

10. Which of our traditional institutions and values might be harnessed in the interest of modernization?

As soon as we have meaningful and useful answers to a few of these questions, can we begin to have our influence felt in policy-making, in legislation, and in action programs? When do we "convert applied research into policy research"?⁸ For all our criticisms of the Land Reform Code, the Barrio Charter, the Rice importation, deforestation, Philippine-American relations, and other national issues, what sociological insights can we offer that might alter a little bit the present state of affairs or enable

⁸ C. Arnold Anderson, "Trends in Rural Sociology," from *Sociology Today*, R. K. Merton, L. Brown, and L. S. Cottrell, Jr. (eds.). Basic Books, Inc., N. Y., 1959, pp. 360-375.

us to say "We told you so"? Some of us are called upon every now and then to participate in certain policy-making deliberations but quite often we shy away from such opportunities. I do not know whether this shying away is a reflection of our allergy to politics and action or whether it is symptomatic of our unpreparedness to make a contribution.

I have observed that our leading newspaper columnists assume a more influential role in defining sociological problems than any single sociologist we know of. Can we, at the moment, do a much better job of performing such a function? How much enlightenment can we add to the journalist's perceptiveness and sensitivity to our development problems? I leave this question for you to ponder upon.

The Process of Community Differentiation: An Insight into Development

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One of the basic assumptions of science is that there is order in nature. We recognize diversity but we also search for unity. The literally millions of distinct plants and animals are subsumed by the unifying principles of evolution. Mendeleev's periodic table of the elements and quantum theory clarify what it is that is common to all compounds, whether known or yet to be put together. The genetic laws of Mendel and the Law of Gravity likewise offer orderly expectations from a morass of observations. Just as alchemy has been removed from chemistry, we might ask whether it is now possible to substitute illumination for mys-

tery in understanding the process of community development.

We speak of communities and community development but what do we know about *how* communities develop? Are there any regularities to the pattern of community growth—or stagnation? We recognize the diversity of communities, not only among different cultural and national settings, but within the same region or within the same network of an intervillage system. Are we to account for these differences as due to the random evolution of communities, and, hence, be committed to approach each community as a unique standing of communities and their development? Or can we identify

any process that will give us a more systematic understanding of communities and their development?

It is the intent of this paper to suggest that the answer to the last question is *yes*. The answer will be given from the framework of cybernetics and information theory, and the application of Guttman scale analysis. What will be suggested is that we have a simple and direct tool to compare communities—rural and urban, cross-cultural and across time—on the general dimension of community differentiation. Differentiation is defined as “the degree to which the community projects diverse areas of meaning.”¹ Areas of meaning are reflected by the diversity of institutions, division of labor and frames of reference.² The community then is seen as a storage for socially meaningful information. By Guttman scales analysis, we will tap the degree of differentiation or the level at which the community is capable of processing information.

There are many ways to view community, and as many ways proposed to measure development. A community can be seen as an ecological unit, a place of interaction or a geographically defined social system. Depending on the orientation, development can be measured in a variety of ways. Development of a community can be measured in terms of per capita income, literacy rate, mean educational attainment, number of toilets built or the proportion of population placing a value on getting to places on time.

The view taken here however, regards the community from a different vantage point. As suggested previously, the community is viewed as an information processing organism. Its capability of hand-

ling and processing information is a measure of its ability to survive or develop. Differentiation is a function of storage and handling information, and is reflected in diverse areas of meaning. The social structure is seen as an information pool and the handling of this information is revealed by the presence or absence of publicly recognized areas of meaning such as the cumulation of networks and diversity of frames of reference. A network refers to a pattern of publicly discriminated social relations including specialization of labor, marketing relations, and channels of social interaction.

Let me be more specific. A community has much to tell about itself. The facilities, institutions and social patterns projected by the community tell us something about the information that is now part of the community. The presence of a resident physician, for example, tells us to what point specialization of labor is recognized. It also suggests that the community is economically capable of retaining the needs and information provided by the physician. Furthermore, the presence of a doctor tells us that, along with whatever folk beliefs of health and illness that persist, the germ theory of disease is also a part of the information pool of the community. The presence of a hotel or inn suggests something about the articulation of the community within the larger structure. More basically, it reveals that within its information repertoire, this particular community has commercially recognized the legitimate stranger. The level of differentiation projected by such a community is in contrast to communities where outsiders are destroyed or expected to leave by sundown. An intermediate level of differentiation is projected by communities where hospitality and safe conduct is guaranteed via the gatekeepers of the village, such as the barrio captain or at preordained entrance points where there are relatives

¹ Young, Frank W. 1965—“A Proposal for the Study of the Effects of Community Social Structure on the Productivity of Farms.” Mss. Department of Rural Sociology, Cornell University, Ithaca, N. Y.

² Young, Frank W. 1965—*op. cit.*

or other contacts (which then comprises the definition of the stranger we are referring to).

Communities differ remarkably in the information they store within their social structure, which Redfield defines as the "set of limiting conditions within which the conduct of individuals takes place."³ A barrio that has a sari-sari store, one room schoolhouse, and an unpaid formally elected leader, has an information handling capacity distinct from a community that has a fulltime, paid secretary to handle inter-community correspondence, experiences weekly visits by a parish priest, and has stores selling shoe-strings and factory-made clothing. A village which has an unused health center and a non-functioning barrio council, suggests a failure to positively retain information intended for it or thrust upon it. We are all too familiar with the statements of those involved in development faced with explaining retrogression such as defunct local government, a cooperative that failed, or formal ordinances that exist in name only. The explanation sometimes given is "the community just wasn't ready for it." Delayed rejection of this type, often masked by temporary local enthusiasm, can be better appreciated when seen in the context of its information level. Reaction relative to the degree of community differentiation suggests insights into the process of community stagnation, existence or development. I now propose that we take a closer look into what is meant by the information handling levels of a community, how these meaning levels can be identified, and what implications the recognition of the organizational complexities of communities have for further queries.

The basic question to answer first is this: What regularity and order can we find in the development of communities?

Work done under the direction of Frank Young of Cornell University on 24 rural communities in Mexico,⁴ on a cross-cultural study of 54 primitive and modern communities,⁵ on 54 Latin American communities,⁶ and on a world-wide sample of 102 peasant communities,⁷ suggests that communities develop along a cumulative, unidimensional sequence. Study of 297 New York state villages⁸ and towns, and 33 Swedish communities⁹ also add to the evidence. What is of interest in these studies is "the typical sequence taken by the communities as they more completely participate within the national social structure."¹⁰ Other studies using units other than the community show comparable evidence. This refers to a study of societies by Freeman and Winch¹¹ and application of scale analysis to the study of cultural evolution of 100 societies by Robert Carneiro.¹² To this I would add the 15 municipalities of Mindoro Oriental, Philip-

⁴ Young, Frank W. and Young, Ruth C. 1960—"Social Integration and Change in 24 Mexican Villages." *Economic Development and Cultural Change*, Vol. 8.

⁵ Young, Frank W. and Young, Ruth C. 1962—"Sequence and Direction of Community Growth: A Cross-Cultural Generalization." *Rural Sociology*, Vol. 27, No. 4.

⁶ Young, Frank W. and Isao Fujimoto. 1965—"The Process of Social Differentiation in Latin American Communities." *Economic Development and Cultural Change*, April 1.

⁷ Young, Frank W. and Berkeley Spencer. 1965—"The Process of Differentiation in a World-Wide Sample of 102 Peasant Communities." Mss. Department of Rural Sociology, Cornell University, Ithaca, New York.

⁸ Wakeley, R.E. 1961—"Types of Rural and Urban Centers in Up-State New York." Cornell University, Agricultural Experiment Station Bulletin.

⁹ Swedner, H. 1960—*Ecological Differentiation of Habits and Attitudes*. CWK Gleerup. Lund, Sweden.

¹⁰ Young, Frank W. and Young, Ruth C. 1963—"Toward a Theory of Community Development." *UNESCO Publications in Science Technology and Development*, Vol. VII.

¹¹ Freeman, LO and RF Winch. 1957—"Societal Complexity: An Empirical Test of a Typology of Societies." *American Journal of Sociology*, Vol. 62.

¹² Carneiro, Robert C. and Stephen Tobias. "Scale Analysis as an Instrument for the Study of Cultural Evolution." *Transactions of the New York Academy of Sciences*, December 1963.

³ Redfield, Robert 1960—*The Little Community*, Phoenix Books, University of Chicago Press.

TABLE I

Mindoro Oriental
Poblacions

	Class	1	2	3	4	6	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	25	26	27	28	30	
CALAPAN	3	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	23
PINAMALAYAN	4	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	22
NAUHAN	4	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	20
POLA	4	0	0	0	1	1	0	0	1	1	0	1	0	1	0	1	1	0	0	1	0	0	0	1	0	1	11
MANSALAY	5	0	1	0	0	1	0	0	1	1	0	1	0	1	0	1	1	0	0	1	0	0	0	0	0	0	10
BONGABONG	5	1	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	0	1	1	0	18
BANSUD	5	0	0	0	0	1	0	1	1	1	0	1	1	1	0	1	1	0	0	1	0	1	0	1	0	1	13
ROXAS	5	0	0	0	1	1	0	1	1	1	0	1	1	1	0	1	1	0	0	1	0	1	0	1	1	0	14
VICTORIA	5	1	0	0	0	1	0	1	1	1	0	1	1	1	0	1	1	0	1	1	0	1	0	1	0	0	14
BAGO	5	0	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	5
GLORIA	6	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4
SOCORRO	6	0	0	0	0	1	0	1	1	1	0	1	0	1	0	1	1	0	1	1	0	0	0	1	0	0	11
SAN PEDRO	7	0	0	0	0	1	0	0	1	1	0	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	7
SAN TEODORO	7	0	0	0	0	1	0	0	1	1	0	1	1	1	1	1	1	0	0	1	0	1	0	1	0	0	12
PUERTO GALERA	7	0	1	0	0	1	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	8
		5	6	0	6	13	2	9	14	15	1	15	8	14	4	12	11	11	6	15	1	8	2	10	4	7	

1—PRESENT

0—ABSENT

- 1—Movie
- 2—Piped Water
- 3—Sewer System
- 4—Electricity
- 6—Resident Doctor
- 8—Hospital

- 9—High School
- 10—Municipal Building
- 11—Police Force
- 12—Fire Department
- 13—Paid Muni. Secretary
- 14—2 Churches

- 15—Plaza
- 16—Park
- 17—Market
- 18—Dry Goods
- 19—Shoe Repair
- 20—Watch Repair

- 21—Post Office
- 22—Public Phone
- 25—Newspaper sold
- 26—Bank
- 27—Gas Station
- 28—Hotel
- 30—Named Streets

piners, which I will draw on for purposes of illustration and clarification.

Various institutional characteristics of all poblacions of the municipalities of Mindoro Oriental are tabulated in Table 1. At this point, it may do well to point out that all items are group level rather than aggregate characteristics determined by a sum of individual responses. If we are interested in a group level phenomenon such as community development, then it would do well to select those properties which apply to the community as a whole. A plaza belongs to the entire community; no individual owns a plaza nor will a sum of responses of individuals indicate ownership of a plaza. Likewise, services such as police and fire protection, bank, movie house or public transportation make sense when the level of analysis is the community. This point is made to focus attention on the need to use group level items to explain group level phenomena, be it development, alliances, disorganizations, or revolutions. Individual reactions are not general enough for the explanation of community development; and, even if we were to rely on psychogenic theories, we would still have to explain how individual tendencies combine to produce group level phenomena.¹³

The poblacions are lined up in order of municipal class ranking and population based on the emphasis that economic and demographic characteristics receive in accounting for development. (If this is so, the number of community characteristics should be proportional to the use and population rankings). Now, how do we make sense of the information tabulated on Table 1? It is one thing to have information on a community and another thing to align the information in such

a way that it sheds meaning on our inquiry. Our object is to find out where a community is in relation to the overall process of differentiation and also how it might be compared relative to other communities.

The items represent a diverse array of institutions: political, health, economic, education, communication, specialization of labor, recreation, service facility, religion. Do the items representing these diverse elements of the social structure occur at random? Or is there any association to suggest the systematic accumulation of institutions by a community? If there is a sequence of growing complexity, a pattern should show up in the form of a Guttman scale. The emergence of a scale is inherent in the data. A scale will form only if an underlying dimension is tapped. If the items are not part of one general dimension, many scale errors will appear.

Table 2 shows the emergence of a pattern. The communities and the institutional items were lined up in order of frequency. Scale errors are numerous in some items which suggest that they are not tapping the general dimension of differentiation. For example, I would suggest that item 30, the presence or absence of named streets, would be more useful in tapping the variable of community solidarity. Solidarity is defined as the degree to which a community projects a unified image of itself. Though it is not the purpose of this paper to discuss this particular dimension, community solidarity refers to those aspects of flexible cohesiveness that prove useful in discussing whether or not a community is open or closed to further differentiation. A fire department, which cuts across sub-group loyalties and looks out for the safety and security of the entire social unit, may be another index of community solidarity. Both of these items are removed, however, for the simple reason that they do

¹³ Young, Frank W. 1963—"Comparative Study of the Dimensions of Modernization." Mss. Department of Rural Sociology, Cornell University, Ithaca, N. Y.

TABLE II

	21	2	3	4	5	6	7	8	9	10	11	12	13	14									
	11																						
	13	10	6	15	17	18	27	9	14	25	30	4	28	20	2	19	1	16	26	8	22	3	
CALAPAN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
PINAMALAYAN	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0
NAUHAN	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0
BONGABONG	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	0	0	0	0
ROXAS	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0
VICTORIA	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0	1	0	0	0	0	0	0
SAN TEODORO	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0
BANSUD	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
SOCORRO	1	0	1	0	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
POLA	1	1	1	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
MANSALAY	1	1	1	1	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
SAN PEDRO	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PUERTO GALERA	1	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
BAGO	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GLORIA	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

$$C. R. = 1 - \frac{12}{100} = .96$$

not fit the basic qualifications for a useable scale item, i.e., they have more errors than cases they discriminate.

Some items are more powerful indicators of a particular meaning level than others. The presence of a plaza (#15) and a permanent market (#17), both tap the same meaning level. However, the lack of errors suggest that the market offers a more clear cut indicator for differentiation of communities at this level. Along this line, we can get some ideas about informational equivalents—items that tap the same meaning level. This is important to keep in mind for we are not interested so much in the concrete items as we are in the pattern of differentiation that emerges. We are not interested in what specific item follows what other item, but what items best tap the information levels which we can use to compare communities. For example, there are many ways to tap children's intelligence. We can have them make up songs, recite poetry, solve puzzles or paint pictures. Some tests discriminate better than others. In the same way, various items can better tap a particular level of community differentiation. Institutional projections as unrelated as piped water, shoe shop, watch repair service and a movie house tap the same informational level.

If a scale is a good one, we should be able to predict what institutional traits a community will have if we know the scale step it has attained. The predictable qualities of a scale are measured in terms of its coefficient of reproducibility. A more conservative measure, the coefficient of scalability, takes into account the illusion of a high C.R. which is possible when too many extreme items or communities are included. A C. R. of .85 and a C. S. of .65 represent minimal levels of acceptability. The scale of community differentiation for the 15 poblacions of Mindoro Oriental have a C. R.

of .98 and C. S. of .91. The suggestion that the poblacions of Mindoro Oriental have developed in some systematic way cannot be ignored.

Several observations are in order. The designation of municipality class and the degree to which a community has differentiated do not necessarily coincide. This comment is made merely to point out that a comparison on the basis of differentiation may be more meaningful than the class. Class can be more often the function of the municipal treasurer's capability in collecting taxes than the economic status of the community unit. Though the sample is too small for generalization, a correlation to consider is that between population and the degree of complexity. For example, at what population level do you expect to find certain services? Some places may reflect segmentation—that is, more of the same kind of thing such as 20 sari-sari stores and a botica and carindaria is much more differentiated than a barrio that has 10 tiendas—most of them part-time and handling the same kind of goods. Economists have suggested that the proliferation and duplication of small retail stores is marked in the lower stages of development.

Mention has been made about the stages tapped by various items, discriminating within a meaning level as well as between levels. The differentiation items discussed here were incorporated in the University of Hawaii Philippines Project study of community stereotyping of outsiders. Preliminary observations show the discriminating power of the presence of a high school in typing the 75 communities, included in the study.¹⁴ Previously, mention was made of four items that tapped the same level of meaning: piped water, shoe shop, watch

¹⁴ Lynch, Frank C. May 1965—Personal Communication. UHPP. Ateneo de Manila, Quezon City.

repair shop and movie house. Of these four, the presence of a store specializing in the sale of shoes turns out to be the best indicator. An easily observed item such as this can be quite discriminating, in other words, a community with a shoe shop has clearly obtained a certain level of complexity. In the study of 24 Mexican communities cited earlier, the Youngs used the presence of 50% or more shoe wearers as an index of an urbanized style of life.¹⁵

For one thing, the wearing of shoes indexed assimilation. Many of the rural villages in Mexico are predominantly Indians who are quite marked in their cultural attire. Shoes represent a Mexican-style of life as well as an urban style. The wearing of shoes indexed assimilation of Indians into the national culture of Mexico. Secondly, it is difficult to buy huaraches, or sandals, in some of the larger cities, while shoes are readily available in all of the large trade centers. Thirdly, shoe-wearing is highly correlated with non-agricultural jobs. The more shoes worn, the less people involved in agriculture and the more differentiated the occupational alternatives of the people. Thus, the information content implied by such a simple indicator as the presence or absence of shoe sales or repair exemplifies what is meant by tapping the community information pool on a cumulative scale of differentiation. However, despite the arguments made for the discriminating power of certain items, what should be emphasized again is the level of meaning that is being tapped by the scale items. It is the meaning level and the revelation of sequential pattern that is important. Thus debates concerning the specific sequence of concrete items, though interesting, is irrelevant. Speculation that hospitals are necessary to handle the victims of gang fights inspired by a show-

ing of "Jesse at James" at the local movie house is academic.

Though the scale suggests that the poblacions of Mindoro Oriental project institutions in a cumulative sequence, we should direct our attention to the scale errors and ask in what alternative ways can communities develop? There are three possibilities: (1) Communities can go through cycles of rising and falling, and it is possible to have typed a community during its movement up or down the scale. (2) Communities can develop all at once, establishing its institutions simultaneously. Brazilia, Brazil, and gold rush towns in California are examples of this. (3) A community might develop something ahead of the cumulative sequence—say a power plant or a supermarket—and thus create pressure for the development of supports that will bring up the institutional rear. All these are possible. However, development of communities in any of these non-sequential ways should show up with respective scale errors. If the three alternatives mentioned were the rule rather than the exceptions, errors would be so numerous that no scale would emerge.

We can discuss the scale errors in the light of these alternatives. The school in Gloria shows up as a scale error. Does this mean Gloria has lost the other institutions and the high school is a remnant of its once higher level of differentiation? Or was the high school recently built and are the pressures building up for the development of other institutional supports? Actually, both Gloria and Socorro are newly-created municipalities. Despite its sudden appearance, the degree to which Socorro has differentiated shows that its accumulation of institutional supports is far from random. Socorro is currently constructing a municipal building. In Gloria's case, the possession of a high school influenced its separation from the municipality of Pinamalyan.

¹⁵ Young and Young, *op. cit.*

Though it has the advantage of community solidarity supported by a rivalry with its mother municipality, Gloria has a long way to go before filling in the missing meaning areas. However, it is reasonable to predict that should Gloria move ahead, it will develop marketing facilities before it invites a rural bank to open offices. Certainly an entrepreneur will do better to open a clothing store before starting a shoe or a watch repair shop.

Victoria has a movie house which is an example of an institution that may be dragged down because the community hasn't quite built up its prerequisite institutional supports. Currently, the movie house is used sporadically, if at all. The different degrees to which Gloria and Socorro have differentiated suggest that the developmental challenges they face might be investigated in relation to their particular level of information handling. However, identifying the preconditions for the differentiation and innovations commensurate with it, is a task for future investigations. Various implications can be drawn, though, from the foregoing observations.

Knowing that developmental regularity of some kind exists is important for a variety of reasons. For one thing, the scaling procedure suggests that functional prerequisites exist for each level of complexity. Identifying these preconditions would give us further insight into the process of development, and lead into a study of correlates and causes. Also, scale analysis suggests a systematic way of looking at communities in terms of both absolute and relative change, i.e., it gives us a way to identify a community as to its place along the dimension of community differentiation, as well as its change relative to other communities.

Secondly, awareness of the levels of differentiation projected by communities allows ways to relate to other variables.

One is *solidarity*, or the degree to which the community projects a unified image of itself. Communities which are lowly differentiated may be highly solidary, while others may be highly differentiated but lacking in community fervor. How does solidarity and differentiation relate in terms of development? Also, regardless of how solidary a community, its capabilities to differentiate may be limited if its access to culture information is limited. This latter variable can be called *the degree of articulation*, and this, too, can be studied in communities at various levels of differentiation. A typology of communities according to these variables can be studied for further insights into the developmental process.

A typology may also prove helpful in relating various community-level features, such as its degree of openness to outsiders and the relative success change agents may experience within its social structure. Particularly relevant is the community's own definition of its problems. It has been suggested that particular problems are a function of a community's level of development.¹⁶ Unemployment, sanitation and leisure time use can be concerns of communities that are highly differentiated. On the other hand, communities in the process of organization may list disorder and crime and social control as their main problems. Communities at the baseline of differentiation may define their important problems to include basics such as getting enough water or building a feeder road. Along this line, take the appearance and disappearance of health centers, barrio halls, and cooperatives in various barrios. At what point is the community ready for such innovations?

The implications for applied work are numerous. Some communities develop without the help of any outside agent.

¹⁶ Young and Young, 1963. *op. cit.*

Others flounder despite the conscientious efforts of many. Why does this happen? A typology of community differentiation may enable us to ask how the proposed changes in a community match information handling capabilities. We can also ask to what extent the level of complexity of community organization was taken into account. A cooperative, for example, requires more than a bayanihan spirit. It requires a certain amount of formally trained leadership versed in accounting and sensitive to economic information. In short, to be successful a cooperative must have a good manager. What is within the community repertoire to suggest that it can supply, accept or maintain requisites represented by the complexity of a cooperative? "Certain social phenomena can be regarded as a threat or a cause for action."¹⁷ What elements in the social structure influence what choice will be made, and how can we tell? Lining up communities along a scale of differentiation might suggest entrance points and an inkling as to why and for what a community is ready.

Before closing, additional mention should be made of the dynamics of information handling and variables to be studied in relation to the process of community differentiation. Interaction itself generates information and meaningful information involves feedback.¹⁸ When we speak of information that is meaningful, we are speaking of publicly discriminated meaning areas—meaning that is internalized as part of the community. Information that is meaningful involves more than exposure or contact. Contact or information alone does not guarantee change. For example, villagers in Orissa, India worked for four years constructing a dam. Af-

ter the project was completed, few of the workers know what the dam was for, nor did they realize that the high voltage wires that passed nearby carried electricity that could light their homes.¹⁹ The Youngs' work in the 24 Mexican villages suggests that it is the capacity to react, rather than contract alone, that influences a community to change.

Communities are reactive social systems and their degree of differentiation gives some indication as to what are its reactive capacities. Depending on the theoretical framework, there are different ways to regard feedback. The Second Law of Thermodynamics, which inspired equilibrium models, stresses the self-correcting capacities of systems. Maruyama, however, suggests that this view of cybernetics does not explain change of the "vicious circle type."²⁰ For example, a low efficiency in work, poor health, and low standard of living aggravate one another. A free play of market forces wherein a privileged few can accumulate more wealth and power while the living standard of the poor falls, add to what Maruyama calls "deviations that amplified negatively." In other words, the poor get poorer and the rich get richer. An example of a positively amplifying cycle is shown by developing nations that have capital, good health, and high energy use enabling even further development. Consideration of the amplifying effects—negative or positive—of feedback bears consideration in understanding the developmental process.

The community has been defined as an information processing organism and its development suggested as being con-

¹⁷ Young, Frank W. and Young, Ruth C. 1960—"Two Determinants of Community Reaction to Industrialization in Rural Mexico." *Economic Development and Cultural Change*.

¹⁸ Meier, Richard L. 1962. *A Communication Theory of Urban Growth*. M. I. T. Press, Cambridge, Mass.

¹⁹ Nair, Kusum. 1961. *Blossoms in the Dust*. Gerald Duckworth, London.

²⁰ Maruyama, Magoroh. 1963. "The Second Cybernetics: Deviation Amplifying Mutual Causal Processes." *American Scientist*. Vol. 51, No. 2. June 1963.

tingent on its being a reactive social system. The degree to which it has differentiated can be measured in terms of Guttman Scale analysis. There is evidence for the existence of cumulative unidimensional sequence through which communities move. The information and cybernetics view suggest a way of being alert to the way communities change—both absolute with respect to itself and relative to other communities. Understanding the process of community differentiation has various implications for both research inquiries and applied work. A comparison of communities differing in their degree of differentiation, solidarity and articulation should be useful in relating the pre-

conditions involved in the development of communities.

In a sense society is like a giant ocean.²¹ Regardless of modern equipment and probing skills, a clamdigger's chances of coming up with clams depend on his recognition of the larger natural forces at work—in this case, the weather, gravity and the pull of the moon. The process of community differentiation may be analogous to the forces governing the tides. Students of community development would do well to recognize the successful clamdigger who digs when the tide is out.

²¹ Young, Frank W. 1963. *op. cit.*

Some Impressions on Indian and Filipino Value Systems

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Historically, the Philippines and India have both been under the colonial rule of European powers for more than 300 years. Geographically, both are situated in the Northern hemisphere in Asia. About 80 per cent of the Indian population depend on agriculture and live in villages. Almost the same percentage of Filipino farmers depend on agriculture and live in the barrios. Philippine barrios have almost the same problems as Indian villages. No doubt there is some difference between the social structure of the Indian and the Philippine village. In India, the majority of the population are Hindus, while in the Philippines, most of the people are Catholics. The Philip-

pines, being a Catholic country and having been under Spanish and American cultural influence, has assimilated much of western culture whereas, India still retains the same old religion with some assimilation of Muslim culture.

One more point needs clarification. India is a vast country, about 2000 miles from north to south and 1850 from east to west. It has about 874 languages and dialects, about 2000 castes and subcastes, with varied food and clothing habits. People also differ not only in their attitudes but in their values. Kusum Nair, relating her experiences of the Indian value system, states that, "From examples given in the book it appears that there is no uniformity yet in the prevailing value system which determines not only

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