CULTURAL IDIOM AND THE PROBLEM OF PLANNED CHANGE: A CASE STUDY FROM A PHILIPPINE MUNICIPALITY

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INTRODUCTION

ORDINARILY, WHAT COMES TO MIND WHEN WE SPEAK OF CULTURAL or social change is the process of modification and subsequent alteration, not only of the behavior of individual members of society but also of the patterns, as well as the content, of their culture. These changes take place as part of the gradual process of social development, as a result of contacts between two groups of people, or as a consequence of planned programs. In any of these cases, it must not be construed that change, as a process, is a matter of one group of people absorbing the culture or planned programs of another. It is not that simple, even if change may be characterized in its simplest dimension; something more dynamic underlies the shift. In passing from one context to another, an element of culture or an aspect of an institution is normally made over to fit the new setting.¹ Or to use Meyer Fortes' metaphor: social institutions cannot be regarded as having been pitchforked, like bundles of hay, from one culture to another.² For one thing, culture is highly selective. Whatever social or cultural elements one group of people borrows from another, is generally modified by the recipient to suit local patterns of doing, believing, and thinking. It is therefore the inner structure of a culture or institution which needs to be understood if innovators want to accelerate the process of planned change.

Of course, understanding the inner structure of a culture is difficult. It is not likewise a guarantee that, once understood, change is easily implemented. There are external factors which also need to be grasped. As Prof. Fred Eggan, writing about culture change in Northen Luzon, has stressed:

Long continued contacts with Asiatic and European peoples have brought about both direct and indirect changes; these have affected the coastal peoples more profoundly but also penetrated into the interior. But certain of the changes seem based upon internal socio-economic factors which vary from

¹Felix Keesing, Culture Change: An Analysis and Bibliography of Anthropo-logical Sources to 1952 (Stanford: Stanford University Press, 1953). ² Quoted by John Beattie, Other Cultures (New York: The Free Press of Glen-coe, 1964), p. 243; M. Fortes, "Culture Contact as a Dynamic Process," Methods of Study of Culture Contact in Africa, International Institute of African Languages and Cultures, Memorandum XV, p. 62.

one region to another and which operate relatively independently. Thus the shift in village organization seems more closely related to topography and water distribution than to acculturation phenomena. Likewise, the variations in social organization which we have noted seem to represent a series of correlated phenomena which has an internal consistency and which is related to factors such as population density, relative wealth per capita, and the like, rather than to external contacts.³

Although this observation focuses attention to changes occurring in upland villages, the same approach can be rewarding in examining the process of change in lowland Philippine communities. No more is this true than today when various programs of planned changes are being introduced. Many of these programs have failed to accelerate social and technological changes for different reasons. One among them is the failure of agents of change to see the *internal consistency* and *rationale* of the orientation people have to their social, cultural, and natural environment. These internal factors are incorporated into the existing set of institutions around which community life is built. Knowing what these factors are, will enable planners to ask whether the existing institutions in communities they are working on are viable to *absorb* the pace of change programmed to take place. Submerging the peasants with concepts for which nothing in their own society has prepared them, often results in frustrations, enmities, and failures.

In this paper, I shall examine the internal factors which innovators label as "resistance" to planned change, particularly in the field of modern health services, in a Tagalog-speaking community of Bay, Laguna province, in the Philippines. No comparative analysis will be made for the reasons that research in lowland Philippine communities has just begun to take shape and that materials on the subject-matter I am presently interested in are not available. At any rate, study of a single group also has its own usefulness: (1) it provides initial data for future comparative work; and (2) it enables one to exercise a good deal of control over the data on hand for intensive analysis.

THE SETTING

Bay is one of the thirty municipalities of Laguna province. It is approximately sixty-eight kilometers south of Manila and is located close to the shore of Laguna Lake. The topography of Bay is varied. As it stretches lengthwise from the shores of Laguna Lake to the foothills of Mt. Makiling, it covers an area of approximately 4,687 hectares. The interior portion of the municipality is rugged and mountainous, although not entirely inaccessible. A dirt road traverses the mountainsides and links the last upland barrio of Bitin with the rest of the municipality. The mid-

³ Fred Eggan, "Some Aspects of Culture Change in the Northern Philippines," American Anthropologist, XLIII (1941), 16.

dle section of the municipality consists of rolling hills and plains which taper uninterruptedly to the shore of the lake. The lakeshore area is level at all sections.

Bay is peopled by peasants oriented to two types of economic activities-fishing and agriculture. Raymond Firth's view of peasants as "smallscale producers, with a simple technology and equipment, often relying primarily for their subsistence on what they themselves produce," 4 finds support here, even if technological innovations have occurred in agriculture and fishing. Most of the inhabitants are still small-scale producers. tenants, laborers, and fishermen. There are some professionally employed residents, but they constitute a negligible portion of the population. There are also big landowners, but most of them are residing outside of the community. Thus, when I speak of people in Bay as peasants. I mean they constitute a group of rural cultivators and fishermen whose ways of life are traditionally oriented to, linked with, but separate from, urban centers, combining market activity with subsistence production.⁵

Because earning a living is done in small-scale production, the relationship between the economic and social referents of community life in Bay is very close. Everyday activities are pursued mostly for economic reasons-whether these are done in the name of leisure (as in card games and cockfights) or carried out as part of the existing social obligations (as in reciprocal exchange of services). In endeavors where modern technology has become dominant, traditional beliefs and practices have lost their influence over local activities. But in other aspects of community affairs where there is little control over environmental conditions, they continue to play important roles. They provide the rationale for most of individual and group actions.

This orientation has set a particular type of community organization, code of ethics, and standards of values which the people consider vitally important. It includes explanations for the existing practices and rules of behavior. This is remarkably true in the field of health and illness. These two aspects of community life are frequently the source of local anxiety, sorrows, joys, and optimism. However, they are difficult to grasp in isolation because they are defined in the context of practices having to do with religion, economics, and the family. It is this inter-linking of specific activities with other institutions in the community which makes planned innovation a complex and difficult task to pursue.

ELEMENTS OF LOCAL BIOMEDICAL PHILOSOPHY

Introduction of scientific medicine and modern health practices has been a recurrent phenomenon in Bay since the early 1950s. However,

⁴ Ravmond Firth, Elements of Social Organization (London: Watts & Co., 1951),

p. 87. ⁵ Cyril Belshaw, Traditional Exchange and Modern Markets (New Jersey: Prentice-Hall, Inc., 1966), p. 54.

local reception proved unsatisfactory to health innovators.⁶ Folk medicine continues to command wider acceptance and higher preference among the people. Health practices remain traditional in spite of efforts to change them. Of course, this problem is not unique to Bay for it also exists in many parts of the Philippines. Thus, even if the scope of this study is limited only to Bay, health innovators elsewhere may find the data comparatively relevant to their own work.

The following questions therefore become relevant. What are the prevailing conditions in Bay which have provided the peasant folk with intelligible behavioral and moral environment, enabling them to uphold traditional values with certitude and validity? What accounts for the apparent satisfaction with the cultural status quo, especially in the area of health and illness? What constitute the rationality of preferences, attitudes, and thinking, with respect to the development, patterning, and transmission of the local culture? It has been argued that men can not act and feel as they do if they can not form concepts and make judgments; and this ability is made possible only through their membership in a social community and in their participation in the cultural tradition.⁷ If this is true, what are the component elements of the social community and the cultural tradition in Bay which enabled the people to perceive the world and to respond to it with satisfying personal experiences? What is the basic conceptual framework of the local biomedical philosophy?

To answer these and many other questions, I shall focus my descriptive analysis on four areas of consensus people hold as valid ways of adjusting to their environment and of participating in community affairs. These are the man-and-nature relationship, the hot-and-cold syndrome, the concept of the body and its response to ecological pressures, and the idea of sanitation as an environmental reality. These views provide the villagers with consistent reasons for much of what they are doing and, at the same time, for changing their ways when these become inadequate to meet their daily problems.

Man and Nature

The English term nature, meaning the sum total of all things in time and space, like the physical universe, has no generic corresponding word in the Tagalog language spoken in Bay. Most informants use kalikasan to approximate the physical reality of the surrounding world, although the term has reference more to abstract ideas, to essence or quality of objects, than to the concrete objects themselves. Human existence is similarly viewed. Man is perceived, not entirely in terms of his physical being,

⁶ Antonio Tan, A Study of Health, Hygienic and Sanitary Conditions Obtaining Among Rural Homes, CDRC Study Series No. 10 (Quezon City: Community De-velopment Research Council, University of the Philippines, 1960). ⁷ Grace de Laguna, "Culture and Rationality," American Anthropologist, LI, No. 3 (July-September, 1949), 379-80.

but also in terms of his human nature, translated as likas ng tao. (plural: kalikasan ng mga tao).

The physical universe—the earth, the sky, the sea, the wind, and the surrounding vegetation—is known as *sansinokop*. Here again we find the same system of classifying meanings of similar terms attached to different elements of nature, cutting across the people's interpretation of *sansinokop*. Generically, *sansinokop* implies wholeness of being, an encompassing attribute of the universal design. The concreteness of knowledge about it, is crystallized through linguistic identification of specific units of the surrounding world—an infinite space like the open sky, the horizon, or the open field is known as *kalawakan*; a vast expanse of geographical contour and vegetational cover is labeled as *parang* or *bukid*; and the physical totality of the earth is abstractly known as *sanlibutan*. *Sansinokop* can be anyone of these subcategories, depending upon the system of relevance governing the choice of perception used to identify and describe a given object, a phenomenon, a relationship, or an abstract idea encompassing all of these.

Aside from this detailed and intimate knowledge of the environment, the ability of the people in Bay to relate empirical data to abstract generalization, is equally amazing. Each event is provided with a theory, with a logical explanation and predictive hypothesis, replete with familiar symbols as to make the argument culturally convincing, if not empirically valid. Seasonal changes, climatic conditions, and the succession of events, for instance, are defined, not only in the context of rain and sunshine or of social occasions, but also in terms of *panahon* or time. Things do not occur in a haphazard manner. They are all rooted to time—among humans, it is time to be born, time to live, and time to die.

Retrogression is never a part of the order of nature. In health, disease epidemics occur because it is time for their appearance. Even if these ailments are not treated, they will simply pass away or become ineffective if their time comes to do so. There are times when life is good and others when it is bad. All depends upon time. Most informants believe that time functions as the link between nature and man. Man becomes part of the universal design because of time. It is this logic about human existence, generally accepted in Bay, which enables the average man to relate himself to his environment, that makes the fisherman or the farmer observe time in whatever he does. Solar, lunar, seasonal, agricultural, and meteorological events are used to indicate time and to put any event in the community in proper perspective. On top of all these, the people also believe that time largely determines man's success or failure in life. Thus, when a farmer or a fisherman in Bay makes a major decision, he consults the almanaki (i.e., almanac; the Honorio Lopez edition in the vernacular) or the position of the stars, the moon, and the sun for the best time

to plant crops, to build a house, to perform a medical seance, to cure an illness, and, among single people, to start a family.

It is clear from this standpoint that the peasant folk in Bay possess a genuinely keen and analytical mind. Even if he rarely expresses himself in a language known to modern science, the average fisherman or farmer understands the logic of events in a manner comparable to the scientific method of observation. Take, for example, the above-mentioned belief that some diseases are prevalent during certain parts of the year rather than in others because it is "their time to appear." If we turn to modern science, especially in the fields of ecology and microbiology, we find the same assertions made to the effect that climate changes affect the resistance of the human body and the growth and spread of microorganisms.⁸ Thus, diseases like asthma, respiratory diseases, acute rheumatic fever, rheumatoid arthritis, and so forth, have also been noted to be widespread during certain parts of the year.

In other words, the difference between traditional and scientific ways of dealing with disease phenomena, as shown in the contrast of presenting information, lies to some extent in the mode of expressing elements of observation. The technical language of science expresses observed events or phenomena in concrete terms, known as facts. The technical language of tradition, on the other hand, is directed toward abstract ideas related to facts. Thus, disease causation, for example, is not explained in terms of the germ theory because local technology has not developed adequate ways of illustrating the concreteness of the phenomenon. In contrast, tradition has developed a way of showing the concreteness of local knowledge about specific events or phenomena through cultural explanations. It is therefore to cultural explanations that we must look if we are to understand the system of folk medicine or the logic of ritual and prayer treatments. The same generalization may be said with respect to other forms of social behavior in the community.

It is commonly held in Bay that events happen because of disequilibrium in the relationship between man and nature and between the elements of nature itself. Events are either positive (favorable) or negative (unfavorable) to human existence. Positive events are caused by favorable but *disequilibrated relationship* between man and his environment. The technical language of modern science may describe this as *adjustment*. Here, the disequilibrium has constructive effects on man. Informants liken the relationship to "growth of a plant—certain leaves must fall so new ones can grow." It is part of the universal law of existence. Or, as in normal body function, "certain flesh must dissolve so that new ones can expand.

⁸ Rene Dubos, Man, Medicine and Environment, A Britanica Perspective (New York: The New American Library, Inc., 1968); S.W. Tromp, "Weather, Climate and Man," Handbook of Physiology, Section 4, Adaptation to Environment (Washington, D.C.: American Physiological Society, 1964); Paul Shepard and Daniel Mckinley, The Subversive Science: Essays Toward an Ecology of Man (New York: Houghton Mifflin Co., 1969).

That is why the flesh of a child is soft while that of an adult is hard. Growth becomes fixed when you are old." It is part of the whole organization of life that an interplay between decay and growth has to take place. This process, explained in a familiar, analogic way, is close to what modern biology calls *metabolism*; in Bay tradition it is known as *bisa ng kalikasan* (force or power of nature). Except for terminologies, the principle held and understood is the same.

The principle of favorable disequilibrium process is locally understood as simultaneous replacement of broken elements, a kind of metabolic development which brings about growth, progression, and harmony. It is further compared to remodeling a house. Said one informant: "You do not destroy all the parts, only portions which you like to change. You tear the walls apart, for example, so that you can construct better and stronger ones." In contrast, *unfavorable disequilibrium*, as informants explain it, "is like a disintegrated rock—its elements are difficult to put back." Disease is one effect of unfavorable disequilibrium process. Reintegration of fragmented elements of nature is not possible unless man helps nature—through rituals and prayers — to accomplish this. Other end-results of unfavorable disequilibrium are misfortunes, natural calamities, like storms, typhoons, and earthquakes, and among humans, illness, emotional disturbances, and mental derangements.

Another essence of nature which farmers and fishermen are articulate about is *contradiction*. According to them, nature is what it is because of contradicting forces inherent in its state of being. Man is continuously buffeted from all sides by these contradictions in nature. His survival rests largely on how he consistently keeps himself neutral between two opposing elements. Contradictions, however, are seen as natural means of facilitating the accomplishment of harmony. This is clearly seen in the binary system of relationships: day and night, light and shadow, rain and sunshine, hot and cold, high and low, male and female, and so forth. All these points of reference require balance of functions, or nature falls apart. Harmony is the theme of the universe. Even contradictions-as long as they remain within the pull of their influence-help nature achieve harmony. For example, vegetation needs heat and cold, rain and sunshine, or it dies. So with man's responses. Man needs just enough contradicting elements from nature in order that he can function normally-too much of one element causes imbalance in the function of the body and this brings about disease and discomfort.

Balance is another important aspect of nature known to the people in Bay. It is latent in almost all processes in the surrounding world. The human body is a good model. The heart must be kept in balance with the head; emotions, with reasons. Food intake must be balanced, or the body suffers. Risk-taking must be balanced with empirical knowledge of resources, or misfortunes take place. Man exists favorably when his ways, thoughts, and body are attuned with the conditions that surround him.

Disequilibrium, contradiction, and balance are recognized as *likas ng* sansunokop (inherent property of the universe). Their manifestation is controlled by the position of the wind, which brings about fluctuations in atmospheric pressure and weather conditions, as well as the harmonious or disastrous relationship between man and nature. These fluctuations result from the passage of cold and warm meteorological fronts, locally known as simoy ng hangin. Amihan (northwind) brings in the cold front, while timog (southwind) ushers in the warm one. Closely following these two main fronts are minor wind-flows which exhibit diurnal and nocturnal oscillations. These are habagat (westwind), sabalas (northwest wind), and salatan (southwest wind). This overlapping of wind-flows often causes imbalance in atmospheric pressures and is locally believed to "bring about the appearance of illnesses like typhoid fever, cholera and common colds."

Wind-flows, collectively known as *masamang hangin*, are one of the sources of diseases. These are strayed air with humid temperature. They are not part of the main wind-fronts or of the minor undercurrents discussed above. These are the dangerously charged emanations from the environment, believed to be controlled by the malevolent spirits. They appear in two kinds. The *masamang hangin* controlled by the spirits of the atmosphere or the earth, are known as *hunab*. These are streaks of warm gaseous emanation from the bowels of the earth. They enter into the body through the posterior openings, like the anus, the soles of the feet, the pores of the skin. The *masamang hangin* controlled by the spirits of the atmosphere or *engkanto* are known as *sareno*. They are cold and humid and they enter into the body through the crown of the head and the back part of the chest.

Aside from the wind, the earth is also conceived to be subject to the controlling force of nature. The *singaw ng lupa* (temperature emanating from the soil) affects man in various ways. Some fields, for example, are productive because the *singaw ng lupa ay malamig* (the temperature of the soil is cool). Such condition is favorable to the growth of crops. Other fields are less productive because the *singaw ng lupa ay mainit* (the temperature of the soil is hot). Because such properties are inherent in nature, man cannot do much about them. Even if the *mainit na lupa* are saturated with commercialized fertilizer, the crop still will not grow well. If fruit trees are planted in this type of soil, the fruits will be less juicy. Sugar canes are found to show similar characteristics—the juice is scant and the stalks are hard.

Building a house is another local activity in which the nature of the soil is considered seriously before construction. Some lots are believed to be lucky because the *singaw* is cool; others are unlucky because it is hot. In the upland area of Bay, this is seriously considered before building a house; in the lakeshore area where residential lots are becoming scarce, much of the traditional beliefs have been modified, if not done away with. If building a house on an unfavorable lot is unavoidable, rituals are performed to obviate the effects of *masamang lupa* on the occupants of the house. Coins, lime, brass, and other paraphernalia are buried underneath the four main posts, to neutralize the annihilating force of *singaw ng lupa*. Coins and brass objects are said to absorb the evil elements of the soil, which lime prevents from restructuring should the coins and brass disintegrate. The occupants of the house will thus be protected from sickness and harm.

The belief that what causes certain diseases to happen is the best medicine for their cure, permeates the conceptualization of healing in Bay folk medicine. If the ailment was acquired from the lake—for example, the *pasma sa tubig* (characterized by pains in the joints)—lake weeds are used for medicine. If an individual suffers from stomach-ache from over-eating, the most potently hot or cold food (*matapang na pagkain*) among those he has eaten, are secured, burnt, and the decoction taken internally. Because it is the *bisa* or power of the food which has upset the balance of elements in the body and causes the malfunction of body-mechanisms, it is also this *bisa* which can restore them.

In effect, then, there are two perceptual organizations of natural events recognized by the peasants in Bay. One is the binary system of opposition and the other is the self-rectifying quality of objects themselves. Nature is conceived as a system of oppositions-bad and good, sacred and evil, favorable and unfavorable, controlling and manipulating, hot and cold, and so on. Man can control nature only in a limited way. Nature holds man in multiple ways. Technology is one way of controlling nature, but nature soon takes control over technology. Thus, in folk medicine, before the patient is brought to the clinic or to the hospital for treatment, the lamang lupa are first appeased and their power controlled through the performance of proper rituals and the application of local medication. It is only when clues from the ritual indicate that the lamang lupa are satisfied that scientific medicine can be effective. This view constitutes the dominant rationale for medical care in Bay as well as in the neighboring communities, a guideline for the various steps taken in the process of making decisions concerning health problems.

Hot-and-Cold Syndrome

The principle of the hot-and-cold syndrome was partly touched on in the discussion above. This binary system of opposition is one of the most important conceptual frames of reference in understanding the man-nature relationship. The terms *hot* and *cold* do not imply the presence or absence of temperature but the effects of such qualities on the human body. Certain illnesses are believed to be caused by cold or hot elements of nature entering into the body through the pores of the skin, food consumed, and air inhaled. Most ailments associated with the hot syndrome are caused by factors coming from within the body itself. Informants state that when stimulated, either by elements from the surrounding world or by psychic forces (*bisa*) within it, the body generates much heat which, when unchecked, causes skin eruptions, boils, hoarseness of voice, gum swelling, appearance of hard coatings over the tongue, and fever.

In contrast, cold maladies are believed to be caused by elements outside of the body. These elements include the wind, water, acidic foods (also known as *matapang na pagkain*), and other environmental conditions. The *singaw ng lupa*, for example, which is generally associated with the hot syndrome, is considered cold during rainy days. Exposure to it causes stomach-aches among adults and convulsions among small children. Most illnesses due to cold elements of nature are characterized by muscular pains, chest pains, stomach cramps, and loose bowel movements. The sensory and the motor functions of the body are usually disrupted in ailments due to cold elements coming from the environment.

As previously stated certain illnesses are closely related to kinds of food eaten. Local food classification is also based on the concepts of hot and cold. Unregulated intake of cold foods brings about maladies generally characterized by swelling of joints, muscular pains, and stomach discomforts. Similarly, over-consumption of hot foods brings about a general malaise and most of the known skin ailments. The hot-cold balance has to be maintained even in terms of food consumed, if good health is desired.

Most vegetables and juicy fruits are considered cold, if only because "these contain juice and fleshy substances that cool the mouth and the stomach, hence the entire body." There are, however, some vegetables which are hot. Beans, like mongo (Phaseolus mongo Linn.) and dried sitao (Vigina catjang Endl.) seeds, are hot and, if not cooked in a leafy vegetable mixture, or with cold foodstuffs for that matter, can bring about skin rashes, lip eruptions, and other discomforts like shortness of breath and pain in defecating. Hot foods make an individual sweat profusely and when this remains unchecked for a period of time, skin rashes known as bungang pawis appear. Newly harvested foodstuffs, except leafy vegetables, are considered hot. One needs to let some time pass before eating or cooking them for meals.

Meat of horses, carabaos, dogs, cats, goats, and pigs (mostly the fat) are considered hot to the body. Meat from cattle, pork meat, chicken, geese, turkey, and meat from other fowls are cold. Fresh-water fish, except big ones like eels, are never considered hot. On the other hand, salt-water fish are classified mostly as hot to the body: labahita, lapad, lapu-lapu, shark, and all big fish. Fish or meat should be cooked with other foodstuffs containing cold elements in order to neutralize the former's harmful effects on the body.

The surrounding world is also seen in terms of hot and cold. The direction of wind source during any part of the year brings about changes in the ecological conditions of the area. People believe that the appearance and disappearance of certain types of illnesses are dependent upon the "kind" of wind flowing over the place. Amihan and amihan mura (north and northeast winds) are considered cold winds bringing common colds, joint pains, and muscular cramps. Timog (south wind) is neutral but it sometimes brings about skin rashes and minor ailments. Habagat (west wind) is hot and causes major illnesses like typhoid fever, cholera, head-aches, and others.

The appearance and changes in the positions of the celestial bodies are said to produce either hot or cold effects on man, directly or indirectly. Stars are cool and their appearance in heaven indicates good weather, cool atmospheric conditions, and auspicious time to start planting crops or building a house. The full-moon is cool but the half-moon is hot. Appearance of a star close to the moon indicates hot conditions and the likely occurrence of events like suicide, elopement, fighting, and others. Overlapping periods between the receding half-moon and the rising full-moon and vice-versa, are turbulent times; there is no definite flow of elements of nature, although hot elements predominate. That is why during this period the *lamang lupa* come out from the bowels of the earth, the *engkantu* roam around, the sorcerers are active, the *mananangal* are dangerous, and even women have their menstrual flow. Many men are said to be highly sensitive and temperamental during this time.

The sun is conceived as hot, but not until it reaches certain points in the sky. Early-morning sun is cool; at noon and in the afternoon it is hot, and before sun-down, it is cool. Planting crops, building houses, starting new business ventures, and so forth follow closely the solar time. The appearance of a comet or shooting star indicates prolonged summer or possible drought. The clouds are generally cool because they bring in rain. But when clouds appear in fleshy hues and are scattered in clusters in the eastern sky every early-morning for several days, or in large masses of deep violet-red in the western sky at dusk, also for a number of days, they indicate that the atmosphere is becoming warm or hot and that a storm, or at least strong winds, is forthcoming. Most fishermen keep close to the shore when fishing at night.

Water is similarly conceived—that is, as either hot or cold. The bases for evaluation are its source and effects on the body. Spring water is cold and is good for health. But once the water has flowed down the stream it becomes hot and is detrimental to health. Ice-cold water is hot in the sense that it produces painful reactions on the skin and muscles when handled. Sea water is hot but lake water is cold. Sometimes water is also conceived as hard or soft. Rain water is said to be soft while faucet water is hard. Water taken from open wells is soft, while that obtained from water-pumps is hard. Softness and hardness, like hot and cold, have reference not to the physical object but mainly to taste and sensation experienced "when drinking the water and not when touching it." Modern drugs are hot. When these are injected into the body or taken orally they upset the internal balance of elements in the body and lower its resistance to the *bisa* (power) of disease. If modern medicine is necessary to treat an illness, it must be taken with other medication which will neutralize its effects on the body. Otherwise, it will take long before the illness can be cured.

The Human Body and its Response to Ecological Pressures

The above discussion brings us to the local concept of the human body and how it responds to the elements of the external world. The body is viewed by many peasants as "a good model for understanding the significance of the hot-cold syndrome in folk medicine." To remain healthy, informants are agreed, one "has to keep the balance of hot and cold elements in the body in a constant state." Any break in the equilibrium causes illness. The term equilibrium is used technically here to mean a state of adjustment between opposing or divergent influences of elements in nature, including the forces of disequilibrium and contradiction mentioned earlier.

Physically, the head, neck, arms, and legs are by nature considered cold, while the joints, chest, stomach, and the genitals are hot. When these parts of the body are exposed more to either one set of elements mentioned above (i.e., hot or cold), illness and discomforts arise. Treatment consists of medication which will restore the balance.

The head is said to be sensitive to heat. That is why it reacts to problems with emotionalism; emotions are conceived as heat emanating from the blood. *Mainitin ang ulo* (hot-tempered) is the term used to characterize a man who easily loses his temper even over trivial matters. Temper is in the head (specifically at the temporal area), although it can be generated by the *damdamin* (feelings) which are based in the chest. When the head is over-exposed to the heat of the sun or of fire, as in cooking, the individual suffers from a headache. The blood that maintains the coordination of brain activities is unnecessarily heated; this numbs certain nerves and causes the pain.

The chest is divided into two parts—depending upon its response to cold and hot elements of the surrounding world. The back part of the chest, known as *likod*, is very sensitive to cold. Thus over-exposure of this part of the body to rain, wind, draft, cold water (as among fishermen), and other similar elements of nature, brings about chest cramps known as *puntada*, *sipon* (colds), tuberculosis, asthma, pneumonia, and other physical infirmities. While these diseases are known and recognized as due to over-exposure to elements of nature, explanations also exist concerning their etiology, involving the workings of environmental spirits.

In contrast to the back part of the chest, the breast responds to hot elements. It is by nature conceived to be warm, the seat of love and affection. When a person is exposed to stress, to emotional problems, and to other kinds of pressures, he suffers from chest pains. The heat generated by the heart paralyzes the nerves controlling the chest-muscles, hence the pain. This can be cured by rubbing coconut oil all over the painful area. Recently, *Vicks Vaporub* has been recommended by some healers as good medication for illness due to heat.

The portion of the body immediately below the *dibdib* and right above the upper section of the *tiyan* (abdomen) is known as the *sikmura* or stomach. This is vulnerable to cold, exposure to which makes the person suffer from pain known as *sikmura*. It is similar to gas pain. There are certain health rules connected with this body response to elements of nature. If one is hungry, tired, or has been exposed to the heat of the sun, for example, he should rest before he takes anything cold. Or else he takes a handful of sugar or a pick of salt before drinking. Otherwise, he will suffer from *sikmura*.

To keep body resistance at a maximum when one is tired or has been exposed to the heat of the sun, warm food or liquid like broth, coffee, tea, or boiled ginger should be taken first before eating. In the morning, one should avoid milk, sour liquids like lemon juice, and cold cereals. These can cause *sikmura* pains. This is one reason, perhaps, why many people in Bay, as elsewhere in the rural areas of the Philippines, are not milk drinkers, apart from the fact that milk is not financially accessible to them.

Immediately below the *sikmura* is the *tiyan*. This portion of the body contains the intestines, womb, kidneys, and other internal organs. Like the *sikmura*, the *tiyan* is also said to be vulnerable to hot and cold. The intestines react in a neutral manner to either element. However, if an excess of hot foods is partaken of, the individual also suffers from abdominal pains because these upset intestinal reactions to body conditions; the converse is equally true—that is, if cold foods are taken in excess, the person also suffers. Thus, food mixtures have to be in the right proportion and their intake has to be regulated.

The womb, locally known as matris, also responds to heat. Over-heating the portion of the body immediately above the womb results in abnormal menstruation or, if the woman is pregnant, in abortion. Sterility and thinness (pangangayayat) also results from the imbalance of the hot-cold syndrome in the womb. Thus, newly-delivered mothers are advised to wear long skirts and long-sleeved dresses, so that the cold (ang lamig), meaning actually "cold air," will not enter into her body. Menstruating women are likewise not allowed to take a bath or to over-expose themselves to cold weather because, if they do, they will suffer from menstrual pains. Coitus interruptus, although known as a method of preventing pregnancy, is not highly favored by many couples, especially by the wives. Some informants agree that there is danger of becoming ill-usually suffering from pains around the waistwhen this method is used because "when the man withdraws his penis, cold air enters into the woman's puerta (i.e., vagina) and harms the heated womb." The womb is known as bahay-tao and if the body is exposed to heat, it reacts unfavorably to the semen and the woman becomes sterile. As informants said: "Natutunaw ang kukusta ng ating similya kapag ang bahay-tao ay mainit." (Free transl: "The reproductive power of the semen disintegrates if the womb is hot.")

The buttocks and the lower extremities are by nature hot. This includes the pus-on (hippogastrium), the genitals, and the thighs. Since these are inherently hot, treatment of any illness in this portion of the body requires cold medicine. During menstruation the body of a woman is hot and pain is felt at the pus-on. Cold medication, like decoction derived from medicinal plants and vinegar, is applied. Genitals are conceived as hot because a little friction on them generates heat all over the body and awakens the dormant energies of the individual. Application of cold medication, like ice cubes or cold water, offsets the feeling if sexual excitement is to be controlled, as among people with heart troubles. Young people are said to be hot because the genitals are not fully used; these respond quickly to slight provocation. In contrast, when the genitals have been used, as among old people, the heat no longer generates as much emotional desire and conflict. That is why old age is conceived to be cold, while youth is hot. The thighs are vulnerable to heat in the same way as the genitals are. As informants state: "Paghinipo mo ang paa, nanginginig ang buong katawan-ayos na." (Free transl: "Rub the thighs and the entire body shakes with emotions-everything can be consummated.")

The skin and joints are sensitive to heat and cold. Rashes known as *bungang araw* are brought about by over-exposure to the heat of the sun, profuse sweating, and over-consumption of hot food. Joints become painful when exposed to cold elements like water (*babad sa tubig*) or cold wind. Medication for such discomforts consists of rubbing over the painful parts preparations which produce heat, like ginger or brew from *makabuhay* plant.

Blood is also said to respond to the hot-and-cold syndrome. There are three blood types known to the people, namely, *malapot* (thick), *malabnaw* (thin), and *dilaw* (yellowish). When the body is over-exposed to heat or cold, the blood becomes thick and causes illness like *mataas ang dugo* (possibly high-blood pressure) and *sakit sa puso* (heart illness). Because of its thickness, the blood circulates very slowly and parts of it stick to the walls of the *ugat* (veins, nerves), thereby causing further malfunctioning of body mechanisms. People suffering from insomnia (*hindi makatulog*), anemia (*maputla*), and weak body resistance (*sakitin*) have *malabnaw* (thin) blood. Those having *dilaw* or yellowish blood are sick with asthma, bile troubles, tuberculosis, and malaria.

When two people are said to be incompatible in blood type and temperature (*init*), they cannot bear children. Hot-blooded males are conceived to be impotent. They cannot have offspring because their *similya* (semen) causes an imbalance (more heat) in the body mechanisms controlling the woman's *bahay-tao* or womb. When both male and female have

cold blood they also cannot bear children. Those with normal qualities are highly prolific.

Because of this conceptual frame of reference, the blood is considered the bearer of symptoms relative to the illness suffered by the people. This brings us to the significance of pulse-taking in the diagnostic technique of folk healing. The pulse is found at the wrist, fingertips, the feet, and ends of the toes. By feeling these areas, the healer knows which part of the body is afflicted. This recognition is based on pulse rate and degree of *singaw* (temperature), either hot or cold, generated by the pulse at sections of the body mentioned above.

Food Preferences and Health Habits

Food is another aspect of human existence in Bay which needs to be examined intensively because of its close association with health and illness. Moreover, the concept of food underlies much of the social and cultural practices of the people. Thus indirectly, but more profoundly, by studying food preferences, one achieves an understanding of the peasant way of life.

Food is one of the elaborate topics of everyday conversation in most barrios. People talk about it almost incessantly—what, where, when, and how to procure it. However, in spite of this magnified preoccupation, food is eaten not only to meet the necessary biological need but also to satisfy certain social, cultural, and psychological requirements of everyday life. Some foods are taken because of their medicinal value; others, exclusively for social functions, such as appetizers during prolonged drinking sessions among friends, visitors, and kinsmen. In the process, foods get the cultural labels "bad," "good," and "agreeable." These labels do not necessarily imply recognition, on the part of the people, of the nutritional values of food as understood by the nutritionists and the home economists. Rather, they imply the operation of a relatively stable pattern of cultural selectivity in the community.

The social function of food often transcends its nutritive value insofar as the community is concerned. For example, food is used as a measure of an individual's rank in the community and as an index of social class differentiation within the group. This means that people with a more plentiful food stock in their house, or who can afford fancy meals, are rated higher in status than those who have an inadequate supply and can not afford anything beyond the usual rice-and-fish combination. Of course, education has slowly replaced this economic criterion in recent years. At any rate, the economic position of an individual in the community is still one of the dominant cultural symbols of status.

This is so because food represents security and power. Most people recognize that only those who are economically well-off can afford to stand up and fight for their individual or group rights. The law has given the tenant ample protection but the judicial processes are usually long, complex, and expensive; most peasants cannot afford the cost. As a group of farmers commented: "Sometimes it is better to conform and fight. Sure your pride is hurt when your rights are trampled upon but in conforming, these are all that you lose. If you hit back against the landlord, you lose your pride and the privilege to work on his land. If you have no ready access to other resources, your family suffers." Of course this is not unique in Bay because it also occurs in all cultures. I emphasize this here to underscore the fact that the people are aware of it and have developed a way by which problems of this nature can be resolved.

In the family, food is used by housewives to show their affection for their husbands and children. Choice foods, for example, are reserved for the husband—beef, chicken, pork, and others. Children may not share in these if the supply is very limited. Housewives are agreed that "this is one way of making the husband feel good. After all he works so hard during the day in order to support a family. So serving him the choicest food available when he comes home is one way of compensating for his hard work." Husbands, especially those who have jobs outside of the community, also show their love and concern for their families by bringing food to their wives and children when they come home from work.

Certain foods are classified as good only for children and not for adults. Such preparations as *lugaw* (porridge), native cakes, bread, candies, ice cream, and sweets are mostly reserved for children, although adults may partake of them. Carbonated drinks—*i.e.*, *Coca-Cola*, *Pepsi-Cola*, *Seven-Up*, and so forth—are used as substitutes for milk or solid food during weaning. Some foods considered harmful to children include pork, beef, leafy vegetables, milk, mongo beans, squash, and chicken. But in spite of this, I have seen children fed on these foods. In the interior barrios, fish is considered harmful because "it produces worms inside the body" (*Nagkakaroon ng bulati ang bata*). Fatty foods and vegetables are "bad" foods because they are hard to digest. Milk is discouraged in other parts of the community because "it causes diarrhea" (*nagtatae ang bata*).

There are certain foods which, because of their effects on the body, are not given to pregnant, puerperal, and lactating mothers. It is not generally understood that nursing mothers have higher food requirements. As a result, many mothers are required to observe numerous food-taboos. Most of those I interviewed said that the food they eat is similar to that served in the normal meals. During conception, however, some foods craved for are added but the diet in late pregnancy returns to the usual rice-and-fish combination, with a few occasional vegetables.

Sour foods are avoided during pregnancy because they can cause miscarriage or abortion; chicken brings about edema; squash results in infantile beriberi and skin disease even before the infant is born. *Ampalaya* (bitter melon) can cause miscarriage. Eggplants are forbidden because they cause scalp ailments on both mother and child; these can also bring about *beri*- *beri.* During puerperium, foods like pork, vegetables, sour fruits, eggs, big fish, and sweets are avoided because these can cause internal hemorrhage or prolapse. In contrast, foods like *tulya* (sea shell), *malunggay* leaves, and other vegetables are taken in considerable quantities because they induce abundance of milk in lactation.

Certain foods are more highly preferred than others for cultural reasons. Meat, for example, is served mostly during festivities. Vegetables, except for newly-introduced ones like lettuce, pechay, and carrots, are not served during special occasions or when there are guests at home. Vegetables are served mixed with meat. Bread is served by those who can afford it and where it is available, only during breakfast and *merienda* (afternoon snacks). It is never a part of the normal meal. Among males, onions, garlic, ginger, and pepper mixed with vinegar are used as meal appetizers to keep them physically vigorous and sexually virile. The other reason is that "these foods have medicinal value and therefore they store up enough resistance against illness."

Among adolescent girls, food preference is related to aesthetic value: tomatoes are eaten raw because "these are food for the skin—make the skin smooth and reddish"; *kalamansi* (a kind of citrus) juice makes the skin soft; and *ampalaya* cleanses the blood, makes the cheeks rosy, and rids the face of pimples.

Rice is the main staple in Bay. Corn and sweet potatoes may be served as substitutes, but this is not normally done, for the reason that corn and sweet potatoes are low-prestige food and are resorted to only when the family is economically hard-up; otherwise, rice is purchased even at an exorbitant price. Among the high-prestige foods in Bay are: canned foods, beef, chicken, pork, eggs, canned fruits, and carbonated drinks. Dried fish, vegetables, unrefined sugar, and similar items may be nutritionally desirable but are nonetheless considered socially shameful and therefore undesirable. These are served mainly to members of the family, kinsmen, and close friends.

Local Sanitation

The discussion of the ecological base of community life in Bay is not complete without considering the concept of sanitation and how the people deal with it. Sanitation, defined as the science and practice of effecting healthful and hygienic conditions, is a vague concept when applied to actual ecological situations in the community and to the manner people respond to it. The local concept of cleanliness differs from that held by the health officers. In San Antonio, for example, absence of visible dirt is sanitation. The term *malinis* or clean certainly takes different shades of meaning. Anything washed with water becomes *malinis*. Contamination is not part of the *malinis* category. Water devoid of particles is conceived as clean, even if it appears potable but is not actually so. I have seen many fishermen drink lake-water. When I raised the question of cleanliness, they argued that "the water is clear, therefore clean."

Variations in the ecological features of the municipality of Bay bring about differences in sanitation perspective among the people. Most residents in the poblacion have modern facilities and many of them understand what constitute hygienic conditions in pretty much the same manner as the health officers. Those residing in the upland barrios have different views from those living close to the lakeshore area. Backyards are clean in the poblacion and barrios close to it, although this is true only in some barrios. In the lakeshore area, yards are clean, but it is also common to see garbage piled in mounds nearby, especially underneath the kitchen windows. When cooking, housewives simply throw out of the window fruit peelings, wrappers of purchased articles, vegetable fronds, and all types of kitchen refuse. Front yards are usually kept differently from silong (sections underneath the house). Among the lakeshore dwellers, duck corrals are built right below the sleeping quarters and the kitchen. In the interior upland regions, some farmers tie their carabaos underneath the house, too. Some build corrals close to their front yards. Debris around these corrals or piled close to the kitchen windows, are seldom removed, and domestic animalsdogs, pigs, ducks, chickens-forage among the scraps for food and bones. In due time maggots are found creeping all over the place and the pungent smell of decomposing garbage and fowl refuse permeates the neighborhood. But the people seem so conditioned to the scent that it does not bother them at all.

Most houses in Bay, except in the poblacion and in some barrios close to it, have no latrines. The open fields and the wide shore of Laguna lake provide them with convenient places for meeting their biological needs, especially at night. Those who have privies construct them close to the house; in the poblacion, they form part of the kitchen. Privacy in Bay, as in other parts of rural Philippines, is a matter of definition. Sometimes, to turn one's back from another person is privacy. It is not uncommon to see men seeking the bush or standing beside a tree to urinate (in spite of many people passing by). At home, the girls change their dress inside the *silid* or room, but the men simply turn their backs and face the corner—then they change their attire.

The kitchen is an interesting part of the house in Bay. In the poblacion and neighboring barrios, the cooking place is well-kept, tiled, and clean. In some barrios, however, especially those along the lake, the kitchen area is never dry. Fishermen and farmers coming from work proceed to the kitchen for a cup of water and in the process wet the place. Water pumps are installed in most kitchens. Since the pumps are not buried deep, the water is sometimes not clear and has a peculiar smell and taste. The water used for washing is emptied right over the place where the pipe of the pump has been drilled. Seepage is evident in the particles of sand found in the water pumped out. However, the people do not consider this as dirty, and the fact that "no one has died because of it" is an argument for the water's being potable and safe.

Foodstuffs brought into the house are deposited on the floor near the stove or in the center of the kitchen. These are unprotected from flies, cats, dogs, and chickens. Sometimes, children, with their hands dirtied from playing in the yard, come up and handle the foodstuffs. Flies alight on and crawl over lumps of meat, unscaled fish, or ingredients being readied for cooking. Raw materials for cooking are not washed thoroughly because "too much washing removes the taste of the food." Anything is safe as long as it is boiled. Thus, no precaution is taken to prevent contamination of food.

Before eating, most people do not wash their hands. If they do, washing consists in drenching one's hands. Sometimes onlookers see dirt-droplets mingle with food eaten, particularly as most fishermen and farmers eat with their hands. In the process, one notices dirty fingernails turn clean after meals: the broth in the plate has washed them. After eating, the left-overs on the floor are often left to the dogs and cats to fight over. Sometimes they are wiped away.

Except in the poblacion, personal hygiene in many barrios is apparently very inadequate. Of course this observation is a biased one-colored by the standards of an outsider. The reader has to take it from that point. For even in the barrios where water is not a problem, like those along the lake, personal hygiene is a matter with which people are not so much concerned. Among the fishermen, the nature of their work does not encourage the cleanliness conceived of in modern society. This is certainly true also among the farmers. Cleanliness is locally seen as a matter of personal definition and preference. To wash one's body constitutes cleanliness among those living in the interior barrios, and this is not necessarily true among the fishermen. To be free from mud may constitute the definition of cleanliness among the poblacion dwellers because the streets on which they walk and the houses in which they live, plus the nature of their work, are relatively free from mud. This would hardly be the case among the farmers. To be free from a repugnant kind of mud constitutes cleanliness. Plowing the field, cleaning the dikes, and grazing the carabaos hardly keep anyone from mud and dirt.

The toothbrush is not frequently used by the people in many parts of the community. This is common among those living in the poblacion. Most fishermen and farmers use their fingers to clean their mouths and teeth after meals. Sticks and coconut mid-ribs are used to clean the teeth; sometimes areca nut peels are used. Food particles, as well as the astringent concoction of lime, betel leaves, and tobacco among those who chew betel, harden and form scales around the base of the teeth. After a period of time these scales harden and push the gums downward, irritating and infecting them in the process. It is not uncommon to see bleeding gums among adults and children in Bay; gingivitis is prevalent.

Summary and Conclusions

From what has been discussed, it is clear that the peasants in Bay share a common ecological model for behavior and views of life. They have an elaborate way of defining man's relationship with nature, the function of the human body, the effects of elements of nature on the physical well-being of man, the bio-social functions of food, and the local concept of sanitation. These definitions are based on concrete knowledge and on a complex theoretical abstraction of natural and social relationships in the community. The cognitive categories resulting from such concrete and theoretical knowledge constitute the framework of rationality through which the people perceive the world and guide their actions, with respect to health and medical practices. These also provide strategic points of reference for the variations that take place in the organization of interpersonal and inter-group behavior in the poblacion, interior barrios, and lakeshore areas of Bay. That is why there is an apparent satisfaction with the prevailing conditions relative to health and illness.

It needs to be emphasized at once, however, that most members of the community are not aware that they view the structure of their universe and the realities of their natural-social relationships in a particular way and on the basis of an elaborately formulated bio-ecological model. Of course, this is true with almost all humans, including the modern, scientifically oriented individuals. Once a particular way of thinking has been accepted and adopted, the concomitant behavior ceases to be deliberate and/or calculated, and, for the most part, is carried out spontaneously and naturally. Thus, in Bay, it is only when people are pressed for explanations and reasons, or are required by circumstances to offer these, that the abstract model on which the broad pattern of behavior is based, is described and articulated.

For example, almost all people recognize the relationship between man and nature. The fishermen know they have to depend on the lake for a living, just as the farmer is certain that the land is the key to economic security for himself and his family. Although they do not articulate it, the fishermen have impressive and detailed knowledge of the directions of the wind and the contours of the lake, and the farmers, a very intimate familiarity with the land and plant life. Both groups of peasants carry on their everyday tasks without serious thoughts about the mechanisms which cause the wind or make the plants grow. But when something happens in the lake or in the farm, then the *rationale* for the event, the reason for its occurrence, is discussed. Bits and pieces of circumstances are put together like a jigsaw puzzle against the outline of the accepted theoretical model of causation. When empirical evidence and the original hypothesis reinforce each other, then a general conclusion is drawn; otherwise, the approach is changed until a satisfactory relationship is discovered and the problem is dealt with accordingly.

In describing the way in which people perceive the world and show contentment with what they have at present, I do not mean to imply that they are not willing to change. Individually, they express their desires for change—i.e., to better themselves—but when faced with a decision which tends to upset the *status quo* the reaction is one of hesitation to break away from what are known and done by most members of the community. One reason for this is that the community is not very heterogeneous in terms of cultural upbringing. The process of learning and transmission of traditional values is almost the same for everyone. This has instilled in most, if not all, the people in the community an intelligible behavioral and moral commitment to tradition which provides them not only with social and emotional support but also with certitude for their actions. New ways of doing things do not have this widespread support of the community and therefore do not provide the same security as traditional practices. Of course, this is not only true in Bay, or of peasants, but also of modern man.

Thus, if we wish to understand why peasants behave the way they do, if we wish to develop strategies for introducing programs of directed change in medical and health services in rural communities, it is desirable, I think, to consider the direction in which the internal factors, as Eggan calls them, shape local behavior. Elements of these local practices that highlight the social, moral, and behavioral commitment of the people to the wider peasant way of life have to be included in the plan for change if accelerated pace of development is to be achieved. In this way, the initial break from what is traditional and secure is not decisively traumatic but imperceptibly fluid.

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