

Anthropology for What?: Directions and Prospects in Present Philippine Anthropological Research

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In the Philippines today there are two major socioeconomic trends that Philippine anthropology should be concerned about: first, the increasing difficulty of access to economic resources by the less fortunate majority population coupled with an increasing monopoly on such resources by the privileged few; second, a similar decline in access to political power by the majority population and the increasing control of this power by the favored elite. These two trends are not mutually exclusive; one begets the other. This paper will describe these trends and attempt to delineate some directions and prospects for anthropological research in the Philippines that grow out of them.

Marginalization of tribal population

As the Philippines quickens her step towards industrialization and moves closer to a Western style of living, the consequent cultural and environmental changes affect the ecological profile of the country. The construction of roads and bridges in what used to be inaccessible areas of the country has converted otherwise self-contained, isolated tribal populations into ill-defined members of the rural peasant population. These previously protected people suddenly have to contend with problems that follow the tremendous structural and functional changes in their sociocultural and ecological system (Cadelina, 1980). The introduction of non-indigenous commercial items to this group of people has increased their desire for cash to obtain these items. To get this cash, they have to step up their collection of commercial forest products and at the same time put more effort into obtaining a greater yield from agriculture. The process has created a group of what we might call "marginal agriculturalists" (Cadelina, 1982). They have become marginal in at least three ways: marginal in the use of modern techniques of agriculture; marginal in terms of level of food production; and marginal in terms of the quality of the land they are cultivating for agricultural purposes.

The increasing exposure of marginal agriculturalists to commercial finished products has shown their traditional technology inadequate to meet their new found needs and desires. This is exactly what is happening among the Batak of Palawan (the province considered the last frontier in the Philippines), in spite of their attempts to preserve the integrity of their ecological niche. The Batak are losing control over

their own economic activities, and their assurance of getting a maximum return from such activities is dwindling. The power they used to have over their own economic life has now been shifted to better informed but unconcerned middlemen. The Batak are being continuously drawn into the mainstream of the rapidly industrializing Philippine economy in spite of their desire to remain in their own, more egalitarian social system.

Marginalization of urban population

Meanwhile, the acceleration of the industrialization process in the Philippines has led to the mushrooming of industrial centers. Most of these industrial complexes are located in urban centers of the country. In these areas more jobs are of course available; and many rural folks think that the "better life" is to be found there. The result is an exodus of rural farm laborers, including such tribal populations as the Badjao now living in Cebu City (Uy and Neri, 1979), trying their luck in an increasingly congested place. Equipped with minimum technical training, they are forced to live in slum areas, where they face various degrees of frustration and success. As urbanization continues, these people multiply, forming urban sub-groups which we might call "urban marginals." Lomnitz described the urban marginal existence in Mexico this way: "It is characterized by dislodgment or exclusion from the dominant urban industrial economy and by chronic insecurity" (1978, 181-82).

Industrialization and ecological cost

Due to the increasing cost of fossil fuel, the industrialization process in developing countries today demands the local harnessing of alternative, renewable sources of energy. At present, the Philippines has one of the biggest hydro and geothermal power programs of any developing country. Recent studies, however, have raised much concern over the effects of the waste products of such generating plants on the environment. A newly constructed geothermal plant in Palinpinon, Valencia, Negros Oriental, for instance, has caused some anxiety among the people in the area. They fear that the geothermal wastes will pollute the nearby Okoy and Palinpinon Rivers. A recent study undertaken by the Environmental Center of Silliman University showed that the Okoy river alone is producing the following food for the people in the area: vegetables such as *kangkong* (*Ipomea reptans*) about 15,680 kilograms per year per hectare

of irrigated field along the river banks; fish, shrimps, and crabs, around 164 kilograms annually per hectare of river (Cabanban, n.d., 13). If this river becomes polluted, these resources may be lost.

In Luzon, the Pantabangan hydro dams and the Chico River Basin Development Program, although they may save oil for the country, have led to the destruction of ecological niches which had been serving as an effective food base for population groups in the area for many years (Cariño et al., 1979). Rapid siltation behind the dams, within a much shorter period than projected, has destroyed the habitats of freshwater fish, crustaceans, and mollusks, eliminating them as available sources of protein. The local population now has to depend on food from the outside, putting them at the mercy of profit-oriented middlemen. What little control (i.e., in dealing with their own problems on their own terms) they formerly had over their own economic programs and activities has been greatly eroded.

In the exploitation of natural resources even worse problems are faced in terms of environmental degradation. On Negros Island, for instance, a copper mine at Basay is polluting the Pagatban river with mine tailings. Fish samples show high levels of copper, iron, and manganese; it is clear that these minerals have entered the food chain. A comparative laboratory study conducted by the Silliman University chemistry department on the heavy metal content of hair of people living far from the Pagatban River (Zamboanguita, Bais City, and Dumaguete City) and near the river showed that hair of Basay residents "contains significantly higher levels of copper, iron, and manganese" (Lowrie et al., 1982, 133). Furthermore, the discharge of tailings from the copper mine "has resulted in the siltation" and consequent decline of food production of the Pagatban River. More than half of the 25-kilometer Pagatban River has been reduced to a grayish quicksand with only a small stream of water; the silt is often two meters deep. This silt has now spread to a barrier reef about one-and-one-half kilometers from the mouth of the river, leading to the death of about 50% of the coral cover in the area. In the river's estuary the oyster *lampirong* (*Placuna*) which brought income to the people in the area before 1978, is now gone (Alcala, unpl. MS.).

Silliman University scientists recently collected samples of sea life near Atlas Mining Corporation's (Toledo, Cebu) waste pipeline. Fourteen species of gastropods and sixteen polycypods were found; unfortunately, all specimens were dead at the time of collection. Over a very wide area from where the pipeline releases its waste the seabed was heavily silted, no benthic organisms were seen, visibility was less than a

meter, and fish life was very sparse. A high concentration of heavy metals was found as far as 60 kilometers from the mouth of the pipeline (Lowrie et al., 1982, 134).

Agrarian "reform"

While we try to exploit all conceivable resources in industrializing the country, changes are also being made in our agricultural sector, presumably to strengthen its base. We can see these changes in the pattern of land ownership, land reform being considered essential to increasing a farmer's agricultural yield. But the benefits of land reform have been unexpectedly short-lived, since staggering long-term problems were introduced at the time of "reform."

For instance, the Green Revolution, a supplementary program to land reform, has actually increased the cost of production five times faster than it has increased yield. Umehara (1978), a Japanese researcher, measured the increase in level of production in comparison with cost in a barrio in Nueva Ecija from 1970 to 1978. The average yield per hectare increased by 15% (from 41.68 cavans in 1970 to 47.98 in crop year 1977-78), while the average cost of production increased by 70% (from 25.11 to 42.78 cavans). This means that the average return per hectare actually decreased by 219% (from 15.67 to 5.20 cavans). The increase in the cost of production followed the increase in the cost of fertilizer, insecticide, and other chemicals needed by the so-called high yielding varieties of rice (Ofreneo, 1980). Thus, whatever absolute increase there was in production actually went to the agro-industrial corporations located in big cities.

The share tenancy system was oppressive; with all power in the hands of the landlord, there was little incentive for the share tenants to produce. This dysfunctional system had to be changed. Land reform seemed the only hope. Yet now farmers have to cope with another problem: For whom are they really producing? (Ofreneo, 1980, 82). What we see today is simply a shift of land ownership. Although roles were changed by the Land Reform Program and the Green Revolution, the distribution of power is still the same. The landlords, whose power over their tenants was to be eliminated by the transfer of land titles to the tenants, have allied themselves with multinational corporations. These giant agro-industrial establishments now control the economic life of our peasant farmers.

The scenario that I have presented clearly shows the increasing

scarcity of economic goods and political power for most Filipinos. Traditional resources that had been successfully supplying the nutritional needs of the local population have rapidly disappeared, destroyed in our industrializing process. This gap must be filled by other means if the population is to live. The industrialization process has made the peasants more helpless, and increasingly dominated by an unfamiliar but ever-present, impersonalized commercial system. The changes in our agrarian structure have not solved the problem of inequity; it has reappeared with a different face. Economic resources and consequently political power have become less and less accessible to most. The few who, due to historical and political circumstances, held the reins of power continue to do so. The "reform" process has created more economically and political marginal Filipinos, a situation definitely unhealthy for any democratic society.

Surely these problems are not divorced from anthropological study. The question we might raise is this: If we want anthropology to be a discipline relevant to the Philippines today, what kinds of research interests should we pursue?

DIRECTION AND PROSPECTS FOR ANTHROPOLOGICAL RESEARCH IN THE PHILIPPINES

Adaptive strategies are techniques by which a population, through responsive changes in their own composition and structure, maintain homeorhesis in and among themselves as they face short- and long-term fluctuations of economic (Rappaport, 1971) and political resources. Through social selection, alternative ends and means are opted for by a population. The choice, although it may be mediated by the social system, usually favors those ends and means that appear most advantageous to the individual. This decision-making process is continuous, hence dynamic.

The complex system of adaptive mechanisms constitutes what we might call the "adaptive infrastructure" (Laughlin and Brady, 1978, 3). This adaptive infrastructure consists of the following domains: economic, social, and political/ideological (Laughlin and Brady, 1978, 8-13).

Economic production

Every society has a means of provisioning itself through the production, distribution, and consumption of economic resources. Production

involves the technological exploitation of resources in a given community. Two opposite modes of production, as we saw earlier, are possible: generalized self-sufficiency or a specialized commercial system.

In generalized self-sufficiency, production is tailored to a diversity of resources, and products derived are as diverse as the available resources. Utilization of these resources is efficiently maintained through proper synchronization and integration of various production activities; these products are for local consumption only. Under generalized self-sufficiency, the complexity of the environmental structure is preserved. Ecologically, the more complex the environmental structure, the more stable its system (Ehrlich et al., 1976; Odum, 1975).

Specialized commercial production derives its desired output by restructuring or modifying environmental structure and components to maximize production of a specialized good to meet outside market demand. Thus, environmental complexity declines, giving way to a simple, artificial, and specialized ecological system. Concomitantly, the ecological system becomes unstable (Ehrlich et al., 1976; Odum, 1975).

Anthropology in the Philippines should closely monitor the direction of the country's mode of production. The risks and the disadvantages of these models of production should be articulated and alternatives should be properly evaluated. Our technological tools should be deliberately manipulated so as to increase our range of choice in style of production. The risk we face in an "over-developed society" is technological tyranny over the individual. C. Wright Mills' idea of a "properly developing society" should be noted at this point:

In a *Properly Developing Society*, one might suppose that deliberately cultivated styles of life would be central; decisions about standards of living would be made in terms of debated choices among such styles; the industrial equipment of such a society would be maintained as an instrument to increase the range of choice among styles of life (1970, 35).

In the face of increasing commercialization of the Philippine economy, we cannot afford to maintain subsistence production. Conversely, due to increasing ecological disintegration, neither can we afford an over-developed technology. We should look for alternatives. Acceptable trade-offs to take in the face of conflicting conditions and benefits that might be derived from these strategies should be thoroughly investigated. The factors that cause increasing alienation of people from economic

goods and political opportunities and the strategies employed to minimize those risks should be recorded and analyzed.

Distribution and consumption

The distribution and consumption of economic goods and opportunities are closely linked with the socio-political and ideological system of the community. To gain access to both operational and cognized resources, groups establish both formal and informal social networks. These networks may emanate from within the local group and may only involve the local population. Or, they may emanate from without, linking the local population with external groups (Brady, 1978).

In any case, the distribution and consumption of economic resources and opportunities between and among participants in the network are mediated, controlled, and facilitated by the power relations between individuals and segments of society. This power relation consists of the control one individual, segment, or group has over another in the successful utilization of situations or economic goods. Such control is legitimized by the rational formulae, meanings, definitions, ideals, and rules upheld by a given society. How the population maximize their economic returns under a given pattern of social network, political structure, and ideological orientation is also worthy of investigation.

Two patterns of economic distribution and consumption are apparent in the Philippines today: one is personalized, where decisions are based on a kin and alliance system; the other is impersonalized, where the society is transformed into a huge salesroom, with transactions made on the basis of mercantilistic considerations. The first emphasizes protection of the individual and the social welfare, while the second considers profit the sole basis for opening and closing economic deals. The demand for increasing cash input by the second type has alienated the mass of our population from various opportunities and from enjoying many of these capital-intensive goods. The former provides the individual a wide latitude in controlling local situations to his own benefit, while the latter gradually transforms the population into a host of robots whose modes of economic behavior are controlled by an outside network of racketeers. Though the first is non-compatible with our increasing participation in the international market, the second destroys the dignity of a human being. Examining creative responses to these conflicting concerns would be a challenging and practical task for anthropology in the Philippines today. The struggle should be properly monitored and

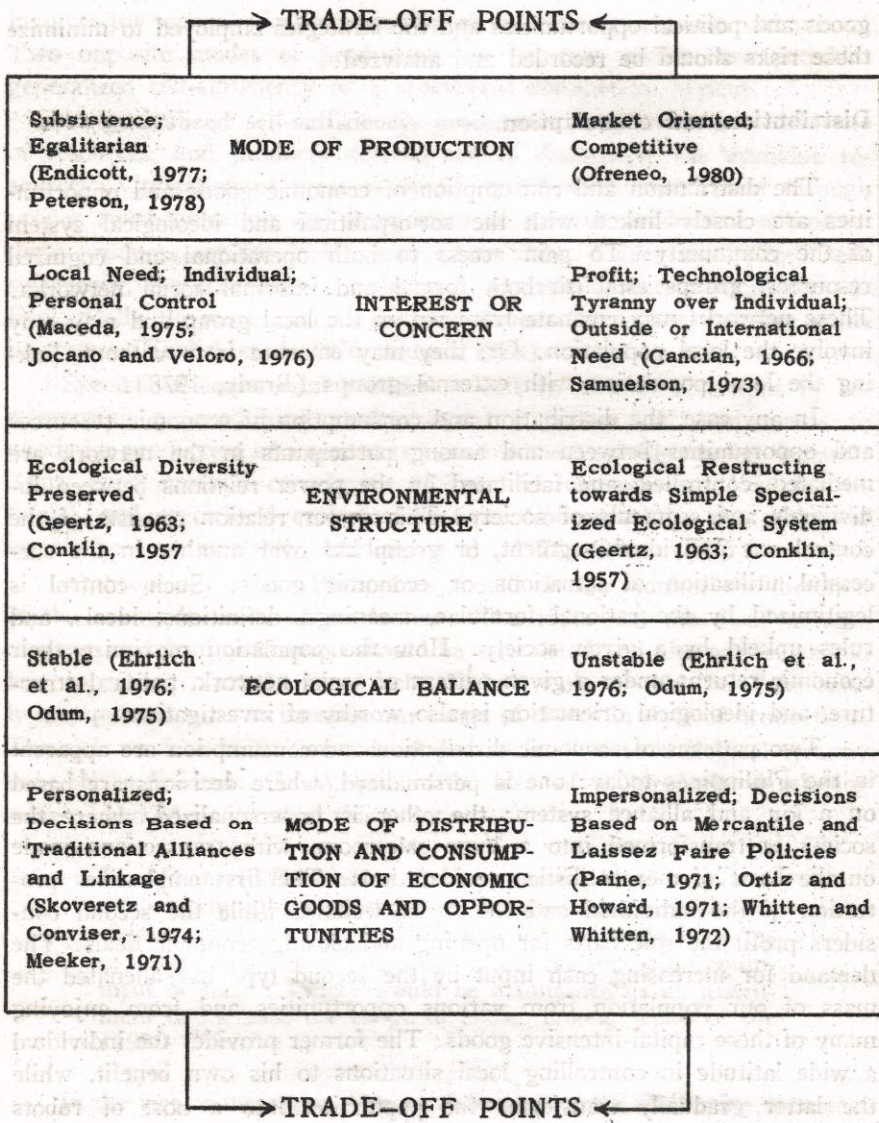


Figure 1. A continuum of an economic system with accompanying socioeconomic and ecological implications.

analyzed with the idea of deliberately generating alternative patterns of distributing and consuming economic goods and opportunities. Figure 1 indicates some points where trade-offs can be offered to the population.

Summary

Adaptation is viewed in this paper as the creative and productive response of a given population as it faces various degrees of stress. The stress is a product of being offered a choice of two opposing socioeconomic systems. For instance, one end of the production continuum attempts to preserve individual interest while satisfying local needs, giving people more control over their own lives, thereby enabling the population to preserve ecological integrity. The opposite end meets outside demand for maximum specialized production by restructuring and simplifying the environmental structure, producing a highly unstable ecosystem. While all would want to preserve individual control over their own lives in a stable ecosystem, we still have to participate in a wider economic system which demands increasing "robotization" of the individual in an increasingly unstable ecosystem.

The trade-offs a population might be offered in this situation should be monitored and analyzed by anthropologists. These data should be amenable to analysis for area or environmental specifics which will allow cross-comparison. How population respond to various micro-environmental types should be properly elucidated in this kind of investigation. Variance of response should be explained. Such variables as social, political, and ideological infrastructure should be explored in the context of increasing cultural diffusion.

The continuous well being of our environment and the quality of life in such an environment should be the foremost concerns of a discipline that studies man and his life.

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...the world collapse due to the lack of a major source of food and energy... More than seventy species of marine algae have been used as food, especially in Oriental countries. *Kavay* (1900) lists twenty-one edible species as occurring near Pangasinan, the most popular of which are *Codium* species and *Enteromorpha*, both locally called *age* and *Enteromorpha* seaweeds and *Enteromorpha* locally called *age*. These "seaweeds", mixed with tomatoes, onions, and vinegar, are eaten as a salad. *Enteromorpha* (1977) also gives the amount of protein (up to 1.5% of the dry weight), carbohydrates (in the form of polysaccharides), and vitamins (as carotene, the vitamin B complex, and vitamins A and other) and trace elements that can be obtained from seaweeds.

3. Phytochemicals — These are substances found in cells walls of certain algae. The most abundant are algin in brown algae and agar and carrageenan (carotenoids) in red algae. Algin extracted from such algae as *Gracilaria*, *Gracilaria*, and *Gracilaria*, collectively called agar-agar, has a variety of uses. In microbiology, it is used as a culture medium, substituting for the more expensive animal gelatin. For human consumption, it is used in ice cream and jelly, used as an anti-drying agent in breads and pastries, as an additive to cheese to improve slicing quality, and in frozen dairy products. In the cosmetic industry, it is used as emulsifier in shaving cream, lotion, and soap. It is also used in dental molds and shoe polish. In drug industry, agar is used for making capsules. Agar has many other uses in industry, replacing starch for sizing fabric, as water-proofing for paper in photographic film, in tanning leather for gloves and shoes, and for making rice paper dummies.