specifically American media worldwide…As corporate entities become increasingly distant and untouchable, local media institutions are developing that are immediate, participatory, and increasingly able to contact and talk to one another…Community radio is increasingly speaking in languages few have ever heard and speaking about things taken for granted or ignored for far too long and exists in places little valued, rarely seen, and only faintly heard (p. 279).

Though this is the opinion of one author, his viewpoint can be confirmed by the existence of various community radio projects that are in motion across western and sub-Saharan Africa, in East Asia and in the Middle East.

UNESCO (2002a) has launched a program, the International Initiative for Community Multimedia Centres (CMCs) to establish such centers in areas that have been disenfranchised from the growth of ICTs, and suffer most from the digital divide. These centers vary depending on the funding available, but the aim is to establish an interactive, participatory approach when designing CMCs so that they integrate radio, ICTs such as the Internet and other equipment (telephones, copiers, fax machines), a library and database storage. The original idea is to combine a community radio station with a community telecenter to create a CMC, where training can occur and access will be provided for all sectors of the community, including farmers, entrepreneurs, students, teachers, NGO staff, community development workers, and so on. The main purpose of the center is to engage community members at all levels in their own development.

Various projects have results from this internationally focused program, such as the
foundation of a CMC in Kingston, Jamaica, and one in Mozambique. The UNESCO program published a multimedia training kit for ICT development and established a global support network for telecenters. The first “train the trainers” workshop for CMC managers took place in September in Burkina Faso. There are various groups across the globe that have donated funds to the initiative, including APC, OneWorld International, Panos, AMARC, Swiss Funds-In-Trust, and the Rockefeller Foundation among others (UNESCO, 2002a).

There are many other independently funded community radio projects being implemented all over the developing world, most located in countries across Africa, some in Thailand, India, and Afghanistan. When the World Summit on Sustainable Development took place in Johannesburg last August, the National Community Radio Forum (NCRF) created a team of community radio journalists and producers from South Africa, Zimbabwe, Malawi, Mali, Mozambique, Togo, Gambia, Angola, Canada, the Netherlands, Ecuador, and Costa Rica to air five, hourly broadcasts that included panel discussions and daily news bulletins about the summit’s proceedings in English, French, Portuguese, and Spanish (Africa News, August 23, 2002). Sentech, a corporate investor, has been funding community radio projects in South Africa for the past decade, and has recently helped bring new ICTs to the stations that have struggled to operate due to high costs involving the distribution of broadcasting signals (Africa News, April 12, 2002). An article from March 8, 2002 on Africa News, reported the results of a public hearing on the Media Diversity and Development Agency (MDDA) Bill that would establish an independent agency to provide funding and capacity building for small publications and community based media. This agency would involve the government, the media industry
and community media. Community radio activists announced their support of the bill but expressed concern over ministerial powers provided in the bill as well as the potential micro-management by the commercial sector over the MDDA due to funding advantages. These articles provide examples of how community media is alive and well in South Africa; however, this sector continues to struggle against the corporate media industry, which is a reality for independent, alternative media all over the world.

Community radio is on the rise in Niger, where it can help bring information to the 80% of adults who are illiterate in the country (Thurow, 2002). According to a Wall Street Journal article from May 10, 2002, about 40 community stations have emerged following an increase in funding from various aid organizations. Topics being covered are basic bits of knowledge that we take for granted in the Western world, yet are essential to health and well being, such as washing cooking utensil before use, cleaning a food prep area, covering food with a cloth to keep the flies away, and basic news about epidemics that have helped to reduce the child death rate. The UNDP director in Niger confirms radio’s usefulness as the “missing link in the development chain” as it extends beyond the reaches of electricity, encourages participation of villagers, and stimulates communication in local languages (Thurow, 2002, p. 2). Last December, the Freeplay Foundation, associated with the Freeplay Energy Group, a South African manufacturer, donated thousands of radios to secure peace and help reduce poverty in Niger. The foundation will distribute radios to poor, marginalized communities through a broader effort sponsored by the UNDP, encouraging community members to turn in guns and advocate for peace (PANA Daily Newswire, December 24, 2001). To further the sustainability of the project’s initiatives, a Freeplay technician will train youth from
Radio Goudel (a community radio station in Niamey) and women recently released from prison to do radio repairs in order to provide jobs to local people as well as technology. The radios have a solar panel and use a wind-up mechanism for generating power, which is perfect for people living in remote areas that do not have electricity and for those who cannot afford to buy batteries.

Foundations, NGOs and some World Bank initiatives in many other areas have funded community radio projects across Africa, like in Namibia, Benin, Tanzania, Burundi, the Democratic Republic of Congo, Ghana, and Ethiopia. These are recent projects that reveal renewed support for community radio, an old medium as cited earlier in this section, that has proven sustainable and effective for means of bringing simple, efficient communication technology to rural areas of Africa that are easily forgotten in the midst of the technology explosion across many parts of the globe. Not only are these projects aiming to bring basic information such as food safety and agricultural information to people (Africa News, December, 19, 2001), but the Studio Ijambo initiative in Burundi is co-sponsored by Search for Common Ground and the European Centre for Common Ground. These NGOs are working in conflict resolution by helping move from confrontation to cooperation. They established the station in 1995 in response to the hate radio that was broadcast widely and used to spur the conflict between the Hutus and the Tutsis in neighboring Rwanda (Africa News, January 28, 2002). These examples support that fact that community radio initiatives can have many purposes and are largely implemented to serve the specific needs of the area and its people.

A Few Figures from UNESCO
The information presented above, though not quantative in form, offers an idea of the number of transmitters that have been or are in the process of being built, especially regarding the growing number of community radio centers. Across the continent of Africa, the number of receivers increased from 93 (per 1,000 inhabitants) in 1970 to 131 in 1980 and finally to 216 in 1997 (UNESCO, 2002b). The following figures from UNESCO provide an idea of the range of radio receivers in various countries that have been discussed above.

Table 1. UNESCO figures on the number of radio receivers per 1,000 inhabitants

<table>
<thead>
<tr>
<th>Country</th>
<th># of radio receivers per 1,000 inhabitants 1970</th>
<th># of radio receivers per 1,000 inhabitants 1980</th>
<th># of radio receivers per 1,000 inhabitants 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>19</td>
<td>39</td>
<td>69</td>
</tr>
<tr>
<td>Kenya</td>
<td>23</td>
<td>39</td>
<td>108</td>
</tr>
<tr>
<td>Mozambique</td>
<td>11</td>
<td>21</td>
<td>40</td>
</tr>
<tr>
<td>Niger</td>
<td>14</td>
<td>45</td>
<td>70</td>
</tr>
<tr>
<td>Nigeria</td>
<td>50</td>
<td>107</td>
<td>226</td>
</tr>
<tr>
<td>South Africa</td>
<td>181</td>
<td>290</td>
<td>355</td>
</tr>
<tr>
<td>Tanzania</td>
<td>58</td>
<td>81</td>
<td>248</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>28</td>
<td>34</td>
<td>102</td>
</tr>
</tbody>
</table>

These figures show that development efforts have been helpful in establishing more radio receivers, however it is impossible to determine the most significant contributing factor in this analysis.

**What’s new? The latest technology influencing global communication-and not just the Internet**

The IT industry is growing rapidly aside from the Internet, and its overnight global invasion is something to analyze. This industry involves, surprise, the radio, and improved sound and broadcast quality due to the use of the digital medium and satellite
technology. The WorldSpace corporation has been “the global pioneer in direct-to-receiver digital satellite audio and multimedia services” (PANA Daily Newswire, January 24, 2002) in bringing these services to emerging world markets in Africa, the Middle East, Asia, Latin America, and the Caribbean. In March 2002, the WorldSpace Foundation announced its first live broadcast on the African Learning Channel and the first joint venture with the African Division of the World Association of Community Broadcasters (AMARC-Africa), which was part of AMARC’s International Broadcast Campaign Against Racism (Africa News, March 21, 2002). The broadcast comprised three hours of live programming in three languages (English, French and Portuguese) and was received by over 100 community broadcasters across Africa. The article projected that the program had the potential to reach 10 million viewers. Another project sponsored by WorldSpace in Kenya under partnership with the Arid Lands Information Network East Africa (Alin-EA) provided programs for the African Learning Channel emphasizing social and developmental issues like health, education, HIV/AIDS, environment and agriculture, small business management, and conflict resolution in order to assist community development workers in their coordination with NGOs, government programs and community information centers (BBC Monitoring Africa, April 11, 2002). The impetus of the foundation’s project is to reflect the founder of WorldSpace, Noah Samara’s, “vision of `bringing information affluence’ to under-served parts of the world like Africa” (BBC Monitoring Africa, April 11, 2002). Another notable WorldSpace Foundation sponsored program in Kenya has donated 500 digital radio receivers to be used in the school broadcast programs in the Rift Valley Province (BBC Monitoring Africa, November 8, 2002). Earlier in the year, the Kenya Institute of Education (KIT)
signed a contract with WorldSpace to launch educational programs on one channel of WorldSpace’s AfriStar digital satellite to schools around the country, which are projected to reach more than 11 million students each day (Africa News, April 20, 2002).

One of the advantages of satellite technology, of which there are many, is the fact that shortwave radio broadcasts can be projected onto the African Learning Channel and broadcast from the AfriStar WorldSpace satellite across the continent to locations that subscribe to that channel. Radio has long been hailed for its broadcasting range, but satellite radio systems, once the technology is in place, can provide the entire continent with programming as long as there is receiving equipment on land. The AfriStar satellite reaches the entire continent as well as parts of Eastern Europe. According to an article in The Economist, “It is satellite radio—with its ability to broadcast nationally or even across whole continents—that tantalizes media analysts. Most expect satellite radio to aggregate niche markets that would not normally be profitable. That could shake up the antiquated radio world much as cable challenged network television in the 1980s” (March 16, 2002, p.1). Another technological advance affecting the radio medium mentioned in the article is the endeavor to create a software-driven chipset based on a generic digital signal processor (DSP) by Global Radio (The Economist, March 16, 2002, p. 3). The major advantage of this forthcoming invention will be the ability to upgrade the software as technology improves without having to replace the entire hard-wired system. The new satellite radio systems, and extensive corporate involvement in launching such technology have great advantages over traditional radio broadcasting due to the extensive range and quality of the programming. This technology is being used to improve education and assist development efforts, so that people in the most rural parts of the
plant can benefit from scientific advances. As globalization continues, our world will continue to shrink due to the technological systems that will connect people across the world.

**The Political Climate in Africa**

In the past twenty plus years since the last country in sub-Saharan Africa gained independence, the political climate has been characterized by civil strife, turmoil, widespread governmental control over all spheres of society, and an unstable ride along the road to democratic reform. In the early to mid-1990s, Zimbabwe was the second most productive and economically stable country in sub-Saharan Africa, but those days seem long gone in the wake of the isolationism that Mugabe is intent upon establishing, including squashing any tenets of a free press, and enforcing the policy of land ownership being returned to indigenous peoples of Zimbabwe (i.e. government ministers and the politically and economically powerful elite). Nigeria has experienced ups and downs in its experiments with democracy, and of course the Rwandan genocide cannot be ignored. According to Gross (1995), a lack of coordination, planning and development of applicable long-term goals has prevailed, though a part of this can be attributed to a tumultuous history and the dependence on outside funding sources for economic growth. Another dimension of this dependency theory that can explain the underdevelopment, in part, is due to the competition for loyalty (and access to resources) between the East and West (Gross, 1995, p. 229). This has diminished to a degree since the end of the Cold War, and in recent years, more multi-party elections have occurred throughout the continent. As the political systems continue to move toward transparency, hopefully the media will continue to become more independent from governmental control. Outside
funding initiatives have assisted in developing programs that are making this transition possible; however, it is essential that African nations focus on political infrastructures to ensure stability so that social and economic growth can follow.

The transition to multi-party elections attempts to establish aspects of democracy, but they have failed in mobilizing support by the masses. According to the writings of Mustapha, an African scholar, he “insists on the need for a restructuring of the foundations of the state so that consent can be generated and, therefore, legitimacy and development secured” (Africa News, July 22, 2002). In this same bulletin, discussing the new initiatives by the New Partnership for Africa’s Development (NEPAD), many scholars feel that the ideals behind NEPAD’s framework lacks focus on the political, social and domestic forces that are necessary to foster positive, sustainable development, instead they are proposing ideas that cater to the specifications of funding agencies. Colin Powell, expressed support and hope for NEPAD in a UN debate where he emphasized the need for African nations to increase efforts toward democracy and acceptance of human rights initiatives, which are fundamental building blocks to establishing economic and social growth (Ewing, September 16, 2002). To back up his statements of encouragement, Powell said that the US would promise to increase assistance to poor nations by 50 percent as long as the government is operating fairly and justly, in other words, with a high degree of transparency.

Every year the UNDP publishes the Human Development Report (HDR) to assess progress in various sectors contributing to human development across the world. This is the most comprehensive source of information about advances and regressions occurring internationally, because the report takes into account almost every aspect of society, such
as health, technology, politics, education, and so on. The UN uses a complex figure to determine the HDI, including factors that contribute to overall positive social change such as; a long and healthy life (Life Expectancy Index), knowledge (Education Index-Literacy, Enrollment), and a decent standard of living (GDP Index). These three index figures are factored into an equation to determine the Human Development Index (HDI) of a country. This can explain, in part, why a country like South Africa, which is highly democratic and has the highest Freedom House rating (current and overall) of all the countries listed below (see Table 4), has an HDI score that falls into the medium range for Human Development. It is due to the HIV/AIDS epidemic so prevalent in South Africa, which affects the Life Expectancy Index, which in turn influences the outcome of the HDI figure.

Table 2. Human Development Index (HDI) scores according to the UNDP Human Development Report: Deepening Democracy in a Fragmented World, 2002

<table>
<thead>
<tr>
<th>Country</th>
<th>HDI Score 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>171</td>
</tr>
<tr>
<td>Kenya</td>
<td>134</td>
</tr>
<tr>
<td>Mozambique</td>
<td>170</td>
</tr>
<tr>
<td>Niger</td>
<td>172</td>
</tr>
<tr>
<td>Nigeria</td>
<td>148</td>
</tr>
<tr>
<td>South Africa</td>
<td>107</td>
</tr>
<tr>
<td>Tanzania</td>
<td>151</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>128</td>
</tr>
</tbody>
</table>

All of the countries listed fall into the low end of the medium human development range (54-137) or they fall under the low human development range (138-173), of which Niger is second to last and Burundi is third to last. Despite various improvements regarding community development efforts and interventions from various NGOs and corporate
foundations, these countries have much work to do to increase their respective HDIs. By 2001, 120 countries had produced more than 360 national and subnational HDRs, and 9 regional reports have been published (UNDP, HDR 2001). The development of HDRs has challenged countries to address issues of education, social and economic development, as a matter of political debate, which has influenced policy formation. Subsequent changes over the years have been reflected in policy and HDI rating changes, most for the better.

Table 3. A Few Figures from Freedom House, Freedoms in the World Country Ratings for 2001-2002

<table>
<thead>
<tr>
<th>Freedom Scale: Free (F)=1.0-2.5, Partly Free (PF)= 3.0-5.5, Not Free (NF)= 5.5-7.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>The three ratings are based on political rights, civil liberties, and overall freedom status</td>
</tr>
<tr>
<td>Burundi</td>
</tr>
<tr>
<td>Kenya</td>
</tr>
<tr>
<td>Mozambique</td>
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<tr>
<td>Niger</td>
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<tr>
<td>Nigeria</td>
</tr>
<tr>
<td>South Africa</td>
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<tr>
<td>Tanzania</td>
</tr>
<tr>
<td>Zimbabwe</td>
</tr>
</tbody>
</table>

The numbers are staggering and reflect the changes, or lack thereof, regarding political rights, civil liberties and overall freedom status that has continued to persist across the continent. These figures also represent the lack of significant change to democratic reform over the past three decades, except for South Africa. The figures for Nigeria and Zimbabwe are not surprising considering the tumultuous political climate prevailing in those countries. The Freedom House survey provides an honest, relatively unbiased
assessment of the various aspects of freedoms and rights afforded to each country’s citizens.

Table 4. 2002 Freedom House Annual Survey of Press Freedom
Scale: Free (F)=0-30, Partly Free (PF)=31-60, Not Free (NF)=61-100

<table>
<thead>
<tr>
<th>Country</th>
<th>2002 Press Freedom Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burundi</td>
<td>77 NF</td>
</tr>
<tr>
<td>Kenya</td>
<td>67 NF</td>
</tr>
<tr>
<td>Mozambique</td>
<td>48 PF</td>
</tr>
<tr>
<td>Niger</td>
<td>49 PF</td>
</tr>
<tr>
<td>Nigeria</td>
<td>57 PF</td>
</tr>
<tr>
<td>South Africa</td>
<td>23 F</td>
</tr>
<tr>
<td>Tanzania</td>
<td>49 PF</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>83 NF</td>
</tr>
</tbody>
</table>

The Press Freedom numbers are not particularly surprising considering the overall freedom in the world ratings from Freedom House as listed in Table 3. The results confirm that African countries have vast improvements to make in the areas of press and civil freedoms, and this is a crucial step in becoming part of the global media system, by agreeing to maintain a high degree of transparency in order to allow citizens to participate in the global network through the exchange of information, ideas and knowledge.

Conclusions

The UNESCO figures presented in Table 1 show that the use of radio has increased over the years. This is due, most likely, to the fact that radios are relatively inexpensive, easy to obtain and operate, and can be used while engaged in other tasks, in other words, it does not require hands-on manipulation, like the Internet, in order to
obtain information or have access to entertainment. Along with the number of radio receivers increasing over time, there has been a resurgence in community radio development, exemplified by the number of programs discussed, in addition to many others not mentioned in this context, in East Asia, the Middle East, and in Latin America. Advancements are taking place with the advent of CMCs, where NGOs and private funders recognize the continued benefits of radio as a valuable media source in the developing world. The functional purpose behind the creation of CMCs is to bring older forms of technology, such as community radio, together with new technology like the Internet, video, TV and computers together in one location to provide communities with a host of technological options. The developmental purpose behind these centers is to create a space for the community that is managed and operated locally to allow for specific needs to be addressed, with the hopes that local development will follow. The potential for organizing a community around a technology center are vast and can lead to social change in the political environment, which could increase press freedom (i.e. transparency), and eventually raising the HDI, which would indicate improved conditions overall for people. This is where theory merges with the human condition. Scholars all over the world have offered various perspectives on development communication, and over time theoretical connections are observable in human behavior.

The rise of satellite radio systems, such as those being operated by WorldSpace, show that the global community cares about the needs of the developing world and corporations are willing to share access to resources for more underserved populations in order to bridge the digital divide. These programs and partnerships offer hope for the future of our shrinking global community and prove that people are expanding their
paradigm of reality when it comes to the notion what a community is and what it means to be a global citizen.

The annual UNDP Human Development Report is an informative and comprehensive source of knowledge about our global community and provides the most up-to-date information about the status of human development. Due to the incredible access to information available to society, especially to those in the developed world, no one is excused from being aware of what is happening across the planet. We should be so fortunate to have this information within our reach. Hopefully there will continue to be people, programs, and foundations willing to share their wealth in resources with those less fortunate so that we can move toward a more equalized global society and strive to close the gap between the haves and the have-nots for good.

It would be most appropriate to conclude this analysis with a quote from the 2002 UNDP Human Development Report that expands on the need to continue the movement toward press freedom globally so that democratic societies can form and people’s voices can be heard. The statement follows,

To be free and independent and to produce factual, unbiased information, the media must be free not just from state control—but also from corporate and political pressures. With great media pluralism comes an expectation of greater political pluralism in the media and greater potential for broader, better-informed debate. But commercial and political pressures still skew the market for ideas (UNDP, HDR, 2002).

It is more important than at any point in history to continue to support and encourage the expansion of transparency and press freedom across the globe so that all people, regardless of their education level, economic status, religion, or values can have equal and unfettered access to the world of information and knowledge. This will help to pave the way for social change, which improves the human condition overall.


UNESCO. (2002b). IV.14 Radio and television receivers: total and number per 1,000
inhabitants. Retrieved November 21, 2002 from
http://portal.unesco.org/uis/TEMPLATE/html/CultAndCom/Table_IV_14_Africa

