

Brown

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MASS COMMUNICATION AND DEVELOPMENT:
THE PROBLEM OF LOCAL AND FUNCTIONAL RELEVANCE*

by

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Abstract

This article criticizes some current communications-development literature on grounds that it:

1. Exaggerates the motive power of the so-called "demonstration effect;"
2. Fails to distinguish sharply between what the mass media can do to influence behavior in specific productive ways and what they actually do as part of a system "built on the 'Western model';"
3. Gives rise to communications policy recommendations that are inadequate and sometimes inappropriate for achieving developmental goals.

The authors urge development scholars and policy makers to focus more sharply on questions of support, control, and content of the media and less broadly on the question of media availability. They argue that the essential characteristic of effective "development communication" is local relevance of content and point out that the structure of the mass communications system and other institutional factors largely determine the extent to which the media will carry locally relevant information. They suggest that

despite the apparent economies of centralization a highly dispersed and specialized communications network may be a more useful investment than a massive centralized one. Finally they note that information that is apparently relevant for development may in fact be useless, no matter how well diffused, unless it is preceded or accompanied by situational and infra-structural changes.

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When only economists studied development, growth models were much simpler than they are now. They described relationships among a few easily quantifiable variables and rested comfortably on a set of undebated assumptions about human behavior. But the trend has been toward increasing complexity as, one by one, underlying assumptions have emerged as variables in their own right.

The pattern has been for each "new" variable to enter the stage in a starring role, as the critical input that could turn a vicious circle into an upward spiral. Natural resources were once thought to be the keys to the wealth of nations. Then

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came the widespread notion that where enough capital could be brought together, other things would take care of themselves. Entrepreneurship has since been cast in the central role, backed by the contention that poor nations have enough capital to get started if only they would use it properly. Newer arguments suggest that entrepreneurs are always present, but often pursue the wrong enterprises. In turn, key initiatory roles have been postulated for non-economic variables, including certain religious tenets, ethnic and cultural mores, and an array of attitudinal factors such as "empathy," "the will to economize," "growth perspective," and "achievement motivation."

Communication is no exception to this pattern. It has not long been of any special concern to development theorists, most of whom have been reluctant to give up the notion that information is everywhere abundant and more properly a subject of supposition than of analysis. The few development scholars who have concerned themselves with communication have probably exaggerated its role. For example, a good deal has been written in recent years to argue that mass communication produces a "demonstration effect" and strikes a "psychic spark to modernization."

This implies that the media increase the number and change the quality of desires as tradition-bound people begin to want and expect the new material goods and "lifeways" they see and hear about. One view has it that these new desires become goals--that they provide new incentives and motives which

stimulate development by creating markets for domestic products and by "motivating" people to earn more (i.e., produce more) in order to get newly desired goods.¹ Other writers are less sanguine about this supposedly automatic stimulus to productivity, but are no less categorical in their conclusion that the mass media, "built on the 'Western Model',"² have a direct and immediate impact on aspirations and consequently on modernization.

Lerner's Passing of Traditional Society³ points up the correlation between the availability of mass media and several indices of modernity. His later writings, including especially "Toward a Communications Theory of Modernization,"⁴ enlarge on

¹Robert L. Heilbroner criticizes the popular view of the "revolution of rising expectations" as a "well-intentioned," but "delusive" one which "conjures up the image of a peasant in some primitive land, leaning on his crude plow and looking to the horizon, where he sees dimly, but for the first time (and that is what is so revolutionary about it), the vision of a better life. From this electrifying vision comes the necessary catalysis to change an old and stagnant way of life. The pace of work quickens. Innovations, formerly feared and resisted, are now eagerly accepted. The obstacles are admittedly very great--whence the need for foreign assistance--but under the impetus of new hopes the economic mechanism begins to turn faster, to gain traction against the environment. Slowly, but surely, the Great Ascent begins." (See "Counterrevolutionary America," Commentary, April, 1967.)

²Daniel Lerner, "Communications and the Prospects of Innovative Development," in Daniel Lerner and Wilbur Schramm, Communication and Change in the Developing Countries, p. 317.

³Daniel Lerner, The Passing of Traditional Society, The Free Press of Glencoe, Glencoe, Illinois, 1958.

⁴Daniel Lerner, "Toward a Communications Theory of Modernization," in Communications and Political Development, Princeton University Press, Princeton, N.J., 1963, see especially pp. 346-350.

this theme, as do publications by Nixon,⁵ Millikan and Blachmer,⁶ Fagen,⁷ McNelly,⁸ and others. All of these writings give direct or implied support to the view expressed by Millikan and Blachmer that a modern mass media system is "an important part of the social overhead capital of a developing country," and that, for example, "A major breakthrough for development would be the creation and production by the millions of a cheap, long-lived radio or television set designed to bring mass communication into villages, bypassing the prerequisites of literacy and electricity."⁹

Studies that have examined the relationship between modernity and media availability have generally taken as their measure

⁵Raymond B. Nixon, "Factors Related to Freedom in National Press Systems," Journalism Quarterly, (Winter 1960) p. 13.

⁶M.F. Millikan and L.M. Blachmer, The Emerging Nations, Their Growth and United States Policy, Little Brown and Company, Boston, 1961, p. 109.

⁷Richard R. Fagen, "Relation of Communication Growth to National Political Systems in Less Developed Countries," Journalism Quarterly, (Winter 1964) p. 87.

⁸John T. McNelly, "Mass Communication and the Climate for Modernization in Latin America," Journal of Inter-American Studies, Vol. VIII, No. 3, July 1966, p. 345.

⁹Millikan and Blachmer, loc. cit. Media availability is similarly stressed by UNESCO Reports and Papers on Mass Communication which suggest that "each country should aim to provide for every 100 of its inhabitants at least 10 copies of daily newspapers, five radio receivers, two cinema seats, and two television receivers," and argue that "the mass media, unsurpassed in speed, range, and force of impact, offer unlimited possibilities of providing technical instruction and training, as well as general education, on a broad scale." (Mass Media in the Developing Nations, UNESCO, Reports and Papers on Mass Communication, No. 33, Mass Communication Clearing House, UNESCO, Paris, 1961.)

for the latter term the presence or the absence of a particular institutional arrangement of the media. The correlations they report are consequently correlations between modernity and the existence of the kind of free, centralized, commercially oriented media system that represents the present stage of communications development in an industrializing western economy.

Without an adequate definition of the "Western Model" of a mass communication system, it is almost impossible to draw sound conclusions about its effects; this has been a major source of difficulty in examining the relationships between communication and development.

The "Western Model" can be defined in technological terms-- the existence of radio and television transmitters, distribution of receiving sets, availability of printing presses, consumption of newsprint, existence of cinema seats, and adequacy of postal and telegraphic or telephonic communications service.

The "Western Model" can also be defined in economic terms-- the existence of commercial media supported by and dependent on either circulation or ticket sales (in the case of most printed media and of the movies) or on advertising (in the case of most printed media and, in many countries, radio and television).

Previous studies have demonstrated that mass media availability normally follows certain socio-economic lines. Low income people, low income regions, and areas of low population density are likely to be disadvantaged not only in terms of whether individuals receive media but even in terms of whether media circulate in the

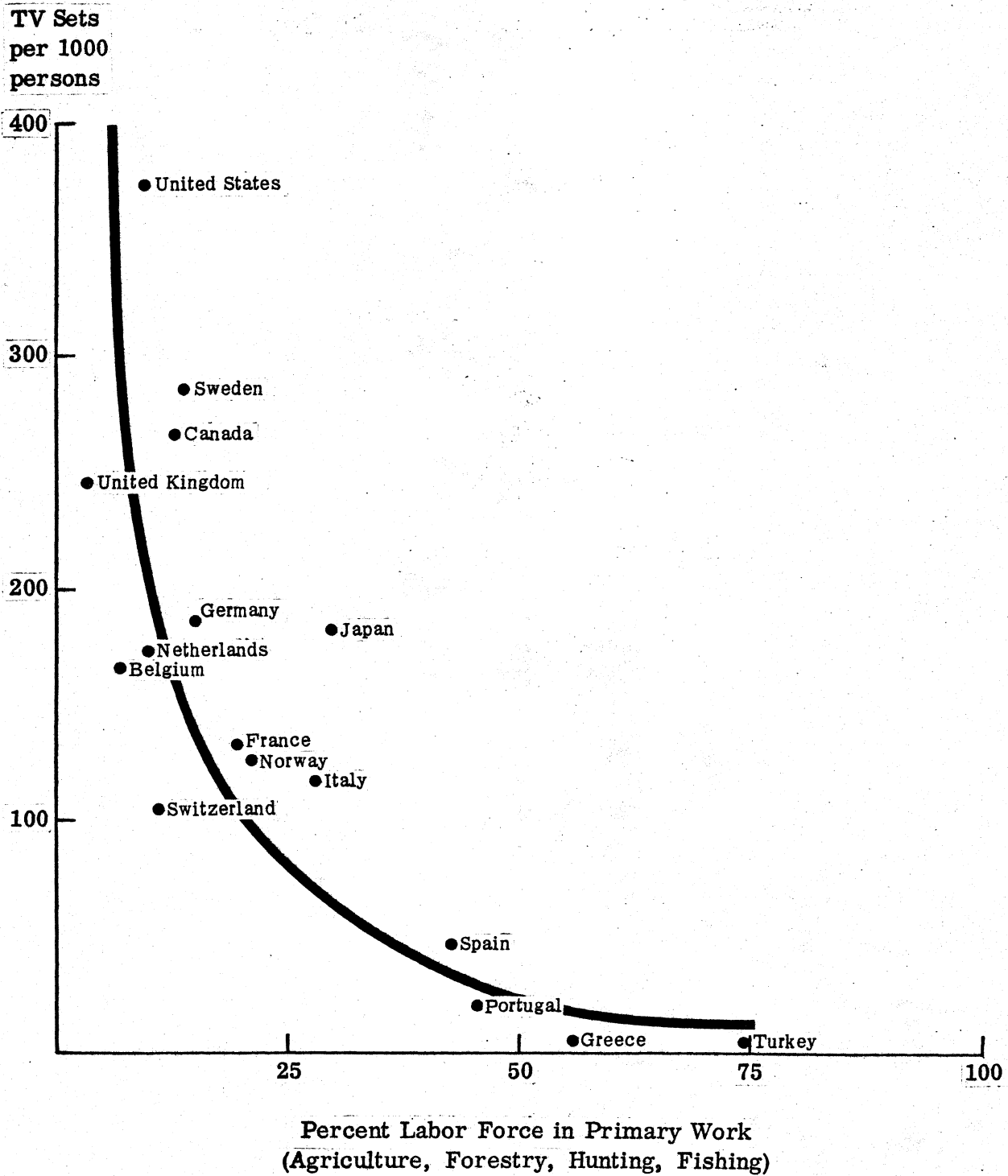
region. Figure 1 shows the relationship between availability of television receivers and proportion of the labor force involved in rural work. Clearly, the more farmers, foresters, and fishermen a country has, the fewer TV sets it has. Although other media may show less dramatic differentials, as a general rule, the media develop spontaneously only where large numbers of people are accessible as a concentrated mass audience and large consumer market. This means that the media usually are not available at all where they are needed most for development purposes, namely in economically stagnant rural areas where large inputs of usable technical information are imperative for development. (Insert Figure 1 here.)

This leads, however, to an even more important distinction. We argue that the influence of a communications system on development involves more than simply the physical availability of media, and that it certainly relates to the patterns of content placed before readers or viewers or listeners. However, the kind of communication system normally considered "modern" contains within it certain inherent determinants of content. The most important seem to be:

1. Centralized selection of content. Expensive media require large investments of capital and, in a developing nation, of scarce manpower. Many of the economies that offset this expense are achieved by letting a few people, centrally located, carry responsibility for all of the basic decisions about content;

FIGURE I*

AVAILABILITY OF TV AS RELATED TO
PERCENT OF LABOR FORCE IN PRIMARY WORK



*Source: The OECD Observer, No. 26, February 1967. Figure 1 combines data given on page 4 with that given on page 26.

2. Emphasis on technical quality of performance. The staff of a centralized or national system must deal with all kinds of content, and thus is more likely to be made up of persons skilled in the methods and equipment of mass communication than of persons less technically skilled but with greater specialized knowledge about local sectors of content or audience;

3. Selection of content to appeal to large numbers of people. This results in a preference for areas of content where there is homogeneity of interest among as many people as possible;

4. Preference for content appealing to persons who are already part of the market economy, have some purchasing power, and possess at least minimum literacy and sophistication. In practice this also means content directed at urban rather than rural people and interests.

The point is that these determinants have some very important effects on certain kinds of mass media content that could be useful in development. They discourage any kind of content that appeals only to a small population group, whether that group is defined geographically or by occupation or by other special interest.

Experimental studies have demonstrated, for example, that the mass media can give useful information on soil management for a particular kind of "problem soil" in a local farming region. The determinants of content which we have stated make it most unlikely that such material will ever actually be carried in the mass

media of a developing nation. In fact, these media will tend to exclude almost any information that might be especially useful to an individual in his occupation or profession. (Eventually specialized media will arise to fill this vacuum, but that will happen long after the process of industrialization and development is well advanced.)

What should be made clear is that correlational studies of media and modernity rest on an implicit assumption that almost any kind of message that finds its way into the media has a direct impact for development and modernization; i.e., that a Hollywood comedy turns the campesino's attention to new and desirable material goods, a radio soap opera stirs new aspirations in the countryside, a national news program transcends the narrow boundaries of traditional society, introduces a wider world, and thus establishes a "climate for modernization."

It is not our intent to deny the possibility that this kind of general information has something to do with development. However, we would argue that its impact is, at best, delayed and indirect. We take strong issue with the popular notion that the "demonstration effect" is a sufficient and altogether positive mover-of-change and that the communications needs of a developing nation are adequately met by investing in a centralized, commercially oriented media system.

If such a system actually did create a "rising tide of expectations" and meaningful aspirations, then it probably would

stimulate more consumption than production. This kind of system is necessarily filled with messages about what and how to consume. Very seldom does it carry information about how to produce. It is well to remember that Nurkse's original formulation of the "demonstration effect" stressed the negative influence it may have on savings and investment, and thereby on the rate of growth.¹⁰ Lerner also has warned that the "demonstration effect" can have negative and even destructive consequences. In a recent book he argues that "People have all too quickly learned new 'values'--i.e., desires and demands." Since these new desires can seldom be satisfied fast enough, mass communications has inadvertently "...led much of the developing world to the verge of a counter-revolution of rising frustrations..."¹¹

Actually, there is room for doubt that the effect of the "demonstration" is either to depress savings significantly or to produce a dangerously unbalanced "want: get ratio."¹² It seems more likely that the usual content of the media in underdeveloped areas has very little impact on people's real aspirations. Most of the new materials introduced by the media may be so unattainable as to never become the objects of acquisitive behavior or of

¹⁰Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries, Oxford University Press, New York, 1953.

¹¹Lerner, in Lerner and Schramm, pp. 305-317.

¹²ibid.

frustrated desires. An aspiration in the absence of an experienced need or of objective possibilities of attainment is not a goal, but merely an idle wish. "If wishes were horses, beggars would ride," but this does not mean that every beggar is frustrated because he has no horse. He is frustrated only if he tries to get one and is unable to do so. An attempt can be frustrated, an idle wish cannot.¹³ Thus it seems the "demonstration" that is at large in the underdeveloped world is more likely to stimulate fantasy behavior than goal striving. A Chilean peasant earning a bare subsistence may entertain himself with dreams of a new Ford pickup truck, but he will not likely work toward getting one unless other changes in his situation alter his real chances of having it.

For an information system to make the developmental contributions which are theoretically within its power, that system must furnish information useful in the solution of problems that are and can be recognized as solvable or in the getting of things that can reasonably be had. We mean information that suggests what might be done in a specific situation, and what is likely to result if it is done--not information about attractive but unreal alternatives which suggests nothing about "ways and means" and has little if any impact on purposive activity. We particularly

¹³We refer the reader to John Dewey's conceptualization of the nature of desire and its relationship to purposive behavior. See especially John Dewey, "Theory of Valuation," International Encyclopedia of Unified Science, Volume II, No. 4, University of Chicago Press, 1939, pp. 15-19.

mean locally relevant information. A national commercial media system will usually develop simultaneously with industrialization. We see little evidence of benefits likely to come from deliberately encouraging it to outrun the general pace of development in an attempt to accelerate that pace. We say this because we are convinced that the most important role of communication in development--that of stimulating specific productive actions--is one that national mass media, with their necessarily general, abstract, supra-local content and their preponderance of entertainment fare, do not perform well.¹⁴

At this point we can profitably emphasize the distinction between the two kinds of studies that have sought to probe the relationship between communication media and development.

Correlations studies have demonstrated that where economic development has occurred there has usually been a parallel development of a mass communications system "on the Western Model."

¹⁴One who wishes to argue from the U.S. experience will need to point out that during that nation's emergence as a modern industrial community, it was served almost entirely by local mass media. Most families were reached by a locally published daily or weekly newspaper; even the large metropolitan dailies saw themselves as serving localities rather than a region or nation. Virtually every farm family received a farm paper published within its state. The wide general distribution of national magazines and, of course, the appearance of radio and television, were phenomena that occurred after development was well advanced.

One should also note the dependence, even today, of many U.S. national media upon the steady flow of trained personnel and the traditions and experience provided by localized and specialized media. It is by no means certain that without these local media, the U.S. could even now maintain the kind of centralized national media that are being urged for the developing nations.

Experimental studies have demonstrated that people in the developing nations can and will make use of specific information, adapted to their needs, brought to them by the mass media.

A good deal of confusion--and unfounded optimism--can result from assuming that these two kinds of studies test the same hypotheses about the relationship between communication and development. Authors of some experimental studies have tended to argue that their findings "...support a conception of mass communication as not only accompanying economic, political, and social factors in national development, but also affecting such factors..."¹⁵

It is significant that a statement of this kind makes no reference to media content. It seems to address itself simply to the availability of mass media--and implicitly to a particular institutional arrangement of the media built, as Lerner says, "on the Western Model." It argues that the growth of such a system not only parallels development, but also has direct effects upon it. But this is not what the experiments show. It is no test of the effect of a centralized or national commercial system to investigate the effects of highly specialized communication. efforts in localized situations and in which the communicators make serious efforts to respond to local needs. This kind of functionally-oriented communication is not what Lerner meant by mass communication. In fact these studies, by demonstrating

¹⁵McNelly, op. cit., p. 357.

the relative importance of locally or functionally relevant content, actually point up the relative unimportance of the media per se. An example is the Spector study in Ecuador, which demonstrates that radio--typically a mass medium--can sometimes be as useful as face-to-face methods in a specialized information program.¹⁶ The disturbing fact is that, for the reasons we described earlier, almost none of the kinds of media content he used in his experimental study (instructions for making marmalade, building a latrine, and arranging to be vaccinated for smallpox) are likely to be transmitted in the normal operations of the communications systems described in the correlation studies. The correlation studies, in other words, fail to demonstrate that the patterns of content usual in Hollywood films or national printed or electronic media have had substantial direct effects on development. The experimental studies have been equally inadequate in producing evidence that these patterns of content are significant influences on development. What they have demonstrated is simply that the media have "... the potential of being used creatively to accelerate development."¹⁷

¹⁶Paul Spector, et. al, Communication and Motivation in Community Development: An Experiment, Institute for International Services, Washington, D.C., 1963. In this experiment separate villages were exposed to various media containing similar messages; special mobile radio transmitters were used for some villages and were judged to have a significant effect on decisions to adopt the practices.

¹⁷McNelly, loc. cit.

This brings us to the practical question raised by this paper: how to establish priorities for investment in communication as part of a strategy of development. Should the emphasis be on a national-centralized media system or on a dispersed, locally- or functionally-oriented network? This is an investment choice of the kind envisioned by Spengler when he describes capital as "the main prerequisite to economic development and modernization" and specifies the need for a set of productive instruments which yield a flow of goods, not a flow of services, as does consumption capital. "The capitalistic productive process consists in the use of input or resources in such a way as will make tomorrow's income stream greater than it otherwise would be, and, in particular, tomorrow's income stream per capita."¹⁸ His definition includes "the devotion of inputs to productive education and training and retraining, to the accumulation of scientific knowledge, to the conversion of that knowledge into applied science, invention, and innovation, buildings and equipment, so-called public capital, household capital, improvement and preservation of health, etc."¹⁹

Under such a definition, the economic arguments for preferring a national or centralized mass media system would depend

¹⁸Joseph J. Spengler, "Agricultural Development is Not Enough," paper read at the Conference on World Population Problems, Indiana University, May 3-6, 1967, pp. 15-16.

¹⁹Spengler, loc. cit.

upon evidence that it would have more immediate and more direct consequences than local media for the income stream. If this could be demonstrated, there would be a persuasive case for limiting the communication investment to such things as centralized radio and television services with, if necessary, extensive subsidies of receiving facilities; development of national newspapers with, if necessary, tax benefits or postal or other subsidies to aid in distribution; development of national general magazines of large circulation, with similar kinds of encouragement; and reduction of economic barriers to motion picture production or importation.

Perhaps the extreme view as to what might be accomplished by such national or international systems is stated by T.J. Gordon in his catalog of contributions technology might make toward meeting the world food crisis:

"Information transfer satellites can transmit broadcasts which originate on earth to whole continents. From synchronous orbit they can relay instruction, properly perfumed with Madison Avenue exhortations, to rural farmers, hopefully listening with mass produced, integrated circuit receivers. These receivers might be produced for less than a dollar each; the United States could probably launch a small direct broadcast satellite for less than \$10 million, including the launch vehicle. This would be a form of aid which, in the giving, would stimulate our own economy, give new purpose to our space achievements, and dramatically

invite into the present the millions of people who will benefit from learning what today can offer.

'The instructors will have to use the best of our behavioral control techniques--for example, saving stamps for achievement, use of local celebrities, the "star" image, sex, youth, fire and brimstone, tribal music, and ultimately the God, Acquisitiveness....The programs beamed over this network might carry as their message the proper uses of fertilizers and agricultural chemicals, pesticides, the practices of multiple cropping and crop rotation, irrigation and drainage, mechnization, hybridization, agronomy, and animal husbandry."²⁰

In fact, we doubt that there is as yet any satisfactory evidence that satellite communication could be used efficiently for purposes of this kind. Media capable of long-distance transmission to large numbers of people may be useful in the development of national and political awareness. We do not challenge or minimize this possibility, although we believe that it, too,

²⁰T.J. Gordon, "Food in the Future," comments on "Population Growth and the Potential of Technology," by Hans H. Landsberg, Conference on World Population Problems, University of Indiana, May 4, 1967, pp. 10 and 11.

deserves more adequate scrutiny and more detailed analysis.²¹

In addition, we acknowledge that any strategy of development should take advantage of whatever automatic general effects the national and commercial media may have on "the climate for modernization." Finally, we recognize that national or even international channels may be suitable for some kinds of health information, for some of what is taught in elementary schools, and for any other information which has near universal relevance.²² Nevertheless, we believe that direct contributions to economic development are dependent upon a media or communication system that is locally oriented or specialized occupationally or in other ways.

²¹The reservations expressed in this paper about the usefulness of national "mass" communication systems for development are beginning to be paralleled in general discussions about other developmental problems. A U.S. congressman reviewing the experience of this nation in foreign assistance over the past two decades says that the most striking lesson it provides is that little can be accomplished through national plans, centrally administered, which fail to tap local knowledge and enlist the energies of local leadership and participation. (See address by Congressman Donald M. Fraser at International Development Conference, International Inn, Washington, D.C., on February 7, 1967, mimeograph.)

²²However, Schramm has pointed out in his discussions of school-room television that national channels work effectively only when they are closely linked with local institutions that organize the audience around specific purposes and help to enhance the local relevance of nationally mediated information. See Wilbur Schramm, "Television in Education," an address delivered at the Research and Development Center, University of Wisconsin, October 20, 1966.

Such a system cannot develop, in the kind of economy where it is most urgently needed, spontaneously or commercially or without external nurturing. To stimulate it will require that we:

- a) Devote some ingenuity and inventiveness to the creation of small-circulation mass media (mimeographed newspapers, informative newsletters to a special audience, local radio transmitters with local programming, etc.) This will demand technological inventiveness and also appropriate kinds of external help on financial and personnel needs;²³
- b) Give attention to mechanisms for generating locally relevant and occupationally specialized information. In agriculture, local and regional experiment stations could help to do this if they had both the encouragement and the local outlet to focus their capacities on local problems and needs;
- c) Include in all national media developments and programs the maximum provision for local participation and local adaptation of content. This means local or at least regional radio transmitters and programming,

²³A useful report on how low-cost mimeographed newspapers have been established in Liberia, together with suggestions and discussion of their usefulness elsewhere, has been published by UNESCO. See Rural Mimeo Newspapers, by Robert de T. Lawrence (UNESCO, Paris: undated), 42 pp. processed.

and close contact with local schools on national educational radio or television efforts.

Thus we do not share Gordon's hope that satellite communication will bring dramatic technological or economic change in the developing nations. Instead, we argue that it is only on a local basis, and perhaps through unconventional channels or media, that one can demonstrably give useful information on many of the questions of crucial importance to development. The kinds of information required to establish a new kind of crop in an agricultural region, for example, are inescapably local:

1. Exact knowledge as to where and when such needed inputs as the seed itself can be locally obtained, and assurance that they will continue to be available locally;
2. Information about potential markets for the new crop or for increased production, and knowledge of marketing alternatives in the immediate geographical area;
3. Detail as to how inputs are to be applied, and information on where to turn for current information to deal with special local situations (differences in soil qualities or fertility, or local climatic differences or variations);
4. Current reports on prices and some idea as to what variations in price the farmer's own local market may encounter.

Considerable support for this stress on local relevance can be found in current development literature. For example, economist A.M. Weisblat says, "We need much more information about the ways in which farmers regard the problems they face. Lacking this, we cannot communicate new ideas or get farmers to appreciate the problems involved in agricultural planning for an entire country."²⁴

Doob also points to this need for local orientation in the use of media. Many mass communication efforts fail, he says, because communicators are not responsive to special local needs, values, attitudes, and interests.²⁵

De Sola Pool describes the weakness of the mass media in terms of their failure to interact effectively with interpersonal sources, "...to provide word-of-mouth support for the messages..."²⁶ This is another way of saying the media content is often too distant and abstract to be of interest to a large part of the audience. It is difficult to imagine a

²⁴A.M. Weisblat, "Adoption of New Agricultural Practices in Asia," Agricultural Development Council, Inc., paper given at the Symposium on Science and Society in India and Pakistan, May 1965, under the sponsorship of the Rockefeller University.

²⁵Leonard Doob, Communication in Africa: A Search for Boundaries, Yale University Press, New Haven, 1961, p. 286.

²⁶Ithiel de Sola Pool, "The Mass Media and Politics in the Modernization Process," in Lucian Pye, ed., Communications and Political Development, Princeton University Press, Princeton, N.J., 1963, p. 238.

really locally relevant item of news or information that does not get talked about in a village, regardless of the medium through which it is introduced.

Schramm repeatedly notes the need for localization in communication, particularly as it applies to politico-economic decision-making in development. An adequate flow of information, he says, must provide channels by which people "may discuss with their fellow villagers and with other villages what policies and practices they shall adopt; and it must provide channels by which the needs and wishes of the villagers may be carried up the hierarchy to form a part of higher-level decisions....Local needs and local voices have more need to be heard."²⁷

Holmberg's studies at Vicos in the Peruvian Andes led him to warn against the hope that national mass media could work quick changes. "While radio, newspapers, and films may play a leading role in the process of accelerated modernization--and the establishment of regional newspapers and radio stations would be a major step forward--in the early stages only patient face-to-face explanation and demonstration can

²⁷Wilbur Schramm, The Role of Information in National Development, Abridged Version of Mass Media and National Development, UNESCO p. 10. The complete book was published by Stanford University Press and UNESCO in 1964.

provide effective channels of communication."²⁸ For us the key word in Holmberg's statement is regional. Here again is at least implicit recognition that a centralized, national media system simply does not stress local relevance strongly enough.

In advocating local or functional relevance, we must recognize that it is very difficult to attain. For one thing, attention to small local or specialized audiences makes it very difficult to achieve high technical quality. To test this observation one need only compare local vs. network television programs--or small circulation vs. large circulation newspapers. Writing for local or functional relevance also requires a kind of skill as a communicator that is rare and difficult to develop, especially in relatively closed societies with little social and economic mobility. A localized information program should be tied closely to research in both the physical and social sciences. Without such research to generate new technology and determine its relevance to local situations, an information program can hope for little success. Knowing what is relevant for an audience is very difficult. But a considerable stride in the right direction can be made by deliberately recruiting communicators from the localities in which they will

²⁸Allan R. Holmberg, "Changing Community Attitudes and Values in Peru: A Case Study in Guided Change," in Social Change in Latin America Today, Council on Foreign Relations, Harper and Row Publishers, New York, 1960, p. 107.

later work, if necessary sacrificing technical polish in performance for direct knowledge of local situations and needs. There is also a great deal to be said for the kind of feedback generated by continuous fact finding and research.

The kind of specialized-localized communications network we are talking about has few of the supposed efficiencies of mass communication, but neither does it suffer as acutely from the inherent disadvantages, including not only generality of content, but also literacy and language barriers. Translation of a nationally developed message to apply in a local area involves much more than simply changing the language. It requires modifying the message in whatever ways are necessary to make it genuinely relevant. In this task, translation to a local dialect may be the easiest part. In interpreting the findings of a national agricultural research center to fit certain local conditions, a farmer from the region in question may be more helpful than a skilled language translator. If we can generate and introduce into a locality messages that are specific and applicable to local problems, they will tend to permeate the community in spite of so-called literacy and language barriers.

In sum then, we do not advocate a "communications theory of development"--nor do we subscribe to any model which gives information a central role and leaves almost everything else to

come forth on its own. Our contention is that, in addition to any general functions it may serve, communication has a very specific role in economic development which cannot be performed without an effort to determine and stress local or functional relevance. Finally, we should note that technological change in a locality almost always must be preceded or accompanied by other situational changes,²⁹ including especially correction of deficiencies in the distribution and availability of credit and modern technological inputs and in markets for products. Changes of this kind clearly affect the local relevance of any kind of technical information and much of what seems from a distance to be useful will prove irrelevant in practice until such changes occur.³⁰ Skillful communication can

²⁹We do not wish to suggest that all development variables are equally deserving of attention. After all, "...if all the complementary factors become limiting factors at one point in time, then none of them is strategic and the matter is hopeless." However, it is also true that "...limiting and complementary factors are continually changing places..." frustrating the search for a universal strategic factor. (See John R. Commons, Institutional Economics, Univ. of Wisconsin Press, Madison, 1959, pp. 189-190.)

³⁰This fact can become painfully apparent to the conscientious communications field worker. As this article was nearing completion, the following communication arrived from an Indian Agricultural Information Officer: "...there is a basic dilemma in agricultural communication in the country. We are advocating new techniques for improved farm production but unfortunately we are short of fertilizers, farm machinery, and the like. The market also is far from steady. In such a situation the information man is not on solid ground because farmers turn back and ask 'where are the fertilizers, what price do you offer for my produce?' I seek your opinion on how best I could be of help as a communicator in such a context." (Letter from Mr. Ravi Varma to Professor Bryant E. Kears, May 27, 1967.)

change a peasant's perception of his situation but it cannot, acting alone, change that situation very much. It can help a backward farmer to see opportunities he ignores, but if few opportunities exist information will not create them. An information program that is not accompanied by other services can do little to provide missing incentives, to make up for deficiencies in input and output markets, or to increase the supply and better the distribution of capital.

Students of economic and social development should neither ignore communication (as economists traditionally have) nor over-generalize its impact (as communication scholars sometimes do). Even a superficial observation of a developing economy leads one to the quick conviction that adequate communication is not one of the things that can be depended upon to develop spontaneously. Still no one should dare suggest that faulty communication is the primary barrier to development, or that some communication phenomenon can, by itself, trigger growth. Somewhere in the underdeveloped world there probably exists a place and circumstance in which communication is entirely adequate, and another in which information is the crucial missing element. But the general case is probably that communication and several other things need special attention.