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ABSTRACT

The Institute for Communication Research at Stanford University collected and synthesized existing data on cross-cultural broadcasting throughout the world. In their report, details are provided about four types of effects resulting from cross-cultural broadcasting: (1) cultural effects with emphasis on the trend of research in radio, television, and film broadcasts; (2) the effect of linguistics in international radio, commercial broadcasting, minority languages, and standardization; (3) psychological effects of communications and visual perception; and (4) political effects. Twelve footnote references and a bibliography of over 100 items are included. (DS)

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THE EFFECTS OF CROSS-CULTURAL
BROADCASTING

A study prepared for UNESCO by the
Institute for Communication Research
of Stanford University.

U.S. DEPARTMENT OF HEALTH,
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Stanford, California
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IMPLICATIONS OF THIS REPORT

In finishing this review of what is known about the effects of cross-cultural broadcasting, we can now indicate our main impressions -- both about what is known and about what is unknown.

The most striking impression is the fact that so little research exists. Our review touched studies and discussions of many kinds, all with some relation to the central question, "What are the effects of cross-cultural broadcasting?" Much of what we found is based on fear or undue optimism. The lack of studies firmly rooted in data: this is the overriding fact about this inquiry.

While the image of cross-cultural broadcasting may be one of "cultural" interchange, the reality is that of the marketplace. Commercial values are the rule; non-commercial broadcasting is not a major competitor to commercial programming. Programs intended for any type of social improvement are rare. If they exist at all, they can be found on radio much more than on television or in films. General entertainment programming has a definite social value, but most observers would hope for programming more explicitly geared to the social needs of their diverse audiences. Furthermore, imported entertainment programs produced for foreign audiences penetrate the host culture in ways that are not understood. Lack of understanding generates uneasiness and fear.

What we say about satellite technology applies to all the cross-cultural media:

We must not speak of men (or nations) free from satellite technology, but of men (or nations) free in relation to it. This requires reality assessment and solutions.

Critics have lingered in lamentations and, in some cases, very good theoretical speculations. Optimists have overlooked reality constraints and foresee marvels of technological dreams. Meanwhile, technical communications developments in the satellite realm and adjoining technologies advance, in gigantic steps, with their own logic.

A definite question mark surrounds the recommendation for "reality assessment and solutions." Is the research problem growing bigger than the research tools? Do technologies like direct broadcast satellites or mass media within any complex social setting exhaust earlier methodologies, or must totally new research designs be created? Can we build on past designs, only now build bigger and better? Or do we need to make breakthroughs in research methods before we can get a handle on "the effects of cross-cultural broadcasting"?

We do recommend more research, because we need more information. But we also want to raise the possibility that old techniques may not provide that needed information. If up until now no thorough research has shed light on cross-cultural broadcasting effects, this may stem from several causes. One of them may be that the tools are inadequate. Research may have to begin one step back from the cross-cultural broadcasting question, to be sure the methods are adequate to the task.

Our report explores four possible types of effects: cultural, linguistic, psychological, and political. While broadcasts may have all these kinds of effects, as well as others, the difficulty of understanding all these effects calls for breaking them down into manageable units. Reconstructing these analyzed parts into a comprehensible whole is another challenge facing anyone interested in grasping the reality of cross-cultural broadcasting.

We note the difficulties in beginning research about the linguistic effects of cross-cultural broadcasting. Language puts some constraints on broadcasters, but once the language choice is made broadcasting has a definite influence of its own on that language. Linguistic homogenization, the extinction of some languages, the creation of linguae francae, deliberate language planning -- these are all phenomena that may lend themselves to research.

The stumbling block so far has been the lack of baseline data on language use in broadcasting. It is necessary to know the language practices of the audience and of the broadcasters, because language policies and broadcasting policies interact. People do gravitate toward programming in their own language. What effects occur when those programs are unavailable, when other languages fill up all the available broadcasting channels?

Data available so far indicate that the relative power of the parties involved in any communication affects the self-perception of the audience. Lack of audience involvement -- whether due to inappropriate language or cultural models -- creates a situation of inequality, to the detriment of the weaker party. Because of the grand scale of cross-cultural broadcasting, pilot studies must be done very carefully to insure that results can be projected into the full-scale reality. Simulation designs may be useful in understanding the dynamics of cross-cultural broadcasting, particularly in the area of individual and group psychology.

The political arena is an area unto itself. A great debate is swirling around the issue of international broadcasting. Most nations demand control over the broadcast material that enters from other countries.

They insist that foreign influences must be limited if their own national sovereignty and integrity be insured. Usually these nations are those that have limited national production facilities, and are possibly candidates to become massive media importers. They fear this, for various political reasons that add up to a desire to control their own airwaves.

Because the technology involved in the production and transmission of international broadcasting is so costly, few nations have their own systems. These nations have tremendous influence because of their communications resources. Unless terms can be worked out that do not subjugate the poorer countries in their use of the new communication media, resentments may grow and opportunities for better international relations will be missed. The concentration of wealth and the proliferation of poverty in our world is a basic fact. If it is allowed to lead to vertical communication patterns between the powerful and the poor, an opportunity for creating widespread awareness of personal worth will also have been missed.

The current traffic patterns in international communications show that the less developed countries are the major importers of programming. Should these patterns simply be transferred to satellites, more of the world's population would be subjected to the programming produced and distributed by relatively small groups of commercial interests located in the United States and Western Europe.

Mechanisms need to be devised and tested that allow the smaller countries and those with relatively young broadcasting systems to upgrade their production capabilities either on their own or in consortia with other nations. A primary goal should be to improve local production

capability and service within a particular nation, but out of this approach should also evolve means for enhancing the distribution of programs on regional or worldwide bases.

The more autonomy that can be given to more nations the better. Such a process will tap into persons and perspectives that are now excluded from participating in the national or international communication process. Just as the new technologies represent quantum jumps in terms of scope and size and speed, equally startling innovations are needed to inject localness into the communication process and to scale down the media from mass systems to people-sized and small-community-sized media. Local systems could plug into regional, national, and international systems. We have a great deal to learn about creating an interconnected system like this; for this reason, we should benefit by involving as many persons as possible in thinking about it -- particularly persons from the local areas that have been uninvolved up until now.

We have found that many authors are concerned about the patterns of international communication that do exist, and have acknowledged the lack of substantive research into the questions that these patterns evoke. What we can principally infer is that the answers to these questions are not needed by any group with the resources to pursue them. There is evidence, though, that other groups -- groups that do not have the resources to sponsor the research -- do feel that documentation of cross-cultural broadcasting effects would be important and would reveal negative effects precisely on those groups with less resources.

Research needs a patron. That patron may be motivated by commercial interests or political interests or social interests -- whatever needs

that added information might fill. In this area of cross-cultural broadcasting's effects, there has been a very limited research interest up to now. We can conclude that no potential patron has had enough need or concern to explore this area.

This, perhaps, is the principle implication of the report: the need for more information about cross-cultural broadcasting's effects is a need that is just beginning to be recognized. As the topic gets more definition, hopefully research designs will be devised and resources to back up those designs will be made available. Not until our knowledge is increased can we hope for action to share information in ways that build up all peoples.

INTRODUCTION

At the invitation of UNESCO's Division of Communication Research and Policies, the Institute for Communication Research at Stanford undertook the broad commission to "collect and synthesize existing experience on cross-cultural broadcasting throughout the world." With such a large mandate, the Institute team cast its nets widely. We did not review all information everywhere about cross-cultural broadcasting. But we did correspond with dozens of persons in positions to provide information; we picked the brains of the many communications people such as Kaarle Nordenstreng and Olaf Hulten who visited Stanford this year; we reviewed the available literature; we talked with colleagues within the university.

"Cross-cultural broadcasting" was defined rather broadly, to mean any broadcasting situation where one cultural group produces the programming and another cultural group receives it. The setting could be intra-national as well as international. Our basic question: What empirical findings exist about the effects of such a broadcasting situation -- cultural, linguistic, psychological, or political effects?

These four kinds of effects proved to be handy categories. In the swirl of literature that we encountered, these categories provided a backdrop against which our thoughts could cluster. Threads of arguments could be picked up, and followed. These four categories were useful for us; we do not assume that they will be the only categories others can imagine.

Exploring this topic, we start with two different and differing feelings. One is that the whole question is quite simple, and essentially political: some nations are strong and others are weak, and this generates fear (in many quarters) that the strong will exploit the weak. It has happened before in many ways; why should broadcasting not be used as a mechanism of control? The radical critics, who state this view compellingly indeed, have history on their side. Truth can be uncomplicated. The straightforwardness of this feeling is one of its best arguments.

The other feeling is far from straightforward. It is a feeling of untamed chaos, dealing with a dizzying complexity of nations, languages, histories, research methods, opinions, insights, experiences, needs, hopes, and fears. Where does the simple truth lie amid all that?, we ask ourselves. The world resists facile definition, and when we speak of cross-cultural broadcasting as we have defined it, we are speaking about the tangle of communication efforts that somehow knits the world's people together, at least to the degree we have known so far. We feel we are in a jumbled jungle, canopied by tall trees, baffled by unresisting undergrowth whose roots we cannot find -- lost, and likely to remain so.

Both feelings have something in common: they lack concrete information, and have built-in resistance to new argument. Strong opinions are not easily put aside. When one is confident that he has the truth, the tentativeness of research seems superfluous at best, silly, to be more candid. The simplicity of the first feeling tends to generate dogmatism. The uneasiness of uncertainty and ambiguity makes dogmatism an attractive, safe harbor.

The feeling of complete disorientation tends to discourage any hope of finding paths or of discovering unities amid the "buzzing, blooming confusion." Such complexity makes strategy-making disheartening. It demands creativity and a relentless energy that is uncommon.

So, on the one hand we start with a sense that no new information is needed because of the simplicity of the matter, while on the other we have the sense that no new information is possible because of the complexity of the matter.

By and large, we found that, in fact, there is little information that bears directly on the question that stimulated this project: What empirical findings exist about the effects of a cross-cultural broadcasting situation? Very few studies confront this question head-on. We present what we have found, in four sections that correspond to our analytic categories. Much of the literature reported here lacks a firm data base. Readers can identify authors who tend toward dogmatism and authors who are bewildered by the complexity of their perspective.

We feel this presentation reflects the situation surrounding what we know about cross-cultural broadcasting effects. We look forward to the input of readers on what we have written here -- we would welcome their input. This report is intended both as a source of information and as a call for new data. All the answers are by no means available here about cross-cultural broadcasting -- far from it. But we do not feel that it is impossible to understand more about this admittedly unclear phenomenon. UNESCO has acknowledged a need for more information by commissioning this effort. We feel this report documents that need.

CROSS-CULTURAL BROADCASTING: CULTURAL EFFECTS

THE PROBLEM OF CROSS-CULTURAL BROADCASTING: WHAT IS AT STAKE

Only recently are new directions for the assessment of broadcast messages developing. Any discussion of their broader and long-range cultural effects lacks hard data to support it. These realities provide the backdrop to this first section. Great importance has been given to the media's potential. The ever-expanding commercial broadcasters seem to have far more confidence in this potential than available scientific research might suggest. While UNESCO and other concerned organizations debate over the principles, hazards, and benefits of cross-cultural broadcasting, commercial cross-cultural broadcasting has already taken over the field. In fact, official national foreign broadcasts, even powerful ones such as the Voice of America (VOA) or Radio Moscow, now provide only marginal inputs in the flow.

If within nations and cultures the nature and effects of mass communications are not wholly understood yet, the field of cross-cultural broadcasting suffers from an incredible lack of research. The effects of mass communications within a given culture are quite complex. But when a message is encoded in one context and decoded in a very different one, problems are far more complex. Possibilities of misunderstanding and unexpected reactions are increased (Smith, A., 1966). However, the issue is even broader: it is concerned more with the effects that massive, repetitive and homogeneous messages bring upon foreign cultures rather than with

the particular reinterpretations of the messages in different settings.

Basically, then, a hidden agenda governs the present discussion: the assumption that powerful messages are being broadcast that are capable of seriously affecting what we term "vulnerable" cultures.

To what extent this assumption holds, this is the question. Up to now, available research has focused more on a description of efforts (system capabilities, ranges of broadcasts, types of audiences reached, and the like) than on the effects of those broadcasts. When research has looked at effects, only short-term or limited effects (non-generalizable) have been probed. Given the importance of the problem and the lack of data, it is not strange that wishful or dreadful thinking has flourished. The ecstasies and horrors of the global village have been considerably portrayed, but never thoroughly documented.

In this section, we want to mention recent research trends and trace what is known about cross-cultural broadcasting via radio, television, satellites, and film..

TRENDS IN CROSS-CULTURAL BROADCASTING RESEARCH

Bruce and Chitra Smith in an extensive review of the 1945-1955 literature on international communication trace the general trends that research followed in that decade, concluding that "no very adequate general theoretical model of the international communication process has yet been developed." They point out why substantial research was neglected. Most effort and money in the "free world" went to "stop communism" within the Cold War climate; research was passive, mainly reactive to political currents. Excluding UNESCO's efforts, clients or sponsors were mostly national governments, foundations, or business firms.

From the Smiths' review, the dependency of research on precise societal needs stands out. The unequal distribution of wealth and power, both within and between nations, is clearly displayed in what is known and what is not. An overstatement, perhaps, but far from baseless.

In 1969, UNESCO held a meeting on the "need for research" in mass communications. An incisive report by James Halloran (1972) dealt with the state of the field at that time. Halloran's basic complaint can be summarized simply: Are we asking the right questions?

We should be aware of the shortcomings and inadequacies of piecemeal studies and the dangers of overconcentration on isolated elements of what should be considered as a social process in which communicator and recipient are parts of the larger social system.

Translate this into the cross-cultural domain and we have an overview of the present situation, aggravated by the fact that even piecemeal studies in this area are hard to find, and those that do exist are of limited generalizability.

Today, Halloran's report still holds. In the interim, technological progress in communications has increased the gap between research and the actual practice of cross-cultural broadcasting. It is only through preventive policy actions that cross-cultural broadcasting has not expanded further (e.g., free flow debates). However, decisions for expansion are continually being urged.

Recently, Schiller (1974a) has taken a very strong position regarding research in his country:

Communication research in the United States has been and remains firmly under the influence of the major power-wielders in the country. The big corporations,

their allies in advertising and public relations and opinion polls, and more recently the Government bureaucracy (overall protector of the imperial system) are the sponsors and clients for a good part of the communications research community The American corporate enterprises stimulate and promote the research it requires for its maintenance and expansion.

All in all, a clearer picture of cross-cultural broadcasting is emerging that challenges some basic assumptions of previous research. The East-West Conference on World Communications (1973), for instance, reflects new ethical concerns when it speaks of "the target that talks" (Palmore, speaking of audiences), "a cross-cultural communication does not take place when there isn't dialogue and two-way communication" (Byström), and a "fair and equitable communication policy" (Lerner). This reappraisal reveals that, to some extent, the recipients' points of view are gaining legitimacy in the senders' strategy.

WHAT WE KNOW IN CROSS-CULTURAL BROADCASTING: RADIO

Masani (1971) states that of over 40 Asian countries with radio service, as many as 25 broadcast on short wave. Obviously, it is not only highly developed countries that place so high a value on foreign broadcasts, even at the cost of impairing their own national broadcasts. For instance, All India Radio covers only 60% of its territory on medium wave and less than 75% of the population, yet it has an external service of over 46 hours/day in 21 languages. If we add that the Indian broadcasts for its people have to be done in 16 main languages, 51 dialects, and 87 tribal dialects, a striking picture emerges of the importance foreign broadcasts are assumed to have. "Assumed," because, as Masani argues (while recognizing there has been little evaluation of the impact), inter-

national broadcasts fail to make their desired impact. Awasthy also points out what we believe is the crux of the matter:

With the huge development of broadcast, there is no possibility of foreign broadcast ever directly influencing the minds of people (fed by the local point of view) ... but by being a source of information to minority groups, it can have a bearing on public opinion in the long run. (Pp. 138 ff.)

A further problem, of course, is the question Masani asks: Even if all linguistic and cultural problems are overcome, which group should be addressed? The answer lies in the political arena.

An excellent book by Sydney Head (1974a) presents a comprehensive view of the African situation. In 1972, some 40 non-African countries and 19 within Africa were pumping out radio propaganda in the continent, not to mention religious stations and the UN radio. As the African colonies won independence, rival European and Asian powers had begun to compete for markets, ideological converts, and third-world leaders. At the same time, the operation of an external service by the new nations became a status symbol. Browne (in Head, 1974) adds that, after World War II, most international broadcasts returned to their function of the 1930's: transmitting the colonial powers' programs to countrymen overseas. In the late 1950's, with Independence, a new era began. By 1972, the air waves were a major battlefield for international broadcasting. Browne analyzes some of the data that exist: the 1970 study by Research Broadcast Ltd. (RBL) (in Kenya, Tanzania, Uganda, and Ghana), and the United States Information Agency (USIA) studies of 1964 (West Africa) and 1966 (East Africa). It is difficult to know how many people listen, and more difficult to isolate effects. However, some facts emerge consistently: it is the better educated who listen most,

domestic service is likely to be more listened to, and the British Broadcasting Corporation (BBC) has the greatest audience and credibility.

Don Smith (1971) holds that Coddington's 1959 assertion is still true: "a major unknown element in International broadcast is the listening audience." If this is the case, and available data cannot deny it, what can we expect to understand about those more crucial unknowns, broadcasting's effects?

The available audience data are indeed sketchy, and can be briefly described. The USIA-1964 survey in West Africa found 20% of the sample listening regularly to the BBC, and 25% in East Africa in 1966. RBL found that 45% listen "often" to the BBC. As for credibility, the USIA-1966 survey gives the BBC 69%, VOA 39%, Cairo Radio 38%, Radio Moscow 23%, and 21% to Radio Peking.

Of the western services, among those 20 plus that claim participation, Browne finds only six or seven to be significant in hours broadcast. Five use African languages. The BBC has more specialized programs for Africa than for any other area. Browne makes some general recommendations for cross-cultural broadcasting: firm and long-established policies, a low-key approach, thorough and objective emphasis on African needs, and programs relevant to African tastes and needs. Whether these suggestions are an antidote to the potential harms others claim cross-cultural broadcasting may cause, the data are not available.

Voice of America started broadcasting for Africa in 1959, and the continent became a priority area during the Kennedy years. VOA provides a "candid and informal coverage," with one-third of English programming for an audience not exclusively African. The USIA surveys give VOA 8-20% "frequent" listening and 35-45% credibility.

Also mentioned by Browne are Deutsche-Welle and L'Office de Radiodiffusion Television Francaise (ORTF), the latter making good use of local radio agreements.

The other data describe programming hours. According to Browne, ten socialist countries broadcast 458 hours/week in 21 languages other than their own. His opinion is that the programs are not tailored specifically for African audiences. Radio Moscow in 1972 broadcast 157 hours/week to sub-Saharan Africa and 20 hours/week to North Africa. Radio Peking in 1970 had 100 hours/week. These would have a small share of the audience.

Within the African continent, Radio Ghana broadcast mostly to its neighbor states 100 hours/week. Radio Tanzania broadcast in English and Swahili, and up to 13 languages for national liberation movements. Forty percent of the Kenya-Uganda sample listened "daily or several days a week" to it. Radio South Africa stresses Bantu and has an advantageous reach position. Radio Cairo emphasizes the vernacular and, while it has a small audience, it has a good credibility.

Magoma (1974) describes UN Radio for African audiences: it is interested in being informative, not exhortative. In 1972, 43 African nations regularly used UN material in eight languages.

Religious broadcasting should be noted too. Robertson's study (1974) describes a Swiss-based organization with 30 African nation-members (Association Catholique International pour Radio Diffusion et Television) as well as the ecumenical World Association for Christian Communication. Some other church-related broadcasts in Africa have declined since Independence. Finally, outside Africa, Transworld Radio reaches part of Africa. Vatican Radio is also mentioned. This was the first truly international radio, but now is in decline (Onder, 1971).

There is some audience research, but too little material available to analyze religious broadcasts.

Given what has been described, what might we assume about effects? Unfortunately, available data do not provide an adequate answer. Browne believes that only 15% of the audience (coinciding with the nation's elite) is susceptible to change. They represent an active group of listeners. But we still have no evidence for generalizing from these "information-seekers" to less active or less sophisticated audiences. And of these "active" listeners, we do not even know how much they are "victims" of influence and how much they are in control of the situation.

Two studies by Don Smith provide some insight into this hazy picture. In one of them (1971), he presents recent data for international broadcasting listening by university students in the years 1963-64. His sample includes students in Turkey, Iran, Malaysia, Venezuela, Mexico, and Peru. Also, African students in France, Germany, and Great Britain are included.

Smith concludes that there is a sizable student audience in these countries. It is similar in relative size and frequency: 40% of the students listen to foreign broadcasts with some regularity. There is a consistency of stations listened to, stations that openly state their links to national governments. In sum, we are confronted with audiences deliberately seeking exposure, and with true cases of information-seekers. These samples refer to a specific minority universe, but one certainly linked to their native elites (and/or counterelites): they are -- or will be -- influentials. Smith's data also show another surprising pattern: an overall high media consumption. It seems that local sources are literally exhausted. Once again, however, we cannot go beyond these

data to broader audience assessments.

Smith's other study (1970) has experimental and control groups. Here the subjects are American university students, and the data refer to the effects of Radio Moscow's North American broadcasts. Results fit into a hypothesis from social psychology. The broadcasts seem to have had an effect because conditions in American society had led the audiences to hold unrealistic, negative images that, upon actual exposure, were clearly refuted for many of the listeners.

From this successful experiment, Smith derives two generalizable implications:

1. National groups that expect biased political persuasion from a source in another nation and get (or perceive) the communication in that way tend to respond negatively, but those who do not get (or perceive) the communication in that way tend to respond positively.
2. Because people expected overt political persuasion attempts and were refuted in their expectations, the political importance of overtly non-political content in international communication is enhanced.

Smith's analysis of foreign propaganda indicates the superior effectiveness of a low-key approach.

As several authors have stated, if foreign radio broadcasts can be defined mainly in the "propaganda" sphere, television belongs to the realm of "entertainment". This distinction calls for a more insightful view into the role "entertainment" and its correlates play in a cross-cultural television broadcast. So we turn our focus to the area of television.

WHAT WE KNOW ABOUT CROSS-CULTURAL BROADCASTING: TELEVISION

In 1966, Dizard stated that:

TV has developed primarily as a commercial medium Theoretically, TV should have followed in the established pattern of broadcast (a state monopoly without commercial connections, except for the U.S. and a few other countries); significantly, it did not Commercial advertising is carried by all but a handful of the world's 95 TV systems The change (to commercialism) confirmed the effectiveness of American-style broadcasting both as a revenue producer and as a highly acceptable form of entertainment and persuasion.

That TV networks are primarily in private hands (socialist countries excepted) is a major factor in assessing the nature and effects of cross-cultural television. While we again lack enough empirical studies on effects, there is some literature dealing with the assumed cultural effects this overall commercialization of television networks causes in the receiving nations.

One kind of study attempts to relate television to the general expansion of the market economy. The long-held positive theory of mass media stimulating national development has given way to disillusionment in developing countries. Wells (1972), for example, states that the media, particularly TV:

... stimulate the masses to 'unrealistic' material demands ... a negative theory of communication that is grounded on experience. But it reflects actual failure, rather than categorical refutation of the long-term potential of the media as a development weapon.

What lies behind this is what the author labels "consumerism" as opposed to "producerism". Whereas, in the short term, these countries are unable

to provide the way of life that advertising and commercial series suggest as consumption models -- and it is doubtful even that those can be long-term goals -- the expansion of transnational corporations seeking for new markets is in dire need of advertising that will help "create" the consumer.

Advertisers have long ago faced the problems posed by international advertising, e.g., how to cope successfully with linguistic and cultural barriers. Several authors were very confident about overcoming these barriers and could see an international trend towards homogeneity of culture, "at least in the consuming countries of the Free World" (Dunn, 1964). Particular campaign blunders because of linguistic or cultural misunderstandings were seen as mere anecdotes that should not obscure the trend and its immediate feasibility.

What was not stated was that advertising was not and is not intended to serve as a truly universal cross-cultural communication. Advertising is meant to be persuasive communication oriented to particular populations: consumers who can enter the market and purchase the goods. The measure of advertising success is its ability to increase (even if only potentially) that population. But the troublesome question that is Wells' concern is not asked: What about the whole receiving audience, those "inhabilitated consumers" who can only vicariously enjoy the goods and their ideological associations? While not a problem for advertising practitioners, it is a serious one for leaders of developing nations.

Lorimer and Dunn (1968) were interested in the extent to which a successful domestic promotional campaign could be transferred to a different culture. They conducted a quasi-experiment with upper-middle class urban Egyptians and Frenchmen, concluding that "persuasive messages can be transmitted across cultures to a greater extent than is generally supposed.

There may well be a cosmopolitan audience in many countries." They further suggest that models used in successful advertising need not always belong to the recipient's cultural group. Therefore, one of the first research tasks would be to determine the positive and negative reference groups for countries the international advertiser wants to enter. Lorimer and Dunn do recognize the special status nature of their samples -- but then, these are precisely the consumers they were seeking. The commercialization of TV is not hard to understand.

Once TV sets are available in a developing country, pressure for more viewing grows much faster than programming availability. Material for continuous programming cannot be produced locally in most developing countries. The need for foreign imports is triggered and the low costs of buying foreign programs (only a fraction of the cost of lower-quality local production) make a strong case for the commercialization of TV. Advertising sponsorship seems to be a small price to pay if "free" programs are made possible. Continuous broadcasting values long-running serials that fill up time for months (even years).

Schiller (1969a) describes how Israeli TV, born educational, was inevitably collapsing into that pattern. Katz (1973) makes a much more forceful argument starting from the same country's problem, concluding that the medium itself is a "horseless carriage": besides manipulative attempts from political, commercial, ideological, and other interest groups, "there is an almost gravitational force that pulls TV stations into an orbit where program schedules look curiously alike." Why is it, he asks, that TV has to broadcast as much as possible? Once that decision is made, the pattern is of a striking homogeneity in the most diverse kinds of broadcast systems. In Chile, where TV channels were born as university

networks out of concern for the problems of commercial TV, the situation was the same: in less than a decade, format and advertising features made them no different from regular commercial channels, which still do not "exist" at all.

With the exception of some direct educational content in some TV networks, the global pattern for TV is a blend of entertainment, advertising, and commercialism. These are the boundaries within which TV has functioned and grown as a medium. There is considerable discussion on the relative merits and demerits of this and alternative models of TV organization.

The only thorough study of television program flows in the world is that of Nordenstreng and Varis (1973a) commissioned by UNESCO. The authors made an inventory of 50 countries. We present a compilation of their major conclusions:

1. In international TV program production, the United States has led markets in the mid-sixties by exporting more than twice as many programs as all the other countries combined.
2. The production of TV programs for international distribution has primarily been aimed at making money. The commercial competition in the world market has led to concentration.
3. The effective distribution system of the Western countries, particularly of the United States (created by the Hollywood film industry), makes it easy for a poor country to purchase cheap programs which are delivered to them. Conditions for effective program exchange through broadcasting unions do not yet exist in general.
4. TV stations in most countries of the world are highly dependent on foreign imported material. Some countries import over two-thirds of their programming.

5. Available studies about prime-time programming tend to show that the proportion of foreign program material is considerably greater in those hours.
6. Program imports are heavily concentrated on serials, long feature films, and entertainment shows. Greater selectivity is observable in some countries, in the purchase of information-type programs.
7. In commercial stations, entertainment accounts for nearly 80% of the programming.
8. In the importation and exchange of newsfilm, the distribution is concentrated on three world-wide agencies: Visnews, UPI-TN, and CBS-Newsfilm. A fourth, major agency is DPAETES-West Germany. The flow of information is one-sided from Western Europe to the developing and socialist countries.

Elihu Katz wisely noted at a 1973 symposium that imported TV programming, in general and especially -- and ironically -- in the developing countries, was treated rather casually. Whatever attention is given to programming is given to domestically-produced programs. Purchased programs are put aside, as if they did not exist, and yet in fact they quickly become 50, 60, or 70% of the TV schedule. This is because the problem of the purchaser is not simply to buy programs -- it is to fill time. His obvious, and only, solution is to buy never-ending series based on the formula of the American model. Golding (1974) has added further that then the new audiences come to expect a certain kind of program style, and this restricts local producers.

The ensuing symposium debate was indicative of the state of the art in cross-cultural television research. The "casual" approach noted by the symposium participants is a basic feature of world commercial television. Researchers know it is a problem; however, it has not been appropriately studied. As Varis points out:

World television has been dominated so much by the commercial and profit-making approach that its social and political characteristics have been neglected. Some authors regard world television as merely a commercial medium without political or ideological bearings.

A case in point is "Sesame Street", a program that was subject to an enormous amount of formative research in the United States. By mid-1973, states the producer of "Sesame Street", Children's Television Workshop, "Sesame Street" was seen regularly in 73 countries (in English); Spanish, Portuguese (Brazil), and German editions were also on the air.

Although developed as an experiment to appeal to American children, the highly entertaining approach to learning has not only lowered many sensitive national barriers but has evoked overwhelmingly favorable reactions from educators, TV producers, and, most importantly, children. CTW feels that although it has a great expertise and information on the use of TV as an educational tool, it could not assume that this knowledge skill and teaching aid was suitable for all cultures. So only if foreign educators considered it appropriate, the original version was made available. (CTW Report, 1973)

CTW then proceeds to report educational gains in Israel and Australia, in Mexico with "Plaza Sesamo", and finally notes as a future project broadcasts for francophone Africa.

Obviously, there is an enormous difference between commercial series and the generally laudable educational contents of "Sesame Street". We should not be so critical of its intent while TV series go around undisputed. But there are reasons to be critical.

Goldsen (1974) states vehemently that the development of "Plaza Sesamo" had no research for assessing Latin America's cultural specificity. The "experts" called upon saw only minor language problems, she states.

Goldsen concludes that "the decision to expose Latin American children to this massive cultural assault is not only mindless, but the height of technocratic irresponsibility."

Mattelart and Waksman (1973) go all the way into the broadest analysis.

'Sesame Street' in Latin America is a ready-made cultural product from the heart of imperialism. The program is attractive ... but it is not only a cultural product ... it represents the invasion of international firms into education, encouraged by the U.S. Government There is thus a significant change in the function of mass media: from a model for leisure time and the average man, to formal education and specified viewers. (Quoted freely)

By focusing on a program that is educational in nature, has research supporting it, and is generally accepted as a significant contribution in television programming, we want to stress that the "other" TV programs are seldom analyzed to this degree. Yet the bulk of TV programming is in this sphere.

Tsai (1970) studied the effects of American TV programs on children in Formosa. In October 1965, of the 33-1/2 hours of entertainment, 18-1/2 were American, appealing both to children and adults. There was one problem: the only option was to watch or not, since there only was one channel. However, many researchers have found that having more than one channel merely results in more of the same type of programming, in general; it was also found that the "entertainment" choice outweighs the "educational" option, when there is such choice.

Tsai confirmed one hypothesis. He discovered that Formosan children and Western children in Formosa watched a similar amount of

television: an average of 19 hours/week for Formosans versus 20 for Americans. But, his general conclusion is cautious: the exposure to American TV is not likely to influence the fundamental outlook. Though intuitively we might think it would have an effect in the long run, for the present no fundamental change was observed. The TV children show different taste patterns and specific attitudes. This difference found in "peripheral" attitudes may indicate a propensity for more basic differences in the long term.

Even if an optimistic view can hold for the "cancelling-out" of diverse short-term effects related to television, the facts that programming is homogeneous, that content structures (whatever their surface plots) are relatively similar, and that the present flow of programs is mostly one-way lead many observers to stress the dangers of widespread TV. It will lead to chaos, states Newson (1973), if the damage inherent in cultural erosion is ignored. He qualifies this only slightly: there is not quite the same worry about the programs produced outside the United States. This strong negative attitude is greatly due to the fact that "consciously or unconsciously, the United States has been stamping its cultural imprint on virtually all of the world."

One significant trend, however, in cross-cultural television is the regionalization of TV networks throughout the world, according to geographical, political, and/or cultural common grounds. This is providing some kind of balance to the present cross-cultural TV situation. Other forms of cultural exchange on the basis of relative equality and understanding are present within them. But the balance is far from adequate. Eurovision and Intervision do not have a balanced exchange; in 1970, from West to East Europe, there was a flow of 3,000 hours versus 1,000 hours

from East to West, according to Varis. This is worth mentioning because here we have a case of powerful networks with a good amount of control of their import/export ratio.

There are other regional groupings. Maghrebvision posits TV cooperation among Tunisia, Algeria, and Morocco. There is also a community of French language TV programs in Europe and Canada, totaling 50 million potential viewers. Nordvision works for the Scandinavian countries; the Oficina de Telecomunicacion Internacional (OTI) established links between Spain and Latin America, as the Asian Broadcasting Union (ABU) does for Asians (mostly propelled by Nippon Hoso Kyokai [NHK], Japan). These groups demonstrate that cross-cultural broadcasting may find its way and perhaps can cope with some of its alleged negative effects through regionalization. Even though some evidence indicates that regionalization may only be reproducing at smaller levels the same world trends described above, the problems associated with cross-cultural broadcasts at least become more manageable.

Yet another problem for world television has not been adequately studied. Browne (1967) believes that there is no universal visual language. Recognizing there are more anecdotal examples than research about this issue, his plea is for emphasis on some anthropological insights. But once again, we fear attention may be focused on programs of educational content or those believed to have significant impact while the issue of commercial TV will be ignored.

WHAT WE KNOW IN CROSS-CULTURAL BROADCASTING: SATELLITES

There is an enormous amount of literature related to communications satellites. Usually the problems posed are technical considerations

and cost considerations, with some emphasis on the legal aspects. The cultural implications, if noted at all, are not studied in detail.

E. Ploman (1973) acknowledges that certain aspects of the new technology and media may be studied by themselves, but that the implications and uses must be seen in an overall approach. In describing the components of that broad approach, however, he gives very little attention to cultural implications of satellite broadcasting.

The discussion on satellites closely follows the controversy about media and messages. Those for whom the medium is the message often describe satellites as the climax of the communication and information revolution whose goal is the global village. On the other hand, there are those for whom the content is the relevant issue; this new technology -- for which they foresee a predictably homogeneous and massifying content -- is a fearsome instrument.

Naturally, this debate does not occur by itself. It is inextricably linked with the stand of different nations about the distribution of communications technology. Economic, political, sovereignty, power, and vulnerability issues permeate the controversy. Fear, helplessness, and emotion color the debate for many developing countries.

Can these complexities be resolved? Lindsay (1973) sampled viewpoints of a majority of ministerial experts and other delegates to the 1971 Geneva Conference on Space Communications regarding the means for dealing with international control of programming via direct satellite broadcast. Sad to report, he notes, "these experts had no more salient solutions or rewarding insights to offer than an author of a term paper on the subject."

However, he himself did get to the core of the issue. In citing what he calls the overwhelming consensus of his sample, he makes his point:

They tell us that these problems are all technical, not political. But of course this is not so Compounding this situation is the tremendous inequality between the haves and the have-nots in the domain of satellite communications.

Not that there are no beneficial outcomes from satellites. For many developing countries, Ploman (1973) notes, "their continued viability is dependent on the integration of many tribal/religious and regional groups which have distinct cultural and political traditions." Furthermore, as many UNESCO missions report, the demands that are and will be made on the educational systems cannot possibly be met through traditional methods. Brazil, India, and Iran are examples of countries in the final preparatory stages for using satellites to bring education to rural and distant areas.

As Halloran (1972) reported for UNESCO, we must not confound the optimistic potential with actual "state-of-the-art". "The open skies are not always matched with open minds." It is worth noting, he adds:

... that optimistic views about the potentialities of the mass media are often voiced by people from the developed countries with regard to the use of the media in the developing countries. People in the developing countries now seem to be tempering their own early optimism in the light of their experiences of how the media have actually been used and perhaps also under the influence of the prognostications and speculations of the pessimists in the developed countries.

Lindsay (1974) is far more specific still:

Communication satellites must not be given to developing nations as candies are given to children. We must insist on the particular conditions of utilization of communication satellites: preliminary experiments, financing possibilities and availability of qualified experts, cultural conditions, political climate, realistic appraisal of specific needs and foreseeable usage It is therefore particularly important [he concludes] to insist upon the urgency of an international organization capable of heading a movement that allows satellites to work on an equitable and rational basis for the benefit of all.

This is said notwithstanding the existence of several UN organizations, notably UNESCO.

Martelanc (1970) also believes that the present institutional framework (such as existing regional organizations) is inappropriate for genuinely global direct broadcasting. There will only be real universality if:

... by universality we understand not merely the technical ability to cover the whole planet by television signal, but primarily a political approach guaranteeing to every country equal right to use, manage, and control the content of global television programmes.

Ploman thinks that for a number of reasons, among them cultural similarities and common levels of development, the argument is in favor of the national or regional approach. This allows for the possibility that all involved countries participate in policy decisions.

For many other experts, the debate on satellites seems to be shifting from technological to other problem issues:

The problem which developing countries face is not a problem of satellite technology in itself; it is more a problem of information that must be transmitted to allow development by giving solution to the fundamental problems of the country. (Polcyn, 1973)

However, much of the debate has constantly focused on the technical realm. Schiller, reviewing Pelton's analysis of Intelsat, is quite opposed to the way issues have been handled. After attempting to document how giant corporations have a decisive voice in the tailoring of American policy on satellites, he suggests that the United States ideological success is its most important achievement in this area: "Eighty-five members (in the Intelsat agreements) approved the principles of efficiency and functionalism above political and social considerations." He quotes Pelton: "Decisions can be made in terms of financial or technical objectives, regardless of political goals or long-term ideals."

Hulten (1973) did a study on satellites for TV transmission. The pattern he found (in 1970) was the following: three-fourths of the television lines have one end in the United States, nine-tenths have an end either there or in Western Europe. The television flows are from the United States to Puerto Rico, from the United States to Hawaii, from Europe to the United States and vice versa, and from the United States to Latin America. These routes account for some 85-90% of the total traffic flow. The use of the Intelsat system follows different patterns in different parts of the world. In the developed countries, the initiative lies with the receiving organizations such as the United States networks and Eurovision. But in the developing countries, the initiative lies with the suppliers of materials, located in the developed countries.

So far, communications technology in the form of satellites is way past its adolescence period. Technical and cost-effectiveness issues have set new boundaries on what is now feasible. Increasingly, there is growing awareness of both the dangers and the benefits of this development.

Whether global villages or 1984's are a paradigm of the future cannot be posited for sure. Rather, what has to be done is a more vigorous inquiry into cultural implications and more decisive cultural interventions. Both of these are notoriously scarce.

We must not speak of men (or nations) free from satellite technology, but of men (or nations) free in relation to it. This requires reality assessment and solutions. Critics have lingered in lamentations and, in some cases, very good theoretical speculations. Optimists have overlooked reality constraints and foresee marvels of technological dreams. Meanwhile, technical communications developments in the satellite realm and adjoining technologies advance, in gigantic steps, with their own logic.

WHAT WE KNOW IN CROSS-CULTURAL BROADCASTING: FILM

We have felt distressed about the small amount of relevant empirical material that exists for other areas of cross-cultural broadcasting: the situation in film is worse. †

There has been only one major study, that of T. Guback (1969), covering Western Europe and the United States since 1945. There is no study for film like the one of Nordenstreng and Varis for television.

Apart from studying film cross-culturally, there is an additional importance attached to it. Guback stresses that "film business is the prototype and model for television ... the future of TV programme production and distribution can be read clearly in the history of film."

The general international trends in film are, in fact, no different from what we have seen for TV:

The flow of films is founded on simple commercial imperatives. What one nation exports and another imports is hardly based on any form of cultural policy. There is a strong position of American films on European screens at least during the last quarter of this century and a virtual monopoly on international distribution achieved by American companies. Furthermore, American companies are involved in the financing of European films. (Guback, 1973. For an extensive documentation on these trends, see his 1969 book.)

This has many implications. The submergence of regionalism in the homogeneous mix demanded by international commerce is one implication. Guback contends that preference is given to pictures whose international marketing possibilities seem most satisfactory. Furthermore, Hollywood film companies have been absorbed by multinational conglomerates that conform to universal marketing strategies without regard to the needs of any one country.

This internationalism implies homogenization of different cultures: a successful exportation means other people must "like" the product. Guback is not speaking of true internationalization of films which "were able to convey a human message in terms understandable to people everywhere," despite their grounding in conditions and times of a particular country.

It is notable that Guback finishes his extensive research realistically. In fact, many authors who so desperately argue against cross-cultural broadcasting hold an implicit assumption of the "goodness" of local production and henceforth the "evil" of cross-cultural exposure. This is not so clear-cut a picture. Independence, concludes Guback, does not necessarily mean better films in an artistic or financial sense, any more than international means better films. But autonomy can increase the

chances for diversity and different points of view. It is imperative that contrasting perspectives be given the opportunity to exist and develop.

Films are expressions not only of personal values but also of cultural environments. Gerbner et al. (1969) brought together leading scholars from the United States and from Western and Eastern Europe. In it, an extensive analysis of film characteristics, focusing particularly on the film hero, was attempted.

Not only was this an example of the joint work of scholars from different cultures: its results revealed that the suspected differences between films as cultural products were there. We can extract from the study certain common features that make for "universality" of these culture-bound productions, but different cultural settings did make themselves manifest. Thus, the film world of American productions was the most global, cosmopolitan, and affluent. More than the West, Eastern European films tended to portray places of work, hardship, and struggle. The class structure of heroes, while hard to establish, was also different: in general, the United States and Western European film heroes were likely to come from the rich, the carefree, and the powerful. In contrast, the heroes in Eastern European films come from the intelligentsia, workers, and peasants. The single major occupation in the West was show business, as contrasted to the of student in the East. Occupations differed by specific countries and so did personal characteristics. There were clear differences in the goals and value choices pursued.

If all of the differences that this study has highlighted are not allowed to flourish, the danger exists that one particular model for the portrayal of fictionalized reality will be elevated to the only possible

model. We would not like to agree with Golding (1973) when he dreads inverse flows of TV production in the form of "an African Peyton Place". This seems, however, to be the trend.

CROSS-CULTURAL BROADCASTING: LINGUISTIC EFFECTS

The linguistic issues posed by cross-cultural broadcasting are interrelated with other questions dealt with in this report. In this section, we narrow our focus to examine those linguistic implications of cross-cultural broadcasting.

Most broadcasting, whether cross-cultural or not, involves the transmission of language. This fact has implications for the evolution of languages as well as for the future development of broadcasting around the world. After briefly noting the scope of the problem, we look first at language as a constraining influence on broadcasting and then at the effect of broadcasting on language. Finally, we offer some suggestions for possible future research.

SCOPE OF THE PROBLEM

The extent and significance of the linguistic questions are dictated in part by the nature of the broadcast media. Since the turn of the century, the media have made possible a new form of language contact on a global scale. In countries where the broadcast media are most fully developed, people spend a significant portion of their lifetimes listening or viewing, and in the process they are exposed to certain languages or language varieties. In other countries, the same pattern emerges as broadcasting develops.

Characteristically, radio and television signals carry languages over large areas, in disregard of linguistic, cultural, and national borders. The direct broadcast satellite promises to remove any purely technological obstacles to global broadcasting. But what languages will be broadcast?

During the past decade, the number of languages used by international broadcasters has increased. Colin Cherry (1971) documents this trend using data supplied by the BBC. He also presents data to indicate that the major international broadcasters have increased the number of hours of programming per week intended for other countries. Recent editions of the World Radio and TV Handbook provide another indication of this global trend.

Despite the difficulty of counting vernacular broadcasts because of changing program schedules, Head (1974b) attempted a listing of all languages used in 1972 by African broadcasting systems. His count showed 196 languages now being used, compared with 109 languages used in 1960, according to a survey by Huth. It should be noted that some individual countries have adopted policies that run counter to this general trend toward increased vernacular broadcasting.

LANGUAGE AS A CONSTRAINT ON BROADCASTING

International Radio

For international broadcasters, language is a key factor limiting the impact of their programming. Assuming that all other conditions for the reception of an international broadcast are met, including such considerations as strength of the signal, quality of the receiving set, and psychological and sociological receptivity, reception is still limited by

the listener's ability to understand the language being used. International broadcasting to Africa provides a clear-cut example of language as a constraint on broadcasting. One survey of such broadcasts concludes that: " ... on the basis of language barriers alone, international broadcasters fail to reach the large majority of African populations." (Browne, 1974)

Language also established limits for broadcasting in other parts of the world. In Asia, for example, all the major international broadcasters use Mandarin, Cantonese, English, and Japanese, " ... but there are also substantial audiences to be served in Indonesian, Korean, Vietnamese, Hindi, Urdu, and a host of other languages and dialects." (Browne, 1971) Although not to the same degree, language is a limiting factor in Latin America and the Near East.

Three realities help to explain why broadcasters are unable to break through the language barrier simply by increasing the number of languages in which they broadcast. First, the increased cost of each additional language broadcast often makes it impossible to add languages. This constraint would vary significantly, depending on the size and resources of the government or broadcasting organization.

Second, it may be difficult to find personnel to produce programs in some languages, even if the funds are available to do so. Radio Cairo, for example, has had this problem with some of its African vernacular language services. Many announcers and writers had been found among the once considerable number of African students studying at Cairo universities, but as of 1970 one observer reported that this source of supply was drying up, at least for some languages (Browne, 1971).

A third factor which is sometimes a part of the language barrier is the lack of sufficient frequencies for separate day-long services in each desired language (Browne, 1971). Frequencies must be available to provide a certain minimum number of hours of programming in each desired language in order to attract and hold an audience.

Internal Broadcasting

Language also sets one of the important boundary conditions for domestic broadcasting, and for many of the same reasons. As in international broadcasting, the cost of airing programs in many languages is an important consideration. Uganda provides a case in point. In that country, the additional cost in base salaries for production personnel alone to broadcast in local languages was estimated at over \$100,000 a year (Nsibambi, 1971).

The economic burden that linguistic diversity creates for radio broadcasters is small compared with the burden of financing television broadcasting in multiple languages. Yet, almost a decade ago it was reported (Dizard, 1966) that the language problem posed complications for television in over 20 countries. That number has certainly increased with the spread of broadcast technology.

Even if the cost factor is overcome, a country faces the task of recruiting a sufficient number of specialist staff to produce programming in its chosen variety of languages. The same problem that faces the external broadcaster becomes more acute as the number of separate speech communities in a country increases and their size decreases.

The problem of frequencies, transmitter time, and scheduling is a source of continual concern to broadcasters in multilingual countries. Head (1974b) has described the problem facing many African countries:

The fragmentation of limited transmitter time into 15 or 20 separate language segments makes it impossible to build a comprehensive broadcasting service. One would need as many sets of duplicated facilities and duplicated teams of production personnel as languages broadcast -- obviously an impossible economic burden.

The constraints placed on a national broadcasting system by linguistic diversity are, again, well illustrated in Uganda. In 1972, Radio Uganda used 20 languages for broadcasting within the country, resulting in a situation described by Moÿo (1974):

Such multilingualism ... divided the available air time into small parcels and limited vernacular programming essentially to news (which is translated from a common news file prepared in English). A single-language service might broadcast on the order of an hour's news per day (say, 15-minute summaries morning, noon, evening, and night), but each Radio Uganda channel carries about five hours of straight news a day. Thus, no special language group receives a continuous service, and much of the time broadcasts are unintelligible to a large portion of the national audience. This tends to drive listeners to foreign stations. For example, on the border in the far northwest of Uganda, people of Arua listen to Swahili programs from Radio Bukavu, a regional transmitter in Zaire, when Radio Uganda is broadcasting in vernaculars they do not understand. Uganda listeners can also pick up Swahili from nearby Tanzania, Kenya, and Rwanda -- not to mention the many Swahili programs beamed toward them by overseas stations.

Commercial Broadcasting

Commercial distributors of programming, particularly for television, must deal with the same linguistic limitations that face

non-commercial broadcasters. Unfortunately, despite the increasing world-wide flow of commercially-produced programming, there is little public discussion of the language limitations involved. Trade and business publications, which should be the most valuable source of such information, tend to treat the question of language superficially, if at all.

Two observations can be made concerning the constraining influence of language on broadcast advertising. One is that linguistic anomalies do occur and they are costly from the vantage point of multinational corporations concerned with marketing their products (Ricks, Arpan, and Fu, 1974). The other is that language differences are perceived by international advertising agencies as a significant barrier preventing the creation of larger markets (Elinder, 1965).

THE INFLUENCE OF BROADCASTING ON LANGUAGE

It is commonly assumed that broadcasting has a significant influence on language. Elinder (1965), for example, predicted that "... the advertising medium which is really going to break language barriers on a large scale will be television." And he suggested that, with the advent of the direct broadcast satellite, "... the influence on children and adults of one-language (English) TV programs and advertising will be enormous."

The prospect of linguistic homogenization through broadcasting poses a threat for many smaller countries whose populations constitute linguistic minorities. If the world is thought of as a speech community, then English and a handful of other languages are competing for leadership in the same way as dialects within a nation. Haugen (1966) claims that small countries, like Norway, feel the pressure of this competition.

An important part of modern mass culture is the pressure exerted by the great international languages, especially English. Both sides of the language controversy in Norway are aware of the danger that Norwegian culture may be entirely denationalized by this pressure.

Although Haugen does not attribute the pressure exerted by the international languages to broadcasting, others have speculated on whether global broadcasting will lead to the extinction of minority languages.

Possible Extinction of Minority Languages

Cherry (1971) argues that since broadcasting is aimed at people, it must seek to reach them in the languages they speak:

As broadcasting countries increase in number, become richer and able to afford more transmitting stations which they can devote to overseas programmes, they seek out audiences in increasing numbers of languages.

As an example, he cites the BBC, which has expanded its range of foreign languages despite financial conditions unfavorable for such expansion.

Perhaps broadcasting actually helps minority languages survive the onslaught of more powerful languages by contributing to language maintenance. Mackey (1962) suggests that access to radio, television, and the other mass media "... may be the main factor in maintaining one of the languages of a bilingual, especially if his other language is the only one spoken in the area." However, in the United States, non-English broadcasting has declined over the past two decades, possibly indicating the limited effectiveness of such broadcasting in supporting inter-generational language maintenance (Claremont, 1973).

Languages of Wider Communication

A powerful effect of cross-cultural broadcasting may be to encourage the adoption of a dominant language or languages as linguae francae. At present, English is considered to be the principal language of international communication, not because of the number of speakers but rather because " ... more people are currently being attracted to English, both as speakers and as readers, than are being attracted to any Chinese, Indian, or European language." (Noss, 1967)

Cherry (1971) attributes the spread of spoken English to broadcasting by the United Kingdom and the United States, which were among the first countries to develop broadcasting. Together with Australian radio, he says, they " ... are today still great forces for the spreading of spoken English abroad."

If English is indeed the principal language of international communication, it is only the latest in a series of languages to hold that position. In the past, French, Spanish, Latin, Greek, Arabic, and Chinese have all enjoyed comparable eminence. And, according to one observer: "If anything is clear from the history of international communication, it is that once a language has established itself as predominant in the world it will eventually fall from that perch." (Noss, 1967)

Language Planning

During the past decade, interest in language planning has been stimulated by the challenges that linguistic diversity poses for many developing countries. Most multilingual Third World countries face two major problems in the area of language policy. First, the propagation

of the national language within the country and, second, the role of languages of wider communication.

Broadly defined, language planning refers to attempts to solve language problems, usually on a national scale, that focus on either language form or language use, or both (Karam, 1974). Broadcasting can be an important instrument in language planning at both the national and cross-national level.

An example of cross-national language planning is the attempt to preserve the semi-intelligibility that prevails between the peoples of Norway, Denmark, and Sweden who speak different, but related, languages. In 1960, Nordvision, which links the three countries and Finland, attempted to transmit a variety show every Saturday night, originating from a different country each week on a rotating basis. However, most viewers were not prepared to watch a program in which the commentary, and even the jokes, were in another language; this particular language-planning venture failed (Dizard, 1966).

The Swedish Broadcasting Corporation has done some research on its programs for Finnish immigrants. These reports -- unfortunately available in Swedish only -- deal with listening/viewing patterns, immigrant children and television, and the potential audience for Finnish-language programs.*

In a given week, Finnish-language transmissions reached 75% of the Finnish immigrant community. Fifty-seven percent of that group listened

*Available from Sveriges Radio, Audience and Program Research Department, S-105 10 Stockholm, Sweden.

to a Finnish radio program and an equal number, 57%, to one or part of one television program in Finnish. The better they understand Swedish, the more they have taken to reading Swedish dailies, and the less they listen to and view Finnish-language programs. This was particularly true of radio listening.

In Sweden, Finnish children watch more television than Swedish children do. Swedish Radio research indicates that Finnish children watch one and one-half to two hours a day on the average, while Swedish children view only one to one and one-half hours per day. Those who watch television most are Finnish children who neither speak nor understand Swedish -- viewing in this group average three to four hours daily. According to Swedish Radio:

The reason why these children watch so much television may be that television fills a social function for them, 'keeps them company.' Under such circumstances, not being able to understand the language of the programmes may be of lesser importance.

A new form of presentation was tried out in the programme 'ABOUT -- a story in Finnish and Swedish': Two people read a story sentence by sentence alternately in both Finnish and Swedish.

The Finnish children showed much greater interest in the programme than the Swedish children, most probably because for once they were able to watch a Swedish television program in their native language.

In Sweden, there is a large audience for Finnish programs. Connections were found between language skill in Swedish, mass media consumption, and emotional attachment to Finland. Consequently, the Finnish-language programs are received by a great number of people who, owing to their poor knowledge of Swedish and their limited choice, are in great need of programs in Finnish.

Two activities of the United States Information Agency provide other examples of cross-national language planning. The Voice of America's Worldwide English Division broadcasts a number of hours every day in "Special English", which limits the announcer to a reading rate of 90 words a minute and to a basic vocabulary of 1,200 words (Browne, 1974). A corresponding effort takes place with television programming. The most popular program distributed by the USIA is a series entitled "Let's Learn English".

This kind of cross-national language planning is pursued by other countries as well. According to Cherry (1971):

Many countries are now teaching their own languages to foreign listeners, both by radio and by TV film recordings, sold, loaned, or exchanged abroad for retransmission. The response is high and increasing.

He also notes that "outside West Europe, both Egypt and the USSR are particularly active in teaching their languages to millions of listeners in other countries."

Broadcasting is also a tool for language planning at the national level. After a first-hand study of language policy in eight Southeast Asian countries, Noss observed that the broadcast media in Malaysia exert considerable influence on language-learning opportunity, standardization and the development of Malay, motivation for learning Malay, and general accessibility to information (Noss, 1967).

Broadcasting also plays an important role in Thailand. There, according to Noss:

Radio programmes, except for certain kinds of entertainment (both musical and dramatic) and specifically labelled foreign language broadcasts, are entirely in

standard Thai. The policy is held in the face of several kinds of evidence that millions of listeners in Thailand would prefer more programmes in foreign languages and other dialects of Thai/Lao.

Noss concludes that "... the radio undoubtedly ranks near the government primary schools among the most persistent and efficient disseminators of knowledge of the national language" (1967).

Thailand also uses both radio and television to teach English to mass audiences. It is not alone in using broadcasting to deal with the problem of languages of wider communication. The growth of this practice in developing countries can be inferred from the popularity of the English-teaching programs distributed by the BBC and the USIA.

Language Planning in Ireland

Ireland provides an instructive example of attempts to use broadcasting in language planning. There, the preservation and revival of the Irish language has been an objective of public policy for over 50 years. Radio Telefis Eireann is required by law to foster this objective by broadcasting programs in Irish (McRedmond, 1974), but a review of the impact of such broadcasting shows that it has had a questionable effect.

As early as the late 1920's, one chronicler of Irish broadcasting reported that it was much harder to find a good supply of broadcasting material in Irish than in English, and that even with such material the number of listeners would be consistently small (Gorham, 1967). A survey in the 1940's indicated that even in the Irish-speaking Gaeltacht areas, English programming was more often listened to than Irish programming.

Gorham reports that the committee which conducted the survey found, when it reported in August 1945:

... that native Irish speakers found less difficulty in following programs in English than those in dialects other than their own. Moreover, English had a fatal attraction for dwellers in the Gaeltacht. If special measures were taken to provide them with wireless sets (as had been suggested), it would be likely to result in their speaking more English than they did.

More recently, audience research has revealed that as many as three out of four persons in Ireland will look at the television news in Irish if they happen to be in a position to view the telecast (McNamara, 1971). In 1972, Radio Eireann established Radio na Gaeltachta, a radio service whose primary goal was to meet the social needs of an adult Gaeltacht population of 45,000.

There are strong indications that the effect of Irish language broadcasting will, at best, be to encourage the maintenance of Irish as a second language. A 1964 survey revealed that about 83 percent of the population did not believe that Irish could be restored as the most widely spoken language, and the younger the person questioned, the less likely he or she was to believe that it could be (McNamara, 1971).

The experience in Ireland has yielded little evidence that broadcasting can have a significant effect on language usage. This is hardly surprising considering the predominance of English language programming and the relatively few hours devoted to Irish language broadcasting, even after the inauguration of Radio na Gaeltachta.

The potential of broadcasting as a tool in language planning is probably better illustrated by its role in other countries. In assessing

the future outlook for language development in eight Southeast Asian countries, Noss predicts that:

The radio, newspapers, and television, whether publicly or privately controlled, will exert a decisive influence not only on the spread of the national language, but also on the form in which it is ultimately accepted by the public. It is here that new coinages and usages will stand or fall and not in the academy-approved grammars and dictionaries issued by scholars.

Politics of Language in Broadcasting

The choice of languages for radio and television broadcasting almost always poses a political problem. The nature of the political issues differs, depending on a country's linguistic situation, political affairs, and the nature of its broadcasting system.

Language was reportedly a factor in the South African government's initial refusal to permit television in that country. The Afrikaans-speaking majority was keenly aware that its attempts to encourage the use of Afrikaans would not be helped by a television system that relied heavily on imported English-language programs (Dizard, 1966).

In Canada, bilingualism in broadcasting is a key issue in the political controversy over the role of French in Canada. The strongly pro-French leadership of Quebec Province has threatened periodically to set up its own provincial radio and television network if its linguistic demands were not met (Dizard, 1966).

In many countries, the most prominent linguistic aspect of broadcasting takes the form of a political dilemma. On the one hand, governments would like to achieve the maximum degree of political penetration

and control over their populations. This goal requires an increase in the number of languages broadcast in order to reach the largest possible audience in a multilingual country. On the other hand, the encouragement of a single national language through the broadcast media can help to build a sense of nationhood and encourage loyalties at the national level.

This kind of dilemma is common in Africa, where Head (1974b) describes the situation faced by many governments:

Either way, government leaders face a dilemma: whether to allow broadcast languages to proliferate for the sake of preserving traditional cultures, winning the loyalty of minority groups, and reaching a maximum audience -- at the risk of encouraging tribalism and separatism; or whether to standardize on a single broadcast language for the sake of emphasizing nationhood -- at the risk of hastening the disappearance of local cultures, alienating minority groups, and failing to communicate with the very people in whom the central government most needs to inculcate an understanding of its intentions.

The case of three East African countries shows that there is no rule of thumb in dealing with such political questions. Kenya has drastically reduced the number of languages used in broadcasting. Tanzania has gone even further, limiting itself to Swahili and English. But Uganda, taking the opposite course of action, has multiplied the number of its vernacular programs (Mazrui, 1972).

Moyo (1974) reports that politics had a lot to do with the number and choice of vernacular languages used on Uganda Radio. Swahili, for example, was introduced at least in part because it was the official language of the Uganda army. Hindustani disappeared about the same time as the Asian community which it served was accused of failing " ... to integrate with the indigenous people of Uganda."

The political issues raised by language are sometimes international in scope. There is an interesting case on record in which the lack of congruence among speech communities, nations, and broadcasting systems made television the subject of international negotiation. In 1948, when the Belgian government first began studying television possibilities, it found that linguistic considerations were closely tied in with the question of technical standards.

Spokesmen for Flemish-speaking groups requested that a 625-line standard be adopted so that set owners could tune in on the neighboring Dutch television stations, operating in a language similar to Flemish. French-speaking elements in Belgium requested the French government's 819-line standard. The Belgian government sought an international solution to the problem by requesting the Permanent Commission to the Brussels Treaty (predecessor to NATO) to set a common European technical standard. (Dizard, 1966).

Behavior Toward Language

Broadcasting, because it permeates multilingual populations, often has a catalytic effect on the expression of language attitudes. Research in Zambia found that minority peoples demanded vernacular broadcasts not only for reasons of pride and status; they also demanded them because they feared extinction of their mother tongues. They thought broadcasting would save their languages and at the same time pass on the memory of ancestral life to the younger generation (Head, 1974b).

An incident in Norway provides an amusing yet instructive illustration of the central role of broadcasting in a society's behavior toward language (Haugen, 1966). Radio broadcasting in Norway is done by the state-owned Norsk Rikskringkasting (NRK). As the only source of oral

news, instruction, and entertainment reaching the entire population, this institution is in an extremely sensitive position with respect to language and has been subjected to pressures from competing groups lobbying in support of the two language varieties in Norway. As early as 1933, the Norwegian parliament voted that 'NRK should be so operated that the language controversy is not unnecessarily sharpened.'

In the late 1950's, groups of listeners started a campaign against the NRK for its language policy. The campaign came to focus on:

... reports that Sigurd J. Smebye, a weatherman in the Meteorological Institute, had been forced to stop saying sne, 'snow' and fjellene, 'the mountains', which he used instead of the required snø and fjella when reading the daily weather reports on the radio. The discussion about the 'abominable snowman,' as he was jocularly called, filled the papers in 1955-1956.

In 1958, the dispute reached parliament, and the Minister of Education reassured the public that people appearing on NRK would have full freedom to use the language form and choice of words that comes natural to them. Nevertheless, the dispute continued inside and outside of parliament and, in 1962, a new code concerning language usage was adopted with the result that NRK relieved Sigurd Smebye from his task of reading the weather reports for refusing to conform to the new code. This made him a hero among supporters of one language variety and a villain among supporters of the other. Although he had not lost his job, he took the case to court on the plea that he had been discriminated against for using his own natural speech. After winning the case on a technicality, he returned to his job of weather-reporting.

This anecdote, amusing though it is, says something about the importance of broadcasting in crystallizing and focusing language attitudes.

However, it should be remembered that attitudes toward language may vary greatly with the composition of speech communities. The exact experience in Norway may or may not generalize to other parts of the world. Nevertheless, the sensitivity of the language issue cannot be minimized.

Language Standardization

Not all languages have standard varieties, but for those that do, the standard language can be advanced by the broadcasting system (Fishman, 1972a). Here it is useful to distinguish between speech varieties that are experientially acquired and those that are referentially acquired.

In most large and diversified speech communities, some language varieties are acquired through actual verbal interaction within particular networks, while other varieties are acquired and reinforced through symbolic integration within reference networks that usually do not exist in any physical sense. "The 'nation' or the 'region' are likely to constitute a speech community of this latter type and the standard ('national') language or the regional language is likely to represent its corresponding linguistic variety" (Fishman, 1972a). It is the standard language that is normally considered most appropriate for use in the broadcast media; its use in those media may in turn help to reinforce its position as the "standard" variety.

DIRECTIONS FOR FUTURE RESEARCH

Research on many of the problems mentioned here must contend first of all with the scarcity of appropriate international data on language and broadcasting. Concerning language data, Fishman (1968) notes

that: "In recent years, the absence of exhaustive international data on language behavior has been bemoaned by a growing number of specialists." The situation with regard to data on language use in broadcasting is equally dismal, but these observations are made, not to bemoan the absence of data but rather to take note of the real-life context in which research must begin if progress is to be made.

Two broad lines of investigation are suggested by the approach taken so far. One would be research aimed at measuring the effects of language on broadcasting. The other, of course, would be research concerning the influence of broadcasting on language.

As already suggested, there are numerous indications that language acts as a powerful constraint on broadcast systems. But perhaps much more can be learned about the manner in which linguistic diversity influences the development and operation of broadcasting systems.

Contrasting studies of the development of broadcasting in linguistically different countries might shed light on the molding influence of language. In some countries, the impact of language on the development of a broadcasting system may be as great as the influence of commercial interests in the development of American broadcasting. A related question is how the presence or absence of a written tradition affects the development of broadcasting.

The second line of research can make good use of an analytical framework developed in the sociology of language. Fishman (1972a) has developed a classification scheme which accounts for language shift in variance terms. This scheme, as explained below, should be useful in research that attempts to show that broadcasting causes changes in patterns of language usage (language shift).

Media Variance

Language may take the form of speaking, reading, or writing. Measurement of language shift or maintenance might be quite different in each of the three media.

Research showing that variance in language shift can be accounted for in part by media considerations might help to answer a number of provocative questions. For example, does the effect of broadcasting on language differ significantly depending on whether the receiving speech community possesses a written language? Do radio and television, with their heavy reliance on spoken language, influence the amount of reading and writing that takes place in literate cultures? By leaping the literacy barrier, does broadcasting decrease the incentive to become literate?

Overtness Variance

Degree of language maintenance or shift may also be quite different in relation to three levels of overtness: inner speech, comprehension, and production (Fishman, 1972b). This is a particularly important factor in relation to the linguistic consequences of broadcasting because of the possibility that significant effects might show up in terms of comprehension but not production. For example, the language variety used in nationwide broadcasting, probably the standard variety, might become comprehensible throughout a country while never becoming part of the overt repertoires of many individuals.

According to Fishman (1972a), even though the adoption of a language variety may be quite uniform and official for an entire country:

... it may remain an entirely passive rather than active component in the repertoire of many interaction networks. Thus, even though television viewing and radio listening are most frequent and prolonged among the lower classes, their overt repertoires seem to be little influenced by such viewing or listening.

Domain Variance

Measurement of language shift or maintenance resulting from broadcasting must also take account of different language domains. These are societally or institutionally clusterable occasions in which one language variety is habitually used rather than another. For example, domains might include home, school, church, or work. There are indications that this concept is useful in the analysis of large-scale sociolinguistic patterns (Fishman, 1972a).

The major difficulty with domain analysis is the lack of agreement among investigators as to what constitute the important domains of language behavior. Further research is needed to overcome this difficulty.

The various domains and the appropriate usage in each domain must be discovered from the data of numerous discrete situations and the shifting or nonshifting which they reveal. This is a central task of descriptive sociology of language, and it can only be accomplished by painstaking research -- utilizing all the available social science methods: participant observation, interviews, surveys and experiments, too.
(Fishman, 1972a)

Given the concerns of this paper, it is hoped that future research will treat radio listening and television viewing as separate domains of language behavior. The sheer number of hours devoted to these two media in many countries would seem to argue in favor of this approach.

The use of Fishman's classification scheme or some variation of it allows the construction of a dominance configuration showing which language varieties dominate in a given speech community. Such measures, perhaps with refinement, will be necessary in order to empirically test the impact of cross-cultural broadcasting on human language.

For reasons already stated, we have dealt almost entirely with descriptive material and anecdotal evidence concerning the linguistic aspects of broadcasting. Within this limitation, however, some of the problems have been identified that confront those who make language and broadcasting policy. If any one point comes through clearly and unequivocally, hopefully it is that language policy and broadcasting policy are interdependent. The hope is that some of the problems mentioned here will form the basis for fruitful policy research, research that in turn might lead to enlightened policy coordination.

CROSS-CULTURAL BROADCASTING: PSYCHOLOGICAL EFFECTS

INTRODUCTION

Plato's classic story of the shadows in the cave applies to our understanding of the psychological effects of cross-cultural broadcasting. All we see directly are shadows on a wall, the hazy outlines of some reality that has not been seen directly. In the absence of any direct perception, it was not surprising that the cave-dwellers who saw those shadows disagreed about their origins and the nature of whatever it was that was casting the shadows.

There are no unequivocal statements to be made about cross-cultural broadcasting's psychological effects at this time. They remain shadows on the wall, too little understood, too flimsy to support much confidence, and at the same time susceptible to the various possible interpretations that provide the fuel for a great debate. But, we believe that it is possible to observe some things directly, that we need not always settle for an inference based on a shadow. In looking for evidence about the psychological effects that might come from cross-cultural broadcasting, we have found a lack of hard data and only a few studies that may give hints about the actual effects -- a few shadows. We will try to describe those shadows and discuss what possibilities exist for better perceptions.

THE POSSIBILITIES OF CROSS-CULTURAL UNDERSTANDING

Before assuming that meaning can be communicated across cultures, it will be useful to examine the research that has been done about the

possibility of communicating concepts from one culture to another. Charles Osgood has been associated with this type of work for many years, particularly in the development of the semantic differential.

The semantic differential is a method that compares the semantic space of persons in different cultures. As Osgood (1974a) explains it, the semantic differential is meant to investigate whether meanings are universal.

To determine the functional equivalence in usage (meaning) of scales in different languages independent of translation, we must put them into a single mathematical space for analysis, and this requires that at least one of the three sources of variance (subjects, scales, and concepts) be shared. Subjects are obviously different and the scales are quite varied, so that leaves us with concepts

Now suppose that Scale #21 for AE (American English) is good-bad and that Scale #37 for JP (Japanese) is iwa-matsu (meaning what, we have no idea); further suppose that there is a high correlation between AE good-bad and JP iwa-matsu scales. What does this mean? It means that, regardless of the translation, we can conclude that the Japanese use their iwa-matsu to differentiate among the 100 translation-equivalent concepts in a way that is functionally equivalent to the way Americans use their good-bad scale. We are thus applying the psycholinguistic definition of similarity of meaning --- similarity in distribution of usage --- across languages.

In his studies with American subjects only, Osgood (1952; Osgood and Tannenbaum, 1955) was able to factor-analyze his data and isolate two, and then three, factors that accounted for large portions of the variance. These factors were clusters of evaluative scales (good-bad, fair-unfair, etc.), activity scales (fast-slow, active-passive, etc.), and potency scales (strong-weak, heavy-light, etc.).

The first cross-cultural study with the semantic differential came in 1956, when Kumata and Schramm tackled the question empirically.

Using bilingual foreign students (Japanese and Korean) and American students, they found two factors -- evaluation and potency -- to be used dominantly by these three language groups. Kumata and Schramm saw this as a remarkable correspondence across cultures, and suggested a trial with monolinguals. This encouraged a series of studies on cross-cultural, cross-language generality of the connotative semantic structures that the semantic differential was designed to measure.

Triandis and Osgood (1958) found a high degree of similarity in the basic semantic structures used by both monolingual Greek and American college students. They were able to show how Greeks and Americans differ in their usage of certain individual descriptive scales and in their meanings for certain concepts. The semantic differential, they suggested, would appear to be adaptable for the cross-cultural study involved in anthropology and the comparison of cultures.

Another study with bilinguals, by Suci (1960), supported previous findings. "The factor structures of a sample of semantic scales indicated that Zuni, Hopi, Spanish, and English-speaking subjects define a semantic space with similar evaluative and dynamic dimensions." Like Kumata and Schramm, Suci found two factors to be dominant -- the evaluative and the potent. The latter was a combination of activity and potency. For the Navajo subjects, however, these factors did not account for the variance found -- a divergence Suci saw as calling for further research, but not one to discredit the similarities discovered among the other language groups.

The continuing research remained more than promising as far as validating the semantic differential as a cross-cultural tool. Sagara,

et al. (1961) analyzed the semantic structure of the Japanese college student. When their findings were compared to Osgood's, certain differences showed up in that the Japanese had four main factors. One factor was activity, one potency, and two separate evaluatives were distinguished. Later investigators (Tanaka, Oyama, and Osgood, 1963) evidently have not felt that these two evaluative factors were really distinct; they read the Sagara study as a confirmation of the findings of Osgood. In fact -- and Sagara, et al. note this in their report -- another Japanese study reported by Watanhe, et al. (1959) found that the Japanese did have the three main factors first put forth by Osgood, and that there was not a significant difference between the semantic structure of Japanese and American English.

In 1962, Osgood reviewed the status of the semantic differential in terms of its generality, both across concepts and across people. He was able to report the studies of Bopp (1955) and Wrigley and Neuhaus (1955) that supported the use of the semantic differential with both schizophrenics and normals. McClelland, First, and Whitaker (1960, a personal communication to Osgood) are cited for showing the stability and reliability of semantic factor structures among groups with varied educational background. Ware (1958) had hypothesized that more intelligent people would show greater diversity in their semantic space, but in fact he found no relation.

Writing for anthropologists two years later, Osgood (1964) could state that the major hypothesis of cross-cultural research with the semantic differential -- that human beings share a common framework for differentiating the affective meaning of signs -- is clearly borne out. The three factors that Osgood's rough survey of written field reports indicated in 1952 still stood:

The highly generalized nature of the affective reaction system -- the fact that it is independent of any particular sensory modality and yet participates with all of them -- appears to be the psychological basis for the universality of three factors of Evaluation, Potency, and Activity, as well as the basis for synesthesia and metaphor. That is, it appears to be because such diverse sensory experiences as a white circle (rather than black), a straight line (rather than crooked), a rising melody (rather than a falling one), a sweet taste (rather than a sour one), a caressing touch (rather than an irritating scratch) can all share a common affective meaning that one can easily and lawfully translate from one modality into another in synesthesia and metaphor. The labelling of this shared affective response is apparently uncovered in the factor analysis of adjectives.

Osgood was quick to point out, as he had repeatedly, that the semantic differential taps only one aspect of meaning -- one that is important, but only one. This is the emotive or affective aspect as contrasted with the descriptive aspect, the connotative as compared with the denotative.

The semantic differential technique is not, therefore, an exhaustive index of meaning, but a measure of the connotations of words -- their emotive and affective aspects.

Further studies have continued to support the cross-cultural possibilities of the semantic differential. These include Tanaka and Osgood (1965), Tanaka (1967), Zax and Takahashi (1967), Stricker, Takahashi, and Zax (1967). An important study is the one by Jansen and Smolenaars (1967), which was computed over 15 languages:

Theoretically the most important finding has been the one of stability of the so-called semantic space. No matter which collection of concepts is being judged, and which kind of subjects one uses, the three factors evaluation, potency, and activity can nearly always be found.

[To be rigorous] ... results obtained with translated semantic differential items have not been used as evidence. The procedure has been to build up the semantic

differential in each language/culture from material in that country, thereby replicating elsewhere the procedure originally developed in the United States.

... The results of these analyses, so far computed on fifteen languages, point strongly in the direction of parallelness regarding the several factor structures. The hypothesis of the intercultural generality of affective meaning systems can be sustained to a large degree.

This work by Jansen and Smolenaars is part of an international project under Osgood's direction to demonstrate the similarity of semantic structure across languages and cultures.

Many studies have already been carried out using the semantic differential as a presumably valid, reliable tool. Rabin (1959) used the semantic differential to study the affective meaning systems of respondents to the Rorschach ink-blot test. Takahashi (1965) noted differences in the semantic structure between Japanese collegians and Japanese juvenile delinquents. Helper and Garfield (1965) were able to assess the relative acculturation of subgroups of minority populations -- in this case, American Indian and white adolescents. Stricker and Zax (1966) found a positive relationship between intelligence and the ability to use semantic space -- a finding not in agreement with that of Ware (1958). Morsbach and Morsbach (1967) put the semantic differential to use in investigating occupational stereotypes among various subgroups in South Africa. Schuh and Quesada (1967) compared the attitudes of American and Filipino collegians, Guggenheim and Hoem (1967) the attitudes of Lapp and Norwegian children. Rabin and Limuaco (1967) worked with Rorschach tests again; their comparison of the semantic differential scores of Americans and Filipinos led them to question the universal application of the Rorschach. Clare (1968) and

VISUAL PERCEPTION

Semantic space has been explored to some degree by the semantic differential and other tools, as we have seen. Cross-cultural television broadcasting suggests a further question as well: how much cross-cultural commonality exists in terms of what people see? Is there something culturally distinct about the way people perceive a visual image? Can Western broadcasters exhibit their television programming without worrying about a lack of understanding by non-Western viewers?

Browne (1967), in his discussion of the problems in international television, cites some anecdotes that make it difficult for anyone to assume that a universal visual language exists - any more than a universal written language or spoken language exists. One of the best known incidents that he mentions is the one documented by Holmberg (1960) from the community development project in Vicos, Peru, that used a film to show how community hygiene might be improved.

The showing of a public health film at Vicos revealed that the picture had failed to convey its intended message, for each scene was understood as a separate incident. The audience was wholly unable to see any connection between the film and its own life, and it misunderstood any features that were not completely realistic. When lice were depicted as larger than life, the conclusion was that they were an entirely different species of animal.

Holmes (1963) describes the misunderstanding of some visual aids in Kenya. Visual expressions were devised to teach latrine building, the boiling of drinking water, the dangers of poison and high voltage electric lines. But in testing the extent of comprehension of these visual aids by a group of Kenyans, it was found that some of the pictures were incorrectly

interpreted by as many as 94 percent of the respondents. Western visual symbols, like Western speech, have no universal meaning.

Sometimes, visual symbols convey a meaning that is not intended at all. Anthropologists' data provide examples of the intersecting and collision of symbols among various cultures. Doob (1961) cites several of these examples:

Again and again films are reported to fail because they are not adapted to the audience at hand. An educational picture produced in Nigeria, and aiming to instruct mothers there on how to bathe a baby offends women in Uganda: a child, they say, should not be shown naked, and his head must be washed first, not last Even what appear to be universally acceptable cartoons can cause trouble. Some Congo soldiers during World War II, meeting Donald Duck for the first time, threw stones at the screen because they thought they were being ridiculed. "Animals don't talk," they shouted; "whoever saw a duck in uniform?"

Almost any international traveler can add further examples, some humorous, some embarrassing, some dangerous. Anecdotes are suggestive of a need for research into what some are now calling "visual literacy."

Dondis (1973) analyzes the components of visual literacy in his recent book. He provides an explanation of the visual "alphabet," in the hope that visuals may come to fulfill McLuhan's vision of the global village. He describes shape, direction, tone, color, texture, scale, dimension, and movement - with the view that these elements are more easily understood than are the complexities of language.

Language separates, nationalizes; the visual anneals. Language is complex and difficult; the visual is as fast as the speed of light and can instantaneously express many ideas. These basic elements are the essential visual means. Proper understanding of their character and working is the basis for a language that will recognize no boundaries or barriers.

He notes too some psycho-physiological aspects of visual perception that have been observed in Western culture: the tendency to organize all

visual cues into the simplest forms possible; the automatic relating of visual cues with identifiable similarities; the overriding need for balance; the compelling connection of visual units born of proximity; the favoring of left over right, and the lower over the upper areas of a viewing field. Dondis' explication of visual literacy, however, makes no claim to touch non-Western culture. What he does do is to make us aware of the phenomenon of visual literacy and the many factors that make it up.

But cross-cultural research is beginning to study visual perception. Egly (1974) directed an investigation in several African countries, a study he called a "pedagogical exploration." The main goal of the study, conducted with support from Unesco and the Agence de Cooperation Culturelle et Technique (ACCT), was to find a set of characteristics, both for form and content, for teaching visual aids that could be useful in a maximum number of African countries. Secondary goals covered many other questions, including:

- to lay the basis for a future manual that would be useful in promoting international visual communication by cassette or by satellite;
- to learn how foreign educational programs would be received;
- to sketch practical guidelines about the production of programs for audiences from diverse backgrounds;
- to improve possibilities for cross-cultural television in the near future.

What were the problems facing cross-national educational television at this point? As Egly and his group saw the problems, they were principally pedagogical (style, curriculum, and methods differences) and cultural (values, customs, nuances). Programs have to be adapted to locally felt needs, even if the programs are not produced in the same country.

In broad terms, the research involved showing dubbed educational television programming from Sweden, Great Britain, France, Canada, the United States, and Niger to school children in Senegal, Dahomey, Gabon, Tunisia, Congo-Brazzaville, and the Ivory Coast. Over the course of one week, the students would view four or five programs per day, a total of twenty-two programs.

The researchers, by interviewing the students and teachers afterwards, found that the television programs had awakened new interest among the students. The students recognized that the programs were for them in a way that traditional teaching was not. This feeling stimulated their interest and led them to more active participation even after the week of televised instruction was over. Teachers discovered that they had a new kind of student - one who was less passive, one who wanted opportunities to participate and respond to the learning process.

The teachers came to realize what television had done for the students. It had guided the students through a visual perceptual experience and led them to a new level of verbalization. The research team judged this impact of television to be indicative of the medium's educational effectiveness. In one week, television had succeeded in making all the teachers reflect about the type of relationship they had previously had with their students. The great discovery of the television week for the teachers was that the pupils had something to contribute to the class, that the teacher could expect something from the student.

Furthermore, on the matter of cross-cultural broadcasting, the research team reported no major problems. The transmissions were effective and the difficulties far from prohibitive.

This joint study did not employ the quantitative measures that generally characterize scientific research. Its findings were gleaned less systematically, by observation and conversation. The scope of this study represents a real strength, however. Because it covered so many different countries, the observations of the research team bear some weight. The researchers suggest further lines of investigation for a continuing study of the criteria for cross-cultural broadcasting guidelines. Their work represents the most ambitious effort of its kind so far.

Finally, the research of a team in South Africa bears directly on the question of visual perception differences between persons of different cultures (Duncan, Gourlay, and Hudson, 1973). From a brief review of the literature on cross-cultural perceptual differences, they develop the working hypothesis that such differences are culturally determined, that they are not innate to a given cultural group. In their research on school children, the investigators tried to obtain estimates of the modal responses of different ethnic groups with various sets of visual stimuli and to estimate the variation among these groups. Basically, they showed ten series of pictures to ten groups of children - urban European, urban and rural Bantu, rural Zulu, and rural Tsonga groups, with boys and girls in each group.

They fundamentally confirmed their hypothesis: that, since Western-style artistic conventions were being used as perceptual stimuli, there would be a direct relationship between perceptual response and degree of acculturation to the Western mode. Not only did the white sample show considerably more facility in the interpretation of the pictures over the Bantu groups, but the urban Bantu were superior to the rural Bantu groups.

Hudson et al. conclude that education in visual literacy is called for;

One may take a step farther here, and propose that, for pictorially deprived groups, there should be remedial training programmes in pictorial perception, which will enable them to make better use of illustrative didactic material. Educational practices today rely heavily on pictorial perception, and make major use of visual aids. Two alternatives then face the educationist in Africa. Either pictorial material must be designed to suit the varying needs of specific ethnic groups, or school children in all ethnic groups must be trained to understand the use of pictorial material.

The second alternative would appear to offer the only practical solution to the problem.

If television is available, it can be a prime force in providing new visual experiences, but this process should be done gradually. Too often the introduction of innovations has ignored the cultural sensitivities of the people receiving them.

Therefore, both research findings and much anecdotal material indicate that different cultural groups perceive visual stimuli differently. From the results of the South African group just reported, it seems that these differences result from different visual experiences. The environment and the survival demands on different groups result in the learning of varying perceptual cues.

The implications for cross-cultural broadcasting are fairly clear. It is possible to present visual images to different cultures, but the visual patterns of those cultures have to be taken into account. By exposure to new visual situations, varying cultural groups can learn new, common perceptual cues. Conventions and symbols have to be learned, but in fact they can be learned. There is not anything intrinsically impossible about cross-cultural visual communication.

Television producers interested in useful communication with groups not accustomed to television should proceed with caution. Images used should be simple ones, building on what the audience is familiar with and leading

gradually into new experiences and abilities. Producers cannot expect their own visual languages to be understood any more than they can expect to broadcast successfully in their own spoken languages. Yet visual language seems to offer greater promise for universal communication. The conventions of visual perception can be shared more rapidly than can the complexities of spoken languages. Broadcasting can broaden the experience of many groups now isolated from each other. This is the promise that has long been recognized. There seem to be no innate obstacles to this communication in the perceptual apparatus of differing cultural groups.

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McNeil (1968) both used the semantic differential to mirror differences in respondents. Clare showed the effects of occupational differences on semantic differential scores, while McNeil was able to estimate degree of socialization from the semantic differential scores.

This review of the literature on the semantic differential serves the purpose of making explicit the research on cross-cultural meaning. It shows that cross-cultural communication is possible to some degree. Any objections to such communication can only be on the grounds that it is done badly, not that it is impossible to do at all. Certainly there remains much to be learned about intercultural semantics; what has been learned so far, however, affirms the possibility of intercultural communication. How this communication can be carried out in the current political arrangement of our world with the current stage of communication technology -- these questions still lie before us.

THE CURRENT DEBATE

As with other aspects of cross-cultural broadcasting, the psychological effects are not well studied, and are the focus of much debate. "Plaza Sésamo," the Spanish version of the successful American children's program "Sesame Street," provides a prime example of this debate. Educators, researchers, and concerned people from many areas have argued forcefully for or against the distribution of this program in Latin America.

The heart of the matter lies in the expectations that the debaters have for this or any other program. Those who support "Plaza Sesamo" have hopes that teaching children the basics of numbers and letters

may have long-range benefits for Latin America. The opponents of this view base themselves in a psychological context, pointing out the worldview that is offered by the program and criticizing the producers for not being aware (or, at times, for being all too aware) of that worldview.

Armand Mattelart (1974) writes most forcefully in stating this position.

Sesame Street-Plaza Sesamo, as the Chilean viewer can learn from Monday to Friday at 18 o'clock, contains no other explicit messages except those strictly pedagogical. On this level, of course, it is proper to ask the question (and we know in advance that the reply will be negative), whether there exists any 'strictly pedagogical' message or purpose, or in other words, neutral. In any event, Plaza Sesamo does not scream any slogans. As the enthusiastic propagator of the serial, 'UNESCO Courier,' wrote in one of its recent issues, it has simply undertaken to teach children the alphabet, numbers, and the rudiments of arithmetic in order to extend their vocabulary and encourage their ability to think.

It would have been better to say, to look at the world around Plaza Sesamo. And, as we shall soon see, it is a very special world. And which, as everything else, is defined by its most trivial, 'most innocent,' 'most neutral' characteristics.

What is interesting, however, is that all this instruction which is provided along with the learning of letters and numbers, is not so easy to inveigh against. Children are to 'open their eyes and look at the world around them,' it is suggested. The world that was chosen for this purpose (and in this sense the term 'neutrality' becomes increasingly less tenable) is the world of the North American middle classes, from which the children's reading figures hail and which Plaza Sesamo presents to the children of Latin America.

This point of view is not without empirical support. Two studies that show how television can be a vehicle for escapist fantasy are those by Greenberg (1970) and by Colomina de Rivera (1968). Colomina de Rivera sampled 1000 housewives in Maracaibo, Venezuela; she found a positive

relation between identification with television and radio novelas and low socio-economic levels. Poor women used television and radio as a way to cope with their difficult life-situations. Novelas gave them an escape from the dreariness surrounding them. The author criticized this result, feeling that the poor of Maracaibo should be encouraged to escape from their poverty by changing their situation if possible, not by fantasizing about other worlds of wealth and romance that the novelas provide.

Greenberg studied the poor in American cities, particularly the black poor, in terms of their media use and the role of the media in their lives. He found that low-income people view much more television than the rest of the American society does; the poor start watching early in the morning and continue until late at night. Poor blacks especially use television as a source of social information or of thrills and excitement, but results are inconclusive that television may serve to reduce anxiety by allowing easy escape into a fantasy world. So, Greenberg's study only corroborates Colomina de Rivera in a partial way, though he concludes with further observations that are of interest.

Content analysis of television programming has emphasized that the television world is exaggerated and emphasizes the values and means of white upper-middle class society. Frequently, blacks have been shown in inferior roles and occupations. Until recently they have been entirely missing from advertisements. Thus, TV -- the principal communication link between the majority society and the ghetto black and the poor -- gives at best a distorted view. There is some evidence that television recently has encouraged political participation among blacks. However, the general conclusion is that media content does little to break down and may in fact encourage the isolation of the poor and ghetto black from the majority society.

It is clear that among neither group of urban poor people does television fit in with the environment. Television comes from another culture, and asks viewers to enter that culture vicariously. Mattelart's criticism would be that television does not create a critical consciousness within the poor communities by which they might confront their own situation.

The pattern of communication in these two instances, and in mass communication generally, is a one-way pattern where a group of producers does most of the sending and a large audience does most of the receiving. This pattern has implications of its own. Bavelas and his associates (Leavitt, 1951) brought out clearly, in laboratory groups, some of the results of certain communication patterns. They showed that position in a communication pattern determines largely both the assumption of certain group functions and the probability of being perceived as a leader. In other words, communication patterns tell us a great deal about the structure of relationships within any group. Mass communication tends to minimize the participation of the audience; the producers have the leadership role. Uniformity prevails in a situation where the spontaneity of the audience is not solicited.

Is uniformity desirable, or should more spontaneity be made a priority? There are two sides to this question as well, particularly in the use of mass media in developing countries. Beeby (1966) has distinguished four stages in the education process; only the fourth or most advanced stage includes genuine student participation.* He feels that educational systems

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- * First Stage: poorly trained teachers, vague curriculum, rote learning
 Second Stage: fairly trained teachers, rigid curriculum not adapted to situation, passive students
 Third Stage: better trained teachers with self-confidence to enrich and adapt the curriculum, curriculum adaptable, students become active
 Fourth Stage: well-educated, well-trained teachers; much student initiative and participation; curriculum is individualized.

have to go through all four stages, so there are certain times in the history of a nation when, according to Beeby, it is both proper and necessary that the instructional system be quite uniform.

Richard Sherrington (1973) expands on Beeby's concept and applies the use of communication technology to these four stages. He points out that developing countries are at a lower level in their educational system, and that the utilization of technology there will be different than in a developed country's educational system. While developed countries can encourage greater creativity, the less developed countries have to prepare students for certain slots in the economy. His ideas are quite thought-provoking.

Politically and economically it makes sense to encourage (and sometimes enforce) uniformity in the education system at lower levels of development.

Naturally, this presents problems for educational innovation. It is not possible for development to occur in one sector of the system, which then jogs other sectors into reappraisal The best thinking of the educational profession is therefore not required very often for developing educational systems, since it can create more problems for a uniform system than it solves.

And yet, paradoxically, it is in the situation of low-level educational development that the conditions exist which educational technologists find ideal Precisely because the system is centrally controlled it has a certain unity, and the introduction of technology can immediately influence the entire system, rather than remaining a fringe activity. Precisely because the system is national, uniform, and authoritarian, the technology has the mass distribution it requires. Educationally, it cannot produce tension, since it has to operate within the terms of the system.

The most important point is to realize that the system, within which the technology is to function, is different from that of the fourth level of development

Technology has to be sold to developing countries, not as an educational aid like textbooks and wallcharts, but as one element in a total educational system. To quote the UNESCO:IIEP Report: 'The time has come for planners to abandon the restrictive kind of thinking that asks such questions as: What can television do? What can radio do? What can films do? What can programmed learning do? These should be replaced by: What is the problem we want to solve and the conditions surrounding it? What combined system of teaching tools and learning experiences, then, will most efficiently meet it?'

Sherrington's approach to the application of communication technology seems to be one in which the decisions are made at a higher level for people who are at a lower level. This posture is criticized by many persons whose educational philosophy calls for participation of the learners, no matter what the level. Most obviously, Paulo Freire's Pedagogy of the Oppressed looks at the educational process as formative of the learner's worldview, not only of his academic abilities. Therefore, the structure of the process has basic psychological implications. (Sherrington would agree, but would come to a different conclusion about the merits of those implications.) If the educational system promotes uniformity and decision-making only at the top, in Freire's view, it has failed to teach the most basic item: that each person can make decisions about his own life.

Technology in communication, in the most usual broadcasting forms of radio and television, imposes a definite structure onto the communications process. When this technology is used in the educational system, the structure becomes part of the educational system too. From a psychological viewpoint, precisely what are the effects of such a structure? Do other benefits outweigh any drawbacks in the psychological area? Or is the psychological posture of the listener so important and so basic that learning benefits are not worth the price paid?

Freire's own experience in Brazil prior to 1964 gives credibility to his views. He was able to instill a critical consciousness in adults while teaching them basic literacy skills. Research with small groups, like that of Bayelas and Leavitt, tends to say that where communication is one-way or dominated by one person, the social relationships are not those of equals. Dependency develops. The structure of the communication setting has a good deal to do with the self-image of the participants in relation to each other.

Freire (1970) explains his ideas about what the structure of the educational process should be. In reading what he says, we can see the debate that is generated when Freire's concepts are compared with those of Sherrington. Freire describes a type of education where the teacher "narrates" information and the students receive what the teacher explains.

Narration (with the teacher as narrator) leads the students to memorize mechanically the narrated content. Worse yet, it turns them into 'containers,' into 'receptacles' to be 'filled' by the teacher. The more completely he fills the receptacles, the better a teacher he is. The more meekly the receptacles permit themselves to be filled, the better students they are.

Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiques and makes deposits which the students patiently receive, memorize, and repeat. This is the 'banking' concept of education, in which the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits. They do, it is true, have the opportunity to become collectors or cataloguers of the things they store. But in the last analysis, it is men themselves who are filed away through the lack of creativity, transformation, and knowledge in this (at best) misguided system. For apart from inquiry, apart from the praxis, men cannot be truly human. Knowledge emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry men pursue in the world, with the world, and with each other.

The issues of the debate are clear. On the one hand, there are those who see educational technology as particularly appropriate for populations at a lower level of educational development, as necessary for these populations to reach a level of creativity. On the other hand, there are those who say that using education in this way, and a fortiori using educational technology, makes it impossible for the audience to develop any creativity of their own; the audience has to be a part of the education process in a participatory way for any education to occur. The structure of the process constitutes an essential part of its results.

STUDIES ON COMMUNICATION EFFECTS

What kinds of data do we have about the psychological effects of broadcasting across cultures? Can we make any inferences from studies that have some relation to studies of cross-cultural broadcasting effects?

McMenamin (1974) examined the teacher's image on television. That is, does the teacher come across in a different way on television than in the classroom, or is a televised class no different in this respect from a "live" class? He asked whether the personality traits of the television teacher are strengthened or weakened, magnified or diminished, in the viewer's eyes. What he found was that the teacher lost forcefulness in the television class, compared with his image among those who saw him in person. There is something about the personal presence of the teacher that adds to his message a certain dynamism that is lost when the message is televised. The television teacher has to be much more forceful and dynamic to come up to the same level of a forceful classroom teacher.

McMenamin points out in his conclusion that the viewer adds something of his own to the televised teacher image, precisely because

it is not the same kind of image that the classroom teacher projects.

On television, the 'real' personality is viewed through a different matrix of sense ratios and is seen as something different from its 'electronic' counterpart. The absence of the living presence is compensated for, but at the expense of forcefulness. As the electronic image is 'fleshed out,' the dots filled in, and the two-dimensional figure extrapolated beyond the confines of the frame, the viewer is highly involved. He creates a living person out of an electronic image by 'reading' more into the image than is there. A change in sense ratios creates a change in perception.

While this is not the kind of involvement that Freire and others talk about, it does modify to some degree the idea that the viewer is not active. The viewer, however, remains in a posture of re-acting to the televised image.

Stanley Milgram and his associates (1973) conducted a series of experiments to study possible links between television and anti-social behavior. Through a series of experimental designs, they showed a sequence that suggested stealing and then arranged it so that the subjects would be put into a situation where stealing was quite possible. Through many different conditions and with several groups of subjects, the experimenters looked for the anti-social behavior, but they could find no firm connection between the television sequence and subsequent behavior. "We did our best to find imitative effects, but all told, our search yielded negative results."

This study casts further doubt on the idea that television is automatically effective with its message, particularly with an anti-social message. While there is a large amount of research done on the effects of anti-social behavior on media consumers and while it is clear that at

least some viewers (children particularly) can imitate what they see, it remains true that most people, including children, resist the negative suggestions of what they see. Just as earlier research showed that audiences were not automatically convinced by advertising promotions, the Milgram study and others show that anti-social behavior does not penetrate the vast majority of the audience. Therefore, generalizations about media effects must be qualified. Data on media effects are not unequivocal.

Mention might also be made of some observations based not on experimental data but upon experience and anecdotal evidence. Lloyd Bostian (1970) offers some hypotheses about the flow of information in non-industrialized, mostly rural societies. He focuses on mass media messages and the two-step flow. According to Bostian, in societies of this type, mass media messages are normally non-influential simply because little useful information is carried and the people have few expectations of receiving instrumental information through the mass media. Rarely, therefore, does the two-step flow operate; opinion leaders are not accustomed to get information from the media. However, if the media content does have usefulness or interest in the local area, then the two-step flow operates at a higher level than in the developed countries. This is because normal communication in the rural, non-developed society is personal and local.

Bostian further suggests that, in such a society, influence is an important motive for the relay of information. That is, most information is relayed because of a persuasive element. There is a low degree of information-seeking and a high degree of information-sharing. This increases passage of influence and influential information, versus a relay

of news per se. But Bostian offers all these generalizations tentatively. "Since none of these generalizations is backed by sufficient data, all should become hypotheses for future two-step flow research." His ideas lend caution to any hasty assumptions that communication flows in less developed areas fit the patterns discovered by research elsewhere.

Atta Koffi (1973), discussing the possible effects of cross-cultural broadcasting, asserts that:

... the co-existence of two different cultures is only fruitful if the people of a lower technical level are capable of analyzing the other culture and distinguishing its positive elements from the superficial, which excludes 79-90% of Africa's population, since the most informed are the urban dwellers.

Koffi manifests strong feelings, based on the experiences of his own years in the African milieu.

Edmund Carpenter (1972) has observed the reaction of traditional groups to innovations in the media. On his anthropological study-trips to New Guinea, he has noted reactions that cause him to question the wholesale introduction of innovations like those. He describes a visit he made to the village of Sio, a remote mountain village touched only by missionaries or soldiers or government agents. He describes his visit and the results that came from it.

Missionaries visit Sio frequently; a local teacher has a handful of students; itinerant traders leave behind steel axes. Yet Sio remains far removed from Western centers. Stone axes were still in use when we arrived; cameras and recorders were absolutely unknown.

We gave each person a Polaroid shot of himself. At first there was no understanding. The photographs were black and white, flat, static, odorless -- far removed from any reality they knew. They had to be taught to 'read' them:

I pointed to a nose in a picture, then touched the real nose, etc. Often one or more boys would intrude into the scene, peering intently from picture to subject, then shout 'It's you!'

Recognition gradually came into the subject's face. And fear. Suddenly he covered his mouth, ducked his head and turned his body away. After this first startled response, often repeated several times, he either stood transfixed, staring at his image, only his stomach muscles betraying tension, or he retreated from the group, pressing his photograph against his chest, showing it to no one, slipping away to study it in solitude.

We recorded this over and over on film, including men retreating to private places, sitting apart, without moving, sometimes for up to twenty minutes, their eyes rarely leaving their portraits.

When we projected movies of their neighbors, there was pandemonium. They recognized the moving images of film much faster than the still images of photographs.

Seeing themselves on film was quite a different thing. It required a minor logistic feat to send our negative out, get it processed, then returned, but it was worth the effort.

There was absolute silence as they watched themselves, a silence broken only by whispered identification of faces on the screen.

We recorded these reactions, using infrared light and film. In particular, we recorded the terror of self-awareness that revealed itself in uncontrolled stomach trembling.

The tape recorder startled them. When I first turned it on, playing back their own voices, they leaped away. They understood what was being said, but didn't recognize their own voices and shouted back, puzzled and frightened.

But in an astonishingly short time, these villagers, including children and even a few women, were making movies themselves, taking Polaroid shots of each other, and endlessly playing with tape recorders. No longer fearful of their own portraits, men wore them openly on their foreheads.

When we returned to Sio, months later, I thought at first we had made a wrong turn in the river network. I didn't recognize the place. Several houses had been rebuilt in a new style. Men wore European clothing. They carried themselves differently. They acted differently. Some

had disappeared down river toward a government settlement, 'wandering between two worlds/one dead, the other powerless to be born.'

In one brutal movement they had been torn out of a tribal existence and transformed into detached individuals, lonely, frustrated, no longer at home -- anywhere.

I fear our visit precipitated this crisis. Not our presence, but the presence of new media. A more isolated people might have been affected far less, perhaps scarcely at all. But the people of Sio were vulnerable. For a decade they had been moving imperceptibly toward Western culture. Our demonstration of media tipped the scales. Hidden changes suddenly coalesced and surfaced.

The effect was instant alienation. Their wits and sensibilities, released from tribal restraints, created a new identity: the private individual. For the first time, each man saw himself and his environment clearly and he saw them as separable.

Erich Kahler, in The Tower and the Abyss, speaks of the end result on German soldiers in World War II of a century of such conditioning to alienation; even during combat, they exhibited no sign of emotion, not even fear or hate: 'these faces which had petrified into death masks.'

It will immediately be asked if anyone has the right to do this to another human being, no matter what the reason. If this question is painful to answer when the situation is seen in microcosm, how is it answered when seen in terms of radio transmitters reaching hundreds of thousands of people daily, the whole process unexamined, undertaken blindly?

Carpenter is talking about the change that a person undergoes when he recognizes himself as an individual, apart from his environment and apart from his tribe. In his experience, the media were a catalyst for this process. But he qualifies the universality of this reaction, noting that tribes at different stages would respond in a different way.

CONCLUSIONS

Both the debate that is going on about cross-cultural communication effects and the little research that has been done suggest that more focused studies are needed before we will have hard evidence on the psychological effects of this type of broadcasting. The subject involves so many different variables across so many different groups of people that easy answers are unlikely to be found, no matter how much research is done.

The existing data does suggest, however, that the relative power of the parties involved in any communication has a great effect on the self-perception of the audience. Lack of involvement and the reception of broadcasting material passively is a constitutive element in the communication process; but even this, as we have seen, is subject to different interpretations as to its desirability. Just as American blacks have rarely found any of their life-experience broadcast into their homes, groups not involved in production and not exposed to the life-style of the groups that produce programming are not likely to identify with what they see and hear through the media.

If up to now we only have shadows on the wall, nevertheless those shadows are not that hazy. They seem to reflect something real in faithful outline. Today's world contains many situations of cross-cultural broadcasting, and the majority of these are situations in which those involved are quite dissimilar and quite distinct in terms of participation level. While more research can and should be called for, more reflection is possible and needed right now on what is desirable in terms of cross-cultural broadcasting. The psychological effects of the media that are presumably possible need to be described in greater detail; then, judgments need to be made about the value of these effects.

Research could be carried out before large-scale implementation of cross-cultural broadcasting through imaginative simulation designs. Uninformed implementation carries a certain momentum, making it difficult to "un-implement" if research reveals problems.

Carpenter's experience sensitized him to the implications of cross-cultural broadcasting:

The dilemma I faced in New Guinea was this: I had been asked to find more effective uses for electronic media, yet I viewed these media with distrust. I had been employed by government administrators who, however well-intentioned, sought to use these media for human control. They viewed media as neutral tools and they viewed themselves as men who could be trusted to use them humanely. I saw the problem otherwise.

I think media are so powerful they swallow cultures. I think of them as invisible environments which surround and destroy old environments. Sensitivity to problems of culture conflict and conquest becomes meaningless here, for media play no favorites: they conquer all cultures. One may pretend that media preserve and present the old by recording it on film and tape, but that is mere distraction, a sleight-of-hand possible when people keep their eyes focused on content.

It is statements like this and so many others that cry out for more understanding of cross-cultural media effects, that refuse to let us rest content with the present indistinct state of our knowledge -- mere shadows on a wall.

CROSS-CULTURAL BROADCASTING: POLITICAL EFFECTS

Questions surrounding the effects of cross-cultural broadcasting are more pronounced in the political arena than in the areas previously touched on in this paper. In recent years, the temper of the debate has intensified as the prospect of direct broadcasting from space has come closer to reality. At the heart of the debate is the realization that communication is power and that control over the mechanisms and content of a nation's communication systems enables vested interests, be they public or private, to control important aspects of a society's decision-making apparatus as well as the cultural and political symbols that bind a particular society together.

Most nations in the world continue to exercise direct control over radio and television broadcasting. In this fashion they pursue a number of objectives. Of prime importance to all governments is the maintenance of social order. By controlling access to the air waves, a government protects itself from those dissident elements of the population who might wish to question publicly a particular government's authority or legitimacy and thereby seek to undermine its power. The desire to develop and protect national identity is another reason why most governments have historically exercised rather strict proprietary control over the broadcast media. Particularly in multicultural states, radio and television are called upon to present a national integrated view of society and to counteract the centrifugal forces stemming from diverse and often competing language, cultural, and political loyalties. In addition, the

broadcast media are often relied upon to perform important instructional and socializing tasks for the government. By mobilizing the broadcast media for development efforts in education, health, family planning, and the like, government agencies try not only to disseminate vital information but also to support social change efforts at the local level. Although projects of this kind have enjoyed only mixed success, planners throughout the world are continuing to commit substantial human and material resources to the design and implementation of development strategies involving the mass media.

Against a background of national security and a concern over the cultural integrity of states, the prospect of direct broadcasting from satellites across national frontiers has raised dramatic and complex political questions. The principal forum for debate on the subject has been, the United Nations, especially UNESCO and the Working Group on Direct Broadcast Satellites, a multi-disciplinary arm of the Committee on the Peaceful Uses of Outer Space. Although these organizations have worked hard in recent years to delineate the numerous technical as well as the political issues involved in the governance of broadcasting from space, their mandate has been clouded somewhat by the contradictory goals and principles set forth in the UN Charter and related international proclamations. The UN Charter, for example, is premised on "non-interference in matters within the domestic jurisdiction of any State," yet Article XIX of the Universal Declaration of Human Rights proclaims that "everyone has the right to seek, receive, and impart information and ideas through the media and regardless of frontiers." Although Article IX of UNESCO's "Declaration of Guiding Principles on the Use of Satellite Broadcasting

for the Free Flow of Information, the Spread of Education, and Greater Cultural Exchange" reflects a more moderate position, suggesting that states should take into account the principles of freedom of information to "reach or promote agreements concerning direct satellite broadcasting to the populations of countries other than the country of origin of the transmission," many informed observers agree with Marcel Bezencon (1973) that the entire issue is confused by the fact that what is formally proposed in one international proclamation or article is often disregarded or contradicted in another.¹

Behind the ideals and principles expressed in international proclamations, and echoed in the position papers submitted by various countries to the UN committees on the future of direct broadcasting by satellite, lies a conflict between two essential values: the sovereign rights of states in matters pertaining to communication across national frontiers and the free flow of information. Most countries pay homage to both values, but a close inspection of the positions advocated and the votes taken in the World Assembly reveals a clear preference for one over the other. In the remainder of this section, we shall explore the essential differences between the two value positions, the reasons for such differences, and the possible grounds and strategies for their accommodation in the years ahead.

Many of the advocates of the strict sovereignty of states position with regard to direct broadcast satellites perceive themselves to be in an economically and politically dependent position vis-a-vis the relatively few countries which have the technological prowess and financial capability to build, launch, and maintain such satellites. A growing number of Third World politicians fear that their countries' dependency

on foreign broadcast technology and programming will be intensified in the future if steps are not taken now to develop and protect native communication industries. According to Armand Mattelart (1970), Theotonio Dos Santos (1970), and other critics of the current situation, a failure to stem the tide of imported technology will only reinforce the "nightmarish realization" that basic decisions regarding communication policies will continue to be forfeited to outsiders.² The sense of vulnerability perpetuated by unequal access to satellite technology is the most common political theme uniting the advocates of a strong nationalistic approach to the development and control of direct broadcasting from space.

The dependency of Third World television systems on imported programming has been decried for some time, but only recently has research evidence been amassed to quantify the degree of such dependency. In a recent UNESCO study (1974), researchers from the University of Tampere in Finland estimated the ratio of communication flow between Western countries and the developing world at 100:1, with the US foreign sales of TV programs alone exceeding 100,000 hours per year.³ In a similar vein, it has recently been calculated that "Bonanza," the popular US Western featuring the rough and tumble Cartwright family, is the world's single most common cultural experience. "Bonanza" is viewed weekly by some 400,000,000 viewers and its 359 episodes are sufficient to fill the world's television screens for many years to come.⁴ "Bonanza" and other syndicated entertainment shows are particularly appealing to struggling national broadcast organizations that lack money and personnel and yet are committed to operating a certain number of hours every day. According to Elliott and Golding (1974), such organizations can hardly afford not to buy syndicated American films and television series.⁵ The series themselves are cheap

compared to the costs of producing local shows and, as Schiller (1969) has argued, the US television networks retain a virtual monopoly over program imports in many countries by charging only what the individual markets will bear.⁶ Reflecting on his experience as founding director of Israel Television, Elihu Katz (1971) has poignantly described just how economic constraints determine the program menu of most national television systems:

... the fact is that one cannot produce whatever one wants; it is simply wishful to believe that the message is totally in one's hands. First of all, talent is scarce: television devours talent, and then kills it. Like talent, money is scarce in a small country, and television is extremely expensive. It takes \$10,000 to \$15,000 to do a modest half-hour variety show, but -- here's the rub -- it takes one-fiftieth of that to buy somebody else's variety show. When the temptation to buy is so enticing, it is difficult to resist. And from here, it is an easy step to the unfortunate slogan that ... 'If you can buy it, don't make it.'⁷

There is also a growing realization among communication researchers and among governments that the international media system is not truly international. Rather, it reflects the values and priorities of certain societies disproportionately with the dominant countries acting as gatekeepers for communication in and between the poorer, developing nations. That problem has both hardware and programming dimensions and each is viewed warily by those who view the advent of direct broadcasting by satellite as merely the next step in the extension of political influence of the rich countries over the Third World. Such influence, the critics argue, will only enhance the monopoly power of the program exporters and erode even further the freedom of the importing countries to develop self-reliant broadcasting systems capable of expressing indigenous cultural values.

Despite acknowledgement of their dependency on outside programs and broadcasting models and a growing commitment to assert indigenous values, many countries are still stymied in their efforts to bring about fundamental reforms. Part of the reason may be traced to the economics of the problem cited above; smaller countries simply cannot afford to produce much on their own. An equally important deterrent to reform, however, is the fact that the model of broadcasting imported and sustained from abroad serves certain internal interest groups. Dependency customarily has an internal as well as an international face and the emphasis on entertainment programming and the escapist formats of most imported television series may promote the commercial interests of the elite elements of society. Only recently have critics in and out of government begun to question the appropriateness of such a steady television diet of entertainment programming and its relationship to individual values and societal goals. Is not a rise in social frustration and tension inevitable, the critics ask, if the standard of life portrayed through the media is available to only a tiny fraction of a nation's people? Regrettably, even in those instances where nations have reduced the proportion of imported material broadcast each day, the indigenously-produced programs offered in their place have often only imitated the same narrow range of consumer values and aspirations. This trend has also thwarted the emergence of creative talent and themes related to national development objectives.

In sum, dependency theorists as well as nationalistic media planners argue that direct broadcasting from space will only exacerbate the existing inequalities in international communication flows, thereby weakening even further the position of the poorer countries. Furthermore,

they question the efficacy of satellite technology as a means for encouraging local development and participation. The scale and concentration of resources necessary to install a satellite distribution and reception system in the long run may only reinforce the political power and prestige of forces dedicated to the maintenance of the status quo. For this reason, the Third World nations have joined the coalition of socialist countries in demanding stricter controls over the development and use of satellites in the years ahead. The nature of these controls is summarized below.

The defenders of the sovereignty of states position with respect to direct broadcast satellites adhere with varying degrees of intensity to one or more of the following three principles:

1. that no country shall undertake direct broadcasting by satellite to another country without prior consent of the latter;
2. that governments be held responsible for any broadcasts emanating from within their territories (whatever the source);, and,
3. that in the long run, any state be entitled to participate in activities which involve broadcasts whose scope encompasses territories under its jurisdiction.

These principles were spelled out most recently in draft documents presented to the Working Group on Direct Broadcast Satellites in 1974 by the USSR, Canada and Sweden, and Argentina, respectively.⁸ Together they reflect a view shared by most countries, but often for different reasons, that binding action must be taken now before state sovereignty is actually threatened by direct satellite broadcasting. Because broadcasting is already under tight control in most countries, the prospect of tighter controls over international communication actually represents no great

policy change. In assessing this situation as well as the potential of space communications for services to the peoples of the world. Oscar W. Riegel (1972) has ruefully noted that, in the final analysis:

... international communication, whether by satellite or otherwise, is a reflection of international politics. No communications undertaking, however innovative its technology or universal its social potential, can rise above, or aspire higher, than its mundane base in the politics of segmented national sovereignties.⁹

Professor Riegel's rather fatalistic assessment is not shared by the relatively few countries that adhere to an undiluted free flow of information doctrine with respect to direct broadcasting by satellite. Advocates of a less regulated approach to international broadcasting claim it would be a mistake to imagine or predict the future solely on the basis of today's communication models and relationships. Although they too share some concern over the uneven flow of communication in the world, the United States and the few other governments championing a less restricted approach view the possibility of an increased and unencumbered flow of information as a potential cure rather than an added curse to the existing situation. In the direct broadcast satellite, they envision a way to overcome traditional distribution barriers which are both costly and subject to many petty political restrictions. In short, they focus on the satellites' potential for lowering political barriers and misunderstanding rather than on their potential for exacerbating them.

The free flow of information advocates also emphasize the benefit that will accrue from a more liberal approach to direct broadcasting from space. In a communications system that would not be hampered by the high costs of a terrestrial distribution system, they see a potential for

... serving hundreds of millions of people who are currently out of reach of today's broadcasting networks and isolated from information that could potentially help them to improve the quality of their lives and, at the same time, make them feel part of some greater national and/or cultural entity. The delivery of health care to native Alaskan villages and the upcoming Indian village development project (SITE) are significant cases where satellites are being relied upon to overcome traditional impediments to the diffusion of information and the development of appropriate rural change strategies.¹⁰ Unfortunately, not much is known yet about the political consequences of these projects, although the SITE project has already generated considerable debate in the Indian parliament over the extent of its reliance on NASA's ATS-F satellite.

In addition to claiming that the sovereign right of states position was antithetical to the Declaration of Human Rights and other international covenants concerning the freedom of communication and speech among people as well as to the legal traditions of specific countries (e.g., the First Amendment of the US Constitution), proponents of the free flow of information doctrine initially viewed any principle regarding prior consent as "unnecessary and unacceptable". Furthermore, they argued that to recognize such a principle in the case of direct broadcast satellites might jeopardize already existing forms of international communication such as shortwave radio broadcasting and freeze future developments. The precedent of prior consent was objected to most vociferously by the United States as an instrument that would ultimately curtail the flow of information and ideas throughout the world. However, when the United States found itself in complete isolation following a 1972 UN General Assembly vote on the subject; it initiated a review of its position which has resulted in

at least a tacit acceptance of prior consent as a basis for future action.

CONCLUSION

The growing acceptance of the principle of prior consent as a basis for the development and eventual utilization of direct broadcast satellites is indicative of a number of political realities. The debates in the United Nations and other forums reveal that countries are no longer willing to accept new technologies without first scrutinizing their potential political and social consequences, along with their technical capabilities. In a world of continuing social and political conflict -- a world in which satellites are still devoted overwhelmingly to goals of national security and defense -- Third World nations must assess how the new technology affects their competitive position with respect to their neighbors and the superpowers. The latter consideration is particularly crucial because, as argued above, an investment in a communication satellite involves not only the purchase or lease of a program distribution system, but also certain concepts about how such a system will operate. Although critics have only begun to assess the impact of the "cultural baggage" that accompanies technological transfers of all kinds, it is clear from the political positions advanced in the UN that in the future nations will demand greater control over all aspects of the communication technologies they import from abroad.

The advocates of strict international control over direct broadcast satellites represent a wide spectrum of political systems and philosophies. They share the view, however, that a country's television system is an important part of its national sovereignty. In their review of the

legal issues involved in direct broadcast satellites, Laškin and Chayes (1974) point out that "respect for national sovereignty" is a concept that can easily become a substitute for analytic thought and/or an easy defense of the status quo. Yet, the two United States lawyers emphasized that the sovereignty principle is based on "a recognition that all countries have, by national political decision, worked out their own arrangements for domestic television to fit their own special needs and situations."¹¹ Even in those countries with long traditions of free speech, broadcasting has always been subject to some sort of government control. Thus, a tighter regime of control over international broadcasting may not, in the long run, represent as great a "conceptual extension" as the strict free flow of information advocates believe.

The second critical political issue in the continuing debate on direct broadcasting by satellite is that of access. Currently, only a small group of rich countries have the resources to operate direct broadcast satellites. Other nations must be willing to use these satellites on the terms dictated by the technologically advanced countries or do without them. It is for this reason that participation has been stressed as a political variable of increasing importance in the debate before various UN agencies. Unless terms can be worked out that do not subjugate the poorer countries in their use of the new communication medium, the resentments are likely to multiply and important opportunities for lowering some cross-cultural barriers to communication will be missed. The participation question also enters into the debate over programming. The current one-way traffic in international television traffic does not bode well for the future of direct broadcasting from space. Should the current traffic pattern simply be transferred to satellites, more of the world's

population would be subjected to the program fare produced and distributed by relatively small groups of commercial interests located in the United States and Western Europe. Mechanisms need to be devised and tested that allow the smaller countries and those with relatively young broadcasting systems to upgrade their production capabilities either on their own or in consortia with other nations. The first goal should be to improve local production capability and service within a particular nation, but out of this approach should also evolve a better means for enhancing the distribution of programs on regional or worldwide bases.

In the final analysis, the central political question surrounding the future of direct broadcast satellites is whether or not a workable balance can be achieved between the demands and controls of national sovereignty and the desire to spread ideas and information freely throughout the world. Skeptics fear that the vast potential of a new global communications medium is in danger of being sacrificed to the wishes and power of a small group of national diplomats and their technical and legal advisors. To Riegel's somewhat caustic eye (1971), the debate has degenerated into arguments as to whether it is better for the mass media to be managed by capitalist profiteers or by dirigist governments in defense of the status quo.¹² Clearly, other interests and other aspirations will have to be identified and nurtured if direct broadcasting by satellites is to escape the relatively narrow range of interests that have been the beneficiaries of other communication media.

Barring any significant challenge to a world order dominated by sovereign states and by leaders more concerned with stability and defense than with change or the elimination of social inequity, it is unlikely that

direct broadcasting by satellite will ever escape the political constraints outlined above. However, short of major political changes or realignments, there is much more that could be done to stimulate the growth of direct broadcasting by satellites in directions that would broaden access and participation.

FOOTNOTES

1. Marcel Bezencon, "Television via Direct Broadcast Satellite," in EBU Review, Vol. XXIV, No. 4, July 1973, p. 15.
2. Armand Mattelart, Agresión en el Espacio, Santiago, Chile: Ediciones Tercer Mundo, 1972, passim; and Theotonio Dos Santos, Dependencia y Cambio Social, Santiago, Chile: Publicaciones del Centro de Estudios Socio-Economicos (CESO), 1970, passim.
3. Kaarle Nordenstreng and Tapio Varis, Television Traffic -- A One-way Street? Paris: UNESCO, 1974, p. 32.
4. Andrew R. Horowitz, "The Global Bonanza of American TV," in MORE Magazine, May 1975.
5. Philip Elliott and Peter Golding, "Mass Communication and Social Change: The Image of Development and the Development of Imagery," in Emanuel de Kadt and Gavin Williams, Sociology and Development, London: Tavistock Publications, 1974, p. 235.
6. Herbert I. Schiller, Mass Communications and American Empire, New York: Kelley, 1969, pp. 88-89, cited by Elliott and Golding, op. cit.
7. Elihu Katz, "Television Comes to the People of the Book," in Irving Louis Horowitz (ed.), The Use and Abuse of Social Science, New Brunswick: Transaction Books, 1971, pp. 255-256.
8. Report of the Working Group on Direct Broadcast Satellites on the Work of its Fifth Session, Annexes II, III, and V. UN Document A/AC.105/127, April 1974.
9. Oscar W. Riegel, "Communications and Nations," in Studies in Broadcasting, Tokyo: Radio and TV Culture Research Institute of the Nippon Hoso Kyokai (NHK), 1972, p. 7.
10. Cf. Heather Hudson and Edwin B. Parker, "Medical Communication in Alaska by Satellite," in New England Journal of Medicine, 289, pp. 1351-1356 (December 20), 1973; or Osvaldo Kreimer, et al., "Health Care and Satellite Radio Communication in Village Alaska," Stanford: Institute for Communication Research, 1974.
11. Paul L. Laskin and Abram Chayes, "A Brief History of the Issues," in Control of the Direct Broadcast Satellite: Values in Conflict, Palo Alto: The Aspen Institute Program on Communications and Society, 1974, p. 7.
12. Cf. Oscar W. Riegel, "Communication by Satellite: The Political Barriers," in The Quarterly Review of Economics and Business, Vol. II, No. 4, Winter 1971, pp. 23-35.

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