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FISHING IN TROUBLED WATERS

Research on the Chinese Fishing Industry in West Malaysia

by

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and
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馬來西亞華僑漁人研究

安德生・馬茄合著

1977

THE CHINESE ASSOCIATION FOR FOLKLORE

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DEDICATED TO

THE PEOPLE OF KAMPONG MEE

AND

TO ALL THE OTHERS WHO HELPED US IN MALAYSIA

AND

TO THE CAUSE OF SAVING MANKIND FROM STARVATION

Preface

This monograph is a report on our research on the Chinese fishing industry in West Malaysia. We spent a year - summer to summer, 1970-71 - in Malaysia and Singapore. During this time we traveled widely, visiting all fishing areas; in particular we visited all major fishing stations in Singapore and in the part of Malaysia lying between Pulau Pangkor and Kuala Perlis. This latter region, the northwest coast of West Malaysia, is the zone in which the Chinese fishery is concentrated. Most of our time - fall of 1970 to summer 1971 - was spent on Penang Island (Pulau Pinang), where we lived for a month among fishermen and others on the Georgetown waterfront, then for more than six months in the fishing village herein disguised under the name of "Kampong Mee." In Singapore we concentrated on library research at the University of Singapore. During the year, we made brief trips through Sumatra and East Malaysia, observing both salt- and fresh-water fisheries. The year's research was supported by a grant, No. GS-3111, from the National Science Foundation, to which we are deeply grateful.

We are at least equally grateful to the many people in the Orient who so generously gave their time, knowledge and help to us. In particular, we may single out the following - in hopes that others (if they read this) will realize that it is not ungratitude, but considerations of personal privacy and protection, that keep us from mentioning them all. First we must thank Ch'ng Teng Liang and Ooi Sang Kuang, and the families herein known as Yeo and Li. Secondly, the fishermen and other residents of Georgetown and Kampong Mee - they were always friendly and helpful, never impatient or hostile, in spite of their worry about the forces that

brought a foreign family to their communities. Also, out debt is great to the many academic persons who helped us - George Elliston (and his family) of the University of Malaysia; Stanley and Anne Bedlington; Ooi Jin-Bee; Milton Barnett; and the entire social sciences faculty of the University of Penang, including the Dean, K. J. Ratnam. We are also most deeply grateful to the government personnel who made this work possible, or assisted by providing data. Che' Ali bin Esa of the Ministry for National Unity was especially helpful in letting us carry out and report our research; his colleagues at the Ministry, notably Agoes Salim, also helped us greatly. The staffs of the Fisheries Department in Penang State and of the Glugor Fisheries Research Institute provided vital information. Co-operative and village officials who must remain nameless, or pseudonymous, here helped us in every possible way. To them, and many others who assisted our work in several nations and many communities, we remain forever indebted.

As these lines are written, our chances of publishing this monograph seem slim. Much of it touches on subjects which cannot legally be discussed in Malaysia: the touchier side of race relations, the special privileges of the Malays, and other subjects covered by national law. For this and other reasons, publication of this monograph at the present time would probably endanger the positions of many persons who helped us and who are all too easily identifiable in despite of pseudonyms. In addition, publication of this research might lead to curtailment of other social science research in such areas (such things have happened before, in Malaysia and elsewhere), including important ongoing research. We are making this report available in draft to interested persons, in the strictest confidence. At some future time, when the climate in

Malaysia has changed, we will consider publication. By then much new information will be available, and - we hope - those persons who have seen this draft will have commented on it to its improvement. Our thanks, in advance, for any and all comments.

* * * * * * * * * * *

The above was written in 1972. It is now 1976, and Malaysia has changed profoundly. Thanks to the brilliant statesmanship of the tragically deceased Tun Abdul Razak and Tup Ismai, Malaysia weathered the storms of the early seventies, and emerged a stable, prosperous country. The successful change of leadership, when Hussein Onn assumed the position of head of state after Tun Razak kembali ka-rahmatul Allah (as the beautiful Malay phrase has it), indicated that the country had turned a corner toward security. Corruption was attacked, leading to the fall from power of leading hyper-communalistic politicians. Malaysia's troubles are by no means ended - communalism and economic problems remain serious - but we feel that we can safely seek publication now for this book. Tempers have cooled in the Penang and Perak waters; new opportunities have arisen; Malaysia is more prosperous and less tense. We hope our report will now be acceptable in the spirit in which it is intended - to help the world develop more successful strategies for using aquatic resources to feed the hungry.

Usage

Currency. All economic citations here are in Malaysian dollars unless otherwise specified. The Malaysian dollar, at the time of research, fluctuated around M$3.00 per US $1.00. Malaysian currency was held at par with that of Singapore. The currency was notably sound, and there was none of the wide differentiation between official and "unofficial" values found in some nearby countries. In terms of buying power, the Malaysian dollar's value may be roughly seen from typical prices: high-quality rice, $1.80 per gantang (8 lb.); chicken, ca. $1.00 - $1.30 per kati (1 1/3 lb.). Imported goods were relatively much higher in price, because of duties and because of high initial cost. Thus foreign-published books, diesel fuel, diesel engines, and cars were very serious expenses for the people of Kampong Mee.

Language. Bahasa Malaysia, the official dialect of Malay, is well standardized. The dialect of Penang and Kedah differs from standard "bahasa" in various minor ways, which we have not indicated; Malay words are cited here in standard dictionary forms (as of 1971, before spelling reform).

Chinese words used here, unless otherwise specified, are cited in Penang Hokkien. This is the commonest dialect of Penang and the real lingua franca of the Chinese community (in spite of the higher prestige of the learned linguae francae, English and kuo-yu Mandarin). It was the first language of most Chinese in Kampong Mee, including many who were ancestrally Hakka, Cantonese, or speakers of other Hokkien dialects.

Penang Hokkien is derived from rural dialects of Hokkien, a language also known as Southern Min, Southern Fukienese, Fukienese, etc., combined into a poorly-standardized dialect heavily larded with loan-words from Malay, English, and other Chinese dialects. We are not aware how close Penang Hokkien is to the Hokkien of the rest of Malaysia, since no serious study has even been published (as far as we can discover) of any of these. As far as our limited observations elsewhere in Malaysia go, there is little difference; however, we have used the term "Penang Hokkien" to be sure of our referent. Penang Hokkien seems to have borrowed more from Malay than have some other Malaysian Hokkien dialects. These dialects are unwritten, unrecorded, unstudied, and considered low in prestige by the Chinese community. Bodman (1955) has written a superb text of Amoy Hokkien that includes much Malaysian usage, but has apparently not published full accounts of actual Malaysian dialects.

Our transcription follows Bodman's usage for Amoy. Where Penang Hokkien is not agreed on the pronunciation of a word, we use the closest form to the Amoy form . (Amoy - the dialect of Amoy city, which is extremely close to Taiwanese - is the "standard" or book-usage dialect of Hokkien.)

In general, vowels have the Continental values; consonants are as in English (with "g" always hard) "h" after a stop consonant indicates aspiration; thus "kh," "ph," "th" are as in "blockhouse," "tophat" and "rathole," never as in "Bukhara," "phonograph" or "thin" (or "this"). "C" in Amoy sounds very close to English "ts" or "ch" when aspirated, to "tz" when unaspirated. In Penang Hokkien it is close to English "ch" and "j" respectively. Another difference in sound is indicated in our spelling. In Hokkien, the combination nasal consonant/non-nasal vowel is impossible. Amoy usually resolves resulting problems by denasalizing both consonant and vowel. Penang Hokkien nasalizes both. Thus Amoy bi "noodles" is mi in

Penang - the "i" in the latter being strongly nasalized. (We follow Bodman in not indicating this particular vocalic nasalization in transcription, since it would be redundant; a vowel after a nasal consonant is necessarily nasal.)

We have not indicated tones. They are not very well standardized in Penang Hokkien and tend to vary with the speaker, particularly if his/her native speech is a Hokkien dialect with similar segmental phonemes but different tone structure, like Teochiu. Tone morphophonemics in Penang Hokkien are exceedingly complex and variable, and many speakers tend to be casual about them, so that they are hard to hear. See Bodman's excellent account for the standard model. The usual Penang Hokkien is very close to Bodman's Amoy in tone morphophonemics.

Part 1

Protein and Fishermen:

Theory and Method of the Research

Part 1. Protein and Fishermen: Theory and Method of the Research

Chapter 1. Fisheries and World Food

1

In spite of wars and rumors of wars, the world's greatest problem is getting enough to eat. No one knows what percentage of the human race is malnourished or undernourished. Estimates run around a half, but some estimates are much higher (Ehrlich and Harriman, 1971; Borgstrom, 1969). Of all the components in the human diet, protein is almost certainly the most inadequately supplied on a worldwide basis [FAO, State of Food and Agriculture (Annual Reports); Cf. the great work of May (1961-)]. Tropical regions in particular are desperately short of protein, and in these areas clinical syndromes such as kwashiorkor are commonly found. Deaths from starvation, kwashiorkor and other deficiency conditions are very numerous; far more numerous, but impossible to count accurately, are the deaths from synergistic conditions - malnutrition coupled with infectious disease, with degenerative conditions or even with accidents that a well-fed person might have avoided. Severe but nonfatal shortage in infancy probably causes permanent mental retardation (György & Kline, 1970; Scrimshaw & Gordon, 1968, where there is some debate). Deficiencies unquestionably account for much of the apathy and lethargy that characterize populations in certain areas (though, as we shall show, such apathy is much rarer than is usually reported by observers of tropical regions).

In the regions where protein shortage is chronic, fish is almost invariably the chief source of animal protein, except for people living far from water, and often (via trade) even for them. Fish also averages

considerably cheaper than other animal protein, and is preeminently the protein source of the poor. Vegetable protein is not a complete source of amino acids unless the vegetarian diet is very carefully chosen, and in practice it is doubtful if any human populations have diets that allow them to flourish without animal meat except in regions where soybeans are stable (the soybean providing more, and more complete, protein than other commonly produced vegetable foods). Even soybeans are not by any means adequate in themselves, and the inescapable conclusion is that the world must produce more fish or pay a price in human lives - a price far greater than that of any war in history.

Yet fish provide only 10% of animal protein consumed in the world. Most of the poor nations produce few fish, and those that produce a great many often export it to rich nations, where it is used primarily to feed chickens, pigd and the like; Peru, the world's leading nation in fish catch, is especially famous in this regard (Dumont & Rosier, 1969 - see the dedication; Ehrlich & Harriman, 1971; Idyll, 1970).

The obvious question - why does the human species so conspicuously fail to feed itself? - is thus particularly poignant in regard to fish. The world fish production of near 70 million tons is inadequate, indeed farther from adequacy than are the supplies of any other major class of foods. Why does it not expand?

The reasons, very broadly, are as follows.

1) The world fishery is targeted toward wild fish. Fish farming, although eminently practicable and a major source of fish in some areas (e.g. China· Anderson, 1970a), has been neglected, in spite of considerable interest in it (e.g. Bardach, 1968, Ryther and Bardach, 1968; Hickling, 1962; Idyll, 1970). World wild fish stocks are limited, rather sharply

so, and in spite of nonsense about "the inexhaustible resources of the ocean" most of the wild fish stocks are badly overfished or rapidly becoming so. In 1948, the FAO assessed little-exploited stocks; in 1968 it reassessed these and found half of them overfished - the richer half, in general. The wild fish catch could be multiplied; estimates range from two to ten times, utilizing only presently saleable fish, and much higher if plankton and krill can be tapped. However, the expense of fishing for these latter is far greater than the return they can provide, and almost certainly will be so during the foreseeable future (Bardach, 1968; Hardy, 1958-9; Idyll, 1970). Meanwhile, pollution and over fishing are ruining more and more fisheries (cited works; Marx, 1969).

2) Much of the world's fishery is "underdeveloped," or "less developed" - i.e. it could be considerably expanded, and/or made more economically successful, by use of already-existing and already-applied knowledge. Technology, economic management and social order are all subject to development. It is also true that the whole world fishery is spectacularly "underdeveloped" in one sense - the field receives little research effort. Money expended on fisheries research is a vanishingly small sum compared with that expended on armaments, or even on military research alone. As in other fields (cf., eg., Thurston, 1969; Anderson, 1971c), the areas most in need get the least research.

3) As the Peruvian case suggests, even when fish are produced, they often cannot reach those who need them, because of marketing problems. In some cases, the poor simply cannot afford to pay enough to cover the producers' expenses. In other cases, more complex conditions exist.

Research on the actual problems of specific fisheries is especially lacking. To our knowledge there is no previous case study, anywhere in the world, of the sort attempted here - i.e. a total community study targeted toward finding those factors which inhibit fisheries development. Other studies of fishing communities have not been specially concerned with development, while studies of fisheries development have generally been on regional, national or even international scale, and have never to our knowledge involved detailed study of the persons and factors operating in a single fishing community. Perhaps it is better so; but our feeling has been that without a combination of in-depth study and committment to change, improvement of the world fishery will be difficult.

Malaysia is a representative tropical country in this regard. Though Malaysia is well-to-do and highly developed compared to most of south Asia, its fishery (and, for that matter, Singapore's, though Singapore is in other ways a thoroughly developed country now) is about average for the region. Its neighbor Thailand has been a "miracle nation" as far as fishery goes, and now operates huge modern boats over long distances; its other neighbor Indonesia is barely beginning to mechanize its boats; Malaysia lies between these extremes. The problems that plague the world's fisheries are well represented in Malaysia; yet, on the other hand, Malaysia's fishery is successful enough to satisfy the home demand and produce a healthy surplus for export to Singapore and farther. Malaysia's problems and successes in fisheries development are notably relevant to the rest of the world, especially the tropical world. Moreover, they are relevant to other forms of development, especially as regards food production; and the problems of the fishermen themselves,

as food producers and as citizens, are broadly typical of those of people throughout the "third world." The many specific features described in this monograph, the many differences in detail and in emphasis between life in Kampong Mee and life in Brazil or Mongolia, should not obscure the underlying similarities. The oceans of earth join, and the boats of the leading fishing nations now cruise in all seas. The world fishery is one, as the human race is one.

2. Cultural Ecolcgy and Ecological Development

1

Our research was animated by a general interest in the change and development of fisheries. More generally, we are interested in the whole process of food production, marketing and consumption. This interest is both humanistic and theoretical. On the humanistic side, we feel that concern with the world food problem is incumbent upon everyone today, especially those individuals doing research in poor nations. On the theoretical, our special interest is in the field of cultural ecology - a field of recent origin, as yet ill-defined and given to conflicts about its most basic assumptions. Potentially, cultural ecology may well be the field that provides the needed theoretical framework for economic development - especially the development of the food eccnomy since nutrition is a major concern of ecology. Before this can occur, however, the field must be systematized, and an "applied" subfield created within it. The present monograph is an effort in this direction.

Briefly, cultural ecology may be defined with that branch of human ecology which concerns man's knowledge and behavior in relation to the nonhuman environment. Human ecology is the study of all man's relations with his environment, and as such includes a number of subfields - studies of genetics and selection, of diseases and pathology, of nutritional needs, and other fields. Cultural ecology differs from these not in subject matter (all humans behave; conversely, all humans are affected by disease, nutritional needs and so on) but in specific focus. Its focus is behavior itself - the behavior, and the information involved therein, which is shared broadly by a group of humans; and, specifically, behavior toward and information about the environment. Traditionally, autecology (the ecology of a single species, in this case Homo sapiens) has been most concerned with the biological

basics - food, protection from enemies and weather, reproduction, growth and development. It has also involved study of the effects of the species on its environment; in the case of man, these effects are notoriously great. In man, a number of other considerations are too important and universal to overlook. Recreation, social behavior, religious behavior and the like have been studied from an environmentalist point of view; much research has been done on information, also, and its sharing within a cultural group. The primary interest, however, in such studies has lain in seeing how such things mediate or affect the ways in which man influences and is influenced by the environment.

It should now be obvious why we think that cultural ecology can supply the ideal framework for food economy development studies. In the first place, it studies the whole range of human factors that affect this economy - calorie requirements and religion, vitamin shortages and educational processes, disease and gift exchange. It does not limit itself to exchange and accumulation of wealth, as economics tends to do in practice. (The old definition of economics - "allocation of scarce resources among conflicting ends" - actually applies to cultural ecology than to most modern economics studies, as we shall see.) Secondly, it is concerned with the totality of man's influences on the environment. There are no "externalities" in cultural ecology. Thus it allows construction of more adequate and powerful theories than those previously adduced in agricultural development (to say nothing of the neglected fisheries field). So far, this is potential rather than actual; cultural ecology has not yet found its feet, and on the other hand much previous theory has been based on similar principles. By our definitions above, for example, much of Marx and Engels would qualify as cultural ecology; it would be remembered that Engels was highly interested

in anthropology, and brought its total approach into his work. However, because of limitations on knowledge in the early days, this earlier work is not so well grounded scientifically; human nutritional needs, for instance, were totally unknown and unstudied in Marx' time (and are still not adequately known). In any case, it is preferable to restrict the term to studies done in the last couple of decades, since Julian Steward coined the term in the early '50's (Steward, 1955). Even the word "ecology" is rather new - it was popularized by Ernst Haeckel in the late 19th century, by conscious analogy with "economics," from Greek roots: "economics" came from oikos 'household' and nomos 'names, general knowledge', "ecology" from oikos plus logos 'word, science." (Note that the idea of ecology as a more powerful economics was specifically present from the beginning of the field.) Culture, in its many anthropological senses (Kroeber and Kluckhohn, 1952), is also a new usage. The conscious combination of these fields followed logically from classic anthropology - Steward was a general anthropologist of the old school - but has taken on a life of its own.

2

At present, cultural ecology is not so much a developed field as an approach and a bundle of controversies. The approach has been outlined above. Some of the controversies will appear in what is to follow.

So far, in spite of its (arguably) more basic and useful approach to human resource management, cultural ecology has far more to learn from economics than vice versa. Economics is a developed science and art, with an enormous body of theory and an even more impressive degree of qualification In so far as the present book moves into the domain of economic development

it will be a tentative, exploratory, and inadequate work. We hope that economists will be moved to adopt some features of our model - notably the elimination of "externalities" and of "uneconomic" or noneconomic behavior" as significant categories - and will not be too impatient with the primitive state of the theory.

Perhaps the most serious controversy in the field, and the one most important in our development of a research project, is between those who study behavior and information and those who study production and maximization of material. The former will naturally be concerned with psychology, sociology and linguistics; the latter, with energy flow, nutrient cycling, economics, technology. The former are more interested in behavior itself, the latter in the results of behavior. The differences are clearly matters of approach and research strategy, rather than of basic theory; yet they have led to quite different and mutually conflicting theories.

The most extreme examples of this are, on the one hand, the "cognitive" anthropology of Levi-Strauss in Europe and the "ethnoscience" group in America; on the other hand, the "techno-environmental determinism" of Marvin Harris (1968) and his group at Columbia University. There is little love lost between these groups, and Harris in particular has been scathing in his remarks about cognition studies (Harris, 1968 Current Anthropology reviews of this book, Current Anthropology, 1968 Yet, as we will show, the dichotomy is a false one and the truth lies with neither side.

The focus of the cognitive school has been, briefly, on how people think about the environment. Levi-Strauss, the most productive and

ambivious worker in this approach, has dealt extensively with primitive peoples' knowledge of their environment, their scientific systems, and their use of the environment in symbolism and art (Levi-Strauss, 1958, 1962), and at even greater length with their beliefs, attitudes and social codes about food (1966-1971). He, however, regards himself more as a student of philosophy and science (viz. especially primitive peoples') than as a cultural ecologist. The American school has been more prone to use the term. Harold Conklin (1961) and Charles Frake (1962) have been most active in dealing with the environment; there has been much other work (see review by Colby, 1966; also Harris, 1968; and for our own forays in this field, Anderson, 1967, and Anderson and Anderson, 1969a). The Americans have concentrated not on thought itself (as Levi-Strauss does) but on creating models, or linguistic descriptions, that permit appropriate anticipation of behavior (Frake, 1964). However, in spite of protests to the contrary, this work is connected with theories of the mind and of human behavior (cf. citations in Frake, 1962; Anderson and Anderson, 1969a; and Harris' biased but not entirely unfair discussion), for example the eclectic cognitive psychology of Miller, Galanter and Pribram (1960 - cited by Frake and others; cf. also Pribram, 1971). The interest here has been first of all in description - accurate description that will allow the reader to act as if he were a member of the culture described (Frake, 1962, 1964). However, it is common knowledge in science that there is no description that is not based on theory; and, from the citations in the work under consideration, there is no question but that the theory underlying this work is that of cognitive psychology. whose concern is with how people know things. The understanding of behavior - and, indirectly, of thought - is the goal here; the way to achieve the

goal is to study the behavior itself, and hence the focus on extreme sophistication in description.

The approach to ecology based on output and energy flow is at once more comprehensive and less ambitious than the cognitive school. It has produced theories of the ultimate cause of all human behavior and of the processes of culture; on the other hand, it does not explore the human mind, or the subtleties of behavior. Thus a recent study of religion, by one of the leading exponents of this appraoch, has concentrated entirely on the payoffs of religion in terms of assisting the culture in getting material things (Rappaport, 1971a); neither the mental processes involved, nor the possible internal reinforcement (or, if you will, nonmaterial values) of religion, are considered. Rappaport has concentrated his work on energy flow, especially food energy, and has discussed at length the ways in which social systems facilitate the flow (Rappaport, 1968, 1971b).

In this context it is profitable to think of culture as a catalyst (H. F. Turnbull, pers. comm.) - as a catalyst is a chemical that facilitates the joining of two other chemicals, substituting complex structure and tiny energy expenditure for massive, less structured energy flow, so culture substitutes structure for massively duplicated effort. To a cultural ecologist, culture can be reduced to a catalyst mediating the reaction between the environment and the individual human organism.

By far the fullest development of this type of theory has been the "techno-environmental determinism" of Marvin Harris. Harris concentrates his attention on the explanation for the resource management of cultural groups. The explanation for all cultural institutions is sought in the interaction between (1) common humanity (individual variations to

intelligence, etc., being averaged out in any actual population) and (2) specific environments and technologies. The logic for this is clear: humanity, being one species, has the same basic behavior everywhere; variation can come only from external forces; and since simple environmentalism does not work ("where the Greeks once lived, the Turks now live, and there's an end to the matter," as an old line has it) technology, and specifically the technology of exploiting the environment, is the necessary further variable. Social organization, religious behavior, and so on are explained as direct responses to these external forces. In practice, the common humanity side is ignored in such analysis. It is equal everywhere, and thus does not change the equation when it is added in; moreover, it is difficult to study. Thus culture is seen as a series of adaptations to environment, and cultural change follows because technology continues to change in order to cope with the environment. Specifically, the environment is managed for its yield to food, clothing, shelter, and other physical satisfaction.

In short, the basis of human behavior lies in man's attempts to wrest a living from his surroundings. Counter-theories of behavior are discussed at length and rejected. Psychological theories cannot explain cultural differences, for man is the same everywhere at birth, except for individual differences (slight) which are averaged out in populations of any size. Theories of man's "irrational" or nonmaterialistic behavior are seen as theories-of-despair, explaining nothing; and are subjected to criticism on factual grounds. Thus the Hindus' "irrationality" in worshipping cows is explained as a mechanism for preserving them because of their great usefulness (Harris, 1966, 1968). (It will be

noted that this theory can be attacked on several grounds: Hindus also worship the pestiferous monkeys; the Hindus who need cows of ten lack them; religion does not specify that cows shall be cared for, though a few well-cared-for cows produce more than many that are badly cared for; and non-Hindus, such as dairy farmers everywhere, often preserve their cows for practical reasons without attaching any religious significance.) This returns us to the theory of culture as catalyst.

The "techno-environmental determinism" of Marvin Harris grows out of two assumptions: 1) the subject of study is the ends of behavior: the goods produced and the effects on society and environment. Behavior itself, as process, is to be understood in terms of its goals or ends. 2) It is impossible for anthropologists to study the workings of the mind. The mind, to the field worker, must remain a black box - closed to investigation. (As a matter of fact, Frake says this also (Frake, 1977), and states that his goal is appropriate anticipation of behavior, rather than mentalizing.) Both these assumptions are questionable. In the first case, goals and ends are themselves part of behavior. In the second, we conclude that a false issue exists here. Information theory makes it possible to specify, and quantify, sharing of knowledge. If a person regularly sorts out piles of fish into ten categories, we can be sure that he perceives differences between them and sorts them according to knowledge that is unquestionably in his mind. If all the fishermen in a society sort and name fish the same way, then they clearly share information - at least enough bits of information to allow them to make these decisions. If the fishermen instruct a new recruit in the matter of sorting fish, then those bits of information

are transmitted; if the recruit then sorts fish correctly, he has stored those bits in his mind. This sort of inference does not depend on being able to read the minds of the fishermen. It is one thing to believe, with Levi-Strauss, that one can acquire intuitive knowledge of all the philosophical and symbolic subtleties of a tribe's though; Harris rightly criticizes this (Harris, 1968). It is quite another to state that all inference about shared knowledge is impossible. For a discussion of how inference can be made, and of different ways of talking about it, see Pribram (1971) - or any other good psychological text.

In actual practice of explaining phenomena, techno-environmental determinism involves two other questionable assumptions: 1) the "common humanity" can be ignored; 2) sheer physical considerations are adequate to explain everything people do. These are easily criticized on factual grounds. 1) Common humanity involves making mistakes. Much cultural behavior clearly comes from a poor choice that became institutionalized and thus too advantageous to group solidarity (or to the group's elite) to abolish. Common humanity also includes play, and many other patterns, which involve exploitation of the environment and yet can vary from culture to culture with some, but not overpowering, environmental feedback. Common humanity also seems to involve a love of diversity for its own sake cultural groups may (indeed surely do) differentiate in the same environment for reasons quite apart from environmental yield maximization. 2) Closely connected with this is the fact that Harris is, in essence, postulating desire for material goods as the motive for human behavior. This is mentalizing, of course. Even if exceptional individuals are exempted from consideration because they do not affect the total culture (a dangerous assumption in itself), the majority of the participants in a cultural group must be motivated by desire to acquire and maximize material

goods to make the Harris system work. It will be noted that satiation with food and so on does not stop human acquisitiveness, and Harris is forced to deal with exploitation (in the Marxist sense) and greed when talking of civilizations. Surely the desire for great wealth is a mental set. Nor is it the only mental set in culture. Thus is mentalism introduced through the back door. Moreover, it is an out-of-date mentalism - drive-reduction psychology with a hoarding or accumulating drive added. Recent psychological findings to the effect that all higher animals explore, alter their states of consciousness, etc., have abolished drive-reduction as a simple explanation, and the findings that animals will leave food and sex and everything else to stimulate electrically certain parts of the brain have more or less eliminated drive-reduction altogether. (It is grotesque to postulate that all animals have an electric-stimulation-drive; to say nothing of the fact that stimulation to other parts of the brain has other effects, ranging from terror to total recall of forgotten experiences.)

Last of all, Harris considers technology as an external thing in itself. In fact, technology is information, plus material that can be worked on according to that information. Economic developers are all too well aware of the consequences of giving people modern "technology" (in the Harrisian sense) without telling them what to do with it.

However, in spite of shortcomings in practice, Harris's theory has its advantages. It escapes the self-imposed limitations of the cognitive school, which does have a very hard time accounting for change or for the effects of external forces. It brings us square against the question of human motivation. And it reminds us that people often have good, solid, materialist reasons for acts that initially appear irrational or governed by blind tradition. These points have been repeatedly ignored in the rest

of social science, and Harris has served a very valuable function in bringing them up again before the social-science field.

Once one admits that both the ethnoscientists and the techno-environmental determinists have their own models of how the mind works, one can go on to construct better models, more capable of predicting the course of man-environment interactions.

This was our initial focus of interest when the research herein reported was in the planning stage. We felt that human behavior could best be seen as an interlocked series of resource management strategies plans for getting what was wanted from the environment (human or nonhuman). Each individual would set up his system of resource management strategies, continually modifying them as they failed, partially succeeded, or succeeded and were transcended. Goals were set to a great extent in terms of strategies available for reaching those goals - people would be expected to want what they thought they could get. Culture, in this view, consists of resource management principles, the generalized strategies shared by individuals in a social group (or series of groups). Information flow was critical to all this, and culture could also be seen as an information system - shared information on what to get, how to get it, and what it was.

There is no need to go into much detail on this unevolved model, for field work showed us that things are not as simple in the world; neither the simplistic idea of individuals or more or less autonomous, nor the casual attitude toward goals and choices, being viable. Interactions of humans within a social system produces a field of information and behavior that is not covered by this view or by the ethnoscientific or techno-environmental models. Further discussion of these points is reserved

for the conclusion of the present book. In the meantime, we turn to the shortcomings of the economic development literature as it applies to the food economy. This, in turn, raises further questions about human motivation and resource management.

3. The Social Setting: Malaysia

1

The history and socioeconomic setting of Malaysia is so inadequately described that one cannot speak intelligently about it, except to make a few obvious generalizations. Even these generalizations have not been made in the literature. They will be briefly noted here, as a precondition to recording the social facts of Kampong Mee.

The reasons for our ignorance of Malaysia are twofold. First, Malaysia's history has been written almost exclusively by British, many of them actively involved in colonial administration (e.g. Wilkinson, Winstedt, Purcell) and far from disinterested observers. The British who have recorded Malaysia's history have tended to be apologetic for British rule, and/or to gloss over British mistakes there; alternatively, they have emphasized British mistakes from an insider's-eye view, without taking a broad view of the structural causes and effects of the mistakes (e.g. Purcell on Chinese policy in Purcell, 1965, and elsewhere). The British historians have also tended to perpetuate the stereotypes about Malays and Malaysia which will be discussed below; the earlier writers in particular had a good deal to do with forming those stereotypes.

Second, in recent years, the politics of research in Malaysia has been so touchy that serious analyses of Malaysia's politics have had to be so "safe" as to distort the true picture (e.g. Milne, 1970; Means, 1970; and especially Scott, 1968) or remain unpublished.

Thus we have nothing comparable to the superb literature on Indonesia, for example; the British did not produce a dissenting, critical school as the Dutch had at Leiden (cf. notably Wertheim, 1956, 1964), nor has Malaysia had anything remotely comparable to the work done by Kahin and his associates (Kahin, 1952;

Feith, 1962; McVey, 1963; etc.) or Geertz and his co-workers [the most important book for our purposes being Agricultural Involution (Geertz, 1963)].

However, some recent histories put Malaysia in a wider southeast Asian context (notably Hall, 1968, and Bastin and Benda, 1968), and others so obviously reflect British colonial biases that they are source materials in themselves (e.g. Winstedt, 1961a, 1961b; Purcell, 1965). For the colonial outlook, in addition to these, useful books include those of Swettenham (e.g. 1907, 1967), Wilkinson (now collected in a new edition, Wilkinson, 1971), and others including such novels as Burgess' Malayan Trilogy (Burgess, 1964). To get a full idea of the true situation in Malaysia it is necessary to read almost everything written on the region, which I have not been able to do. However, the following preliminary statements can be safely made.

The major thesis is that ethnic conflict is the dominant problem in Malaysia today. This fact is well enough known to need no discussion; it is admitted by the present administration. The minor thesis, which has not been discussed before, is that the Chinese-Malay conflict is the result of British colonial and post-colonial policies, and is only part of an entire structure set up by these policies and affecting every facet of Malaysian life. Thus ethnic conflict is seen as the surface manifestation of a cultural and economic pattern - one which will be very difficult to change, especially since it has produced the present Malaysian elite, who thus have a vested interest in maintaining it.

British colonial rule has been followed by ethnic conflicts in many former colonies. Violent civil wars in Nigeria, Sudan and other African countries; the separation of India and Pakistan and later of Pakistan and Bangladesh; and the repressive racist regimes of South Africa and

Rhodesia - all are legacies of British rule, and all are polarized along ethnic or religious lines. In many of these cases, the British denial of "divide and rule" charges has taken the form of maintaining that ethnic conflict was present before, and merely broke out again after the British left. In the Malaysian case, this cannot be maintained. "Divide and rule" was indeed a policy of at least some British in Malaysia, however much of it is denied; the memoirs of officials are clear on that point. But other officials were not consciously engaging in that policy, and the "divide and rule" argument oversimplified the case. What in fact occurred, briefly summarized, is that the British adopted a policy of economic exploitation (or development, if you prefer) that made it logical, indeed almost necessary, to polarize the Malaysian population; and the beliefs and strategies associated with British colonialism were such that this polarization naturally occurred along ethnic/racial lines, sowing the seeds of future trouble.

In Malaysia, there is no question that it was indeed the colonial situation that created tension. Malays and Chinese had been in contact for centuries (cf. Wheatley, 1961) and had had uniformly peaceable and amicable relationships. The Chinese colony in Malaysia existed since the 1400's and Chinese had been in Malaysia (as transient merchants perhaps, but definitely there) for hundreds of years before, probably since the early Sung Dynasty or before. A large Chinese community, permanently resident, developed in Malay from the 1400's on. This community intermarried with the Malays, and it was a point of prode to be of mixed origin - even the Malacca sultans took great pride in tracing their decent from the union of a Malay ruler with a Chinese "princess," while the "Baba Chinese" community seems to have been equally happy to be

of mixed origin. The latter community became monolingual Malay speakers, and added much of Malay culture to their lives (Vaughan, 1971, and my own observations). This Malayanized Hokkien culture spread to immigrants from China in the early years, and the citizens of Kampong Mee - first to fourth generation immigrants - are heavily acculturated to it, using many Malay words and cooking "nonya" curries as special dishes.[1] During the entire pre-British period, there was no case of serious strife between Malay and Chinese; instead, a harmonious setting of mutual accommodation and acculturation existed - almost a model case of ethnic relations. Thus the present conflict cannot possibly be traced to pre-colonial roots.[2]

In the late 1800's, the British first took over most of what is now Malaysia (in one capacity or another - the administrative details need not concern us here) and then began to develop it, with the aid of labor brought from China and India. At this period there were several good reasons not to use Malays as labor. 1) the Malays were few and scattered. 2) They also had better things to do with their time. Their disinclination to work for the British, which the British "explained" by claiming Malays were lazy, unreliable or too independent, is better understood when one

[1] "Nonya" is the old Malay term for a Chinese woman and is especially applied to Straits Chinese. It has become applied to the hybrid cuisine of that community.

[2] We believe this fact has considerable significance for the study of ethnic conflict in other former British colonies, notably the Indian subcontinent. We think the generalizations made here about British policy probably apply widely. By all accounts Malaya had exceptionally able and sympathetic administrators; the situation must have been considerably worse, in, say, Burma, judging from Furnivall (1948), etc., to say nothing of recent developments.

compares the returns on subsistence farming and fishing with the wages paid for mine work etc. in those times, especially given the felt needs of the Malays themselves. 3) The Malays were untrained in the needed skills. 4) The Malays were still not reliably pacified; bringing them together as laborers would have given them a feeling of oppression and a center for organizing resistance, while shoring up their traditional society and agriculture had the opposite effect of scattering them and pacifying them. As we hall see, this last observation is the most important of all.

Thus Chinese and Indian labor - most of it drawn from destitute rural areas, ruined in large measure because of British policy of the time - flooded into Malaysia from the 1870's up to (and into) the depression of the 1930's. The depression almost checked the flow, and the Japanese and postwar movements completely checked it; but by then most of the population of British Malay was Chinese and Indian. Repatriation of these, and higher reproductive rates among the Malays, have now reduced the Chinese-Indian share to less than half, but only very recently (the 1970 census being the first to show it).

It is important to note that, at the same time, Malays and other ethnic-group members were migrating from Indonesia, in an intensification of a flow that has been going on for hundreds, if not thousands, of years. The royal families of western Malaya are originally from the islands; so are most of the commoners, over very broad areas of the western part of the peninsula. Only in the east were there substantial populations of Malays in pre-European-contact times, and even there many immigrants have come.

These immigrant Indonesians could be - and were - integrated into the Malay world of the peninsula. This led to dislocation of many orang asli (the true aborigines of the area - Mon-Khmer speakers or non-Islamized and stateless Malays) but to little other economic effect. The case was quite different

with the three categories of British-introduced newcomers: the Chinese, the Indians, and the British themselves. These groups were brought over for specific purposes, and were allocated to specific roles in the economy.

The British, of course, reserved for themselves all top-level managerial and administrative positions. They dominated the upper echelons of every sector of the economy, most particularly the big-business and government ones. The Indians were brought in for special jobs: Sikhs as guards and policement, south Indian Dravidian speakers as "coolies" (a word of Tamil derivation) for the rubber plantations and public works, Ceylonese (especially the "Jaffna Tamils", with high levels of Western-oriented missionary education) as clerks and general lower-level managerial workers, etc. The Indians tended to concentrate at the two ends of the socioeconomic scale; most of them were workers in the hardest and least rewarding jobs, while many (the Jaffna Tamils, etc.) were a sub-elite. This polarization has persisted to this day; in Singapore, for instance, Indians are over-represented at the two ends of the economic scale, under-represented in between. The Chinese were brought in as labor also, but as servants, porters, craftsmen, and in general as workers at all the miscellaneous service and odd-job and artisan tasks. They were also allowed to trade, indeed encouraged to, because of the British belief that the Chinese were "a nation of shopkeepers." This pattern too has persisted. The Chinese are the small shopkeepers, the artisans, and the service-sector workers to this day.

Meanwhile the Malays were kept in the subsistence-farming sector in so far as possible. The origins of this, as I have noted above, were manyfold and practical. Soon there grew up around this allocation a body of mythology and stereotypes, invented by the British, that served to

excuse or maintain the policy. These stereotypes continue; thus we read in a recent geography (Robinson, 1967, p. 324) that "the Malays...are a charming but somewhat indolent people." This about sums it up. On the one hand, the rural Malay way of life is so quaint, so "charming," that it should be preserved as an amenity. On the other, the Malays themselves are so lazy, innocent and foolish - in a word, so inferior, since all these are really vices in colonial British eyes - that they must be protected. The love-hate ambiguity in the response of colonial peoples to their victims has been described elsewhere; it is abundantly documented in the British literature on Malaysia - perhaps most notably in the strang combination of unmerited scorn and unanalyzed love that Winstedt pours forth on Malay literature (Winstedt, 1961b). In Malaya, the result of it was a series of policies that froze Malay society in a more or less artificial preindustrial state. Most important of these were the style of maintenance of traditional royalty and the Malay reserves. The former created a profound structural change in the power balance of the Malay states. Before the British, a Malay ruler was subject to powerful sanctions he could be assassinated, deposed, killed in war, deserted by his men, or otherwise eliminated if he did not inspire his subjects. Partly as a result of this and partly as a result of the free and flexible Malay social structure, a rajah was something more than an equal-among-equals but very, very far from an Oriental despot of the classic form. He was a chief in war, an arbitrator in peace, but with a limited and often short-lived authority. The British, by imposing the pax Britannica, immediately eliminated the sanctions. No longer could revolt or regicide limit a rajah. In fact, all recourse against him was eliminated. Meanwhile, the British redesigned the Malay royalty in a romantic image of theor own monarchy.

An elite private school was set up at Kuala Kangsar, and from it the brighter princes could go on to English colleges. The traditional Malay rituals and titles were preserved or even elaborated, and much-increased revenues and British payments allowed the rajahs to live in the most royal style - especially those who, like the Rajahs of Johore, were clever enough to seize the opportunities as they came. In short, the traditional Malay society changed from a flexible, rather free, rather violent one, where the rajah had many duties and fewer privileges, to an exceedingly static, class-ridden, inegalitarian one in which the rajah had no duties at all except token arbitration in the famous "matters pertaining to Malay custom and religion," but far more privileges than he had ever previously had.

There would have been nothing especially wrong with this if the Malay subjects had been allowed to move into the modern, British-controlled sector of the economy, leaving the rajahs and sultans as graceful relics of a past civilization. But the British early set up Malay reserves, where traditional rice agriculture was to be carried out in traditional villages, and the modern world was to be excluded. This was to protect the Malays, who were believed to be so inferior that they could not possibly compete on equal footing with Chinese or Indians (to say nothing of the white man!). But by making the Malays secure in this landhold, and by making them less secure elsewhere, the British made the reserves so attractive that they were hard to leave (and the same goes, somewhat less strongly, for non reserve kampongs). To the credit of the British, they left some decent land in the reserves; the Malays were not shoved onto the worst and most worthless land, as were the Indians of North America. But, even so, the reserves were hardly sited in the center of industry and trade, nor in

the areas most favorable for plantation agriculture. It is exceedingly fortunate for Malaysia that its successful plantation crops, rubber and oil palm, thrive on hill soil worthless for food production. (This is due to the British search for crops that would thrive on Malaya's execrable soil - perhaps the best legacy of British rule.) If the British had grown sugar, as did the Dutch in Java (see Geertz, 1963, for the effects of this), or cotton, the situation might have been different. As it was, the rice agriculture fits in neatly with rubber: rice in the valleys, rubber on the hills. An independent small-holder lifestyle could develop, and this was encouraged. Unfortunately, this again served to make the reserves attractive but not successful. Smallholders could never compete with the great plantations - they could merely assure themselves of a sort of isolated security.

Meanwhile, the Malays were guaranteed a thoroughgoing lack of that security in the modernizing sector. Preferential hiring by the British, based on the stereotypes, made this sure. As the stereotypes finally developed, the Indians were hard-working and, when educated, intelligent (though prone to be "ludicrous" in the "aping" of British ways - there is a succession of vicious "Babu-English" jokes). The Chinese were industrious, with an unbeatable business sense and a talent for crafts. The Malays were poor, simple, lazy, in love with rituals on which they spent all their money and thus not to be trusted with much cash, and capable only of subsistence farming and of jobs requiring bravery but not much intelligence - police and army work, etc. (For a good compilation of stereotypes, see Anthony Burgess' Malayan Trilogy).

In short, the Malays were kept from the developing sectors of the economy. In the modern world, where neither subsistence agriculture nor

police and army work paywell and where the opportunities are in business and administration, the Malays were locked into the worst possible situation. On the other hand, theChinese and the educated Indians were given the developing sectors. All this was done with the best of intentions - the British colonials, almost to a man, liked and admired the Malays ("the gentlemen of the east") and wanted to protect them from the Chinese ("the Jews of the east") and other groups. Unfortunately, a combination of economic facts and British beliefs about them conspired to keep the Malays isolated and poor. It was all too convenient for the British to believe that the best way to help the Malays was also the best way to preserve a consolidate British political and economic power....

With the coming of independence, the situation was in final form. Malay society had crystallized into a class of peasant cultivators and a class of aristocrats without many sanctions. Chinese society had crystallized much less; it was made up of a few rich and powerful merchants, many lesser merchants at all levels, and a vast number of fishermen, intensive market-oriented farmers, artisans, etc. In almost every sector of the economy the market-oriented, monetized portion was in Chinese hands, while the self-sufficient and therefore nondeveloping sector was Malay. This applies to the fishery with special strength. The powered boats and the modern equipment in Malaysia today are in Chinese hands. The small, primitive craft are mostly Malay. The Indians, as noted, were coolies or lower-and-middle management workers, with many merchants (specializing in Indian or Islamic wares, as opposed to the general merchants, mostly Chinese) and other workers. And - even after independence the British were still running the economy. Since merdeka, the Americans and Japanese have added themselves to the upper economic echelons, but

the British are still powerful. James Morgan, in the Far Eastern Economic Review (March 6, 1971, pp. 39-40), points out that as of 1967 60% of all profits accrued to foreign-owned firms; 70% of wholesale trade was in their hands; two-thirds of retail trade. Foreign firms had much higher return on capital and much better ability to master said capital. The situation has almost certainly not changed much since - if anything, the coming of the Americans and Japanese has worsened it. Morgan feels the Chinese businessmen of Malaysia may be underreporting their profits, but we doubt very strongly if they are doing this any more than the foreign firms are. Malaysia, economically, is in a neo-colonial situation.

Under these circumstances, it is all to reasonable that the British racial stereotypes have carried over into independent Malaysian life. The worst of all is that the Malays have tended to accept their own inferiority. Mahathir bin Mohammad, rapidly-rising star in the dominant United Malay National Organization (Malaysia's ruling political party), won fame by expressing this view in his book, The Malay Dilemma. (The book was banned in Malaysia as of 1971, but, like the old "banned in Boston" label on pornography books, this fact merely served to increase its sales, circulation and popularity rather considerably.) Dr. Mahathir does no more than express the common view. Most literate Malays we talked to knew the book and agreed with much of it, and the literate Chinese invariably knew of it, believed (often without reading it) that it "proved" Malay "inferiority," and were happy to accept this fact. The book itself would require far more discussion than we can give it here; suffice it to say that the argument for Malay inferiority is founded on falsehoods (e.g., "Intermarriage between Malays and Chinese was extremely rare"

in pre-British Malaya (p. 23)) and on many serious misconceptions of heredity and genetics.[1]

Obviously far more relevant than alleged native ability to the relative difference in progress of Chinese and Malays is the colonial past above out-lined and the existing social organization of the communities. Traditional Malay social organization - class-ridden, without strong intergroup ties and without a good way of organizing groups or corporations or mutual-aid societies - contrasts sharply with the Chinese, where mutual aid and organized bodies to administer it are old and highly developed concerns. Second, the Malays and Chinese see their opportunities in terms of their traditional opportunities - i.e. in their opportunities in those sectors of the economy programmed to fail and to succeed, respectively. Thus in talking to young Malays of Telok Chantek, we found that to a man they planned to stay in their village farming and fishing, to develop new farms in new and isolated areas

[1]The myth of the inferior, lazy, uncreative Malay is easily disproved by examining Malays outside Malaysia. The Minangkabau of Sumatra, but significantly not the Minangkabau of Negri Sembilan, have been in the forefront of Indonesian and indeed of southease Asian literature, business, and other activities for decades. The coastal Malays of Sumatra have done well also, producing, for example, the great poet Chairil Anwar as well as many other leaders in other fields. In much of Indonesia the Malay trader is as cordially envied and disliked for his acuity as the Chinese storekeeper is in Malaya. Conversely, the "natural superiority" of the Malaysian Chinese in buriness and trade seems somehow to have kept down in the homeland. Malaysia's Chinese community derives from some of the most poverty-stricken, rural, undeveloped and above all unsuccessful populations in the country - for instance, the villagers of isolated parts of the Fukien coast.

(on Federal Land Development Authority projects), or to go into government service at the lowest levels, i.e. army, police, etc. Many of them regarded these latter two as alternate, or as sequential, possibilities: "I think I'll go into the army, and then maybe go out on an FLDA scheme...." The Chinese of Kampong Mee were even more unanimous: their ambition for themselves or for their children was invariably to get a good education and try for a white-collar job, preferably in business, possibly in civil service. Needless to say, the whole social order reinforced these career choices, making them the most realistic ambitions under the circumstances. (The usual fate of Kampong Mee Chinese was to keep fishing or otherwise living a marginal hard-working life, but this was no one's ambition.)

The policy of the Malaysian government was to try to bring the Malays up to the economic level of the "other races", i.e. the Chinese. (The Indians are not notably better off than the Malays and most Indians are poorer; the orang asli are worse off; and no one expects the Malays to reach European levels soon, unfortunately.) The policies invoked to do this included somewhat ential treatment of Malays in certain categories of hiring, loan extension, citizenship (it was easier for an Indonesian Malay to become a citizen than for a Chinese or Indian, because of language tests, etc.), education (places reserved for Malays) and other spheres. (For the policies themselves, see esp. Means, 1970, and the publications of the Malaysian government). The reason for their relative lack of success is clear, given the above analysis. The Malays are still on the land or in the army, because of the structure of the economy - not because of Malay indolence. The measures taken to improve their lot

sometimes tend to reinforce rather than to correct this. The Malays, for instance, are the ones who benefit from the opening of new farmland by the Federal Land Development Authority and other agencies. This, of course, reinforces their tendency to look to small-scale agriculture in isolated areas for opportunity. Since the FLDA developments have tended to be in remote areas with poor soil, the prognosis for the Malay pioneers is bad indeed.

It is against this background that one must see the lot of poor rural Chinese in Malaysia, and specifically in Kampong Mee. According to the stereotypes, poor Chinese do not exist - all Chinese are rich businessmen who survive by sharp practices. The poor Chinese therefore get little consideration as a problem group. Needless to say, neither this stereotype nor the stereotype of Malay inferiority is held by the more enlightened or experienced government officials; however, the stereotypes are so widely held that they cannot be ignored.

The Chinese feared oppression by Malays and rich Chinese, and they feared riots like those in Penang (1968) and Selangor (1969). Their fear had demoralized them, coloring all aspects of their social life.

Part 2

Kampong Mee: An Introductory Social Overview

4. Introduction to Kampong Mee

1

A few initial words must be said about our choice of where and how to work. We chose the Chinese fishery of Malaya for two reasons. First, we wished to work in a tropical country, for our interest lay in the area of the wet tropics, where both people and fish resources are poor. Second, most of our previous experience had been with Chinese fisheries, and we wished to see what happened to these in a tropical environment. Our knowledge of Chinese culture would stand us in good stead in such work. Within the tropics, Malaysia, Singapore and Indonesia have large Chinese fishing populations. Indonesia was virtually inaccessible in 1970 for the type of study we intended. The choice between Singapore and Malaysia was made on the ground, after surveying both. Malaysia had more Chinese fishermen; the fishery was more important; and the lives of the fishermen were less influenced by urbanization, which has scattered the Singapore fishermen so that there are no large communities of them remaining. Being interested in studying just such a large community - a fishing town, to be exact - we turned to Malaysia.

Here, Penang Island was chosen because of its concentration of Chinese fishermen and because of the presence of the University of Penang. We received help and advice from the Dean of Social Sciences there, Dr. K. J. Ratnam. The university was planning a broad-gauge study of the fishery, and near it was a fisheries research facility, the Glugor Fisheries Research Institute. We wished to cooperate with the University, and so settled in the area.

On Penang, we lived for a month on the Georgetown waterfront, but found that the fishery was small and the fishermen scattered; there was

no real community. We thus moved to Kampong Mee, because it was the largest fishing settlement in the region, a true fishing town. Here, with the assistance of friends, we quickly found ourselves living in one room of a row-house. This five-room dwelling contained two other families, that of the local fish-hawker (a former fisherman) and that of a fisherman on a large-net boat. There were in all some 14 people dwelling in the house; each of the families (including ours) had two young children and two male relatives of the fish-hawker slept in. One of these, a boy, got a job on a boat and usually slept there during the latter half of our research time. In the next-door unit to the east lived a woman with her mother-in-law, her three children, and a varying number of roomers. On the west lived the father-in-law of the fish-hawker, with his family (wife and 7 children), and the leading village net-maker, a single man who rented a room. Other units stretched on up the street, and many detached atap[1] houses were nearby.

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[1] Atap is thatch made from the fronds of the nipa palm (Nipa fruticans), and is a very superior thatch. Houses made from atap over a framework of poles, or - as here - houses made from thin, poor boards and thatched and repaired with atap, are called atap houses. By contrast, the row houses are thin wood and plaster, with much beaverboard; their roofs are corrugated iron, though often - as in the case of our house - the back part is thatched with atap. The row houses have more local prestige, but the ataps are better built on the whole, and more comfortable, though much less well equipped with such amenities as flooring.

Here we settled into the routine of anthropological investigation. Basically, this consists of continual observation of life in the community, by a person (or persons) living in that community. This is usually known as "participant observation," but of course the anthropologist does not participate in all (or even most) of the activities of the rest of the citizenry. He may participate in a good many, but basically he remains an outsider; he generally comes to be regarded as "our foreigner," but, of course, never as "a part of our group."

The advantage of this strategy is that, by being always around, the anthropologist can make himself a part of the background. He can observe all that goes on, without affecting it too much. In communities that change their behavior and statements considerably when a briefly-visiting outsider is present, the anthropologist can be the only person who can collect valid information; he is around so long that, if everyone continued to play artificial roles before him, normal community life would be impossible. Such a community is Kampong Mee. The outsider making a short visit is treated to a highly selective picture of village life; nor can he hope to see significant events that occur infrequently. The anthropologist resident in the village, however, can see these events, and also see the residents with their masks off. True, the projection of images for the outsider is never wholly dropped - some persons retain it much more than others - but after a while the image projection becomes at best slipshod, and the sensitive anthropological observer can see through it in a way impossible for an outsider on a short visit, or for an untrained outsider even on a long stay.

Moreover, suspicion of the outsider is reduced to a minimum. We were suspected up to the last of having ulterior motives, but suspicion waned

so much as time went on that we were able to collect information on all areas of life - though in regard to the touchiest areas we could trust information only if it came from sources that we knew were not overly suspicious of us. The commonest theory was that we were "CIA spies"; this suspicion automatically attaches to all Americans in Asia today, thanks to the immoral behavior of the U.S. Government and of certain persons - including some anthropologists - who have more or less clandestinely collaborated with it. Neither our rather open opposition to U.S. Asian policy, nor the inherent probabilities involved in stationing a spy in an insignificant fishing village, had any effect on the belief of some of the residents. There was a good deal of romanticizing in the belief - a feeling that the town was a center of international intrigue. Another, and more serious, suspicion was that we were in some way connected with the government in connection with income-tax assessment. This suspicion arose from the fact that the U.S. Peace Corps had recently carried out a study of fishing incomes in Penang state, the findings of which had been used by the Malaysian Income Tax Department in investigations of tax evasion. Because of this we were unable to collect information on incomes from most residents, though many trusted us and reported honestly. We stayed out of village conflicts in so far as possible, but were naturally suspected of being allied with the opposite side by some partisans; thus because we were outsiders, some of the poor suspected us of alliance with the elite, while because of our interests and research the elite suspected us of alliance with those challenging their leadership. The Chinese could hardly accuse us of being collaborators with the Malays, since we lived and worked almost exclusively among the Chinese; but some Chinese did suspect us of association with the Government, and thus with the Malays, since these individuals felt that the

Government was Malay and anti-Chinese. And, of course, we were *personae non gratae* with the most conservative and anti-Chinese of the local Malay community; from most Malays we received traditional Malay courtesy, but on the other hand the only insults, etc., publicly directed at us came from the circle around a local *lebai* (traditional Muslim religious instructor; a focus of conservatism here as in many another Malay community). Last of all, we were widely regarded as hippies (the word exists now in both Malay and Malaysian Chinese dialects: *orang hipi*, *hi p'i*, etc.), because we lived among the poor although we were Americans and therefore presumably very rich. (Our life style was *not* what is called "hippie" in America!)

None of these varied suspicions had very much effect on the field work. They were, in fact, no worse than the general run of rumor in a village where gossip was one of the few genuine recreations and pastimes and where romanticising of spies, international operators and the like was well established by the mass media. Compared to many rumors told by members of factions about each other - and we will have occasion to examine these - the rumors about us were mild, and did not prevent us from getting friendship, hospitality, assistance, and courtesy in all quarters. We were not loved; neither were we disliked. We attempted to fade into the background and appear as inoffensive as possible, and in this we were successful enough to avoid intense reactions. Our children formed close friendships and were not ostracized; children are a good indicator in situations of this kind.

Our communication was limited by the language problem. The language of the Chinese of Kampong Mee was Penang Hokkien. Our studies of Amoy Hokkien were inadequate and, in any case, did not prepare us for this

local dialect. Being used to considering Hokkien as a language for use within the community (as opposed to *kuo-yu*", the lingua franca of the Chinese, and bahasa Malaysia (Malay) and English, the linguae francae between communities), the villagers simply did not think in terms of teaching us the language, or trying to talk it with us. Their own knowledge of the linguae francae was usually minimal. Our knowledge of Cantonese stood us in moderately good stead, and we know some Malay and *kuo-yu*" as well.[1] Not infrequently a conversation would range through five languages. (Our field assistant was fluent in six; multilingualism is the rule among educated Malaysian Chinese.) However, we were far from able to converse easily. This was less handicap than might be expected; most of our work was listening and watching.

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[1]The major so-called Chinese "dialects" are actually separate languages - as distinct as French, Spanish and Rumanian, or bahasa Malaysia, Acheh and Toba Batak. Spoken within Kampong Mee, by one or more families, were Penang Hokkien, Teochiu (very close to Hokkien), Hakka, Cantonese, Hainanese (Hailam), and, as the second language of some *kuo-yu*" (Mandarin). The vast majority spoke only Penang Hokkien and varying amounts of Malay (usually little of the latter). On the other hand, one or two were fluent in English, and there were those who were fluent in Malay and/or in several Chinese languages. Outside the Chinese community there was at least one Tamil who knew Malay and Hokkien, and all knew Malay while some knew English; the Malays were monolingual or had English as a second language - the latter condition being much rarer than among the two other groups, for reasons that will be discussed later.

In addition to sheer observation, we collected systematic data. We censused the Chinese part of the village, copied and recorded economic and catch data, noted accounts and amounts of food, and collected fish and food names according to the methods of ethnoscience (see, especially, Metzger and Williams 1966, Anderson 1967). This latter method is an attempt to find as exactly as possible the meaning of a word; in collecting fish names, for instance, it involves repeated questioning on the order of "What is that fish?" for every fish seen if it is at all distinctive, and then "What kinds of it are there?" and "How do you tell it from other fish?" Thus one builds up the classification of fish as seen by the fisherman - his knowledge of the fish around him. In any case, the systematic data will be introduced, with notes on its collection, at appropriate points.

A last word about methods: the uses of working as a family, with young children, are many, and often underestimated. The greatest advantage is the increase in data collected. One's children really are participant observers in the fullest sense, accepted by and interacting with other children to a degree denied to adults. The observing adults can study child-rearing behavior, development of behavior in children, and indeed all social relations within the household and neighborhood. Moreover, children are greatly loved in Malaysia (as elsewhere), and children provide an ideal entree. It is hard to suspect a family of really nefarious schemes if they have their young children along. Ours (a daughter and son, respectively six and three at the beginning of work) were invaluable in the village. They also remained a good deal healthier and more content than we did.

2

Penang Island is a large island of 110 square miles, rising over 2000', off the northwest coast of Malaya. With an adjacent strip of mainland (the Province Wellesley of British days) it makes up Penang state. The population of the state is 572,132 according to the 1957 census. 234,930 of these live in Georgetown, the main city. With Butterworth, which faces Georgetown on the mainland side, an urban area of some 42,506 people exists. Connected by ferries, the two cities are in effect one. Butterworth is the location of most of the heavy industry, while commerce, government, and population center in Georgetown. The rest of Penang state is rural, with no towns larger than local centers - the drab little rows of shophouses along main roads that are so typical of southeast Asia. The landscape of the island is hilly and broken; flat land is sparse and scattered. Most of it is covered by the city of Georgetown, which is built on a point projecting into the strait that separates it from the mainland. This fact gives rise to the Malay name of the town, Tanjong ("point of land"). The next largest level tract is a former strait, now filled by alluvial wash, which connects the hills above Kampong Mee with the rest of the island. Thus the area of Kampong Mee is somewhat isolated on a peninsula of low hills, cut off by marshy areas from the island proper.

Georgetown was the largest city, after Singapore, in British Malaya. Moreover, it was the first city to be founded. British colonialism in Malaya was born when Francis Light convinced the British to acquire "Prince of Wales Island" (Penang) in 1786. Almost uninhabited at the time, the island immediately attracted Malays from Kedah and Sumatra, Indians from

both southern and northern India, Chinese (especially emigrants from Fukien Province), and traders from the world over. Society was free and easy at first, and these groups lived in harmony, or at least accommodated sufficiently to allow both business and intermarriage. British intervention in Malaya, and above all its final result (i.e. the colonization of the entire southern half of the peninsula), suddenly raised Georgetown from isolated trading settlement to gateway to a huge, unexplored hinterland rich in tin, jungle produce and other goods. Meanwhile, the town had prospered exceedingly on the Dutch East Indies trade - east Sumatra in particular still looks to Penang as a major focus, and the ferry service from Belawan (the major port of northern east-coast Sumatra) to Penang was in 1971 far more reliable and quick than services connecting Belawan with other Indonesian ports. The link allowed in the part for an enormous amount of smuggling, and the occasional free-trader still operates.

As Malaya built its economy on rubber and other plantation products as well as extractive industries, Georgetown continued to flourish, and later attracted much tourism as well. A cosmopolitan and cultured town, it developed a strong sense of pride and an international outlook.

The history of Penang has been covered elsewhere (Purcell, 1928; etc.) and is somewhat irrelevant to this account. However, recent events cannot be ignored, as they have influenced the fishery. Briefly, Georgetown had in 1970-71 fallen from its high estate, and with it the economy of Penang Island became depressed. Confrontation with Indonesia, the rise of Kuala Lumpur and its ports, and the split between Malaysia and Singapore were all disastrous for Georgetown's trade. The capital - once smaller than Georgetown, now twice as populous - and above all its ports were

rising at Georgetown's expense. Singapore's free-port policy and aggressive development had allowed it to capture essentially all of Penang's remaining international trade. Penang was formerly a free port, but its free status was progressively eroded during the nineteen-sixties, and now it is no longer a free port in any meaningful sense of the term (a few commodities of appeal to tourists have low duty still). The port had declined to the status of entrepot to the northwest Malaysian hinterland, and the extremely high-quality road and railroad network of Malaysia allows much that would otherwise flow through Penang to be diverted to Singapore or to the ports of Kuala Lumpur, Klang and Port Swettenham. Fortunately, Penang rallied rapidly after 1971, and has now regained much of its old relative position, with much new wealth and industry.

In addition to this, Penang state was a center of opposition politics. The Gerakan, a middle-of-the-road party, controlled the state legislature. The Gerakan formed from a fusion of rather disparate elements and since our research has joined the ruling coalition front, but at the time of research it was a powerful force in Penang. Its major opposition, especially in the urban areas, came from the democratic-socialist Democratic Action Party, which pitched its appeal primarily toward the Chinese community and was widely accused of "communalistic" policies. The Alliance was powerful - the dominant political group in Malaysia - in a few rural districts, including the district of Sungei Itek in which Kampong Mee lies, but even in the rural regions some left-wing activity existed; there was one state representative, from a rural district, whose affiliations were with the Partai Ra'akyat, a Socialist party of

Malay appeal. Since the Malay community is almost solidly conservative everywhere else in Malaysia, this was an indication of liberal tendency in Penang. The Federal government was said to pass over Penang in development schemes, and the universal belief in Penang was that the Federal authority is "punishing" Penang for its left-opposition voting. (The subsequent switch of Gerakan from opposition to coalition with the Alliance was followed by marked improvement in Federal-Penang relations and in the economy.)

The result of all this was a stagnant economy with high unemployment and even higher underemployment. Unemployment in the state ran around 15% or more by conservative estimates. Among poorer urban Chinese, it was at least 25% (McTaggart, 1968). If one takes into account the number of people who would search for work if it were readily available - i.e. all the housewives and younger men who listed themselves as "not looking for work" in McTaggart's survey - the figure runs around 40 to 50% (McTaggart, 1968, and our own studies in Georgetown). Moreover, many persons are working in jobs that are at best inefficient or part-time and at worst pure makework. Thus there are thousands of food-hawkers operating portable stalls. This is an anachronistic occupation in modern Penang, with its many restaurants and cafes, and in fact is only taken up as a last resort by most of the hawkers. It pays very little and contributes nothing to the general economy. Much of the small-time farming, and - as we shall see - much of the fishing is equally redundant. In short, every form of underemployment exists. If it were not for the incredible ability of the Penang work force - whether Malay, Indian or Chinese - to create jobs out of nothing, the unemployment figure would be far higher than it is.

Another aspect of Penang life that makes it unique in Malaysia, and affects its politics and economy, is its ethnic ("racial") balance. While Malay (West Malaysia) as a whole is 49.8% Malay, 37.1% Chinese and 11.1% Indian, with 2% "other," Penang Island is 31%, 57% and 12% respectively.[1] This is not atypical of unbanized areas in Malaysia, but it gives a distinctive flavor to live in the state.

The fishery of Penang will be described in detail in a later section. Here the following background material should be presented. Penang state lies in the heart of the band of very intensive, largely mechanized

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[1] Figures from 1957 census. The proportion of Malays in the population has risen since, and there are now a majority in Malaya (and Malaysia), according to the 1970 census. Breakdowns for Penang are not available to us for periods later than 1957, as yet. Given the high birth rate of Chinese in Penang state, it is quite possible that the Chinese population has not lost ground to the Malays there, as they have in Malaya as a whole.

The figure for "Malays" in the Penang percentages given above includes also the figure for "others" - in Penang, a number of Europeans. In 1957 the percentage figures for Georgetown were: Chinese, 73%; Malays, 11%; Indians, 13%; others (Europeans and other outsiders, almost entirely), 9%. In Butterworth, the figures were 51%, 24%, 22%, and 3% respectively (Ooi, 1963, pp. 150, 156). In the rural parts of the state there were virtually no "others" and considerably more Malays, but, also, a large number of Indians, as well as many Chinese.

stretching from Kuala Perlis (near the Thai border) to Pulau Pangkor and its area a hundred miles south of Penang. The zone from Penang Island south to Pangkor is particularly heavily fished, and huge fishing villages are spaced closely along the shores. A high percentage of the fish landings of Malaysia, and the vast majority of the large, highly mechanized boats in the country, are along this stretch of coast. At present this zone is badly overfished, and great tension has built up among the fishermen.

However, before investigating the fishery per se, we prefer to give an extended account of the community of Kampong Mee - its fishermen and nonfishermen alike. We feel that knowledge of everyday life in the community is basic to understanding of the fishery.

3

Official records allow Kampong Mee more than two thousand inhabitants. Of these, some eight hundred (the number fluctuates considerably with the fishery) live in the densely-settled core. All of these are Chinese. A few Tamil families live at the inland edge, where the Chinese core fringes into the Malay kampong. The Malay households are scattered widely; the center is a mile inland from the shore of Kampong Mee, but it is no more than a mosque, a National Language (i.e. Bahasa Malaysia) school, and a miniscule Chinese shop. The houses of the citizens are scattered among fruit and rubber trees, and there is no separation (except the line on the official map) between Kampong Mee and the smaller Malay settlements that are its neighbors. A few Chinese shops occur here - one per relatively concentrated zone of houses - but in general the most rigid segregation prevails. No Malays live in the densely-inhabited

sector of Kampong Mee; no Chinese except small shopkeepers live in the Malay zone. Northward, however, Kampong Mee gradually gives way to a marshy region of scattered houses, and here Malay and Chinese houses occur in the same zone - though never very near each other.

There is no way (except the formal lines of the maps) of telling where settlements begin and end, except where the sea puts a barrier to housing. To the northward in particular, along the main road, a scattering of houses links Kampong Mee with the rest of Penang. Likewise, settlement (almost entirely Malay) follows the main road westward after the road bends in a L in the center of Kampong Mee. This continuous strip of Malay (west) and Malay-Chinese (north) rural settlement links Kampong Mee with the district sea, Sungei Itek. The latter town has a small market, several Indian and Chinese shops, and restaurants, a large number of modern, well-equipped schools, meeting halls of political and social associations, and minor public offices such as a post office and a fire station. Near it are a few factories and other facilities; these orient toward Georgetown, and have little impact on the tranquil rurality of the district.

As a whole, the Sungei Itek district is dominated by fishing and very small-scale farming. The factories and facilities bulk larger in official statistics, but have little relation to the lives of most of the district's citizens. The few plantations are locally-owned (much of the area being owned by Kampong Mee's richest individual, Tan Tik-Soon) and not intensively managed. Most of the economic planting consists of the fruit, coconut and rubber trees of the Malay smallholdings, which turn most of the area into a man-made tropical forst. Small rice areas, all Malay subsistence plots, occupy the lowest, flattest land;

Chinese orchards and farms (vegetables, poultry and pigs) are widely spread. Kampong Mee depends on its fishing, and several minor settlements of predominately Malay population also have considerable fishing activity, administered (in so far as it is administered) from Kampong Mee.

The landscape, with its fruit trees, rice, brushy hills (abandoned or casually-amanged rubber plantations) and shores, possesses the tranquil beauty for which Penang, "the pearl of the Orient," is justly famed. However, when we commented to this effect to a grandson of Tan Tik-Soon (the grandson being well educated and a businessman in Georgetown), he said "You call it beautiful; we call it underdeveloped." There is much in this remark. Much of the district's beauty is the beauty of decay - the abandoned rubber plantation that occupies the hill above Kampong Mee, for example - and all of it is related to the decline of the old rural subsistence pattern. Population explosion, the money economy, competition from modern farming, and other forces have made small-scale rural life a losing proposition for a district so near a modern city. Poverty and unemployment run high. Much of the landscape is the result of failure: a coconut plantation killed by salt incursion, a factory district with all to much unbuilt cleared land where factories were projected, fishing villages whose decaying appearance reveals the plight of the fishery. Aware of this, both the national and the state governments have formulated schemes for development, and the beautiful underdevelopment of Sungei Itek district is beginning to fade. In addition, there are pockets of prosperity: well-managed small farms; the headquarters of a dissident mystical sect of Islam, whose Malay members belie the colonial stereotype of Malays

by working with all the enterprise and efficient neatness that Weber ascribes to the Protestant ethic; and the wealth, born of extensive holdings and business connections, of Tan Tik-Soon, and of his counterparts of Sungei Itek. These local successes have not damaged the beauty of the environment - something which cannot be said for the governmental schemes - and may point the way for development strategies more closely attuned to preserving the better aspects of rural Malaysia, if only for tourist-attraction purposes.[1]

Kampong Mee partakes of the general economy of the district, in spite of its fishing emphasis. The Malay community has some rice-paddy land, but more land under coconut, rubber and fruit trees. The fruit trees are an important subject of study in themselves (Allen, 1967; Burkill, 1966; Anderson, 1971c). They are grown in layers - the tall durian (upland) or coconut (lowland) emerging from a canopy of rambutan, mangosteen, jackfruit, duku, betel palm (the "pinang" tree from which the island gets its name is nowhere more in evidence than in Sungei Itek district) and other trees. Below this canopy is an understory of banana, guava, cashew, jambu (Syzygium spp.) and other economic plants. Lowest of all are vegetables and ornamental plants. Advantage is taken of the "edge effect" wherever sunlight comes down - along roads and the edges of padi land. The result is an ecologically sophisticated

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[1] Appearance is a matter of particular importance for Sungei Itek, for it is near a major airport which gives the average visitor his first close-up sight of Penang Island, or even of Malaysia if he is flying down from Bangkok. There is also a weekend resort at Kampong Mee.

agriculture second to none in the world. The houses are shaded; no built-up land goes to waste; diversity in height and species allows much higher production per unit input; the soil is protected from lateritization; and the environment is kept neat and beautiful. The Chinese have picked up much of this pattern, though they prefer to increase labor input and productivity at the expense of aesthetic satisfaction. Below the trees, chickens (marvellously tough of flesh) and ducks wander at will, as also goats (in the Malay settlements) or pigs (in the Chinese; but usually penned). Intensive chicken and pig farms are operated by a few Chinese.

Many young men now work outside their communities. The Malays find openings most easy to discover in government service; some go out on Federal Land Development Authority schemes, in which farmland is opened up from forest. The Chinese, finding government employment hard to get due to preference for Malaya in hiring, and also possessing connections with the business world, find jobs in trade and commerce. However, the economy of the region is dominated by agriculture and fishing. In Kampong Mee, there is only one person (the aforementioned grandson of Tan) who commutes to town work. The rest of the Chinese community is involved in fishing, agriculture or supportive occupations (driving fish trucks, operation stores, etc.), as will be described more fully below.

The Chinese center of the village is located on the shore of a small bay, and lies between a swamp and a steep but small hill. The swamp puts an effective stop to northward expansion along the shore; an inextensive but typical mangrove swamp, it has its own stores of

persons drowned or missing. The hills limit southward expansion. Occupied by an abandoned rubber plantation and a WWII fortification, the hill directly over Kampong Mee is believed to have spirits and ghosts resident on it, and is feared and shunned. It has reverted to jungle. A small tank for water supply and a tiny shrine to its leading spirit are the only evidences of recent human activity, except for the occasional tapping of the neglected rubber trees. Kampong Mee extends from the tip of the point made by the hill's fall into the ocean around to the mangrove swamp. Westward and northwestward, it merges into the previously noted rural tissue.

The main road around the peninsula runs south from the circum-Penang highway to Kampong Mee, L-bends westward, runs on to the Malay fishing village of Telok Chantek, and bends northwestward to Sungei Itek. In Kampong Mee, two roads branch off: one runs on through the village, winding in a semicircle and ending on the hill at the last houses; the other runs south over a pass in the hills to the small fishing settlements on Telok Nyior. All of these roads are paved. Dirt roads run to two fish-fertilizer plants; houses off the road are connected to it by mud tracks, some passable to cars, others foot trails only.

The core of the village consists of some 110-120 houses, depending on just where the line is drawn (see below, next chapter). Most of these are private houses, many of them row houses built by Tan Tik-Soon. They range from a tiny shed, a few feet high and open to the elements, to the enormous marble-decorated mansion of Tan Tik-Soon. Offshore, when the fleet is in, anywhere from one hundred to 150 boats are lying.

The business section of the village follows the main road till it bends, then the small village street, as it parallels the shore. The businesses include a restaurant and associated concessions (of appeal only to tourists and local well-to-do); six Chinese coffee shops and one small Malay one; three Chinese general shops; two pool halls, one primarily for the Chinese and one more or less integrated (both Chinese-owned); an Indian barber shop; two fish assemblers' sheds; the headquarters of the fishermen's co-operatives (five of them share one room, one has its own headquarters); and a netting stand at one of the fish assembler's. Private houses are interspersed with these. The most important businesses, disregarding the restaurant as irrelevant to village life, are located at the L-bend of the main road, where the village street forks off; these are the major Chinese shops and the two largest coffee houses. In addition to the permanent businesses, varying numbers of hawkers and food vendors pass through with varying degrees of regularity. Food at the coffee houses is supplied mostly by concessionaries, the coffee houses providing primarily drinks; the two larger houses have food concessions, and share a mee (mi, flour-and-water noodles) concession. The food provided is Hokkien. A smaller house has a concession run by two brothers, half Malay and half Tamil, who supply a few Tamil foods; and the Malay coffee shop is supplied with snacks by local Malay households. The three smaller Chinese coffee shops do some cooking on their own. Hawkers selling mee, sweets, fruit, saté, and miscellaneous snacks come every day; some (especially those selling fruit and sweets) appear every day, others (especially the Malays who sell saté, etc.) only occasionally. Hawkers of toys, soap

and various other things appear on occasion. The general shops carry staple foods and vegetables; meat and fish are provided by hawkers - a pork-butcher who comes on a bicycle from Sungei Itek, and a fish-hawker (the one with whom we stayed) who pedals a long bicycle round through local villages. He does a poor business, since most people have the fish they save from catches, and other buy at the beach. No other meats are available; for beef one must go to Sungei Itek; poultry and goat are raised. (Essentially every family has poultry adequate to its needs. Eggs are often bought, though, since the local poultry are poor layers.)

A temple - a branch of the well-known Snake Temple of Co Su Kong - was being constructed while we were in Kampong Mee. A fishermen's training school was also under construction - it is a national project, and is awaited eagerly; it should do much for the village. Otherwise, public services consist only of a National Language school and a mosque at the center of the Malay settlement. As of 1970-71, Chinese desiring education, worship, a post office, or any other public amenity had to go to Sungei Itek (or farther).

Kampong Mee has a letterbox, a telephone (often nonfunctional), and a bus that runs every 40 minutes to Georgetown.

In addition, taxis (most of them unlicensed) appear when the fleet come in to take fishermen to town if they so desire.

Skinner, in a classic series of articles (1964-65), has ably described the hierarchy of central towns in the traditional Chinese countryside. A similar hierarchy exists in Malaysia. There are four levels of town:

1) Villages, such as Telok Chantek and Telok Nyior. Services available: the minimal staple foods; a meeting hall; a bus stop or other way of getting to larger towns; snacks and a few drinks. Often this is all concentrated in one Chinese shop, which has a meeting room, is at the bus stop, sells canned milk, rice, and other staples, and has coffee, carbonated soft drinks and locally-made Malay snacks.

2) Larger villages like Kampong Mee. Full range of staple commercial goods including wide variety of canned foods, locally-grown vegetables, curry pastes, etc. Cafes with adequate food selection for anyone needing to eat out. Telephone and sometimes other public utilities.

3) Towns like Sungei Itek. Market, covered, with full stock; shops with kitchenware, hardware, and other universally necessary durable goods' more choice of restaurants; government offices and stations; schools; utilities; small movie theatres, etc.

4) Cities.

In general, the important fact seems to be this: at Level 1 villages, one can get only the daily necessities of a person who raises his own food (or a lot of it). At Level 2, one can procure the daily necessities (and minor luxuries like cheap toys) of persons not partially self-sufficient in food. At Level 3, one can obtain things needed daily but not normally bought every day. At Level 4, one obtains major luxuries and such necessities as are bought only infrequently.

In general, this corresponds closely to the system in rural China (cf. Skinner, and also Potter 1968, Anderson 1970b), perhaps partly as a result of the Chinese domination in the small-shop sector in Malaysia, but primarily because such a hierarchy is a highly efficient one, tending to arise in all rural regions, as central-place theory in geography shows (cf. again, Skinner's discussion).

The services of Kampong Mee are adequate most of the time, except that children must go to Sungei Itek (or near it) to school, and fishermen starved for entertainment go to Georgetown for shows, girls and other relaxations. In practice, trips to Sungei Itek are made rarely and only for specific shopping, while trips to Georgetown are made for entertainment (and that only very rarely except in the case of single young fishermen); major shopping like serious clothes-buying, and religious services. Women in particular, being bound to the house but also in charge of religious life, do almost all of their traveling for religious reasons - seeking spirit mediums who can cure them or their family of ills, forecasts future events (including the outcome of the ekor "numbers game"), serve at life-crisis rites, or help with worship at temples. Such trips are infrequent. Since so many staples - vegetables as well as fish, etc. - are hawked from door to door, many women never leave the house (and its yard) for days on end, and then go no farther than the nearest shop, perhaps 50 yards away. Trips of more than a quarter mile are real events, often coming only once every month or two, for even the better-off residents of Kampong Mee. This applies much less to the young men than to others, but even the young men have little contact with the outside world except with that sector of it which is represented by the cheaper theatres of Georgetown. On the other hand, moving to follow the fishery or to take up casual jobs outside it is so common and regular that every village family has had direct contact with the world outside Kampong Mee.

This is connected with the fact that the development of Kampong Mee as a fishing port is primarily a recent affair. The village really began to flourish with the introduction of trawling in 1962. Previous to that, it had been a tiny hamlet with only a few families - including all of the

present elite, then far less elite, since their money has of course come through the growth of the fishing industry. Even now, moving into and away from the village are common events, and many of the fishermen (specifically, the entire bag-net fishery) are seasonal, appearing with the great schools of kembong and following them away. These fishermen come as single men, leaving their families (if any) elsewhere - usually in Pulau Pangkor, center of the fishery - and renting rooms or sleeping on the boats. Some stay to settle in Kampong Mee, bringing their families, when they become master fishermen or otherwise get ahead in the field.

In general overview, Kampong Mee is not a pleasant place. The houses are poorly constructed and barely maintained. Dust, garbage and burning sun or mud-producing rain are dominant features. The town is a haphazard agglomeration of houses built without relation to each other or to water and sewage facilities. The water is local and contaminated, resulting in high disease and parasite loads. The sewers are the natural drainage, which is poor at best; standing water, with its load of sewage, is characteristic. The distance to schools and other facilities creates an isolated, uneducated populace, but the ebb and flow of people prevents the development of any sense of community or local culture. The fishery is declining fast, while political and social conflicts are intensifying. Without traditions, without entertainment, without secure or profitable employment, without peace or social harmony, the villagers are an unhappy and conflict-ridden group. Traditional culture has long given way to modernization here; yet development has not occurred. Modernization without development, here as elsewhere in the world, has brought rootlessness, alienation and bitterness.

5. The Social Situation of Kampong Mee

1

The district of Kampong Mee has, officially, more than 2000 residents, about half Malay and half Chinese. (There are a few Tamils, all engaged in the toddy business.) Of these, as noted above, only some 750-800 live in the more or less densely settled core of Kampong Mee. All these are Chinese except for a few Tamils on the fringes.

The core of the village, i.e. the densely settled Chinese part, consists of about 115 houses, depending on where the line is drawn. Of these about half are old atap-and- board constructions, while half (an ever-increasing share) are row houses with around six units separated by very thin partitions. Four houses are more solid constructions: the mansion of Tan Tik-Soon, and the bungalows of his son and two families who are friends of his. All these more solid houses and all the row houses were built by Tan, who owns most of the land in the village; he sells the row houses (ca. M $2000-$4000) or rents them out at varying, often low rates. The houses of Tan and his two friendly families are on a hill, above and separate from the rest of the village; they enter little into the village picture. His nephew Tan Hiap-Oh lives in the village proper and enters more conspicuously into village life.

The "true" Kampong Mee is bounded on the north by the mangrove swamp; on the east by the sea; on the west by a strip of undeveloped land, a sort of no-mans-land, separating it from the Malay Kampong; and on the south by the hill base. (This excludes the three large houses on the hill.) Within this low-lying area there were, at the time of work, 110 regularly occupied houses, as well as a few vacant or intermittently occupied. In these 110 , as of February 1971 when we surveyed, there lived 747 people - almost exactly 7 per house. Half the houses contained nuclear families - parents and children

or smaller units. The other half was primarily houses in which other kin dwelt, but in 17 of the houses, rooms were rented out. Most of the families involved were nuclear, and several single men rented. Our household was rather an extreme case - a small row-house unit, with five rooms plus a walled-off storage area, contained three families of four, four and six persons respectively - the last being an extended family. However, it was not the most extreme case, for there was one old and very small row unit in which lived a single woman and three nuclear families each including seven persons - a total of 22 persons in one house; and Tan Hiap-Oh had used his bungalow to house all his relatives that he could persuade to live there, a total of 28 (counting Tan himself). The details of houses are summarized in the accompanying table (following page).

Separating "house" and "household" is easy in this case. The household, as we use the term, is the Chinese chia (ke in Hokkien). The word ke in Penang Hokkien now normally means a business establishment, as in the term "towkay" (thau ke, 'head of a business establishment'), but we here resurrect its root meaning. In this narrow or original Hokkien sense, it means the people of one family (plus any dependents) living in one residential unit and sharing one hearth. The large, raised hearth or cooking place, residence of the Kitchen God and true center of the ke, is perhaps the most important defining item - with interesting qualifications. Thus when several families are living in one house, they must of necessity all use this raised area; but they are expected to have their own small kerosene or natural-gas stoves to put on it, rather than using the holes provided in it. Before the advent of small stoves, burners or holes were assigned. Further, they are expected to have their own cooking ware, and are assigned an area of the kitchen to keep it. Moreover, each household has its own room for sleeping.

Household Survey Results

Surveyed: 110 households, all Chinese except for 3 Tamil (2, 5, 8 persons) and 2 half-Malay, half-Tamil brothers living together.

Additional information: some 20% of heads of families originate in Batu Maung, the rest elsewhere. 27 families include someone with a "Khei" (religious adoption; godparenthood) relationship. This involves 60 children: 34 with relatives as Khei parents, 16 with gods, 10 with friends. 15 families have only 1 Khei relationship within them, 8 have 2, 2 have 3, 2 have 4.

Most older villagers have had no schooling. Most of the rest stopped after six years of Chinese primary education. Some stopped after each year of same; a few had secondary education. Most primary-school-age children are in school, all Chinese except for a very few in English and (from one Tamil family) Tamil schools. Most secondary-school children are in English schools. Only 4 families have members with education beyond Form 5 or equivalent, and the only poorer family among these is counted because the head, a young chicken farmer, went for a brief period to a poultry institute in Taiwan.

No. of Households

Number in Household	Nuclear	Fams. with Married Children, and/or Godparents and Godchildren	Extended families (i.e. with collateral kin)	Multiple fams. in one house
1	4(single men alone)		1	
2	2	1		2
3	10	1		3*
4	6	4	2	
5	4	4	1	2
6	5		2	1
7	7	2		1**
8	2	5	1	1
9	5	3		2***
10	6	1	1	
11	1	1	2	
12	2		1	
13	1		1	1
14			1	1
15			1	
16				1
17				
18				1
19				1*
20			1	
22				
28	55	22	16	17

*2 houses with 2 nuclear families each, w. 3 and 2 persons respectively; 1 with an extended fam. of 3 and a nuc. of 2
** Nuclear with 4, and 5 single fishermen renting rooms
***Nuclear families, 8 and 5 people, renting to 3 and 6 fishermen (single men) respectively
*three nuclear families, with seven people each, and a single woman.
ALL nuclear families with fewer than 4 children are either young families just starting to bear, or families of which several children have moved away.

Such rooms (three of them to the standard house) have a second floor 1 1/2' above the true floor, and on this second floor the sleeping gear is laid out. They are thus derived from the traditional Chinese bed - a walled-off platform in a sleeping room - and might be thought of as beds rather than rroms. They are small (10' x 10' or less - i.e. barely room for the sleeping mats of a normal-sized family) and are not used except for sleeping, dressing and similar private activities. During the day they are empty, dark and closed.

By this definition of "household," there are 130 among the 109 houses - counting single men living together as one "household," though these are merely aggregations of fishermen. In addition, several single men live on their boats, but they all maintain regular households elsewhere, usually in Pulau Pangkor, whence they come for seasonal fishing.

The average number of children per family is about four, nor does this fully indicate the seriousness of the population explosion. Older children (over 17 or 18) move away. Moreover, many of the families have not had anything close to the number of children desired, since Kampong Mee's population is so heavily composed of young fishermen and other recent in-migrants. Families questioned usually plan on having about six children, and those who have completed childbearing usually have at least that many; several families have eight or more children. This situation is typical of rural Malaysia, Chinese or non-Chinese, and is the main cause of Malaysia's very high population growth rate - more than 3% per annum. It is a contributory factor to the large unemployment and to the great pressure on rural education, sanitation and health resources. By all indications, the employemnt situation in Malaysia is bound to worsen when the present crop of young people reaches working age. The rural areas are overpopulated,

or soon will be, thanks to government land-development schemes; there is little chance of finding work on the land. A flow of young people of the cities, already developing, may reach Latin American proportions in the next decade. Fortunately, the urban population is not quite so prone to reproduction. However, the seriousness of the population explosion (one of the most drastic in the world) cannot be overestimated; it is certainly providing a major check on meaningful economic growth, and will very possibly provide a worse check in the near future. It is imperative that Malaysia immediately institute a major birth-control program if it is to prosper. This affects the fishery as it does other segments of life; the fishery is rapidly getting more and more crowded, leading to overfishing, reduced yields per man, etc., as will be discussed elsewhere.[1]

The reasons for desiring so many children are rather simple. First, the traditional Chinese desire for a son to carry on the family line is found in full strength. Without a son, the ancestral rites cannot be continued - and thus the person who failed to sire a son will have no one to send him food, money, etc. in the afterworld. Thus families continue to produce children until they have one son, and almost invariably until they have two or three, as insurance in case one dies. Second, and far more important, the Chinese (and no doubt other rural Malaysians)

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[1] Other rural pressures on the resource base - such as soil erosion due to too many people trying to farm the land, and deforestation for the same reason as well as because of commercial overcutting - are even more serious in much of Malaysia, but not in Kampong Mee.

feel that, in contemporary Malaysia, security is possible only if one has a large family to support one. Both economic and physical security are involved. Given the employment situation and the vast gulf between rich and poor, the poor Chinese find that having a large family, with many hands to work, affords the only hope of a decent income. One at least can find a good job, and the others can do piece work or some similar tasks to support themselves. Feeding and educating children is expensive, but education can be dispensed with and food produced at home. As for physical security, the racial, political and other conflicts ("other" including, for Kampong Mee, the battle between trawlers and other fishermen) are so serious that all poor rural Chinese expect them to intensify and to affect them specifically. They thus have many children for the specific purpose of guaranteeing a loyal defensive force - a home-bred army.

Under the circumstances, these considerations are all to rational. It is clear that security, rather than specific antinatalist measures, is the requirement for controlling the population explosion in Malaysia. Evidently the low birth rate in Singapore is the result of the greater economic and social security there more than a result of the excellent birth-control program - though that too has clearly been important.

2

The reader may wonder what effect this crowding has on household life, or, more generally, what are the ways of managing space and interpersonal relations within these households. We have discussed this elsewhere, in a theoretical context (Anderson, 1972a), but a summary here, from a slightly different stance, seems needed.

The typical Kampong Mee house has a large front room, a back kitchen, and two to four sleeping rooms. Whether it is a dirt-floored atap or a modern row house, it will deviate little from this arrangement, though very poor houses will tend to have only one or two sleeping rooms, often curtained off rather than walled. (Even in the best row houses, the interior walls are paper-thin and their upper parts are mosquite screening, to allow passage of air into otherwise very close rooms.) As one enters the house, one walks directly into the main room. On the opposite wall, facing the door, is the household shrine, flanked by the decorative objects, souvenirs, photographs and similar items which the household possesses. A short connecting hall leads to the kitchen. Sleeping rooms bud off the main room or the hall. The main room and the sleeping rooms are kept extremely neat and orderly at all times. The kitchen is less so, and in any case is the center of much more activity, which gives it the appearance of mild disorder characteristic of "lived-in" environments.

Each of these rooms has its associated activity. The sleeping rooms are for strictly private activity, as previously noted. (Not everyone sleeps in them. In our house, the two males not part of any nuclear-family unit slept in the main room and the kitchen.) Personal possessions are kept in them. The main room is primarily a formal "front region" (Goffman, 1959). It is the scene of interaction with strangers, or of any formal contact with the universe - any major ceremonial transaction, whether with man or gods. It has a strong religious aspect; as the site of the main family shrine, it is a doorway to the other world, as well as the point of entry for the outside social sphere. These two facets are definitely part of one function, rather

than being perceived as separate functions. The main room is the ceremonial connection room - whether the formalized communication is with alien humans or with the alien world of the gods and the dead.

As such, it is formally set up: chairs backed in rows against the wall; decorative table; any art the family may possess. Anything valuable or beautiful is kept in the front room, usually as near the shrine as possible. Chinese who know Western habits keep magazines on coffee tables here, but the traditional Chinese leave such things in the sleeping rooms.

The front room is not reserved purely for formal communication, however. Men sit in it to relax. Children play in it. Since a television set is a major valued good, it is in the front room, and thus everyone gravitates there when the television is on. Our house contained one of the very few television sets in the village - it belonged to a relatively well-off single man next door, who may well have left it in our house so that it would draw off the large numbers of children who otherwise disturbed his net-making work. This television set was in the front room, and when turned on attracted a vast audience, especially when children's programs were shown and the local children (fifty to sixty for favored shows) gathered.[1] Malay and Indian programs were sometimes watched, but Chinese programs almost never. The significance

[1]The favorite shows for both adults and children were British and American though only one person in the audience pool knew English, and hers was inadequate for following the more difficult material.

of this will be discussed below. The favorite program, in terms of audience size, was the children's series "Monsters from Outer Space." Even so, the front room is far less often used than other parts of the house, and frequently its total use during the day is by individuals walking through it and by the lady of the house when she sweeps and dusts - a task carried out faithfully at least once a day.

The kitchen is the center of daily life in the house. At one corner of it, and walled off for bathing purposes, is the water tank - a concrete tank of about 4' x 5', and some 3' deep. Water runs into this from a tap, the only water source in most houses. The water is scooped up for bathing (one bathes by pouring water over oneself from the scoop) and other uses. Dirty water is not allowed to fall into the tank; on the other hand, fish are sometimes kept in it, for food or decoration. Just outside the walls round this tank is the washing area, often with a deliberately roughened concrete floor as washing board. A short set up, to prevent water sloshing, separates this from the kitchen proper. The water and washing areas are often outside the house in a shed that adjoins and connects with the kitchen. Also, just outside is the stone or concrete-floored area where fish are cleaned, vegetables cut up, spices ground, and meat sliced.

In the kitchen, life centers around the big brick or concrete stove or hearth, a raised block some 3' x 3' x 5'. Modern stoves have replaced it in some wealthier houses, but not in Kampong Mee. Its top has various kinds of depressions and holes for cooking fires. It is now universally supplemented by small kerosene stoves, and in the newest houses it has shrunk to a support for these - a mere stove-counter

against the wall. In older houses it still exists as a free-standing block, but is used less for charcoal and wood fires (though it keeps this function) than as a support for the kerosene stoves.

In addition to this, kitchens contain shelves, tables, and at least one screened cabinet for storing food. (Only the richest houses have refrigerators or other electrical appliances in the kitchen.) Near this, on a table, will be the cooking ware.

Eating takes place in the kitchen, even during festivals and ceremonies; the only food transaction in the main room is the obligatory serving of drinks (coffee, tea or soft drinks) to formal visitors. Besides eating, most of the women's activity - cleaning, caring for children, washing, mending, etc., as well as virtually all socializing - takes place there. Only on the most formal or sacred of occasions will the women socialize in the front room. On ordinary friendly occasions, everyone congregates in the kitchen; on more formal ones (or on occasions when socializing is definitely split along sex lines) the men congregate in the main room, the women in the kitchen. Men take naps, do odd jobs and do a great deal of their socializing in the kitchen. The Kitchen God - whose function includes reporting on the family to the higher deities - and two or three deities that are worshipped by the women will be in the kitchen; the Kitchen God's residence is the stove or hearth block.

Thus in the household, space is managed according to definite rules. In addition to the above, there are others even more important in reducing interpersonal conflicts.

In the first place we may list the absolute privacy of the sleeping rooms. No one except those who regularly sleep there - usually a married

couple and young children - can ever go into a sleeping room except under very exceptional conditions, e.g. close relatives visiting. Indeed, no one except the regular users is supposed to look into a sleeping room, or to listen to anything going on there. (The paper-thin partitions make this last impossible, but one is supposed to ignore what one cannot help hearing.) Conversely, it is antisocial to spend much waking time in the sleeping room; but it is always there as an absolute refuge and private zone.

In the second place, there is the fact that men are usually outside of the house during the day, either working or at the coffee house. However, they spend almost all nonworking time in the house. Children tend to play outside - something that can be done every day in Penang, with its hot climate and infrequent day rain (most rain comes at night, especially between about 11:00 p.m. and 6:00 a.m.).

Thirdly, child-rearing patterns minimize the disruptive effect of children. This will be discussed further in a later section, but here we should note that any adult or older child can mildly discipline a child, and thus feuds over "undisciplined" children do not arise, nor do protests by parents when their child is disciplined by an outsider.

Fourth, a rigid sexual morality within the family and village, coupled with a relaxed attitude toward men's visits to town (and town girls including prostitutes), reduces sex-based conflicts. There is minimal hope of sexual adventure in the village, maximal opportunity in the city, and any conflict is exported. Girls have less leeway in this, but they marry fairly early, or did until recently. The one public sexually-based battle in Kampong Mee during our stay was an exported one,

from city to country this time - a Georgetown man set up his mistress in Kampong Mee and was discovered by his wife. She appeared one day with her mother, and together they chased the man out of his mistress' house and through the main street, to the infinite delight of the entire assembled village. Such public action made the man lose face to the maximum possible degree, and no doubt had the desired effect for his wife. Other sexual disruptions in the village were given minimal exposure and had minimal effect on life. Further points in this regard will be made in a later section.

Fifth, the entire code of interpersonal relations minimizes open, disruptive conflict, and maximizes control of behavior. The man who can control himself and not stir up trouble becomes socially admired - which is often to his economic as well as social advantage. A number of social rules, both general and specific, circumscribe interpersonal transactions; everyone knows what is expected of him, more or less, in ordinary situations.

To these rules of social behavior we now turn.

3

The structure of kinship, traditionally the favorite concern of anthropologists, is logically the first domain to discuss. Breaking a tradition, we will not deal with kinship terms or the formal system here. Kinship in Hokkien society is amply described elsewhere (Freedman, 1957), the kinship terms given in Rodman (1955) and Freedman being those in formal use in Kampong Mee as elsewhere in Malaysia (with appropriate dialect soundshifts). The terms being quite adequately explained there, we do not feel it necessary to give them here.

It should, however, be noted that these terms are terms of formal reference only, and that is daily speech the terms - especially of address but also of reference - are the ones made up by prefacing a to the root syllable of the word. These terms are extended, as in Cantonese (Anderson, 1970b), to nonkin on the basis of seniority - much older men being called by terms for father's father, less old but still senior men by terms for father's elder brother, and on down to children addressed as one does one's own; the system is described by us elsewhere (Anderson, 1970b), the Cantonese extensions being the same as the Hokkien. Apparently this is universal in Chinese society, and has received far too little attention from kinship students. Indeed, the whole kinship usage system (as opposed to the formal reference system) has been neglected. However, this monograph is not the place to discuss so specialized and complex a topic.

Much more relevant to our concerns here is the actual behavior of kin toward each other. The extent to which behavior and kinship terminology mirror each other is controversial. In Chinese society, the situation is simpler than in most - the Chinese kinship terminology being completely descriptive, with separate terms for every possible segmentation of the kin group, it is not surprising to find that there are differences of behavior toward different kin categories. On the other hand, the relation of named groups to behavioral categories is not without interest, especially in view of the extensions of kin terms to nonkin.

The expectations of behavior are reasonably well known. In traditional Chinese society - which still persists, in regard to these features, throughout the Malaysian Chinese community - seniority and

sex are critical dimensions, in that order of importance. Younger defers to older, and female defers to male. The elder of a pair, be he father, elder brother, elder cousin or other kin, should guide, protect and educate the younger; the younger should respect, yield to and obey the elder. Male-female relationships are similar. Modern life has added the expectation, in some quarters, that husband and wife should love each other in the romantic sense; but in Kampong Mee and elsewhere among the fishing villages, romantic love was still an alien custom, and husband-wife relationships (though usually warm and loving) were still structured according to expectations of respect, deference and accommodation rather than expectations of romatic passion. In traditional China, parents chose spouses for their children, and this pattern continues to some extent; now most marriages were based on free choice by the children, but with a very heavy component of parental search, encouragement, approval, etc. Since, in the old society, the wishes of the children were taken into account at least by the poor, one wonders whether the differences are in behavior or merely in statements about it. In any case, respect and deference to seniors persists.

It is, of course, this which is generalized when kin terms are applied to nonkin. When a person addresses his senior by the terms for elder brother, he is implying friendliness, respect and deference - creating a friendly relationship, but one characterized by willingness to respect and obey. One would not so address a social superior, usually, because the friendly component would be lacking; nor a close friend of one's own age, because the obeying component would not be there.

Friends of one's own approximate age are addressed as brothers, though - older or younger according to specific age - and the implications of solidarity and mutual trust and respect are clear.

Within the general framework, in actual behavior there are conflicts and tensions, roughly those found elsewhere in Chinese society (cf. Newell, 1962, for Malaysian data; otherwise, by far the best sources are the novels, notably Dream of the Red Chamber. See also, for general aspects of kin behavior, Anderson, 1970b; Diamond, 1969; Freedman, 1958, 1966; Gallin, 1966). The most serious tension zone is that around the married couple as a unit and their parents, and specifically the conflict of wife and husband's mother is famous. The wife, being an outsider, is often subjected to ill treatment, especially until she has produced a son. Ideally, the wife should do what she is ordered and look on her mother-in-law as her mother, now that she is away from her true mother's house; while, similarly, the husband's mother should regard her as a daughter to be cherished and instructed. Actually, the husband's mother often treats her daughter-in-law as a servant or drudge, and the wife responds with bitter but inevitably repressed anger. In traditional China, this often led to suicide or attempted suicide; this brought extreme loss of face to the husband's family, and, if the suicide was successful, the ghost would haunt the husband's mother. Such episodes - especially attempts - were once not uncommon (cf. Anderson, 1970b). However, in Kampong Mee, neolocal residence and nuclear family were typical, and brought the husband and wife away from the husband's mother. Even in families that were an exception to this, the husband and wife could always move away, not only out of

the house but out of the town entirely. As a result, tensions among families which did stay together were not serious.

Another classic tension zone, that between brothers (cf. Lin, 1947), was also thus minimized. Sibling conflict could always be resolved by one sibling leaving the area entirely; there was no pressure to stay together to keep up the family holding intact.

Needless to say, conflict did arise in the families of Kampong Mee. When it did, leaving home was a standard way to resolve it. Young men - down to early teens or even lower - could always sleep on the boats if involved with the fishery, or otherwise stay out of the house. Divorce was easy and sometimes resorted to. Girls could leave home to live with distant relatives (or even by themselves) and find jobs there.

Since we are concerned here with the fishery, it is necessary to state only that this method of resolving tension increases (and is in turn made more typical by) the mobility of the fishermen. Following the fish, moving often seasonally and at short intervals in any case, living in small households, the fishermen are less vulnerable to social pressures than are persons in most professions. This has important effects on interpersonal relations in the fishery, as we shall show in due course.

The position of the larger kin groups - the extended residential family and the patrilineage or "clan" - in Chinese society is currently a matter of interesting debate. The commonness of the nuclear family was once considered atypical, a result of Westernization and/or modernization. It is now known that the nuclear family was a typical - indeed, often the typical - residential arrangement, except for the well-to-do who could afford big houses. The earlier belief that extended-family residence was

common stemmed from the writings and life-styles of literate, more or less well-to-do Chinese. Kampong Mee is thus probably quite typical of relatively poor villages; its households, mostly nuclear and the balance mostly stem families except amont the rich, are probably representative of Hokkien fishing villages in traditional days in Fukien province - and of fishing villages in many or all parts of China.

Similarly, the lineage - cok in Hokkien - has had its importance vastly overrated in much of the literature (e.g. Hsu, 1967). The Cantonese fishing people of Kwangtung province have utterly lost it (Ward, 1955; Anderson, 1970b). The Hokkien fishing people of Taiwan have lost it too, at least in one well-known case (Diamond, 1969), where the word cok has come to refer to a group of people, not necessarily related and indeed generally including people from various descent groups, which appears to be similar to the face-to-face mutual cooperation groups so common in Chinese society but not usually given a name. More significantly perhaps, Pasternak has traced a case of "lineage atrophy" in which changes in irrigation and land arrangements rendered the lineage economically less useful, and led to its rapid decline (Pasternak, 1968). This and other cases are discussed by one of us (Anderson, 1970c) and the inescapable conclusion is drawn; the Chinese lineage, far from being basic to Chinese society, is subject to disappear rapidly and easily. (Cf. also Freedman, 1957, 1958, 1966, for further information on lineages and their varieties in Singapore and in China.)

In spite of all this, the lineage in Kampong Mee continues to flourish. Everyone knows about lineages and knows what lineage he is in. The commonest voluntary organization category (in terms of number of people involved) is that of lineage organization - these organizations are made up of heads of families (usually), members of the lineage, who wish to play an active part in lineage affairs. They meet for business - administering

the lineage hall, it funds, its scholarships, affairs of its members, possible trips to the home area in China, etc. - and also for recreation - conversation, games, and arranged affairs. Even though the lineage halls are in Georgetown, concentrated in the district of churches and public buildings to the north of the main city, many Kampong Mee men get in frequently for these affairs. Large and prosperous families are more likely to have men active in these groups, but some relatively poor families do also; however, no really poor families have men taking part in these (or any other) associations. Quite apart from these lineage associations is the lineage itself. One is born into that, and does not stop being a member, no matter what he does. (This may seem self-evident, but it not. Among Cantonese, joining the fishery traditionally meant giving up one's lineage sooner or later) Among many or most families, an extreme example of lineage solidarity is maintained: the giving of names according to generation. In this custom, the first part of the given name is identical in all members of the same sex and generation within the lineage. Thus all Tan Tik-Soon's brothers, and also his male cousins of same generation, and even distant relatives will be Tan Tik-something while the next younger generation will have a different first syllable from Tik, but one likewise shared across the board. Charts exist to show all these generational names for all generations from the founder of the lineage to the generations yet unborn.

The lineage is especially meaningful in the lives of the rich, progressively less so as one descends the socioeconomic scale. This is because the rich can better use the services the lineage affords: a hall, an organization for scheduling and mounting events, and social and business contacts. The poor have neither the facilities to make use of these nor the need for far-flung business contacts, nor can they contribute much either financially or otherwise.

They are thus far less involved in lineage affairs and far less knowledgeable about their lineages. However, even the poor find uses in the solidarity and rootedness provided by lineage affiliation.

On the other hand, one wonders how long the lineage can survive. Traditionally most important as a land-administering and defense group, it had in south China many other functions, both ritual and practical. It administered tombs and temples, whole villages, even whole districts; it supported poor but bright members through education and job-seeking; and in general, it provided most of the services of government in often anarchic regions (Freedman, 1958, 1966). In Malaysia it performs none of these, and by most standards should disappear. However, as elsewhere in the Nanyang (cf. Skinner, 1955, 1958), it has taken on renewed importance. Most significant is its role in finding and maintaining contacts, and in providing a solid base of support in business dealings and in dealings with a hostile government. It also provides a major way of preserving Chinese tradition, both by simple existence (it is, after all, a part of that tradition) and by its facilities - halls and meeting rooms in a tradition-dominated context, and channels for organizing traditionally-minded men for purposes of keeping the old culture alive. Thus it has been important in maintaining the Chinese community <u>as</u> a Chinese community. As Chinese culture fades, as first-generation immigrants die off, and as Western-derived organizations from political parties to hobby clubs play a larger and larger part in Nanyang Chinese life, the lineages will slowly decline; they are already showing signs of so doing, especially among younger people. In Kampong Mee, they affect the individuals who are active in lineage affairs, but not village society; there are no lineage halls or centers in the village, nor does the average villager get much from his lineage organization.

On the other hand, the importance of kin, including distant kin (distant both physically and in terms of kinship reckoning), cannot be overstressed. They are the most important contacts outside the village, for nearly all the residents. Children old enough to leave home but not old enough to live by themselves (according to local reckoning - this would be about 14 to 22 or a bit more, depending on sex, men being allowed out earlier) often go to live with faraway relatives. Visits to town, a strange and alien place to many Kampong Mee people, are made easier if there is a relative's house to use as a base of operations and a familiar environment. Any business transactions outside the village are made far easier and more profitable if there are relatives to help. Relatives co-operate in running boats and businesses; they are the first sources turned to when a loan is sought; they are the first people to help whenever help is needed. Thus in spite of the nuclear households, the wider family is vitally important in the lives of the citizens of Kampong Mee.

One last point in this connection is the importance of neighboring kin. Our immediate landlord was himself paying nominal rent to the actual owner of the house, his father-in-law, who lived in the next unit to the west - separated from out house by a partition some 1/2" thick, with only mosquite-screening at the top. The children of the two households were inseparable during the day, and our neighbor's older daughter spent half her time in our house, often bathing there. Only for sleeping were the two nuclear families always separate. This was an exceptional case, but relations between several other households were close, and in one case - the Tan family of considerable economic importance.

Thus, in summary, family and kin remain exceedingly important social configurations in Kampong Mee. They are even more so in some other fishing villages. Relations within the family afford ways of structuring all one's

encounters with society; the family offers help and support, economic and psychological, in every situation; and the importance of such units as the lineage remains, despite changed roles. In fact, kinship relations - far-flung yet strong, flexible yet dependable - are perhaps the most important (to the more traditional Chinese at least) of the many personal linkages and relationships that are so characteristic a feature of Chinese society. If we are correct in our hypothesis that one of the major factors in the economic success of the Chinese (in Malaysia and elsewhere) has been this network of linkages, then kinship becomes relevant to development. Conversely, the social linkages in Malay society are fewer and looser, and in this lies one major reason why the Malays have fallen somewhat behind the Chinese in Malaysain economic life. It seems probable that kinship is less important in fishing villages than in most traditional settings within Chinese society; lacking land or a really permanent base, fishermen reduce their kin linkages, as is shown by the Hong Kong and Taiwan cases mentioned earlier. Therefore, no doubt the generality of Chinese in Malaysia draw even more heavily on kin links for support, except in so far as they have substituted Western-derived institutions as ways of recruiting connections. It should be remembered that kin outside the immediate family cannot impose on each other; loans must be repaid, services returned - poor kin cannot depend forever on rich, nor is capital ever dispersed (except in minor ways, usually with expected return) among wide kin groups. Kin provide help when needed, but not permanent support - and here lies another strength of Chinese family economics.

Last of all, every person feels he is related to everyone of the same surname. There are only about 400 common surnames in China, and these (as well as the rare ones) form real patrilineal clans, in the sense of descent

groups that cannot trace their descent to a real or known ancestor. Marriage within the surname is forbidden, and indeed any sexual contact is considered somewhat incestuous. Same-surname people support each other and help each other, especially in the situation where a stranger comes to a new area - he can expect aid from his surname relatives. All people of one surname are referred to as kinsmen - the term used is hia:-ti, which is the formal word for 'elder and younger brothers' but the informal term for 'all kin' (the informal terms for actual elder and younger brothers being a-kou and siou-ti or a-ti respectively). In practice, in spoken Malaysian Hokkien, hia:-ti always means "kin generally except in extremely formal ceremonial contexts.[1]

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[1]The same thing is true of cognate forms in other Chinese dialects. The fluid society of overseas Chinese gave new importance to the same-surname bond. In China, the bond exists and is used in getting aid (Anderson, 1970b) but is very unimportant. In the Nanyang (the Mandarin Chinese term for southeast Asia's Chinese world - "Nanyang" becomes lam-iu: in Hokkien) the link is much more important, as is well known (T'ien, 1953; Crissman, 1970). A Chinese fieldworker can get more information from people of his surname - they will not be so secretive; we observed this even in Hong Kong, and it is much more visible in Malaysia, as T'ien's experience and our own (with our field assistants) confirms.

Thus the bond of surname is yet one more social link that can be used as a channel of communication, aid and support.

4

One aspect of kin that deserves a separate section is fictive kinship. In most societies, especially traditional ones that had a strong agricultural base, the interpersonal links formed by kinship are extended by ceremonial means to include non-kin; the ceremony converts the non-kin into kinsmen of a special sort (or of several special sorts). In general, we may say that these highly kin-organized societies, when they need strong personal links with someone outside the circle of actual blood or marital relatives, will create those links by extension of the kinship circle. This artificial extension is consciously metaphorical. The fictive kin are carefully distinguished by both word and behavior from actual blood and marital kin. However, the kinship bond is maintained in this metaphorical way in order that certain obligations of kin to each other - especially protection and aid in time of need - may be expected.

One can, indeed, distinguish three concentric circles of "kin": actual kin; formal fictive kin; and the wide set of humanity to whom kinship terms are informally extended, as described in the previous section.[1] From the first, one expects the full set of services and support; from the second, a modicum of protection and aid at need; from the third, no more than friendship and mutual respect.

The commonest form of fictive kinship is the khei[2] relationship. In this, a child is made the fictive son or daughter of someone, by means of a small worship ceremony - the child's parents and his fictive parent worship

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[1]Incidentally, this extension went to such lengths that one local Chinese leader was called a-peq ("father's elder brother" in Hokkien) even by the Malays.

[2]This word is khai in Cantonese, Mandarin ch'i4.

together, or, if the fictive parent is a deity, the child's parents worship him. The child, if old enough, pays reverence ceremonially to the new parent. Thereafter, the child is supposed to offer special sacrifices to his khei-parent if the latter is divine, or gifts if human; the khei-parent is supposed to provide supportive aid, and, if human, give small gifts on Chinese New Year and other special occasions. Khei is a classical Chinese word, meaning (among other things) a formal contractual bond. The significance of it here is that the khei-relatives are bonded together and cannot separate.

We have discussed elsewhere (Anderson, 1970b) the significance of khei-relationships in Hong Kong. There, comparison was made with old English godparenthood and with Latin American compadrazgo, the latter being (in some areas at least) a strikingly close parallel; and there are other parallels elsewhere in the world. In Hong Kong, we found that khei-relations are like Mexican compadrazgo in that they are either symmetrical, i.e. between co-parents of similar socioeconomic status, or asymmetrical, i.e. a relatively poor or politically weak family solicits a powerful local figure to be co-parent. (These forms were distinguished by Foster, 1961, in an important paper on compadrazgo.) Among Hong Kong fishermen, most relations are symmetrical; among nearby land-dwellers, asymmetrical. Nearly all relations in Hong Kong were with human co-parents.

In Kampong Mee, at least 27 families included someone with a khei-relative. (There were probably several more. We asked especially about children - adults with khei-parents, or with khei-children, often did not respond.) Sixty children (at least) had khei-parents. For forty-four of these, the khei-parents were human - being actual relatives in thirty-four cases, friends in 10 (and all forty-four symmetrical). The other sixteen are the khei-children of gods, especially Kuan-Im (Mandarin, Kuan-Yin), the Goddess of Mercy, or Co Su Kong, the most important deity of the Sungei

Itek area, with major temples nearby. Such relationships with gods are, of course, asymmetrical.

In Hong Kong, the usual reason for invoking a symmetrical khei-relationship is that the child involved is sick or unlucky, or from a family that believes itself unlucky. He is supposed to inherit health or luck from his khei-parent. Asymmetrical relations, on the other hand, are invoked for the benefit of the child's parents more than for the child; they invoke these relations with a view to getting aid for their family from the powerful khei-relative. In Kampong Mee, khei-relations are invoked as insurance. The khei-parent is supposed to aid the child, and the child's family as well, if trouble occurs. Relations with gods are invoked to put the child under the special protection of the deity. When relations are invoked to give health and luck to the child, a deity is usually called on. Children who are very sick are especially prone to be made khei-children of Kuan-Im.

Most families never bother with establishing khei-relations. Those that do, however, often establish several. In fifteen households, only one person had a khei-relative; in eight, there were two who had; in two there were three, and in two as many as four, who had khei-relatives.

Other forms of fictive kinship are blood-brotherhood (with actual mixing of blood) and other, less intense and binding forms of sworn brotherhood (cf. Anderson, 1970b). These exist in Malaysia, but are not very important except in the special case of secret societies, whose members are sworn brothers and we have little data on them.

5

Perhaps more relevant to cultural ecology than kinship structure is the actual behavior within the family. It is often said that child-rearing is a necessary field of study if one would see how behavior is learned and transmitted. It is also often said that the Chinese "succeed" in southeast Asia because of certain hypothesized values or ideals, learned at the mother's knee. We find that neither of these formulations is entirely true, but the first has its points; the second, however, does not stand up under inspection. The values hypothesized for the Chinese do not square with the actual behavior patterns observed in Chinese families, or with stated ideals for behavior. Here, we will not try to list the stereotypes held about Chinese in Malaysia; suffice it to say that the Chinese are usually held to be exceedingly hard-working but also dishonest and unscrupulous, untrustworthy, deceitful and (of course) inscrutable. The British were the formulators of these stereotypes but many Malays and Indians have adopted them. Other, less uncomplimentary stereotypes are also held - the Chinese are sometimes said to be both hard-working and diligent, and also highly conscious of education and of the need to learn facts - but in general they are most famed for their shrewdness and sharp practices. Behavior within the family does not show any of this. Moreover, supplemented by other information, it suggests a more accurate theory of how the Chinese manage to prosper in the face of adversity.

Interpersonal behavior in Kampong Mee is, of course, not typical of all Chinese, or all Malaysian Chinese. It is, in fact, more or less typical only of the poor and rural segment of the population, and to a somewhat lesser extent the poor urbanites. However, it has its own significance for a general model. There follows, then, a general description of behavior within the family, followed by some attempts to lay the groundwork for an analysis.

In the first place, the Chinese of Kampong Mee want children. They want a great number of children, as I have shown above. Boys, of course, are much more desired than girls, as is true among all traditional Chinese for the reason that boys keep on the family line while girls marry out and are lost. Indeed, a family must have sons to keep up the family sacrifices, or it will starve and go to ruin in the afterlife; thus every family member has a direct, personal reason to want sons (unless he has lost all belief in the afterworld, and no Kampong Mee Chinese had come anywhere close to doing that). Boys are treated better than girls, and a woman is not regarded as truly a part of her husband's household until she has had a son, i.e. contributed to the family name; but when she has a son, she has considerable power, since she has done so and since she can neglect him or take him away if she is mistreated. However, girls are not treated with the scorn and neglect that they received in much of traditional China. In Kampong Mee, girls are highly regarded, both for themselves and because they can (if educated) break out of the circle of poverty and get good jobs at least as easily as boys can. Boys, conversely, are not treated with the adulation found in traditional China (according to many descriptions). Girls are punished for less than boys, and are punished perhaps somewhat more for comparable offenses; boys are talked of as more desirable than girls, and get more respect and more tangible benefits; but the gap is not as great as those usually described for Chinese cultures. On the other hand, it does create a psychological problem for the girls, who are taught to think of themselves as second-class citizens, and thus develop a bitterness and frustration and drawn-in, suppressed attitude. We have described this for Hong Kong (Anderson, 1970b) where the difference is more pronounced and the favoring of sons notably greater than in Kampong Mee. However, children are loved and wanted in most families, and girls do not develop serious syndromes as opposed to boys.

Pregnancy is regarded as a more or less normal and certainly a desirable state, and birth is not set about with special tensions. Most births are in hospitals; indeed, all recent ones have been, as far as we know. A new baby is shown off with great pride, passed from hand to hand around the village, and protected against a hostile world by fairly thick wrapping (which he must be tough to withstand, in the tropical climate) and by a battery of charms. As soon as possible, he is given a necklace, bracelet, anklet, and clothing-pendents set with magical items of various sorts, to protect him on all sides from evil. Boys are somewhat better protected than girls, but both are thoroughly decked with these amulets, which are believed to be absolutely necessary to survival. As the child ages and these become less necessary or more in the way, they are put aside for periods of time, and eventually are often abandoned altogether when the child is around school age, though many (if not most) people wear some sort of charm guard, such as a jade bracelet, all their lives. (Everyone has such charms, kept in a private area if not actually worn.) The amulets have practical usefulness: they show that the child is wanted, and they give him something to play with. They are usually excellent in this toy role.

For the time that he is an infant, a child is played with and passed fro hand to hand, but not made the center of attention all the time. Quite the reverse; while he is cared for more than are older children, he is very much subject of his mother's scheduling, and of the wants of any other female in t vicinity, particularly his grandmothers (if present). He is fed, changed, picked up, put down and played with not according to demand, or according to fixed schedule, but according to the convenience or feelings of any female around. When his mother feels it is time to feed him, he is fed. Usually t approximately correlates with his demands, but he may be fed well before

he wants it, or alternatively left to cry for a while. He has little or no ability either to control or to predict his scheduling. As we have shown (Anderson, 1970b), this pattern is widespread and has the function of integrating the child into the family. Along with other practices, it destroys his feelings of independence, or rather prevents him from developing any. A creature of his family, subject to manipulation by his parents and anyone else older who is around, he learns quickly that his wants will be satisfied but not through his independent action. This goal of childrearing is implemented in other ways through life, and clearly is important in the development of the interpersonal behavior of the Chinese, teaching them to expect cooperation, and teaching them to be orderly and more or less submissive. He is neither hurried into walking and talking (or, later, into schooling) nor discouraged from it, though he is strongly discouraged (by being picked up and returned to his starting place) from walking into dangerous territory or probing too deeply into things.

It is with the beginning of walking the discipline begins to be imposed. Even for a very young child, there is no mistake about the force with which it is applied, or about the reasons for applying it. The rules of the Chinese household are definite. The most important ones are these:

1. Obey the elders, in a descending hierarchy of age and sex. Specifically, given the usual elders that affect a child's life, obey grandmother, mother and older sister in that order. This rule is so well established, bu the method noted above, that punishment need not normally be used to help establish it.

2. Do not fight, or cause outbreaks of fighting or serious conflict. Contravention of this rule is a frequent cause of beatings, which for an older child can be savage. In our household a boy of 11 was beaten with a stick for some time by his father for causing strife; in this case the boy had been aggravating everyone around for some time, and it came to a head when he started a fight

with his cousin next door. A younger boy of 3 was beaten and locked alone in the dark storeroom for some time for stirring up trouble. One frequent source of such conflict is for a child to take, or "mess with," a sibling's possessions, especially those of a younger sibling.

3. Privacy is to be respected. Sharing from a distance is fairly reprehensible, staring into a private space is bad, and invading a private space (e.g. our sleeping room) absolutely forbidden. Even the most exceedingly curious and forward of children, even when invited, did not come into our room - except on one or two occasions, surreptitiously, when very yourn children tried and were promptly caught and punished by someone older. This respect of private space is the most important single factor in making a very crowded house livable, and everyone knows it.

4. Private property is to be respected also.

5. A certain amount of cleanliness is to be maintained. The standards of cleanliness in Kampong Mee were loose, but they existed; when the younger son (age 3) of our co-renting neighbors was found playing in the village sewer, he was beaten hard for his pains.[1]

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[1] A significant item not covered by the rules is verbal behavior, other than that leading to conflict. There is little concern to develop "good" verbal behavior, either in terms of competence or of honesty. Children are not helped or encouraged with their schoolwork, and never develop much concern for education or for developing verbal facility. There is also no concept whatever of honesty or falsehood in regard to children's speech; children are expected to lie almost inevitably about such matters as, e.g., who broke something when no adult was around to see, or who started a fight. Both these principles stand in partial contrast to the child-rearing behavior of people of Hong Kong, and presumably of other parts of China. They have consequences the children learn to take education lightly, and to take the truth even more lightly, for whatever that is worth. The latter tendency is a source of friction with other ethnic groups. It seems to have developed as a response to fears of exposure in an alien and hostile environment; there is a felt need to conceal much of life, and specially anythin that might cause trouble. The traditional Chinese value of putting a good face on everythi

Other rules obtain, but are either minor offenses or infrequent transgressions or both. The above rules cover the reasons for serious punishments that we recorded.

Punishment is by means of striking, usually with a stick. Pedlers sell lengths of rattan, with one end twisted into finger grip, specifically for use in discipline. The sight of one in a mother's hand is in itself adequate to send a child scurrying; the application is even more effective. The stick does little damage but stings ferociously, reducing a child to helpless weeping. Men will often pick up a heavier and tougher stick - a piece of firewood or of an old box - to use. Beating is on the buttocks and the backs of the legs, especially the thighs; the legs are a very effective area to hit, since they are usually bare and exposed. Response to a beating is usually complete collapse into tears; there is little, if any, attempt to put a brave face on it or to control the reaction. In addition to beating - and accompanying it - sharp scoldings is carried out in no uncertain terms. The most serious punishment, invoked in the case of conflict by the 11-year-old boy noted above, is beating by the father, scolding by all available relatives, and then a full report of the crime, by the father, to the huge crowd of assembled curious villagers. This last is so shaming that it is rare indeed.

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if possible, seems to have been extended in these dangerous-seeming circumstances to become a quite un-Chinese tendency to dissemble, even in the family, in very many circumstances. Incidentally, it was the only serious problem with living among the hospitable and friendly households in which we stayed; our children picked up an attitude toward in-family honesty that was excessively elastic by American standards. This vanished after we left the village.

Such punishment is infrequent, and a normally well-behaved child can expect to be really beaten only for serious offenses, which he usually manages to commit every few months. During intervening times, he is usually prevented from wrongdoing by the older people that are always around him. Any silber- sibling, relative, or neighbor - can stop a child from doing wrong or from getting into potential trouble. The child is ordered back, then if necessary picked up and placed out of harm's way. Children too old to pick up are invariably socialized enough to respond to a forceful voice. There is little independence or defiance in a Chinese family; even the older teenagers, if still at home, feel no need to assert independence - in great measure because by then they are taking care of their younger siblings, and thus necessarily responsible citizens. (The youngest child in a family will have nieces and nephews, or other young relatives, to care for.)

It follows, from the above, that the major changes that occur with aging are in the matter of widening the sphere of responsibility. The girls in particular do more and more housework and child care as they grow, and so move gradually and steadily into adult roles. The boys can do less, since man's work is harder and is usually wage labor. The combination of relative idleness and relatively higher status leads the boys into various sorts of mischief, but little serious trouble develops. The transition to young manhood is gradual and fairly early; a boy of 10 or 11 may be working for pay, and a boy of 16 will almost certainly be, if a job can be found. The tendency is to begin with odd jobs and gradually get to work more and more until a full-time job doing grown man's work can be held down.

Education in Kampong Mee is not nearly so highly valued or so much a concern as in traditional China (the situation in Kampong Mee is very different from that we found in Hong Kong, for instance). Education is still valued, and regarded as necessary in small doses and desirable in large ones, but there is none of the traditional pressure. The figures speak for themselves. Most older villagers have had no schooling. Most of the rest of the adults have had no more than primary education, usually no more than one or two years. Not counting the elite of the village (the Tan family, some of whose younger members have gone beyond), there was only one person in the village who had gone beyond the Form 5 level, a secondary level at which those not hoping for college usually stop. This one individual was a young chicken farmer whose higher education consisted of some time at a poultry institute in Taiwan. He subsequently left the village. Most primary-school-age children are in Chinese primary school. A very few go to English primary. The usual plan is to send the children to Chinese primary school long enough to learn the rudiments of Chinese writing, and then pull them out, unless they show special promise or their family feels secure and high-status enough to hope for a good job for a more educated child. In the later cases, the student will go on to English secondary school, up to the Form 5 level. The rural schools of the Kampong Mee area are not good, though not especially bad either; they are certainly better than the general run of rural Asian schools. But a person who has gone through the primary system knows nothing except how to write and do elementary arithmetic. A little miscellaneous information is acquired and soon forgotten; reading, writing and arithmetic are the serious content. A person who has gone through

Form 5 in the English schools will know more, but the rural secondary schools of the area vary considerably in teaching quality, and graduates of most of them know little English. In all ways, this situation differs strikingly from that in Georgetown, where education is exceedingly highly valued by the Chinese community and many of the schools are comparable with any in Asia, producing graduates who are often fluent in five or six languages. There was one fairly good secondary English school near Sungei Itek, to which more education-conscious villagers went. Malays in the area kept primarily to Malay language schools. Schools thus divided rather than unifying the community. Teachers were often explicit about their communal prejudices, and served as major foci of communalism.

6

Interpersonal behavior among adults within the family is governed by considerations of age, relationship and competence. As in all Chinese societies, the older a person is, the more respect he gets and the more authority he has (other things being equal). Also, as in other Chinese communities, men have more authority than women, though women have a great deal and can extend it to spheres where men are usually inactive. It is quite inaccurate to regard the Chinese male as sovereign; his wife can always "twist his ear", as the Chinese idiom has it, and control him when she wants to and has no organized opposition. In particular, the wife is sovereign over the household, unless a senior female relative is present (in which case the latter has the authority). The mother of a three-generation household, i.e. a woman

whose dauther-in-law and grandchildren live with her, is a formidable figure indeed, running the household and usually quite able to handle her husband in any situation. However, in the formal ideology and in practice as well, the man usually has the last word in all important decisions, and the position of control over major events. A last dimension along which control is polarized is competence. A person can abnegate his authority, opt out of his place in the system, simply because he does not want to be bothered, or because he feels someone else can do it better. A person can become head of the household, even though junior, by right of being notably more competent at running it than his senior. The normal structured case of this is when the father of the household becomes senile; his eldest son takes over, or a younger son if the elder is away or does not want to run the house, and the father goes into retirement. This is a gradual process, keeping up with the slow decline or weakening of the father.

All of the above is typical of Chinese communities, and well attested in all relevant literature (see, e.g., our more extended discussion in Anderson, 1970b, which applies well for the Kampong Mee situation). There is little distinctive about Kampong Mee, except that in comparison with other communities - including others we have seen in Malaysia - it seems less hierarchically-structured, more democratic and easy. In households, immediately around us, the women exercised cheerful and rather easy-going control, with little dissent from the men; and the younger women were not oppressed by the older, having, indeed very cordial relations. There was variation in this; the household in which we stayed was more harmonious and more democratic than the one

next door on the oceanward side, a house in which a woman lived with her daughter-in-law and the latter's children. In the latter there were several occasions on which the older woman exercised control in traditional Chinese mother-in-law fashion. However, the really tyrannical and authoritarian elders, so classic a part of Chinese folklore, public lore, and community life, were conspicuous by their absence in Kampong Mee. Nearby, at other fishing villages such as Sungei Ikan Mati, the more classic Chinese case held forth. Unquestionably our household was unusually peaceful, and in it and elsewhere there was never any question about where the authority lay; but on the other hand there was little outright bullying and perceived abuse of authority, such as is so continually reported for other Chinese communities in both sociological literature and folklore or novels. The important point, however, is that no matter how democratically decision-making may be done, there is an extremely explicit, unquestioned, and thoroughly understood authority structure. Moreover, everyone knows that as they get older they will move up the structure - a matter of consolation to the less powerful. The woman persecuted by her mother-in-law can always try to content herself with the reflection of what she will do when she is a mother-in-law. The teenage young man does not feel, as he does in the West and increasingly in the urban East, that he is given all the duties and none of the responsibilities or privileges of adulthood; he is slowly, gradually, working his way up in all three categories at once, and can expect to continue to raise. The middle-aged man does not see himself as sliding downhill from his "peak earning years" or youthful manhood; he sees himself as rising in prestige up to an honorable

retirement in which he will still enjoy the highest respect and esteem. It is clear - though not widely stressed in the literature - that these are important points in maintaining the solidarity of the family, and in maintaining the family system itself. The other side of the coin is that there is little to regulate the conservative and often arbitrary hand of the old. A forty-year-old man is often ordered around like a boy; a woman, all the lower because she is not of the lineage but is an alien who is married in, is at the mercy of her husband's mother. Another spinoff is that brothers can very rarely stay together though the Chinese ideal is that they should. If they are close in age, the tradeoff between age and competence and/or the ambitions of the younger will soon split the family through constant questioning of authority, questioning which can hardly be resolved. When the father of a household dies, his sons almost invariably separate, if they have not done so before.

Marriage and sex are irrelevant to this manuscript, but a very brief summary of the situation regarding them is useful for other reasons. Marriage is moving from "arranged" to "love" matches; parents' permission, convenience, and personal attraction and compatibility are all involved in marriages now. Polygamy being legal in Malaysia, some of the richer Chinese keep two or more wives. (A law has recently been passed limiting polygamy to Muslims; we do not know what effect this will have. It was opposed by Muslim women, who wanted monogamy general, and of course by Chinese men for the opposite reason.) Maintaining a household for each wife was desirable, but Tan Tik-Soon kept two or more in his household, maintaining others elsewhere but occasionally bringing them in (he

had five in all). The ordinary village Chinese were invariably monogamous, for financial and personal reasons. Marriage with much younger partners, marriage with girls adopted for the purpose, and other traditional Chinese practices were rare or absent and apparently had always been so in the area; wives were about the same age as their husbands, and were independent and fairly equal in most spheres. The model behavior was frank discussion about matters of concern; most of this was done in the bedroom, at night, after others were asleep.

Sex was usually kept in marriage. For women this was a rule, rarely broken. The double standard existed, and men could visit other women, but they could rarely afford to. The young, single fishermen made constant trips to town, but their poverty and lack of social skills usually restricted them to movies for entertainment - a visit to a prostitute was a rare luxury. Men who could afford it would occasionally keep a mistress. A Georgetown man maintained a mistress at Kampong Mee for a while, but the relationship was discovered by his wife, who one day trailed him there, with his mother in tow. His wife and mother caught him red-handed attempting to escape (he had been forewarned by the grapevine, but not in time) and the resulting furious and completely public scolding he received from the two women was the greatest source of delight that occurred in the village while we were there. The entire village turned out to watch and listen, laughing uproariously at the humiliation of the husband, who of course lost face to the ultimate degree by this public show. Clearly keeping a mistress was negatively sanctioned, and very effectively so. Nevertheless, fidelity was not invariable, especially among those with some spare cash.

The sexual act between couples was not a daily occurrence - a hard-working man might manage it once or twice a week. The position involved the man sitting tailor-fashion or in a similar way, with the woman sitting on his lap with her legs around his body or down at the sides - a position commonly seen in Chinese

pornography pictures (Beurdeley, 1969) and in many Tibetan yab-yum sculptures, and therefore presumably standard in the Chinese area. The main advantage claimed for it was that it produced minimal squeaking and shaking, and was thus adapted to a room with a very insecure and creaky floor and a huge number of children and others in immediate earshot.

7

Relations with neighbors are far less structured. What structure there is will be discussed in the following chapter, and here we will emphasize, first, the general rules of neighborliness, and secondly the voluntary links that arise in this small community.

Neighbors interact surprisingly little, considering the small, ingrown nature of the community. Most interaction is between kin, especially among the older but often among the younger people, or within the work group (the boat crew, etc.). Many women of Kampong Mee almost never go out of their households, and when they do it is to market or for a major trip to visit distant kin, usually in Georgetown where a movie can be seen on the trip. There is little visiting of unrelated friends; there is effectively no visiting of friends outside the community, except by the village elite, who have ties all over the district. Among the ordinary people, relations with neighbors are often formal and unsocial, and sometimes downright hostile. At Sungei Ikan Mati, where strife over the unsurveyed land and over village power has split the village into many factions, a high percentage of households are hostile enought to their neighbors to cause a continual problem of litigation, threats, and danger of personal violence. Kampong Mee lies on the more peaceful side of the continuum, but it too has its personal feuds. It also has many cases of cool relationships, such as that between the household where we stayed (including renters and relatives of said

household) and the household on the oceanward side. In the latter lived a woman with her son, daughter-in-law, and grandchildren; the son rowed a sampan (row-boat linking fishing boats to shore) in the harbor and was rarely home during the day. The family was not friendly to outsiders - a rather tight, self-contained, stern and humorless group. The two young boys, the grandchildren of the household, had no one to play with and little care; their parents were strict and beat them much more often than they played with them. The result was that the two boys spent most of their time looking sadly into our yard, where a fence and our household's unwelcome forbade them to go. Moreover, with the bitterness of frustrated and lonely children, they did everything possible to cause trouble for the young of our house - the children of our landlady, our fellow renters, and ourselves. Throwing small objects and blaming for uncommitted sins were the usual methods invoked. This was never serious or very hostile; it was a reaction of envy and misery. But it did not endear the two houses' residents to each other, and, although there was never any loud argument or threats, there was no friendliness either - the residents of the respective houses simply never had anything to do with each other, to the point where we had some difficulty interviewing the ladies of the house next door. The half-dozen single fishermen who rented spare rooms from them were much more sociable, however; and sometimes the two unfortunate young boys were allowed over to watch television. Clearly hostility was not especially pronounced; there was just no liking, no bond. The social links holding the houses together did not exist, or had been dissolved. Similar almost affectless relationships existed between many other households of the village.

However, there was a vague sort of community solidarity and mutual help. Perhaps the clearest example visible to us was the pack that assembled to watch television. Children did most of the watching, and the most popular program,

"Monsters from Outer Space," regularly drew fifty to sixty children from our whole street. But men, too, and even a few women (most of them relatives), would come to watch more adult programs, and the most popular of these (the Clay-Frazier fight) outdrew even the monsters for the one day it was on. At these sessions there would assemble the entire community, our little subsection of Kampong Mee. Almost all the assembled multitudes came from the surrounding two dozen or so houses, within a radius of a hundred yards. Some of these houses did not send forth their inhabitants; lack of social links, or slightly superior social status (as in the case of the people across the street whose household head worked at the airport), kept them away from us. A few people came from as far as three or four hundred yards away, almost all the way to the ends of the village; but despite our central location, our house drew very little from such great distances. Similarly, our house's residents did little visiting outside the same tiny radius. The work of the men took them far away, many miles in fact; here they socialized with a great range of people; but few of these people visited us - usually only a few fishermen, the crew of our fellow renter the boat captain. (They stayed on the boat, in the harbor, not a quarter of a mile off.) The women of the household, denied the opportunity of meeting people in work groups, saw no one except close neighbors and the people from whom they purchased things. This meant the village vegetable hawker, the pork hawker, and one or two other roving salesmen on bicycles, plus the families who ran the three general stores and the one or two other shops that entered into our lives. The persons of our household, however, knew almost everyone in the village - by face usually, by reputation invariably, except in the cases of newcomers. Gossip spread fast over an effective grapevine; a story might not travel more than 100 yards per telling, but it was told many times in a day.

Thus there was a sort of potential village solidarity, actualized during periods of danger, stress, or good times. The whole village turned out in unified joy and delight to celebrate or to watch a village scene, such as the humiliation of the erring husband described above. The village also turned out at rumor of threat. Once, an argument between two Chinese fishermen was distorted by report, and made to be a showdown between Chinese and Malay youths. The whole village turned out, all the young men armed with bludgeons, nail-studded boards, etc. Fortunately the rumor proved untrue and the argument quieted down. It was an impressive display of village solidarity, but even more impressive as a display of how very close to communal violence are the fishing villages of Malaysia.

Raising of money is always a good indication of where the solidary links are. The Kampong Mee Chinese raised capital, when they needed it, almost entirely from relatives or from official loaning bodies (banks, etc.). Normally, there was little search for assistance from neighbors, and no mutual-aid associations of the sort so common and characteristic in traditional China. These hui or tontines had become suspect in Malaysia, due to abuses, and were banned during the time we lived there; this ban did not affect Kampong Mee visibly.

Thus a Kampong Mee citizen could expect support, help, and co-enjoyment from his neighbors, but only in special cases and not in regard to serious loans. Businessmen gave better deals to co-residents than to outsiders, but there was nothing like the systematic, patterned, extremely large discrepancies between insiders' and outsiders' prices that we have described for Hong Kong (Anderson, 1970b) and that exist elsewhere in the Far East. Within occupational communities, of course, bonds were tighter - fishermen tended to socialize together, and so on - but not notably so except in the case of permanent, stable work groups.

Thus the "core" crews of fishing boats, the stable configuration of regular crew who were not recent additions or mere boys, were really close-knit organizations, drinking together, going to town together, etc. This applied especially to fishermen of equal pay - the captains and navigators on the one hand, the ordinary full-time crew on the other. Among single men away from home, the boat crew takes on some of the functions of the family, providing solidarity, aid, and socializing opportunities.

It is this ability to form linkages quickly and on many bases that gives a distinctive quality to Chinese village and urban life. However, in Kampong Mee as opposed to traditional Chinese communities (not only in China but in Malaysia as well), the relative softness and weakness of authority structures and the atrophy of community life makes social life not only far duller and emptier, but also far less able to permit mobilization for aid, defense, celebration or any other purpose. Like Javanese villages (Geertz, 1963), but to a greater degree than Geertz describes, the society has dissolved under pressure - it has come perilously close to luan, the Chinese concept of ultimate social entropy where all bonds are dissolved. Only kin, and the latent aid and assistance that so rarely have occasion to break forth except in work groups, give structure to an otherwise friendly enought but quite vague and amorphous village life. One knows and communicates with one's immediate neighbors, but expects little of them except in exceptional cases.

However, the latent bonds of association and the very real and far-reaching bonds of kinship (real or fictive) are a powerful and vitally important element in the society. Even in Kampong Mee, so much less a community than Sungei Ikan Mati (to say nothing of Castle Peak Bay and other communities in China itself), the basic structure of Chinese face-to-face society is seen - in fact, it may be more clearly seen here, stripped down to its skeleton. To this we now turn, for

an understanding not only of Kampong Mee but of Chinese everywhere, and above all of their success in foreign shores such as Malaysia.

8

The thesis which we will state here is that the essential feature of Chinese society, and the reason for its success in the modern world, is its ability to extend links - both on the basis of ascribed and voluntary social connections - to form enormous yet highly personalized networks, that can be used to organize assistance in almost any situation. We have discussed this elsewhere (Anderson, 1970b), and will make ourselves clearer in the conclusions to this manuscript. At this time, we want to summarize very briefly the salient points of the above discussion that are relevant to the economic situation, and reserve discussion of them for the conclusion of this work.

1. The higher the socioeconomic status of the individual, the more contacts and links he has - in kinship, neighborhood, and relations with the outside world; in voluntary associations; in economic dealings - in short, in every sector of social life.

2. Kin links are the links invoked by the poor and ordinary villagers. They have few social links other than kin; their major links, otherwise, are economic (see the economics chapter, but the links with storekeepers and hawkers are more or less social as well). They have, however, a great deal of solidarity with neighbors, though usually this is not very visible.

3. The elite of the village, on the other hand, are members of voluntary associations, have fictive and real kin links with many people including very distant ones, and in general participate in a far wider and far less exclusively close-kin-oriented social world.

4. This is not because the elite <u>have</u> more potential links or channels for invoking links than do the rest of the people. It is because they <u>activate</u> more

channels than the ordinary people, and activate more links that the average villager leaves inactive. Thus they maintain relations with kin in other cities; with very distantly related kin; with fictive kin - all links that exist for everyone, but are matters of concern for the elite, not for the others. Bu the same token, everyone could join voluntary associations, play intervillage politics, maintain good relations with strangers from other areas, etc., etc. But only the elite do so, and then only in so far as it may be useful to them to do so.

5. Critically important here is the fact that voluntary, face-to-face, person-to-person links can be extended indefinitely, or on the other hand contracted to a very narrow circle of close relatives. A man can build up a vast network of friends and relatives, linking him to the life of Georgetown, Kuala Lumpur, Singapore, even Hong Kong or Jakarta; or he can maintain links with his wife, children and parents, and be quite casual about the rest of humanity. (There were even more hermit-like people in Kampong Mee; one man, a leper, lived alone with no relatives or friends and virtually no social contacts at all. His case was tragic and exceptional, of course, but not beyond the bounds of social possibility.)

We are not talking here about casual sociability or polite formality. Obviously the villagers greet each other, maintain some sort of relations, and will occasionally visit each other during formal contexts. We are talking about actual relationships that involve personal responsibilities and obligations.

6. Specifically, the social links of which we speak are defined by reciprocal obligations. If a person is called kinsman or friend (Kuo-yü <u>p'eng-yu</u>, with cognates; the meaning is not the same as English "friend"; cf. Anderson, 1970b), one can expect assistance from him at need. The more remote the contact, the less the expected assistance, but a great deal is expected of even the most

remote contact. Thus our housing in the village was arranged as follows: a man in the Fisheries office in Georgetown had a friend in Kampong Mee, a widely known and sociable individual. He brought us to see the latter, who fixed us up with his son-in-law next door, who had a room to rent. Here both friendship (distant) and kinship were envoked, and a favor done as a result. This was a case of mutual benefit; we were helped, but we could help out in return, i.e. by paying rent. In other cases, in which a person is helped but cannot immediately reciprocate, he is expected to reciprocate eventually - by another comparable favor if possible, by a feast or similar gift otherwise. Food is the expected return for favors done, if an opportunity for a return favor does not arise. Feasts, especially, are the standard way to initiate a relationship (by getting the guests indebted to the host) and the standard way to pay back a favor. This is the greatest single reason for the frequency of feasts in the Chinese business and social world (see, again, Anderson 1970b for an extended discussion of this).

7. Thus a vast, flexible, adaptable, changeable network, centered on a single individual, is built up and bound together by reciprocal obligations. Every person is the center of such a network, and the social world consists of millions of these networks, connected together, bound into a fabric.

8. Within this network, social expectations are fairly well known. Respect - both in terms of the attitude of respect and of the obeying and heeding associated with it - flows from junior to senior, from poorer to richer, from female to male, from less competent and socially viable to more so. Within the family, this is all hardened into a traditional and explicit authority system that presents most conflicts and allows others to be arbitrated or at least settled some way. Within the wider world, it is much less definite but still exists.

9. Respect based on competence is partly straightforward - a man is respected and honored for what he has done - and partly concerned with social persona, known as "face." We have discussed this elsewhere (once again in Anderson, 1970b), and need only summarize it here by saying that a man's face is based on his skill in handling social events and processes. Arbitrating disputes is especially important in giving face. Two combatants cannot back down without losing face; an arbitrator is able to propose a solution that, agreed to, gives face to both combatants - and the arbitrator gets even more face from this. A successful arbitrator is appealed to by everyone around him who has a problem, and thus becomes a political figure of standing. Wealth and such success also help in keeping face, but are not nearly so important as one might expect. Living up to social responsibilities, such as reciprocity, duties to kin, respectability in the community, and helping in times of trouble, is necessary to the maintenance of face, and a person who is a shining example of good behavior gets face thereby. Also, brilliant success in communicating (this can mean either getting a point across clearly, or fooling an outsider or sucker thoroughly) gives face. The common denominator is success in handling communications channels such that the social order is maintained or made more firm.

10. There are many dimensions along which links can be constructed. In practice, not only kinship and neighborhood, not only being friends-of-friends, not only economic ties are channels for potential linkage. Links can also be established on the basis of same surname; same class in school; same school; same office; same promotion schedule; same dirtrict of residence; same district of ancestry (in China, Malaysia or anywhere else); and any other conceivable kind of relationship. If all else fails, one can start a new voluntary association!

11. Conversely, again, none of these links need to be picked up. Most of those listed above are not invoked in Kampong Mee, for instance, except by the highest elite.

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In short, there are methods for forming socioeconomic ties under any circumstances. Once these ties are formed, authority structures and economic obligations are clear. The ties are exceedingly flexible and adaptible - they can be formed anywhere at any time, and broken, dissolved or ignored anywhere at any time. (In practice, bonds within the nuclear or stem family are hard to break or ignore, but even they often are.) The social world is a vast summation of individual networks. The networks themselves are formed pragmatically, ad hoc, from the bottom up. No other structure in traditional Chinese society is so important, not even the family.

Our contention is that this is the secret of Chinese success, the basis of the economic organization that enables the Chinese to dominate so much of the Asian world. By contrast, to take the example most relevant in the Malaysian case, contemporary Malay society is both over-organized and under-organized (in terms of its economic capabilities). It is over-organized because the feudal regimes - the rajahs and sultans - and the modern government and party bureaucracies still are so dominant in the organization that the ordinary commoner or villager has a very hard time getting an independent footing. It is not so much that he is oppressed by these authorities, although he is, and that is a counter-incentive. Even more important is that he thinks of success in terms of these authorities. His ambition is to rise in government service, and his perception of his chances of success in life is determined by the availability of this channel. The business world, the world of education, and other modern worlds of enterprise are less a part of his life. As for the under-organization, traditional and modern Malay society is relatively atomized; the individual family is a unit, and the kampong (or the small part of a kampong) is a rather shadowy unit, but beyond that there is not much chance of forming links - except by invoking the formal governing organizations. Wide-flung networks of the Chinese type cannot be

easily formed within the traditional framework. If they are formed, there is much trouble in regard to structuring of authority, respect, economic reciprocity, etc., etc. In short, the organization of Malay society is well adapted to a world of small villages and conservative royal courts; it is, by that token, counter-adapted to a world of international corporations and worldwide jet travel. The Chinese organization fits the latter far better than the former. In an earlier time, the Malays were more successful in their own sphere; now, they are at a relative disadvantage, though their involvement with government is becoming more and more a factor of success in today's bureaucratized world. This, we believe, is the main reason for the relative economic success of the Chinese, and the rest of this book will use this social point as one theme. We will explore the actual ways in which these two forms of organization - bottom-up, voluntary, flexible vs. top-down, government-structured, rather atomistic at the village level - play off against each other in the Kampong Mee fishery, and its economy and economic development. However, Chinese in Kampong Mee were much less prone to such social manipulation than are most Chinese, and live relatively atomized lives. They consequently have less success, and their failure feeds back to keep them less hopeful of success. They represent a peculiar case, with many problems.

6. Politics and Community

1

The preceding discussion leads directly into the political life of Kampong Mee. In the last section, we noted that channels of communication tie the whole Chinese community together, at least potentially; and that person-to-person links are easily established between almost any two people, on the basis of some actual or fictive relationship or similar social background. Here, we will first discuss the way in which an individual can make himself a local leader by playing on these links; and, secondly, how the official power structure of Malaysia impinges on the village organization.

We have shown elsewhere the development of grassroots leadership in a Chinese community (Anderson, 1970b). The discussion there is valid for Kampong Mee, and probably for every other Chinese community. However, the relative importance of grassroots leaders and official, government-appointed leaders varies greatly between communities. Among the boat people of Hong Kong, grassroots leaders reach high degrees of importance. Kampong Mee lies near the opposite extreme, with weak local leadership and a powerful externally-imposed power system. However, even in Kampong Mee, local leadership turns out in the end to be the more important. It is worth noting here that in traditional China, the official administrators of districts were expected to work in cooperation with the grassroots leaders - both systems were recognized, and both used for the purposes to which they were believed to be suited, in the days of the Chinese Empire with its famous bureaucracy. Thus the state shored up the local-leadership system, and helped it to develop, or at least did not inhibit (though it did change) the system's development. This is an unusual situation in a major polity, and may well have contributed to the importance of grassroots organization and local leadership in traditional and modern China.

We have noted above that a leader is one who can successfully manage to develop a social persona, a reputation, that makes him respected. He has face. Wealth is a help, a great help, and is represented for itself to some extent; but the real value of wealth is that it allows a man to discharge his social obligations in style. It is easy to find financially poor leaders and rich hermits and misers in traditional Chinese society, though the natural tendency is for a man to be a local leader if he is rich (partly because some of the same skills that make reputation also make money). More critically necessary is an ability to arbitrate disputes between one's constituents. A man who can successfully arbitrate, such that both contestants are happy with the decision and feel they have gained face by accommodating in the situation, gains even more face, and if he is successful in such arbitration he will be asked to arbitrate still more disputes among higher-status contestants. A man who can arbitrate within his family is a good citizen; if he can arbitrate for his neighbors he is a leader; if he can arbitrate within the shole community, he is a member of the community leadership.

The other criterial attribute of a leader is his ability to plead cases before higher authorities. He is good at representing his constituents. Whether their desire is for a new water system for their village, a slice of a corrupt rakeoff, a new law permitting their business to move into new areas, or a policeman to come to keep order in an intervillage conflict, the constituents go to the leader to get things done.

A grassroots leader of this kind has no jural authority and no force to back up his decisions. He relies on the rationality of his position, the persuasiveness of his argument, and the force of his character and reputation to bring public sentiment around. He often can command a show of force,

in that he will assemble or attract a group of tough young men who can very thoroughly enforce his commands (the secret societies are often an extreme case of this). But he cannot command this force by appeal to any legal or even extra-legal sanction. (The organized secret societies have gone behond this stage, of course, and are highly structured with many extra-legal but very real authority systems and sanctions.) He can only continue to act such that public sentiment, at least that of the toughs, is with him, and any dissenter is isolated and kept in a minority. In actual practice, only a tiny percentage of grassroots leaders have any force associated with them at all, and they are often regarded all the worse for it. A true leader need not attract a gang; he convinces by force of argument and leads by force of character.

In genuine democratic elections, such people get elected to offices. In appointments, a wise administrator will appoint them to positions. However, all too often the legal and duly constituted authority clashes with the authority of the grassroots leaders. A legally appointed authority will be an outsider to the village, often with no skill at arbitration or advocacy. Or he will be an insider to the village, picked either because of his wealth or because of his political docility. In either case he will start under a cloud, simply because he is associated with an alien, intrusive force, viz. the legal government. Only the most competent person can get from this cloud, let alone administer wisely. And the ultimate evil occurs when both incompetent outsiders and corrupt insiders are picked, often relying on each other. The incompetent needs the help of the corrupt to get anything done, while the corrupt needs the legal protection afforded by the incompetent. Needless to say, the incompetent winds up caught in the corruption. On the other hand, once in a while there is an outsider leader who can win the respect of all sides.

The problems of duly constituted legal authority are worsened by the fact that, in traditional Chinese society, the desirable and needed functions of a leader are performed by the grassroots leadership, while the government is left with the unsavory or distrusted jobs: policing, drafting for the military, taxing, regulating sharp practices, and in modern Malaysia helping the Malays in ways that the poorer Chinese believe to be specifically directed to hurt them (the poorer Chinese). In traditional China, as noted above, the two sides cooperated - sometimes with good results, sometimes with bad (the incompetent and the corrupt formed a natural unit then too), but at least it was an attempt. In the modern world, the legal government is usually unaware of the grassroots leadership, and when aware thereof it views the latter as a threat to the legal authority's position. Thus grassroots leaders, who are admittedly often uncomfortable to deal with for the vested interests, are often systematically cut down. This has happened at the national political level, and also in Kampong Mee.

With this background, we can turn to the actual situation in Kampong Mee and recount a few facts. However, the actual details of the administration and political infighting in the fishery must be left for the next part of this book. Here, we will give only the general attitudes of the people, and a few details on the actual leadership structure of the village at large.

2

As one might expect in a village that is so fluid, unorganized, poverty-stricken and generally low in stability and status, there is not much of a grassroots leadership. Arbitration and advocacy are jobs of a boat captain, so that for his crew the captain is usually a leader. A few of the longest-established and most well-known captains, having the requisite skills, have become grassroots leaders. In particular, the individual who started trawler-fishing at Kampong Mee

and ran the only large modern boat there in the early days is an extremely enterprising, intelligent, competent man, and also very happy to exercise his role as advocate. Thus he served on the cooperative committee from its founding until he left, protesting its takeover by shore business elements, and maintaining he was forced out. He continues to be a major sounding-board for village grievances and to take these to people who offer themselves and might conceivably do something about the problems involved. A few fish-dealers also have leadership authority. Our next-door neighbor, father of the lady of our house, was such a person; himself a low-level employee of fish-dealing firm, he was a middle-aged man long resident in the village, friends with all, and a cheerful, extroverted, honest and reasonably respected person. Only his lack of the requisite smoothness and intelligence kept him from being a major leader; as it was, he was an important figure, arranging things, transmitting information, arbitrating, and generally active around the village. Significantly, he was active in his lineage club in Georgetown - a rare thing for a Kampong Mee Chinese, and showing a more-than-usual interest in associations outside the village.

However, there is no one village head, or group of informal leaders. The many grassroots leaders are scattered, weak, with small constituencies. They operate in traditional fashion, by wandering around the village, talking to everyone they can, and sitting in the coffee shops during busy times of day. This last is the equivalent of office hours; a leader meets his constituents there, and is visibly available. The structure of coffee-house office time, walking around, and so forth is not well developed, though; nor is the village unified. Newcomers feel there is little organization or authority, and even old residents will often take their cases to an official government representative, or to anyone else with obvious signs of power, rather than to a grassroots advocate.

But there is one real leader in the village, a leader not highly regarded nor often sought out by the ordinary villagers, but very powerful nevertheless. This is Tan Hiap-Oh, son of a brother of Tan Tik-Soon. The latter, as village rich man, actually holds much of the power; but his son is the political arm of the family, the person who actually deals with both the villagers and the local representatives of the Malaysian government. Tan Tik-Soon himself manages his business and family affairs in isolation, in his great mansion on the hill overlooking the village; Hiap-Oh lives down in the village itself, though somewhat removed from the main areas, and is always visible on the harbor shore, or sitting in the cooperative office which is his special province.

In addition to being one of Tik-Soon's family, Hiap-Oh is rich in his own right, with many sources of income in the village, and a son living with him and earning a high salary working in Georgetown. Clearly the pair of families are the rich of the village. They are the village elite. The only other well-to-do figure is a veterinary doctor, a friend of theirs, who never appears in the village, but merely drives through on his way to his house on the hill. The village's microscopic middle class consists of the leading storekeeper; some more of the Tan family; and one or two leading fish-dealers and farmers. The rest of the village is working-class or lower. Therefore, the Tan family can enjoy an especially high niche, being the only people with much money. In addition, the middle class blends with the rest of the village - living in poor houses (often atap), and avoiding all conspicuous consumption, in order to appear at one with the villagers and not alienate customers and trade by seeming too distant. Thus the only conspicuous consumption in the village, the only visible money, the only good houses, are the property of the two Tans (and their invisible friend the doctor). Tik-Soon has by far the more expensive and elite life-style - Hiap-Oh's style would be considered low and "backward" in Georgetown - but Hiap-Oh is more

visibly involved with the village. Tik-Soon owns the land, collects the rents and organizes the temple committee and other such things; but Hiap-Oh deals with political parties and the government, runs the cooperatives, and handles other public affairs. There is a deliberate separation of functions.

The Tan family maintains control in three ways: First, it is the dominant economic power in the village. Second, Tan Hiap-Oh is enough of a grassroots leader - responsible, competent, reliable and intelligent enough - to attract some patronage. He is the penghulu (official, government-recognized head man) of Kampong Mee. Third, the Tans assiduously cooperate with the constituted government, its more conservative representatives in the villages, and the Malayan Chinese Association (the Chinese component of the Alliance group of communally-based parties that rules Malaysia). They were also active in the Muhibbah Committee of the area. Muhibbah (Malay for "goodwill, tolerance") Committees were formed after the 1969 ethnic riots in Selangor, with the object of bringing the different communal groups together. In Kampong Mee, the Malays and Chinese were far too estranged to come together, and the people who joined the committee did it quite frankly out of self-interest; Tan Hiap-Oh, the Kampong Mee representative, was honest with me on the subject, saying he joined it to have good parties and make influential contacts. The Muhibbah Committee was universally regarded (by its members as well as by the rest of the public) as an association of conservative elite, who joined the better to consolidate their position. Something similar seems to have happened elsewhere, for the Muhibbah Committees were downplayed while we were there, and are now defunct. The one of the Sungei Itek area (including Kampong Mee) sputtered out and died during the last part of our research -

the reason given us was that the parties were getting to be a bore! Apparently they had become speechmaking occasions, with more and more speeches and less and less food and drink. Of course, the real reason for failure was that the committee had served little useful function - the elite could meet just as well, and less obviously, without it. But the coup-de-grace was apparently given by a big get-together of the Muhibbah Committees of all south Penang, which was so riddled with speeches, and so obviously a device for ingratiating with Malay authorities (it was in honor of a new official), that men like Tan Hiap-Oh gave up in disgust.

In short, the Tans are typical "Chinese towkays". "Towkay" is a word derived from Hokkien thau ke, 'head of the household (i.e. the buiness firm).' In Malaysia, it has become a word in all languages, meaning a conservative, rich, powerful and not too scrupulous Chinese businessman. (In Hokkien, it is merely a polite address form for a man of substance.) The Malayan Chinese Association is often condemned as the "party of the towkays" - which is not true in Malaysia as a whole, but is true enough in Kampong Mee an dthe area around it, where only the Tans and a few other rich men are in it. The "towkays" are sometimes charged with conspiring with conservative and powerful Malays to cooperate sub rosa in exploiting the poor of both races. Somewhat beyond this, the towkays and conservative Malay elite are charged with conspiring to set the poor of the two races against each other, the better to exploit them - to divide and rule strategy. This may be true in at least some cases, though not visibly so in Kampong Mee, where the Tans are as anti-Malay as anyone and the Malay conservatives are very anti-Chinese. This does not prevent a minimal cooperation on economic matters, but does preclude anything so devious as a conspiracy to divide and rule.

To take up the three sources of the wealth of the Tan family, in order: Their economic strength originally came from their ownership of the land. Tan Tik-Soon bought the land years ago, when it was just another isolated farm; like many Chinese of Hakka (Kheh) background, he was a farming semi-pioneer by profession and ambition. But the land became more valuable, both through his efforts and through the gradual development of Penang Island. In 1962, the real fishing boom came; Tan was lucky enough to own the shore land, and clever enough to parlay that ownership into control of the regional economy, with lands stretching far inland. He sat up his nephew in business, and the latter quickly became dominant in the fisheries economy, by acquiring a monopoly on supplying oil, fuel, ice and other inputs. Since the local supplier is the person best situated to make money from the fishery - because of his monopolistic position and the critical necessity of his wares - Tan Hiap-Oh made much money thus. He has other interests as well, but they are not central, nor are they relevant to our study.

As an advocate and arbitrator, Tan Hiap-Oh must trade off his advantages (intelligence, enthusiasm and good contacts) against his disadvantages (he is distrusted by the fishermen because of his monopoly and his government contacts). The latter offsets the former in ordinary cases, but in desperate situations, the villagers have few other people to turn to. Tan Hiap-Oh will carry a serious case to the right people and do it courageously and straightforwardly; he was instrumental in stating the need for protection of the fishermen against fishermen of other communities, and has continually lobbied for more reasonable tax structures, etc., for the fishery. There is obviously self-interest in this; the ruin of the fishery would clearly damage Tan's economic position.

But Tan could have chosen to gradually phase out his fishery interests, and go into dishonest activities solely (as some Chinese leaders in other fishing villages have done) or into activities that would bring him close to the power centers of Penang. He has chosen to stay with the village fishery, and to state its case when real problems arise. Being one of the better popular leaders in the village, and the only native villager with any managerial expertise or personal advantages who is involved in the fishery, he owes much of his power to real and highly necessary qualifications.

As for the third base of Tan power, the association of Tan Hiap-Oh (and to some extent Tan Tik-Soon) with elite Chinese and Malays of the Sungei Itek and nearby districts must be seen in the context of traditional Chinese patterns of leadership. The Tans are simply keeping open the channels of communication and forming links, person-to-person, of obligation and reciprocity - doing as any Chinese leader should. They use the power derived therefrom to consolidate their own economic and social position - again, a leader's role, or at least his recognized and orthodox benefits. In traditional China, such alliances were expected, encouraged, planned for and often advantageous to all.

However, such cooperation between antagonistic elites leads to economic pressure on the poor. This is primarily because the thing that Tan can most easily get from the Malays who administer the district is protection of his monopoly position as supplier and of his post as business manager of the five cooperatives in the village. Other things that would not only help Tan but would help the whole village - better police protection for the boats, better tax structures for the fleet, sanitation, disease control, etc., etc. - are far more difficult to get from the government,

even though Tan wants them and tries to get them. Thus, again, unfortunate tendencies are reinforced. On the other hand, Malay officials in the cooperatives and in the village government structures are forced to rely on Tan for help, because only he will help them, and the opposition they meet from the rest of the Chinese community makes their jobs impossible without Tan. The conservative Malays thus work with him. The more progressive Malay administrators are either forced into semi-inaction or, if exceptionally honest and competent, must operate almost isolated. This is especially true because in the eyes of these more dedicated officials the first thing that must be done to help the Kampong Mee fishery is to eliminate Tan's stranglehold on it. (They were quite vocal to us on this matter.) This is hardly a sentiment popular with Tan, and thus hardly a sentiment that is likely to have any effect in the Chinese community.

Moreover, the Malay strategy of holding and consolidating leadership is not based on manipulating communications channels, but more on doing the job at hand, and providing good service for one's superiors (and, hopefully, for the governed as well). The Chinese and Malay elites have a great deal of trouble understanding each other's positions and strategies. This obviously makes cooperation, in any meaningful or useful way, difficult. Incidentally, it also means that there is a real gap between the conservative Malays whose commitment is to consolidating government control and Malay ethnic power in the village, and the liberal Malays whose commitment is to improving the fishery and providing services to help do so. This gap led to sharp factional fights within the administration of the cooperatives of the area, with the liberals charging the conservatives with corruption (partly because of their association with Tan). Such gaps would be harder to find among Chinese leaders, who commit themselves to

different constituencies more than to different ideologies, and who can maintain communication with each other, even if they dislike each other personally, because of this fact.

The remedy suggested by radical younger fisherman for the above-noted situation is to "throw the bastards out" (as the traditional American phrase has it). The anti-Tan faction wished to remove the group of cooperating Chinese and Malay elites; the Tan faction wants to remove the liberal Malays and the grassroots Chinese leaders (other than Tan); and the ordinary villagers cordially wish that both sides would be quiet and inactive, alleging that all government is at best a nuisance and at worst the combination of corruption and paralyzing infighting that they fear was developing in Kampong Mee. In fact, the villagers continually appealed to Tan and the Malay leadership for help in a variety of matters; this did not greatly change their publically-expressed sentiments. What has happened is that the clash of different control strategies and of different ethnic groups, in a setting of great economic inequality and social fluidity, has created a situation in which it is very difficult to do a good job of administration.

3

The villagers are highly aware of state and national-level politics, and many of them take it very seriously. The poorest and most mobile are least interested; there is not a firm correlation of political sophistication and wealth, but there is a firm correlation between political sophistication and standing in the community. The most active person, politically, thus tends to be a long-resident individual with some degree of grassroots leadership. In addition, there is a definite

age tendency. The younger individuals are much more politicized than the older, but the youngest tend to be the most politicized. This is not always true, but it is a tendency with consequences, since the young are more extreme and more hostile than the old.

Politically, the village was vaguely leftish, with strong communal sentiments, but with especially strong anti-establishment sentiments. Anyone who provides opposition to the Alliance drew some support. (The only serious support for the Alliance is found in the Tan family and among the Malays.) In the most recent elections, the Gerakan had received most of the votes. As the Gerakan became part of the perceived establishment controlling the state government, torn by factions, and cooperating with the Alliance - the tendency was toward the Democratic Action Party. The Partai Buroh, or Labour Party (a socialist party), outlawed for alleged far-left activities of some of its members, drew some support. The fishing villages voted rather lightly in recent elections, not because of disinterest, but because they followed the Buroh boycott of the elections after it was outlawed. In 1970-71, some fishermen claimed the Buroh was outlawed because it provided a real threat to the government, rather than because it was too far left, and claim perfectly ordinary local leaders from the villages were jailed as "dangerous Communists." The Buroh is very much stronger in the older, more organized, and far more tense and allienated mainland villages than in Kampong Mee. At Sungei Ikan Mati it was a major force; a Kampong Mee, a vague anti-establishment tendency got it some support, but shifted most support to whatever party was currently the most vocal opposition of the Alliance.

Despite intense politicization and polarization, and an enormous degree of strong feeling about the whole political business, the villagers

knew little about the actual political process. They knew the word-of-mouth stereotypes - most of these being exceedingly unflattering to the people in power, whoever they are. (Chinese opinions of governments are notoriously low - cf. Anderson, 1970b.) They thus tend to know the content of laws (except laws relating to the fishery) only by word-of-mouth, often with distortion. The Malay protection legislation was believed to be written in specifically anti-Chinese terms. The Malaysian political process, not characterized by complete democratic freedom at best, was said to be specifically repressive of Chinese, especially emergent popular leaders (cf. the opinions on the Partai Buroh above). Little is known about actual individuals in government, or about their positions, or about differences within UMNO.

It is no secret that relations between Malays and Chinese are not cordial in Malaysia (as the riots of 1969 proved) and among other places in Penang (which had its own riots in 1968).

In Kampong Mee, the stereotypes appear as follows:

The Chinese regard the Malays as lazy, stupid (educated ones cite Mahathir bin Mohamad's book The Malay Dilemma (1970)), and interested primarily in getting into government so that they can live by oppressing and exploiting the Chinese.

The Malays believe the Chinese are all rich, dishonest, corrupt, and interested primarily in getting into business so that they can live by oppressing and exploiting the Malays. In addition, religious prejudice enters in. The Chinese regard the Malays as inferior for lacking Chinese culture, but the Muslim Malay reaction is potentially more serious, regarding the Chinese as infidels, pig-eaters.

The degree to which fear enters into this can readily be seen. The crux of the matter, as it now stands, is that the two groups fear each other's political and economic power, and are absolutely convinced that such power is primarily used to oppress and exploit the opposite community.

This leads naturally to a feeling that Group A must stop Group B before Group B can stop Group A. Also, the groups themselves believe some of the stereotype; many Malays will say they are indolent and inferior, many Chinese that they (as Chinese) are dishonest and sharp. Thus the stereotypes become self-fulfilling to a great degree. Malays will seek political power in order to get "equal" to, or preferably a little ahead of, the Chinese businessmen. Chinese will use sharp economic practices to "get revenge on" the Malays for oppressing them politically. Both have a strong and explicit feeling that, since the other group believes the worst of them and treats them accordingly, they must treat it with similar harshness - both to even the score and to stay alive as a group.

One of the worst side effects of this is to relegate the poor, rural, unsuccessful Chinese to a real limbo; this problem was recognized by t government. Malay actions, individually and via UMNO, tended to be predicated on the assumption that the Chinese really do have economic and social advantages over the Malays. The Chinese of Kampong Mee, however, were desperately poor and subjected to every kind of social stress and strain - no one could be in more need of economic help. Instead, they saw the Malays' special privileges as cutting at them specifically.

The conclusions that emerge from the foregoing are that the fishermen of Kampong Mee, and indeed of the whole Chinese fishery of Malaysia, were at the very bottom of the nation's social scale. They did not even control their own boats in most cases, and thus were worse off than the farmer who

owned his farm. Moreover, they were caught in an economic situation that was potentially disastrous. They knew that their social and economic position was worsening relative to the more modern, urbanized, successful sectors of the economy. They feared that their position was worsening relative to the Malays and relative to the rich and middle-class Chinese. Last of all, they knew that the fishery was headed for almost certain disaster, with little hope that they could change the policies causing this, and little hope of any opportunity. Their only real hope was to escape the fishery into some other line of work, and even this was a slim hope, due to their increasingly great disadvantages in education and in employability. Both their lack of skills and their undesirable ethnic status were against them. Fortunately, this faint hope paid off, and rapid industrialization in the area alleviated their troubles.

Some of the above anticipates the rest of this book, but the last few sections have shown that the citizens of Kampong Mee (except for the richest) were isolated from the mainstream of Malaysian life, caught in a sad ethnic situation, and at the mercy of elite Chinese. It is clear from our data, indeed, that their perceived social and political situation is much worse than their economic one. Economically, they are surviving, and if they invoke dishonest practices on a large scale they can even make fairly good money. Sociopolitically, however, they feared much and hoped little.

Since they were aware of this, they were reduced to a state of mind that combined defeatism with a great pressure to get what they could. The latter intensified their hatred of the Malays and their willingness to cheat and exploit the latter. The former, the defeatism, was more pervasive.

To understand it fully, one must realize that the people of Kampong Mee had very little even in their traditional culture to sustain them. They came

originally from a segment of Chinese society that was as rural, even poorer than, and almost as despised as they are now - the marginal, isolated peasantry of the southeast Chinese coast. Thus they never participated to any great extent in the great tradition - or even in the more prestigious little traditions - of China. They came with little cultural baggage; in their homeland they had been used to relying on people of higher social status to administer them, educate them if they could afford education, minister to them religiously, and create their arts. There were village traditions in China, of course, but those of the impoverished southcoast villages from which these villagers come were traditionally considered to be poorer and less satisfying than those of most villages. Whether this is true or not, most Chinese, including the villagers themselves, tended to believe the stereotype.

In Malaysia, the old culture crumbled - slower than might have been expected, but still all too rapidly. Under the British, the Chinese could acculturate to high-class Chinese (many of them scholars imported specifically to teach the Chinese great tradition), to Malays (as in Malacca especially), or to the British. The poor were relatively less able to do any of this, especially in the isolated wholly-Chinese villages of the fishery. But the poor could by the same token keep up a semblance of their Chinese culture and society.

Merdeka began to change all this. Options for acculturation became reduced. The free-and-easy interchange between Chinese and Malays had eroded all through British days; now it has been stopped, and acculturation to Malay, or even "Baba", culture has been closed off. The British are no longer available as role models, and higher-class Chinese are no longer imported; the older generation of Chinese scholars is dying off. Meanwhile

the modernization and rapid development of the country is making traditional Chinese village culture nonviable. Mobility of the work force, thorough monetization of the economy, and ethnic and political polarization have made many of the old social forms either meaningless or down right counterproductive - though many other social forms serve to mediate the transition, and help the villagers to adjust and survive. (Among the latter we may stress the voluntary-association person-to-person links. Among the former, the class structure and some aspects of the religion stand out.) A social form that was valuable and useful in the context of a traditional Chinese village can become anti-developmental in the changed context of a modern society. Traditional Chinese ideas of cultural superiority can serve as an example, once they maintained the villagers' sense of pride, their sense of belonging to a great and long-lived culture, while now they primarily serve to make accommodation to the Malays impossible. Of course, the social forms themselves have changed; thus cultural superiority is no longer felt toward the British, who are rather considered as ideals to emulate in many spheres of life, but is directed primarily toward the Malays

The bitterest category of person - and the category most dangerous to Malaysian's future - was the small group of those from the villages who have managed to get some education. Totally removed from any cultural background, aware of the forces of the modern world, and standing to lose most of anyone from the Malay protection measures, they had an intense form of the full load of tensions and bitterness.

7. Structure of Survival: Health and Food

1

Questions of health and diet are not separable in Kampong Mee. Both in fact and in the beliefs of the villagers, the two fields are one. Much of the disease and "unhealth" of the village is due to poor nutrition; and the villagers believe that the state of the body is determined in large measure by what it takes in. The problem is that the villagers' ideas are often the opposite of medical opinion on given nutritional questions. This is not a random process, or the result of "mere superstition" or "backwardness." Indeed, the villagers' thinking on the subject of health, food and disease is far less reasonable or accurate in terms of medical science than is that of really traditional Chinese. Thus an important question for investigation is raised: why have both diet and medical knowledge deteriorated?

To answer this, we must first point out that beliefs about health and about food are intimately connected with (indeed, are a part of) beliefs about the self, the person. In all cultures, including the modern west with its advanced medical science as well as more traditional cultures, beliefs about the welfare and satisfactory state of the individual are expressions of the whole pattern of beliefs about humanity and individual personality. Thus they can be studied as expressive systems. Actual feedback from the environment is relevant, of course; a group that believes it should eat nothing will die out soon, and a group that believes in total lack of sanitation, or in living entirely on tapioca (as Sukarno is said to have advocated in an extreme speech on self-reliance), will either learn better or become extinct in short order. But some groups clearly attend to feedback more than others. One is left with the task of explaining why these others continue to hold their beliefs in the face of presumably discoverable invalidation by the experience of the group members. In particular, when a community's strategies of body management and food management

actually deteriorate sharply and rapidly, one must be particularly attuned to the need of finding out causes. Here in Kampong Mee (and among Chinese in Malaysia generally), we have the extreme case of a community whose standards in these fields are deteriorating steadily even in the face of extremely rapid growth in scientific medical knowledge throughout the society.

2

We may begin with health in general, and an objective view of Kampong Mee's health situation is probably the best place to start. No adequate figures on health in the village are available, except for malaria (constant at three cases in the village during our stay) and serious leprosy (one case; there may or may not have been early or incipient cases, but probably there were not). A death occurred during out stay - an old, unwell man, said to have died of "old age" (probably a heart condition aggravated by disease). For the rest, we can only give, for what it is worth, the fact that heart disease is now the leading killer in Malaysia, with cancer second and tuberculosis third (these two may be reversed, actually, since TB is not always diagnosed). Pneumonia and other serious respiratory diseases are major killers. Tuberculosis and malaria formerly led the death rolls, but have been semi-controlled; during the same period, heart disease has risen sharply, especially in the last few years. This is evidently due to the modernization of Malaysia, specifically the rise in life expectancy, the growth of sedentary jobs, the reduction of exercise, and the increasing amount of sugars, fats, etc. in the diet. In Kampong Mee these overall trends are probably less sharp - certainly sedentary life is a nonexistent commodity! - but still exist. Dietary deterioration and at least some reduction in physical work has increased weight, by all accounts and observations, and presumably heart conditions will follow. Tuberculosis, pneumonia and other

respiratory diseases continue to be widespread, however, and possibly still rank as the leading killers. Medical care being casual and spotty in the village, there is absolutely no way of knowing.

The level of health in the village is not especially high. On the one hand, infant mortality is evidently very low, life expectancy is good, and major diseases are rare; on the other, though, there are widespread minor ailments, parasitoses, and infections. Epidemics of tiuq kam, "catching cold," regularly and frequently sweep the village, almost every month; this is a class of diseases characterized by fever, general malaise, and often respiratory trouble with coughing and running nose, as well as weakness. It is translated as "flu" - a very vague category in much medical parlance in Asia and elsewhere - and clearly involves a number of different diseases. An epidemic of conjunctivitis struck while we lived in Kampong Mee, and almost everyone caught it. Rashes and insect bites are frequent and tend to get infected; other forms of dermatitis also appear. Any cut or sore gets infected due to the lack of sanitation, and serious infections from insignifican cuts are frequent. Our landlord had a sore on his leg, originally from a minor itching place (insect bite or rash area) that was scratched, and was chafed by sitting down. This became infected and eventually led to a huge swelling involving the whole leg, with intense pain and a large suppurating sore covering four or five square inches. This was aggravated by traditional treatments, e.g. with a black gummy herbal plaster that seals the wound and introduces undesirable bacteria. Eventually a Western-style doctor was consulted, and the sore was healed (a rather slow process). Several days of work time had been lost, and great suffering caused, by an irritation that had begun by being utterly insignificant. The availability of penicillin cream reduced the incidence of this, but even so children usually had a few infected sores and cuts at any given time; the penicillin creams were not always used

They were not always viable, either, since it appears that very weak or very old and inactive creams are sold.

Parasites, specifically pinworms (Oxyura supp.) and roundworms (Ascaris spp. and possibly other forms), were common enough that most people and all children could expect to need worming at least once a year and usually more often. Other, more serious parasites were known but not so common. Various vermifuges, Oriental and Western, were available - again, some were neither fresh nor very effective, but on the other hand one could usually find Antepar (specific for the above) in the village or at worst no further than Sungei Itek.

These were the major medical problems during our stay. In addition, there were colds (usually lumped as tiuq kam, "catching cold"), unclassified fevers, and the inevitable and frequent bouts of diarrhea that usually come from shigellosis or salmonellosis but may come from influenza or simply from inadequate or poor diet. Such diarrheas would hit a given person about once a month, with varying degrees of seriousness - usually a day of mild discomfort, sometimes several days of suffering.

Thus major diseases had been eradicated or stabilized at low levels of incidence, but minor ailments were exceedingly common and frequent. The reasons are not far to seek. The first fact stands to the credit of the public health work begun by the British and continued by the Malaysian government. Malaria control was the only thing here that seemed inadequate. The disease was held to a low level, but was not declining either (it was much commoner in nearby parts of south Penang, such as the more isolated coastal areas near Telok Kumbar we use the real name of this town.) A lack of delivery of drugs was involved, and more important - at least potentially - was the reliance on DDT spray for mosquite control. The spray was rather spottily applied and is certainly not an adequate control in itself - the mosquitoes of at least some parts of

Malaysia are now resistant to DDT. Elimination of mosquito breeding places was a critical need around Kampong Mee.

The second factor, the high incidence of minor ailments, was clearly due to the lack of sanitation in the town, coupled with poor nutritional status. All the Chinese fishing villages of the Penang-Perak coast are lacking in sanitary facilities of any kind, except for crudely built outhouses which open directly into streams and rivers. Night soil is collected every few days, but a great deal is spilled or left around. Children up to six or seven do not use the outhouse regularly, and babies do not use it at all; these children will at first relieve themselves anywhere they are, and later are trained to use the open drains around the houses. They do not always live up to the training. Cleaning up the resulting filth is done very casually. In general, there is no feeling among the villagers that urine and feces are particularly unclean - they are regarded as more or less equivalent to any other kind of dirt, and are more or less ignored accordingly. On a dirt floor, children's urine is not cleaned up at all. There is nothing wrong with this attitude - it is a healthy enough one - except that bodily excretions do transmit parasites and disease.

Down the center of Kampong Mee, between our house and the one behind it and following the house rows up and down, ran a marshy stream that opened into the salt marsh. Other such streams existed in other areas. These were sewers; chil eliminated into them, kitchen waster were thrown into them, and ducks, chickens, dogs, pigs, etc. fed in them and excreted into them. They were avoided carefully by everyone, and one of the worst beating we ever saw given was to a young child who had been playing in one. But in spite of all the sanctions, people did get into them, and in any case the fact that they flowed only a few inches from the kitchen areas of the houses was not calculated to maximize sanitation. The drain concrete-edged ones especially, as opposed to ones that were grasses - were choke with filth, and had stagnant water of considerable interest to flies and mosquito

Household cleanliness was maintained, with daily sweepings of house and yard and washing down of the kitchen area and other areas; and the people bathed daily, often three or four times in a day. Clothing was kept clean by diligent laundering. However, cleaning was limited to the family house area; the public parts of the village, and even the yard areas adjoining the street (as opposed to those by the house), were filled with litter, miscellaneous animal and human eliminations and garbage. There was no conception of caring for such public places; they existed as receptacles for anything that needed to be thrown away. The streams and the harbor served similar functions. Personal cleanliness too had its limits; bathing was frequent, but the lack of any special feelings about excrement, etc., meant that no one felt it necessary to wash the hands after changing a baby's diaper or handling a night-soil bucket or otherwise dealing with sources of contagion, unless a visible mess was made, in which case the hand was merely rinsed. Again, this natural and relaxed attitude has its advantages; the children did not develop tension or repression over natural bodily processes. Unfortunately it also spread parasites and disease like wildfire. Even the dust swept up, and thus the air breathed in, was laden with pathogens; and walking barefoot around the village was dangerous in the extreme because of the excrement-borne animals that could tunnel through the foot skin, such as hookworms and certain roundworms. In other villages, notably Sungei Ikan Mati, tetanus is common and a major killer. It is a result of the filth and the often sharp-pointed litter.

The villagers were not filthy or unclean by their standards; their homes were swept and kept extremely neat, their clothes were always clean and neat except when the wearer was doing work that was by nature dirty or hard on clothes. The problem was that the standards set were low, and a total lack of pride in the public areas led to really dangerous deterioration thereof. The situation was

far worse in many mainland villages - Pantai Remis (to use a real name again stands out in mind as a particular pesthole, but the north Perak and south Province Wellesley group of villages offered competition. Here villages far larger, more concentrated, and less cleanliness-conscious than Kampong Mee were crowded along very slow-flowing sloughs, and there were more pigs wandering about.

Here we must stress that the traditional Chinese village, while no model of cleanliness by Malay kampong standards[1], is certainly a far cleaner and safer place than these fishing villages were. There has clearly been a deterioration. Partly this is due to economic factors; night soil, paper, wrappings, bits of wood, etc. were treasured and re-used in China as they are not in Malaysia. But there are other factors at work, connected with village image and related concerns, that will be discussed in due course.

3

This brings us to the question of how disease is regarded by the villagers. Here they stand between two traditions. They have forgotten, or never knew, most of the Chinese medical traditions; they know very little of any other. They are between Chinese and Western with a small Malay input. The basic beliefs are from the Chinese folk-medical tradition, but much has been lost, the rest preserved with strange rearrangements and rethinkings. It is, indeed, hard to draw together a coherent picture of medical thinking, whereas traditional Chinese medicine is coherent, well-though-out, and quite successful (cf. Palos, 1972; also Anderson, 1970b, and Anderson and Anderson, 1968).

[1]The traditional cleanness and neatness of the Malay population was visible - diluted slightly by modern littering tendencies - in kampongs around Kampong M

Disease is caused by some disruption of the natural harmony of the body. The body is thought to be the product of the dynamic interaction of forces, and when the correct balance of these is not maintained, the body appears sick. Focus in healing must be on the restoration of correct forces within the body. This is traditional Chinese thinking; but to it has been added Western ideas of sickness as some alien outside invader, attacking the body and necessitating military-type techniques to conquer it. Thus less attention is paid to bodily harmony, and more to specific devices to fight disease, than was done in former times.

The most important balance is that between hot and cold - zuaq and lieng in Hokkien. Fever occurs when there is an imbalance with too much heat; symptoms accompanied normally by fever, or related to obvious dietary factors, are also caused by too much heat. These include sore throat, local infection or inflammation, and diarrhea. Weakness, depressed temperature, and shivering are caused by too much cold; the weakness of a postpartum woman is especially cold and dangerous to life, and tuberculosis displays the classic group of syndromes in some cases (though others - with fever and sore throat - seem more hot). Malaria is a classification problem, being alternately hot and cold - the kua: zuaq pe: ('cold-hot disease') of local Hokkien. (Kua: is colder than lieng.)

Imbalance of temperature is caused primarily by dietary imbalance, and can be cured by that among other means. Certain foods are heating, others are cooling, still others are neutral. The English-language category "rich" roughly translates the category "hot" and is in fact historically related. Alcoholic drinks except beer (cool or neutral, sometimes hot - there is conflict) are heating. Spicy foods, fried and baked or roasted foods, greasy foods are all heating. Ordinary white rice is heating. Tropical fruits tend to be - rambutan, durian, watermelon; this branch of the learning was acquired from Malays. Cooling foods include

beer (to most people), broth, squash, tea, bean milk, most vegetables especial when boiled or raw, most fruit, abalone, etc. Especially cold are small clam bamboo shoots, and various herb teas - the latter are the standard, virtually inevitable remedy for diseases thought to be an excess of heat. Congee and boiled mee - both typical foods, especially for children - are neutral and saf this contributes to their importance in the diet (or, quite possibly, their importance led to their being classified as safe).

There is difference in classification here, as in Hong Kong (Anderson 197 and among the Malays (Christine Wilson, personal communication). But certain things are agreed on - the heating aspect of alcoholic drinks and hot-prepared foods, the coolness of most vegetables and of teas.

The hot-cold dichotomy in folk medicine and dietetics is, of course, found throughout the world, having spread from some unknown center (probably in Asia) at a very early date. It is preserved in the earliest reliable medical writings of Greece, India, and other areas, and survives today here and there in every part of the globe. Both Chinese and Malays have had it for millennia, differing in the details of the system, but believing the basic premise that imbalance of heating and cooling foods leads to sickness. Details of belief, such as the particular danger of imbalance in critical periods, are shared and apparently always have been. Thus a woman recovering from childbirth is in an especially touchy situation. Convalescence, weakness in childhood, and certain life-crisis periods are also regarded as times to be especially careful. On the other hand, a person otherwise in good health and normal life-events can eat pretty much as he want to - though if he is careful he will try to drink beer and tea at a feast, and perhaps follow it up the next day with congee and cooling dishes. Even in sickness, there is variation; some individuals stick entirely to cold foods when fever is on them, others drink cooling teas but eat some neutral and

even some heating dishes, others worry only minimally about the whole thing. However, at least some belief in the system and at least some resort to appropriate dietary remedy is effectively universal, not only in Kampong-Mee but throughout village and even urban Chinese society in Malaysia. The Malays share this stress on the system, and perhaps the Indians we well, since it is in their traditional medicine. It seems highly successful - partly because it works to some extent; bland foods and herb teas are indeed helpful for fever or indigestion, and the usual foods to gently reheat a cold person are such things as protein-rich broths, very desirable for a postpartum woman or a weak person (see fuller discussion in Anderson and Anderson, 1968).

For external complaints, black gummy plasters may be applied; these are made with various herbs, and are thought to cool down infection and heal the wound. In fact they tend to keep air out and cause further complications. In addition, there are other external applications for disease. Fever is often treated by pinching a fold of skin to cause a rupture of the small blood vessels just under the skin, producing a purplish-red bruise. This is usually done on the nasarion (bridge of the nose), and if that fails on the chest and lower neck The pattern is normally kept symmetrical.

Magico-religious curing is not so well developed as in Hong Kong. Charms are worn to avoid disease, as well as other dangers, especially among children. There is little use of exotic animals - the egret broth and "living-fish" of Hong Kong are not found here. On the other hand, there is apparently more use of herbalist doctors and especially of small, pruchased bottles of proprietary medicines - the most famous and widely used being Tiger Balm in its various form.

Purely religious curing is fairly often resorted to. A spirit-medium visits the home of the sick individual, is possessed by his familiar deity, and during possession he writes charms - usually cutting himself, especially on the

tongue, and using the blood to write much of the charms and prescriptions. The tongue can be used to write directly. The charms so written are burned, and the ashes drunk in herbal teas; the prescriptions are usually written in ink unless they too are to be burned and drunk later, and generally require further herbal teas. For milder sickness, or for averting sickness in a fam or curing some sick child, the sick person or the child's mother or grandmoth will go to a spirit-medium at a temple and get the above performance, or will go to a regular templekeeper and get a fortune which will be interpreted. Ag herbal teas are the usual result. The full background and ceremonies will be described in the following chapter. It is important to emphasize the fact th this is normally resorted to in the case of chronic illness. Such chronic illness often leads to depression and other psychological effects, and is oft purely psychosomatic from the start, these extremely colorful and exciting festivals can have a miraculous-appearing effect. They convince the sick person that everyone - human and divine - is trying their very best to help him, and thus are always cheering and often quite effective.

There is an increasing tendency to visit western-style doctors[1], and to u western medicines. When home remedies fail or a disease is obviously serious, the western-style doctor is resorted to. If he fails, the spirit-medium is th next appeal. Children are now often taken in to the western doctor for checkup

[1]It is perhaps important to emphasize that a western-style doctor is not always a scientific authority. True medical science must take account of Chinese traditional medicine's many successes as well as the west's - and Malay and Indian medicine, and other medicines, also have much to offer. By contrast, in Malaysia, as elsewhere, a western-style doctor is often a quack or a very poorl trained individual who takes little care in prescribing or treating his patient For the very poor and rural people, who cannot evaluate such things and who are made very unwelcome in the plush offices of most of the better city doctors, th is an especial danger. Our impression was that the citizens of Kampong Mee wou often have been better off with Tiger Balm and the spirit-medium than they were with the Western medicine they got. Thus we have no intention of holding up th above-mentioned tendency as necessarily desirable.

and the utility and necessity of "shots" is well appreciated (or over appreciated, with the "shot" considered magically effective) by most people. Western medicine is not though of as an alternative to traditional conceptions, but as a supplement. The old procedures clearly work in many cases, western medicine clearly fails in many (especially the western medicine available to the poor fisherman), and there is some difference in specialty. Western medicine is better for short, intense problems - really serious contagious diseases and injuries. Chinese medicine is best for chronic ills, and for such diseases as soul loss which have no equivalent in the ordinary western-style practice of the area.

In isolated fishing villages like Kampong Mee, contact with responsible medical care of any kind is all too limited. During our stay of six months, medical care delivery to the village consisted of a visit by a malaria control officer (an excellent one, but given far too large a beat) and his assistants, a visit by a public health nurse or two (not so excellent), and perhaps one or two other public health personnel visits. There were some visits by curing spirit-mediums, but none by traditional Chinese doctors, though occasionally an herbalist or purveyor of miraculous cures would wander briefly through the town. Otherwise, the villagers had to go to Sungei Itek or Georgetown for everything, even for the purchase of medicines, except for the few (aspirin, Antepar, and one or two other things, including the inevitable Tiger Balm) sold at general stores in Kampong Mee.

The bus ride to town was an expenditure of some moment for a good percentage of the population; a trip in wasted a whole day, because of the extreme infrequency and irregularity of the bus service; and men were unable to go because

[1]This is not to say that soul loss is not a clinical entity. A perceptive western doctor would realize the equivalence of severe soul loss with anaphylactic shock, and of milder soul loss with a number of psychological syndromes.

because of work, while women were expected to stay at home and mind the house except in real emergencies. Therefore, contact with medical care was kept to an absolute minimum. Even a quite serious disease might be treated solely by home remedies if there was little chance of dying. Examinations including well-baby checks, dental work, and similar cures were exceedingly rare.

This must be seen in a context of a sort of "knowledge crisis." The villag know almost nothing about western medicine and rather little about Chinese tradi-tional practice. Their knowledge is fragmentary, and not much reassurance when they have to cope with events. There is no expert in any curing art in the vill In traditional China, villagers were far more sophisticated in their traditional systems, and experts (notably herbalists) much better distributed - every village of size had its herbalist and spirit-medium, every market town its street of traditional practitioners of several medical arts. At worst these persons provided reassurance and symptomatic relief; at best they were fine doctors, some-times helpless against major epidemics and the like, but able to cope with a wide range of ailments, psychological and other. In Malaysia, such practitioners are far less competent or honest than the traditional Chinese doctors, partly because of the relative lack of feedback from patients, partly because of the tendency of western medicine to move into their territory and draw off both patients and potential good practitioners. Western medicine is also concentrated in the cities, of course. There is no way the villagers can acquire it.

There is somewhat more to the breakdown of medical knowledge, however. Conceptions about the self, its integrity, its balance and viability, are shattered and fragmented. The old picture of the self as a dynamic balance - a point at which opposing forces meet and interact to produce a constantly changing, dynamical stable organism - is a casualty of the last few decades or years. The present conception seems to be uncertain and tentative, much less concerned with dynamics,

and much less hopeful. The body is viewed as a rather static thing, which always has something wrong with it. Not only the traditional ideal of "positive" health, in which the body can be more than simply disease-free, has gone; even the western idea, in which health is defined as the absence of disease, has gone. Minor afflictions ranging from overweight to decayed teeth are viewed as inevitable. Expectations of bodily integrity and success are low.

It is clear that something has occurred that gives people of the fishing villages a low opinion of themselves, a low hope for themselves, and a reduced knowledge of themselves. This we shall examine after some discussion of diet and its effects.

4

A natural transition between medicine and diet is given by the uniquely revealing problem of tooth decay. The tooth decay problem in Kampong Mee is especially revealing for a number of reasons, the major reason being the extreme seriousness of the problem. Literally everyone in Kampong Mee has bad teeth. It is not only typical, but almost inevitable, for a child to lose all his baby teeth before their natural shedding time. Adult teeth grow in already rotten, or at best crooked. Persons over 20 always have a few artificial teeth, and frequently have more artificial ones than real ones. From casual observation elsewhere in Malaysia, this seems to be a situation rather widespread among rural Chinese, frequent among poorer urban Chinese, and not infrequent among Malays.

The causes and prevention of tooth decay are now well known (Scherp, 1971). Tooth decay is caused by bacteria, which destroy the enamel. These bacteria in turn feed largely on sucrose, i.e. white sugar (cane sugar, beet sugar, etc.). Thus a diet rich in sucrose is conducive to calories, while a diet lacking in sucrose makes cavities rare or absent. Dental care is also involved. Flourides in drinking water and other intakes will be desposited in the enamel, making it

resistant to attack. Cleaning of the teeth gets some of the bacteria off, and also gets rid of most of the sucrose and other media for bacterial growth. This cleaning can be done deliberately, or can be accomplished to some extent in the process of eating - when hard-to-chew food is eaten, the chewing process cleans the teeth. On the other hand, sticky food or fibross food tends to stick in the teeth and provide sites for scurose and bacteria to accumulate. There is a good deal of hereditary variation in hardness of enamel and resistance to tooth decay. Also, inadequate calcium intake in early childhood can lead to weak enamel. But even so, it is not generally agreed that fluoridation and reduction of dietary sugar (especially sucrose) could decrease cavity incidence by an enormous percentage (Scherp, 1971).

The cause of the fantastically high incidence of cavities in Kampong Mee is not far to seek. Consumption of sugar is also fantastically high. Sugar almost invariably means sucrose in this area. Sugar is eaten in coffee (both as sweetened condensed milk added in, and as pure sugar), in the small cakes known as Kueh [originally a Malay word borrowed by the Hokkien - or perhaps originally Hokkien, borrowed by Malays (J. McGough, personal communication), who pronounce it kue], in candy, cheap ice "creams" (sugar and water), soft drinks, cookies, and occasionally other snacks. Drinks and kueh are the main forms of intake. It is quite impossible to give any idea of quantity, due to the variety of forms and the fact that most of them are comerical ones of sugar content unknown to us; but consumption per capita - adults and children - is at least 1/3 to 1/2 pounds per day, in households we observed. Adults' coffee and childrens' drinks will have around 2 oz. per cup or more, what with sweetened condensed milk as well as pure sugar; several cups per day are drunk in many cases. Children's diet will be discussed below; here it is only necessary to state that it is both soft and sticky as well as sweet. Families with children give them large quantities of sweetened condensed milk with at least 1 oz. of sugar added to the already sweet brew, proprietary drinks

claimed to be "nutritious," such as Milo, Horlicks and Ovaltine, are also consumed in vast amounts, with both sweetened condensed milk and pure sugar added.

Obviously, the main cause of the caries problem lies here. However, we cannot ignore the other factors. There is no fluoridation of the water supply, of course - water comes from a nearby spring, or from local (contaminated) wells. Toothbrushing is standard, but is done casually and gently, so that minimal good is done. The soft, sticky diet assures the buildup of large, old, unremoved plaques of sugar and bacteria.

The kueh is the perfect tooth decay food. It is both soft and sticky, and made mostly of sugar by weight. Traditionally, the sugar was palm sugar, which probably does not have so much sucrose; we have no analysis of it by us, but it is fairly clearly a mixture of various sugars. Now, however, refined white sugar (i.e. virtually 100% pure sucrose) is used. Kueh are sold door-to-door every morning by children, and make up the breakfast of the villagers. They are often eaten as snacks at other times.

A result of all this is that not only is tooth decay universal, but a specific pattern appears. Decay begins in young children on the first teeth to come in - i.e. the front incisors - and starts symmetrically at the corners where the teeth join the gum. As new incisors come in, they are attacked the same way, at the gum corners. Decay proceeds rapidly, in an expanding quarter-circle from the original site; eventually the healthy part of the tooth is reduced to a thin line at the gum, gradually expanding to the end of the tooth. This pattern is very rare in the United States, where decay is primarily in the farthest-back teeth, and is less frequent the less far back the teeth are. Decay in the U.S. tends to start in inaccessible cracks where food can lodge, rather than at any and all gum corners. This is because American toothbrushing and firm diet remove the plaques from the front teeth, or at least keep them under control. Only in

ethnic groups that feed children on very soft foods, especially very starchy and sugary soft foods, does the Malaysian pattern appear - because the food sticks and does not scrape off the plaque (Dr. William Byrne, D.D.S., personal communication). Even then, the extreme situation found in Kampong Mee is rare.

The attitude of the Kampong Mee residents toward tooth decay is that it is inevitable, unserious, and not worth much attention. It is explained as being due to the climate. The somewhat lower incidence of caries among Malay and Indian groups is explained by the fact that these ethnic groups are used to the climate. There are other folk explanations occasionally heard. Our suggestion that sugar was responsible was greeted with complete disbelief. Clearly, to the citizens of Kampong Mee, nothing is necessary and desirable as sugar (almost the criterial food) could cause something so pathological. The strange situation - the climate, the oppressive social conditions, the whole alien and dangerous Malaysian scene - was at fault. There was clearly and visibly a lot of psychological energy invested in maintaining this. The alienness and hostility of the Malaysian environment was blamed for many other things; but in the case of tooth decay, so universal and so painful, the blame was most specific. It is almost needless to point out the psychological factors in this. Malaysia and the Malays have invaded the very body, stressed and attacked it, made it sick. Health - that most basic of human conditions for happiness - has been made impossible by the alien and barbarian world of Malaysia. Fear, and the hate born of fear, could find no clearer or purer expression than this hotly defended belief.

Caries being viewed as inevitable, they are not taken very much into account. Baby teeth will fall out anyway, so they are never treated. Adult teeth are allowed to rot out, then replaced with gold; at best, they are allowed to half-rot, then capped with gold. The gold teeth are very prestigous, here as in so much of the world. They are usually put in by cheap dentists

in the city, who specialize in the work, and who are well aware that there is more desire for a good show than for good dental health. The work is showy but terribly badly done; frequently, capped teeth are barely worked on, and continue to decay under the caps, necessitating extraction in a year or two more. Jaw deformation is common. Older people will normally have lost nearly all, or quite all, of their teeth, and be unable to chew. Dentures are rare, expensive and bad. So the old may live on congee and the like for the last twenty or thirty years of their lives.

In children, teeth begin to rot as soon as they grow in; typically the first t n to erupt are beginning to rot by the time the fifth and sixth teeth come in. Since nothing is done about this, the jaw is often deformed, and the adult teeth often are rotting as they grow, before they are grown out. Rot on such a scale is not a problem of the teeth alone. The mass of bacteria is so great that it infects the whole body. In addition, the pain is so bad that the child is perpetually suffering. <u>All</u> children we observed in Kampong Mee had enough unattended tooth decay to cause at least occasional suffering. Very typical was the case of one child next door to us. He was four years old when we left, and had never had a healthy mouth since decay began soon after his first teeth grew in. The decay kept him in perpetual pain, and kept his body permanently slightly sick, making him easy prey for any ailment around. The constant pain and irritation made him a behavior problem. He never smiled; he was usually whining or crying; and like most children of that age who are slightly sick and quite uncomfortable, he was aggressive and negativistic, fighting with his brother or disobeying his elders. Because of this, his mother and grandmother (far from understanding or sympathetic souls, and heartily disliked by the village) were constantly punishing him, often by beating him severely with sticks. The family was not one calculated to make the

healthiest child grow up normal or successful; but given a childhood spent entirely in pain, this child's future can only be a nightmare.

Also quite frequent was poor performance in school, by older children, due to the pain and mild sickness that attends severe tooth decay. This is common enough that we believe it to be a major factor in suboptimal educational performance in rural Malaysia's Chinese, and presumably in other rural groups as well.

This brings us directly to the question of diet, and again we shall first discuss the actual food situation, then ideas about food, then special problems that occur in the present situation. Once again we find what appears to be a deterioration on all levels from traditional Chinese foodways.

The most important single food of the people of Kampong Mee is, of course, rice. An average family of two adults and four children will eat a pound or more of beras (rice, uncooked) a day, i.e. at least 1/2 lb. nasi (cooked rice) per person - the adults getting more, of course, but not as much more as one might suppose, since adults eat a more diverse diet than the heavily rice-dependent young. Most rice used is good grade locally grown grain - most of it from Kedah. Thai rice is preferred, but brings premium prices, and is thus more or less a luxury for the ordinary villagers. The rice is long grain, highly milled and polished, though the very local rice is not polished enough to destroy all nutrient value.

Rice does not comprise the major source of calories in the diet, however. Given a niminum of 1/2 lb. cooked rice per day, a maximum of 1 1/2 lb., we have 250-750 calories derived from rice, as against a total caloric intake of at least 3000 calories per adult and a high intake for children. It appears

that rice is not by any means the staple that it is often said to be, both by the villagers and by writers about "the Chinese" or "the Malaysians" generally.

Consider the purchases for a family of six. Our landlord's household, with four children and two adults, is probably fairly typical except that it does eat a more varied and high-quality diet than most. Here, average consumption worked about like this, on an (mythical) average day.

Breakfast: kueh, bought from a door-to-door pedlar, and mee soup with a great deal of mee and fat. Every child eats at least one kueh. Adults may eat some, or a little leftover rice and vegetables from the day before. Adults and children eat the mee; young children eat congee, everyone devours milk and/or proprietary drinks such as Milo or Ovaltine, using very much sweetened condensed milk and white sugar and relatively little drink powder.

Lunch: This is the main meal of the day, eaten around 11:30 and following (the youngest eat first, the rest afterward; the family never eats together; everyone eats more or less separately, in inverse order of seniority, except that children of about the same age may eat together). Lunch is the main meal because food is sold only in the morning - ca. 8:30-9:30 for most foods. Shops remain open all day, but fresh food (meat, vegetables and fish) is sold only in the morning, and hawkers come around in the morning. Storable foods are kept by the shops all day. This morning marketing is a general Chinese tradition, but the extreme form found here, with no fresh food available after 9:00 or 9:30, is due to the heat and the inadequate refrigeration facilities of the area. The food won't keep. Also, the housewife does not like to prepare it during the heat of the day. So the food is prepared through the morning - an ordinary lunch takes about 2 hours to prepare, if the work is slow and easy, or 1 to 1 1/2 hours at the fastest. A good deal of work is put into the food.

In any case, lunch will consist of: a huge amount of rice, made into the usual sort of cooked white rice for adults, congee for babies, vegetables cooked in lard; fish, either fried or curried (in either case a great deal of cooking fat is used - lard or coconut milk); a little bit of meat, usually fresh bacon, sliced very thin and stir-fried; and some shrimps or similar shellfish, usually incorporated into the vegetable dish or cooked separately with a different vegetable. Often there is fried mee or other noodles. Always food is either deep-fried or stir-fried (quickly sauteed, being stirred quickly during the process). The usual cooking oil is lard, bought fresh each day and melted down from the fat of a freshly-slaughtered pig. (Pork is sold by a roving pedler from a bicycle which he sets up in the town. The demand is for the fat, for lard, or the bacon, for eating. The lean cuts are not desired - we were usually the only people in the village that would buy them, thus endearing ourselves to the pork-butcher, who could get rid of otherwise worthless meat. The lean cuts - superb, fresh, lean, high-quality pork - were thus quite cheap relative to the fat.) The most popular vegetables were yard-long beans (eaten virtually every day), cauliflower, carrots (small amounts), eggplants (brinjals), Chinese cabbages and similar greens of the Cruciferae and Amaranthaceae, tomatoes, onions, peppers, okra (ladies' fingers - not too popular, but excellent in quality), shallots and Chinese or garlic chives (as seasoning, sparingly), and, in curries, potatoes. The starchy roots so popular in much of Malaysia were not popular here, even the potatoes being quite sparingly used. Chilis, also, were sparingly used.

Dinner: leftovers of lunch, eaten at any time anyone feels hungry. Often this is in two installments, at ca. 4:00 and at 8:00 or 9:00 p.m., especially for the men who have been working all day without much lunch, and regard the 4:00 meal as the "real" lunch.

Snacks: All children every day eat sweet snacks, usually more kueh, or sugar candy, or frozen desserts made of sugar, water and artificial flavorings, and sold by vendors. Men visit the coffee house to consume coffee with the inevitable sugar and sweetened condensed milk - typically the latter half-fill the cup, hot water is added, and a very little strong coffee. Everyone may drink more sweetened condensed milk with sugar, or more of the proprietary drinks, or more mee soup (bought from a private home across the street, that sells it, especially in the early morning), or similar items. Most people consume at least one soft-drink per day. Our landlord usually drank a half-pint of stout in the late evening.

Breaking this down into average household consumption:[1]

rice, cooked	about	1 lb. per person	500 calories
vegetables	about	1/4 lb. per person	250 calories
meat, fish and eggs	about	1/3 lb. per person	250 calories
fats, including lard in the bacon and in the mee soup, and fat in milk		of it merely used to cook in, and not eaten, so say --	1000, but much 500 calories
Mee (in the soup) or bread		1/2 lb. but not every day, so say at least 1/5	100 calories
sugar, very rough estimate since present in snacks and not available for counting how much was bought, but at least	about	1/3 lb. per person	600 calories
			2000 calories

This fits very well with our estimate of daily calorie intake. There were, for all practical purposes, 4 adults (the 10-year-old nephew of the landlord ate as much as a full-grown man, and was excessively overweight, even by Kampong Mee standards). There was one 8-year-old child, who was thin (at least by

[1] Calories and nutrients in food calculated roughly from Watt and Merrill, 1963, and unpublished Malayan tables.

Kampong Mee standards) and did not eat much, and a young baby. The adults must have eaten at least 3000 calories/day/person - the ones who stayed at home were extremely overweight, and the two grown men did hard physical work. The 8-year-old girl certainly ate no more than 2000 calories/day, the baby about 1000. The average of the above is 2500, but one of the men did not usually find work, and when he did he lived on little food (only ca. 2000 calories), drawing the average down to about 2300. Since the estimates in our table are more or less minimums, especially for sugar which was hard to count, the reason for the error is that every day a more-than-minimal quantity of one of the foods was eaten. Fat consumption did not change much, but often there would be an extra sugar snack, or a festival that raised the consumption of meat (chicken, for instance, was eaten only at festivals). These special occasions thus raised almost every category of food sooner or later - on ordinary days the carbohydrates were more in evidence, on festival days the meats. Naturally enough, on a festival the intake would normally be well above 2300 calories, while the day after it might drop well below. We expect that 2300 is a definitely minimal figure, in view of the fact that many of the household stayed overweight in spite of a good deal of hard work. 3000 per adult, throughout Kampong Mee, is certainly a minimum estimate.

It should be noted, finally, that very young children did not eat significant amonts of vegetables and meat; they did not start doing so until the age of 6 or 7, or even 8 in some households. The low figures for these in the above table thus represent virtual non-consumption by the baby, and thus the adults got relatively more.

The household above described consumed more vegetables and meat, and less rice and mee, than many or most households in the village. Being both more

conscious of food and more prone to put discretionary spending in that sector of the domestic economy, to say nothing of the very cheap fish available (unsol or relatively unsaleable fish that the hawker procured), they ate fairly well.

It will be noted from the above table that sugar is the biggest single item in terms of calorie consumption. Moreover, the estimate is even more likely to be too low there than elsewhere, since sugar was so hard to assess; we feel the total was probably nearer 1/2 lbs. than 1/3. Second to sugar was fat - again hard to assess. The lady of the house would buy 1-1 1/2 lb. of lar and fat bacon a day, and absorb more from the mee soup (recipe: ca. 1/4 lb. mee and 2-3 oz. lard, in water, with some flavorings and garnishes) and condensed milk and other snacks. Also, the entire fat mass used to cook food is often eaten - as in curries, when it forms part of the gravy and is mostly consumed. On the other hand, the estimate for rice is based on observing how much beras was bought (with a little added amount for rice in the kueh), and not likely to be overestimated. So it seems that sugar and saturated fats (lard, butterfat in milk, coconut oil) each bulk larger than rice in the diet. Note, also, that perhaps 100 or more calories came from wheat; this was in the form of Australian bleached flour, made up by commercial firms into mee or bread.

The depressing conclusion emerges that at least 1700 calories are empty calories - starch, sugar and saturated fats - while only about 300 are of any nutritional importance! And this, be it remembered, in one of the more quality-conscious houses in the village! There were houses where the situation was even worse. As can be seen from the above, the young children in particular were eating poorly. The other family renting in our house had two boys, some 3 and 5 years old. These lived entirely on kueh, congee and sweetened condensed milk with heavy sugaring and sometimes some Milo or Ovaltine. The older one

was beginning to eat meat and fish, but no more than a couple of ounces a day. The younger was being introduced to these foods but ate insignificant quantities.

Given a reasonable breakdown of the 300 calories unaccounted for, we can assume 100 in meat and fish (mostly from festival consumption which is high) and 200 to other foods. This allows 350 calories meat and fish, perhaps including some more vegetables as well, for a total of 400 calories (at least) of nourishing foods. That leaves 1900 empty calories. Since the 400 "non-empty" calories were mostly fish and eggs, very highly nutritious and protein-rich foods, we can assume probably about 80-100 grams of protein a day - amply sufficient for health, but not much of a margin for stress.

As far as other nutrients go, we noted no special shortages in adults. Vitamins came from vegetables and spices, as well as meat and fish. Iron came from these - blood and liver were both popular and frequently consumed. the blood being coagulated and sold in rather gelantinous cubes, and stir-fried with onions, a popular and excellent dish. Iron also came from vegetables and spices. Calcium was evidently abundant, in fish, shellfish, eggs, spices, chilis and the like; children got a lot of it in milk. The adults clearly were not getting overly large amounts of these, but their diet was abundant and varied enough for ordinary circumstances, though no doubt a pregnant or parturient woman would have had a bad time of it.

With the children, the situation was different. Even with the proprietary drinks, iron and possibly protein were rare enough in the diet to cause danger of deficiency. Vitamins, especially vitamin C (which is not stored in the body and thus must be eaten frequently), were also a problem. Some of the sickness in children was quite possibly due to subclinical deficiency of vitamin C, and other nutrients.

Iron and vitamin A are deficient in the diets of some Malaysians (Christine Wilson, pers. comm.); vitamin C and protein occasionally lacking.

In the above diets, the intake of critical nutrients was low enough that stress - disease, pregnancy and childbirth, etc. - would quite possibly create shortages; young children getting poor diets had shortages; and reduction of income, leading to phasing out such "luxuries" in the diet as meat and vegetables while retaining "necessary" starches, would unquestionably and certainly cause malnutrition. There were, indeed, cases of poverty in the village where symptoms of malnutrition were evident, but we were not in a position to record food intakes there. Someone should study the diets of the really poor rural people of Malaysia. In this connection it should be noted that Kampong Mee was exceptionally lucky, because of its effectively unlimited supply of cheap fresh sea food and the large numbers of high-quality eggs, vegetables, etc. available locally. The sea food in particular was important - its cheapness was clearly the only thing standing between Kampong Mee and shortages of protein, calcium and perhaps other nutrients. Areas less fortunate have problems with protein, and plantation workers (the poorest and least food-supplied people of Malaysia) commonly show rwashiorkor in young children, and other malnutrition syndromes. The implications for Malaysia of a reduction in the supply of cheap fish are obvious.

Even within the village of Kampong Mee, for all the food, the children show much lower figures for height and weight gain and general maturation than do children reared on better nutrition. Our children were consistently estimated at 1-2 years older than they were, on the basis of physical and other development. Height was especially striking, since weight differences were blurred on the gross obesity of many children. Unfortunately we do not have figures on heights, but the differences were striking to observe, and measurements should be done.

The reason is, of course, that the children between babyhood (when they are nursed) and the age of eight or ten (when they begin to eat adult proportions of meat with the rice) live mostly on rice and sugar. Their sugar consumption is probably higher - absolutely, not just relatively - than adults'. Their starch consumption is relatively, though not absolutely, higher. They get a lot of milk, but it is sweetened condensed milk - nutritionally poor, being mostly sugar, with the calcium diluted thereby. Because of their inadequate and malnourishing diet, they are subject to diseases, especially tooth decay; this weakens them and interferes with growth.

In traditional Chinese society, children are nursed till the age of three or four. In Malaysia, this does not occur. Children are weaned at around two, or even one. This is because of emulation of the supposed habits of modern westerners, who are believed to nurse only a little and to feed the babies on such modern, superior inventions as sweetened condensed milk. This phenomenon is common in much of the world, and has led everywhere to worse nutrition and higher disease risk from unsanitary and nutritionally bad milk or milk substitutes (Györgi and Kline, 1970). Moreover, during the nursing period, in traditional China, the child got to nurse as much as he wanted for at least the first two years of life; in Malaysia, he is early introduced to the cup or bottle. The first foods are always rice congee and sweetened condensed milk with a lot of sugar added - typically equal volumes of sugar and the already-sugared milk, made up thick. The rice is, of course, polished, and therefore virtually pure starch. Thus the baby gets a diet almost entirely carbohydrate, with barely enough protein in the milk to keep him alive, and certainly nowhere near enough iron or vitamin C to keep him healthy. And on this diet - varied by the addition of kueh and similar sweet snacks as early as he can be made to eat them - he lives for four or five more years. Other

food are introduced at about two years, but no significant quantities of anything except congee, milk and sweets are eaten until three or four years. The only saving grace - and perhaps the difference between life and death for many children! - is the rapid spread and wide acceptance of Milo and Ovaltine, which introduce some iron and other nutrients. But even these are used as vehicles for sugar more than anything else - they are often made up with more than 1 oz. sugar per oz. of drink powder. On top of all this, the sugar is none too clean, usually being full of dead ants and miscellaneous items.

Carbohydrates are utilized so fast by the body that the eater is hungry again soon afterward (Christine Wilson, personal communication). Proteins and fats "stick to the ribs", as the American phrase goes; they satisfy the eater for a longer period, since it takes a good deal longer to digest them. Thus the snack habit is a natural development of a carbohydrate diet. Since all snacks without exception are sweet now, and nearly all of them are mostly sucrose, the effect is disastrous. Once again, this is a change from traditional Chinese practice. In the old days, Chinese were not fond of sweets and had no made-up desserts or sweet snacks of any significance; the only sweets eaten normally were fruit, of which enormous quantities were consumed. (There were many other snacks not sweet at all.) Now, fruit is not only rich in vitamins (depending on the species of fruit, of course; mangoes and citrus are notably good) but its sugars are almost all simple sugars, not very conducive to tooth-decay bacteria or other wreckers of the internal ecology. Fruit is very healthy and has no significant bad side-effects. It is also readily available and very cheap in Kampong Mee - the fruit-hawker is as typical a sight as he is everywhere else in southeast Asia. But his wares go begging, and he is probably soon going to fade from the scene; only the trade of the very poor,

too poor to avoid him, comes to him. The typical snacks of the masses are kueh, made of white sugar instead of the traditional and healthier gula melaka; candy; soft drinks; etc. Fruit has low prestige (see below).

7

A few sidelights on relative food costs are given here. They are no substitute for a complete picture of the food economy, which should be surveyed. Since this is being done by the University of Penang, we need not be detailed here.

Rice, the staple, ran about $1.60-$2.20 per gantang (9 lb.) in Malaysian dollars.

Pork, ca $2.00 per kati (1 1/3 lb.) up, lean cuts being cheaper, fat bacon high.

Vegetables, $0.30-$0.70+ per kati, depending on kind and season. The coarser root crops were cheaper.

Eggs, about $0.10 apiece, but often raised by the family, and often cheaper per dozen due to local overproduction.

Chicken and duck, free - everyone raised their own. They could not be bought.

Fish, free for most; the rest would get the fish cheaply, one way or another - usually from illegal sale of the take-home fish allowed to each fisherman for his family use. This fish could not be legally sold but most of it was, at $0.20-$1.00/kati depending on quality, sometimes more for a very special fish.

Snacks (kueh, fruit, etc.), $0.05 for a small piece, $0.10 for a large one. Pieces of fruit weighted more (but had less calories) than individual kueh.

Mee, $0.50 for a small bowl (about half a kati of soup, or more), $1.00 for a large bowl, from the home that made it or from the mee stands in the village. The homemade mee tasted better sometimes, according to informants, but was otherwise about the same - flour, water and fat, basically.

Prices of manufactured items like soft drinks and milk were standard and need not be noted here.

The prices above imply no special deals, bargaining, etc. In practice a friend of the seller could get better deals by haggling. This was not so characteristic a feature of life as it is elsewhere, however; there was not such a pronounced grading of prices as in Hong Kong, for instance (Anderson, 1970b). (There isn't in Hong Kong any more, for that matter.) Bargaining did go on, however, and strangers - especially visiting anthropologists or other non-Malaysians - could expect to pay at least the above prices and usually more. At the end of our stay, we were getting charged typical (i.e. not especially high) rates, though not the low rates given to special friends.

Thus a very crude estimate of the good bill for a day for our landlord's family of six would be in the neighborhood of $3.00 or more, with almost half of it on snacks and sugar, and most of the rest on fat meat. On days of economizing, the latter was the first thing to be cut down, but some lard was almost a daily necessity, due to the powerful preference for it as cooking oil.

8

What we will discuss in some detail here is views of food, since these are not covered in the U. of Penang survey. We have discussed this in still more detail elsewhere (Anderson and Anderson, 1973).

The cuisine of Kampong Mée is basically Penang Hokkien - a cusine of Chinese origin with large borrowings from Malay and British cooking and some

introductions from Cantonese and other Chinese cuisines. The villager's non-Hokkien families have taken up this basically Hokkien style, with-varying amounts of regional flavor but generally with little difference from the basic pattern, so the Hokkien style will be discussed as typical - virtually everyone in the village (indeed, everyone we observed) eats this way, whether at home or dining out at the village coffee shops.

The importance of food in health, in maintaining the necessary balance believed to exist between heat and cold in the body, has been discussed above. It should be noted that ordinary white rice is hot, or heating, though congee is neutral; this is the stated reason why congee and not ordinary rice is given to children (and adults who are weak, sick or in stressful bodily conditions). Sugar too is neutral, or very slightly heating according to some (it is more heating in other Chinese beliefs). Mee is also neutral. Thus the great trinity of children's foods is set up. Spiced foods, fatty foods, etc., are too hot for children, this cuts them out of a great deal of meat and vegetables (usually cooked in heating ways).

In terms of sheer manipulation, processing of the food, the cuisine differs sharply from the better-described Chinese cuisines. On the one hand, curries and kueh have been borrowed from the Malays, and Sinified. On the other, a great number of items are borrowed from the British, or rather from what the British cuisine is thought to be. This has changed the overall strategy of cooking.

The basic method of cooking used in Kampong Mee is a rapid cooking of the food in medium quantities of liquid in a pan. This varies from ordinary rice-cooking, where the result is supposed to be dry and juiceless though still moist and tender, to congee cooking, in which the rice is boiled for a long time and becomes a thin porridge. Thus the two ways to prepare rice stand

at opposite ends of the cooking continuum. Between the "driest" method is stir-frying or sauteeing, in which the food is rapidly stirred around in enough oil to coat it and produce a little gravy, in a round-bottomed pan (kuali, wok, etc. of general Malayan usage - there is no separate name for it in Hokkien). This is recognized as a separate process, but actually grades into deep-fat frying, where the fat covers the food, and currying, in which both fat and water are used to produce a thick cooking medium. The latter is, of course, more obviously distinguished by the spice mix used, but this distinction in the cooking medium is interesting; traditional Chinese cooking usually used either fat or water, rarely both except for the addition of necessary water to prevent burning in stir-frying. The acceptance of currying has been helped by this latter tradition, but does represent something of a departure here as well as in the spiciness, from traditional Chinese cooking. From currying it is a short step to boiling, producing dishes that can be regarded as thin stews or thick soups depending to some extent on arbitrary use of terms. In all of these processes, the cooking is carried on long enough to allow the food to absorb the cooking medium as thoroughly as possible. This is especially important in rice cooking and in currying, but extends to other domains; stir-fried food is cooked for a long time at lowish heat in a lot of fat, so that the resulting food is sodden thoroughly. This contrast sharply with the traditional cooking of most of China, in which stir-fried foods were quickly cooked on very high heat, precisely so that they would not absorb fat and become too greasy for the traditional taste. The Penang Hokkien prefer the food much more oily than do most Chinese in China, as well as much sweeter.

The general principle seems to be: food shall be sodden in some liquid until thoroughly cooked and more or less impregnated with the liquid.

This involves more use of fuel than in, say, Cantonese cooking (cf. Anderson and Anderson, 1969a). It does conserve cooking pans - one needs a round-bottom pan for ordinary cooking and a flat-bottomed one for rice and curry, but not much else, other than the necessary tools to stir and take out food. Two types of stoves are used, a gas-burning and a wood-burning. The latter is sufficient unto itself and the only type found in poor households; the former is useful for ordinary cooking, but for some types of cooking (currying and, ideally, rice cooking being among them) the wood-burner or a charcoal-burner must be invoked. Every family has one of the large built-in stoves in the center of the kitchen, with fire-holes in it, big enough so that a large-sized kuali will fit neatly over it.

Good is defined by ingredients, including spices. The following categories can be recognized: snacks (sweet, normally, but some seeds like peanuts count also), mee (the traditional breakfast or light meal); congee; rice (cooked ordinary style); curry; general stir-fried and deep-fried foods; and feast foods. The latter two categories blend into each other, but are basically separable. Among the others, ingredients and use are obvious. It should be noted that mee as a light meal means mee soup; the fried noodle preparations (fried mee, fried kuei-tiao) are either regular meals in themselves or, more typically, courses in a regular large meal. Curry is distinguished from the others by its spices and cooking method. The spices are bought in small bundles from the store, and some further ones added; some families mix their own spices from the start rather than relying on ten-cent store-bought packets of "garam masala." Turmeric is dominant, with chilis also heavily involved; lesser quantities of cloves, cinnamon, mustard seeds, etc. occur, depending on taste and the type of curry. There is less spice and less tamarind or coconut cream than in equivalent types of Malay curries, and more of certain

other spices - in short these are "nonya" curries rather than Malay-style ones. Cooking a curry is something of an occasion - done perhaps once a week or less and with a lot of excitement.

Feast foods include roasted foods, and foods prepared in the stove-top pan but in such a way that they resemble roasted foods (they are pan-broiled or pan-fried). Chicken, duck and pork - the latter usually with the caramelized glaze that gives it the name "golden pork," or else bought roasted with a red exterior - are the criterial feast foods, distinguishing ritual occasions from everyday ones. Chicken and duck are raised by everyone for food, and consumed on all ceremonial occasions, but never at other times. In particular, the large plates of fowl without vegetables are characteristic festival foods. Among the rich, any feast will have some; among the ordinary villagers, only a high religious occasion produces them.

Typically the main meal of the day will involve about four dishes plus the rice base. An ordinary day might produce a very little bacon, sliced thin and stir-fried; some deep-fried fish; a large dish of cauliflower and similar vegetables, cut up and simmered in lard, with a little of the bacon added; and a dish of greens stir-fried with tiny shrimps. A very greasy soup - basically water and lard, with some slices of starchy vegetable or bacon or some similar item in it - is also typical. Sometimes a dish of stirred eggs is produced. The nearest thing to diversity comes in the cooking of fish and sotong (squids and cuttlefish - this Malay word has been borrowed into Hokkien to the near exclusion of the Chinese word). These being daily foods except on the highest religious feast-days, they are cooked in enough ways to provide some variety: boiled, deep-fried, stir-fried, or curried.

Food is carefully prepared before cooking - fish cleaned and scaled, spices pounded in small mortars, vegetables sliced to the correct chunk size.

This occupies at least an hour of every woman's time every morning. Cooking is not taken lightly; it is the most serious and most important job in a woman's day.

Available at the coffee houses are some other foods. The two major coffee houses of the village each had food concessions - cooks, not from the village, would set up cooking stalls in the front of the coffee shops and sell food to the patrons. In addition, a mee stall was between them. Sometimes roving mee hawkers set up shop across the street, or a Malay sate vendor set up operation on the sidewalk outside. The other coffee shops had some facilities for providing food. Usually a seller of pao (Chinese steamed umplings - bread enclosing cut-up bacon or other foods) set up in front of the biggest coffee shop, and one of the smaller ones made its own pao. Another coffee house had associated with it a food stall run by two brothers, half Malay and half Tamil, who cooked very poor Muslim food and were virtually unpatronized. This, plus the private home that sole mee in the mornings and various snack sellers, made up the food resources of the village. Thus the potential food diversity was great if not usually represent all at once - the food vendors and stalls were never all open at the same time. The main food booths at the two big coffee shops sold Hokkien curries, pig's blook fried with onions, stirred eggs in pancake-like form, roast pork, and the usual Hokkien dinner foods (bacon, fried fish, soup, fried vegetables with a little meat, etc.). The main consumers of this were young fishermen without families, especially those from outside the community. These had no one to cook for them and found it cheap enough not to cook for themselves. The food was made extremely fatty, to satisfy the young fishermen's large appetites without recourse to large portions. At least the young fishermen did not get so much sugar as most people did - they were hungrier for

substantial food. Even they, however, consumed large quantities of solf drinks and heavily sweetened hot drinks.

Hokkien food is not spicy or salty, and usually has very little flavor of any kind except for that of the lard used to cook almost all of it. Vegetable oil was coming in, especially via the Cantonese in the village, who traditionally use it instead of lard. But lard was still the prevalent cooking oil, more or less a daily necessity in every household.

The traditional Chinese idea of rice as the perfect food was not really dominant in Kampong Mee. Not only was it regarded as heating, but its position as starch staple was shared with mee (though mee was a long second in consumption) and its position as leading contributor of calories was clearly obsolete, except among the poor. Everyone who could afford to, and many who could not afford to, got more of their calories from fat and sugar. The young unattached fishermen were perhaps the biggest category who were reduced to relying on rice for the largest single chunk of their calories; forced to eat at the relatively expensive food stalls, they filled up on it. Even they got most of their total calories from other foods, again especially lard and sucrose.

When asked, the villagers would still say rice was the staple, but it had clearly fallen from its traditional place of esteem. It is noteworthy that tea - the traditional Chinese drink - has been even more emphatically displaced, by coffee, soft drinks, etc., and is not even liked any more by most.

Food as a marker is important in Chinese life. The feast is the traditional place to establish communications links and repay favors. Business is transacted over it, contacts cultivated. The tea shops of traditional China were the places of business for the community, and community leaders had

regular "office" hours there (Anderson, 1970b). In Kampong Mee, the coffee shops have taken over the function. The community is not so integrated as some, so the coffee shops were less vital; but, still, all leaders wandered the rounds of the major ones at frequent intervals (usually every day, often twice a day). All important meetings and business were transacted there, or - among the elite - in regular restaurants. Every adult male spent a certain amount of time there, socializing or just watching the world. Women and young boys were definitely not welcome. Whey they came, it was to make a take-home purchase. A boy would start coming with his father or other adult male relative, at about six or eight years old; he was welcome to come alone for a while when about ten' but he did not participate fully in coffee-shop society till he was old enough to work, and preferably when he was actually working. When our household's boy found a job (at age 10) his visits to the coffee shop increased considerably.

Food as a marker is also prominent in the religious life of the community. Structures of sacrifice will be described in the following chapter, but here we should note the religious-feast foods (quite obligatory) above, and the fact that they are also sacrificial foods. An offering rite without them is by definition a minor rite. These minor rites - and the major ones too - involve offerings of tea, sometimes wine, and fruit. The fruit should be citrus, or at least include some citrus; citurs is traditionally held in quasi-magical or religious regard in Chinese society. Peanuts and sometimes other seeds are also characteristic of sacrifices. In most cases the food is offered, the spirits eat the essence of the food, and the humans eat the actual fleshly portion. But with these minor sacrifices, the food and drink is usually left until it dehydrates and is unusable by the humans. At a major sacrifice, ordinary Hokkien dinner foods are offered along with the roast meat

but it is the meats with their distinctive cooking style that really identify the ceremony. For a really major offering, a whole "golden pig" is absolutely required. The villagers cannot afford this, and resort to chickens, bits of pork, and other smaller game. Recently, in Georgetown at least, there has arisen the concept of renting out "golden pigs" to worshippers - particularly those sacrificing to the ancestors on Ch'ing Ming day (see next chapter). The pig may take twenty trips to the cemetery in a day, and presumably his spiritual essence is renewed as frequently, to feed twenty sets of ancestors. The point here is that food symbolizes the social events taking place, as it does in every culture, but nowhere more clearly and explicitly than among the Chinese. The equation of certain foods with certain religious structures, of eating with business dealing and general communication, of coffee-house visiting with adult male status, and indeed a food balance with total bodily integrity, is characteristic and important in all of Chinese society.

It follows that when diet and nutrition have broken down in the Chinese social group, as they surely have in Kampong Mee, the society itself is in trouble and stress. We now turn to a discussion of this, and also of the need for practical steps to bring good nutrition to the village.

9

The breakdown in images of health and diet takes two forms. First, the traditional Chinese ideas and beliefs are going out. Second, ideas and beliefs believed to be "western" are coming in. The latter ideas are derived from the British, often in mistaken or bizarre forms. Characteristic British foods like bread are accepted; even the pattern of eating sugar so heavily is a British one (the British have one of the highest per capita sugar consumptions in the world), and certainly is the very antithesis of Chinese.

In medicine, spirit-medium healing, traditional diet and herbal therapy, and a few related beliefs survive, but other Chinese ideas less solidly rooted in the folk tradition (acupuncture, for instance) have dropped out, and all the lore is fragmentary except among older spirit-mediumistic curer A certain amount of faith in western medicien, especially shots, has come in; but there is no knowledge of the total system or how it works.

Very little has been picked up from the Malays, and what has been picked up consists of fragmentary ideas learned long ago. Most of these relate to food. For foods strange to China, the Malay assessment of their heating and cooling qualities has often been followed (e.g., durians are heating); such cooking techniques as currying have been borrowed, though with many adaptations.

Here, then, as in other aspects of life (see next chapter and other parts of this book), we see a process of westernization on the very lowest level, with no "malaysianization" going on. The villagers of Kampong Mee are Chinese first, British second (at least by emulation), Malaysian not at all. There is no idea of creating a new or distinctive culture (as there is in Singapore, at least in official ideology) and there is extreme hostility to the idea of acculturation to the "inferior, barbarian" Malays. Given the circumstances we noted in Chapter 3 above, none of this is surprising. We may add that, given the equally extreme hostility of the Malays to the "alien, cheating, lying, grasping" Chinese, these Chinese could not possibly assimilate to Malay life, or to a broader Malaysian culture fusion, even if they wanted to. They would never be allowed full participation in the Malay world, or in a world governed by Malays, unless there was a total change of mind on the local level. They would always be regarded as aliens, no matter how many generations they had lived in Malaya, and they would always meet

with prejudice and discrimination. They are thus given no choice; if they change, it must be in the direction of the "international" or "western" culture, locally represented by the British.

In actual fact, the Chinese of Kampong Mee are emulating urban Chinese, who are emulating Britishized urban Chinese elites, who are emulating the British. There is some direct emulation in the villages, but very little - usually the villagers get their British culture from the cities, already Sinicized. The bread, for example, is baked in Chinese bakeries that may originally have catered to the colonial British, or may merely have learned from bakers who did. It bears a moderate resemblance to the worst British bread, but is little like the excellent and genuinely western-style bread available at Cold Storage[1](for one example), either in taste or in nutritional quality. The other western foods are likewise more or less adulterated or poorly made versions of British foods, with less nutritional quality than the originals. Similarly, the medicine is often merely the outward form - pills that turn out to be years old and inactive, shots with dubiously sterilized needles, etc. So not only are the Chinese of Kampong Mee (and every other poor village in Malaysia) losing their own culture, they are not picking up a real second culture; they are getting a sort of ersatz or misinterpreted version of the old colonial British lifeway (a partial one at best, under the stressful and strange conditions of Malaysia).

Why, then, do they imitate it? What attracts people who came originally from a viable folk tradition to a pathetic imitation of an atypical version of a culture adapted to a totally different climate and region? This brings us to the crux of the problem of the Chinese in modern Malaysia.

The problem is, in a word, prejudice. On the one hand, the poor Chinese are the victims of so much prejudice - not only from the Malays but

[1] A Penang store catering to westerners and the well-to-do.

from the Chinese elites, both new and traditional - that they have develope powerful and deep feelings of inferiority and insecurity. Their own culture seems inadequate. Moreover, recent immigrant scholars are only too willing to tell them how far they are from the Chinese great tradition. At the same time, they are told by the Malays that they are inferior and evil, and can never hope to participate in Malay (and by extension Malaysian) life. They are aware that the world is changing, that China itself is now dominate by western-derived ideas, that western medicine and machines are the secrets of power.' Thus there is every reason for them to emulate British culture. Finally, the rising Chinese elite of the towns has long been going through this process (originally in part to curry favor with the British, subsequently in part to do business on an international scale; but the psychological factors operate among them too). The poor, long given to emulating the Chinese elite here, continue to do so - and this may be the strongest factor of all.

But the rural poor Chinese are afflicted with a massive failure of hope and of will. Seeing their position worsening and their hopes and ambitions getting farther and farther from realization, they turn inward and partially surrender. Having little inward strength - their traditional culture is gone, their sense of security is gone, their sense of integrity as a unit is gone or never existed - they take the tags and scraps of belief that they can get. Their image of themselves, of their physical being and its integrity, is fragmented and miserable. Just as they expect tooth decay (blaming it on the climate, i.e. the alien Malayan environment) and disease, just as they have lost the old concepts of maintaining positive health and have picked up the western-derived belief in waiting till sickness comes and then stopping it, so they have lost the sense of person, of human integrity and dignity,

that was the core of old Chinese folk life. The one symbolizes the other, as in traditional Chinese belief, where the state of the body and the state of the mind were always known to be essentially one. This equation of psychological and physical is one legacy of old China that proves resistant to Change (in China as well as in Kampong Mee), and thus investigation of the structures of health is an excellent way into the minds of people.

This symbolic expression of deep insecurity and fragmentation is found even more strongly in religion, which will concern us in the next chapter.

8. Oh Lovely Appearance of Death:
The Deformation of Folk Religion in an Overseas Chinese Community

1

Chinese folk religion can be seen as a celebration of ongoing life. The ancestors are worshipped by their descendents, and the descendents are preparing to be ancestors themselves. The continuity of the family, and of the lineage where it is present, is one basic message of the worship. The gods, living in the other world that is so close of our own both cosmological and in organization, are not grim watchers over the world of the dead, but immanent participants in daily life - beings with their own joys and sorrows, strengths and weaknesses.

However, a religion based on ancestor worship, contact of beings in another world, and propitiation of ghosts carries within it the possibility of becoming a cult of death, a worship of loss and of the dead per se. This can occur in any religion; Chinese folk religion seems at least as well adapted as any to such change. Under conditions of failure and loss of hope, such a transformation might be expected to occur. Indeed, it does occur, as the present case will show. That the present case is not unique is implied by the title of this article; "Oh Lovely Appearance of Death" is a Christian hymn, and it arose and flourished under conditions similar to those that will be described here.

The purpose of this chapter is to translate back into ordinary terms the conflicts and troubles that are expressed symbolically in the religious behavior of a community. Among its other purposes, religion is communication; rites and obligations are a language and once the language is understood, even in part, the listener or reader can find out a great deal about a community

beyond what its members will say in ordinary talk. The practical value of this chapter, if any, is in providing clues for interpretation of other such languages. When communities express their troubles as the citizens of Kampong Mee do, then perhaps we can more easily perceive such trouble - and, one hopes, correct them.

2

Most of the citizens of Kampong Mee came from villages near Amoy; fortunately, this area is the best-covered of any part of China in terms of folk religion. The biased but incredibly detailed observations of Doolittle (1865) and de Groot (1892-1910) are the classic sources; recent supplementary detail, less complete and not from quite the same area but more anthropological sophisticated, comes from investigations of Hokkien Taiwanese, who came from the region of Taiwan about 300 years ago (Ahon 1973; Diamond 1969; Gallin 1966; Jordan 1972; A. Wolf 1970; M. Wolf 1968). The rest of the people of Kampong Mee are mostly Cantonese and Hakka, heavily acculturated to the Hokkien and usually speaking Hokkien as their first language. Descriptions of Cantonese folk religion (Anderson, 1970, 1972; Burkhardt, 1953-1958; Elliott, 1955; Freedman, 1966, 1970; Potter, 1970) provide an additional baseline for comparison. Last of all, one of the best field studies of Chinese religion deals with the Chinese (primarily Hokkien) of Singapore, thus providing an especially good control for the Kampong Mee case (Elliott, 1955). Therefore, we will describe here only the major changes from this base, the religion that the Malaysian Chinese brought with them from coastal Fukien Province and neighboring areas.

The personnel of the spirit world has been supplemented by a new class of spirits, or rather a local adaptation of an old familiar class. The

traditional Malay beliefs of the area included a large class of locality spirits known as datok keramat, who were indwelling powers of rocks, trees, and other emergent features of the scenery. (The name can be roughly translated as "chiefs with holy power.") These were close enough to the Chinese belief in sacred rocks and trees to be adopted en masse under the name datok kong - kong being a suffix standardly applied in Hokkien to deities (cf. cok kong "lineage deities" as a term for ancestors in the lineage). The datok kong are worshipped in the same way as other minor deities, and have the same beliefs attached to them; the only difference worthy of note is that the datok kong of definitely Malay origin are considered Islamic and are not given pork (usually receiving goat meat in its place) or alcohol. Malay kui (ghosts) are similarly treated, but do not differ essentially from other kui. (A mildly ironic touch is that the local Malays have been affected by attempts on the part of the Malay elite to purge Malay Islam of beliefs considered to be "pagan" and "pre-Islamic," including the datok keramat; so the latter are now remembered only by the Chinese.) The assimilation of datok kong and traditional Chinese local spirits is complete enough that the latter are also called datok kong. This is not surprising; the two evidently spring from a common root, the pan-East-Asian worship of local spirits in emergent objects, often phallic (such as the phallus-shaped mounds made by mud-lobsters, often regarded as homes of datok kong). The adoption by Chinese of these Malay beliefs shows how much closer the two groups were at one time; it is now inconceivable that religious borrowing on any serious scale could take place between the two communities.

The datok kong are more feared than revered. They can give luck, but more typically they send bad luck. Children are afraid of them, afraid to pass them at night or to show them any irreverence; urinating on a datok kong

residence leads to a painful swelling of the genitalia. The powerful datok kong near the top of the hill overlooking Kampong Mee was shunned by everyone, except for occasional propitiatory sacrifices.

The human personnel of the religious life at Kampong Mee - or rather in Penang Island - were primarily spirit mediums. No major mediums resided at the village, nor were there any major temples there, so villagers had to travel elsewhere for religious services. They traveled to three categories of religious establishments: a temple, a cemetery where their ancestors were buried, or a spirit-medium's establishment. The latter was set up as a small temple, but the spirit-medium makes his own locality; spirit-mediums often travel to pay house calls, while anyone wishing the benefits of a temple must go there.

People involved in the transactions include the ordinary worshippers; the temple caretakers, who not only take care of the temples but interpret lots and fortunes, supervise worship and occasionally serve as spirit mediums in various capacities; sai kong, the officiants at funerals, weddings and other life rites; and dang-ki, the true spirit mediums. Tang-ki apparently once meant an apprentice to a full-scale spirit-medium known as a wu in Mandarin (de Groot 1892-1910), but now is used in Hokkien for all spirit mediums. Wu persists in modern Cantonese as mou, usually in the combined forms mou si "wu mountain." Wu itself is usually translated "shaman" or "spirit-medium"; theoretically the difference between these two terms, at least in one anthropological formulation, is that the shaman goes on a soul-journey to visit the gods, while the spirit-medium stays here while a god comes and possesses his body. In former times, the wu appear to have shamans in this sense; they are now unequivocally spirit-mediums, and so are the tang-ki. The activities of the tang-ki in general have been excellently described by

de Groot and by Elliott (1955); as well as the works on Taiwan cited above; there is no need to summarize them here, except insofar as they become relevant to our central concerns.

The sacrifice rites have remained traditional, as have the ordering of the annual round of ceremonies and the series of life-crisis rites. For a large festival, the sacrifice includes incense, candles, fruit and drinks, and food. The canonical food for a really major rite includes roast pork, chicken and duck, all glazed red or golden; bowls of noodles; bowls of vegetables cooked with very fat meat; and various kinds of rolls or pastries, each appropriate to a specific occasion. Some or all of these may be present. The roast pig is especially important for a big ritual; at Ch'ing Ming, when families sacrifice at the tombs of the ancestors, there is a flourishing rent-a-pig business, and the same roast pig may make a couple of dozen journeys to the cemetery. apparently the pig's essence is renewed each time, so that every set of ancestors gets its feast of pork. All of these extra items are necessary to make the inhabitants of the other world well-disposed toward the living; they are not absolutely necessary to the initiatio of communication itself (as the basic incense is, for example).

3

Kampong Mee is under the patronage of Co Su Kong, a popular Hokkien god (cf. Diamond 1969). The main Co Su Kong temple of Penang Island is the Snake Temple, near Kampong Mee. Here many Wagler's Pit-Vipers (Trimeresurus wagleri, a small, midly poisonous, exceedingly inoffensive snake) are kept, and supposedly are under the god's influence such that they stay there and harm no one. A snake was observed going into a hole at the foot of the hill near which Kampong Mee lies; this was interpreted by a tang-ki as an

indication that Co Su Kong wanted a temple there, and one was being built when we were in Kampong Mee (it is now finished). By an interesting "coincidence," this temple improves the feng-shui (see below) of the richest man in the village, who also was the organizer of its construction and funding. Before this temple, Kampong Mee had a loose identity as a village - everyone knew it was one, and roughly where it ended and began. Unfortunately we were not able to see what effect the temple had on village consciousness, but a confident prediction can be made that it will give the village a greater sense of community, a feeling lacking in 1970-71. It enhanced the prestige of the richest family, consolidating its leading position. The village's status as a definite entity is officially marked by its possession of a community temple; Kampong Mee, a town of very recent growth, had not had need for such marking previously.

Below the level of the village are the small, amorphous neighborhoods united by the possession of a local datok kong. People meet around the shrines, and know each other and each other's datok kong. This leads to a small increase in neighborliness, but more important is the general sense of geography conveyed by the rites. The village is not a formless, imageless entity; it is marked out by shrines, its places, the residences of spirits. The shrines are not, however, the important foci that they often are in traditional villages in China.

Below this level is the level of the house, and here a more complex and precisely marked goegraphy prevails.

Beginning with the household, the first thing in the religious consciousness of the villagers is the ancestral shrine. It is the first thing that strikes the eye of anyone entering the house, and is the most colorful, decorative and well-kept place in the household. The most important rites in the villagers'

lives are commemorative ones either at this shrine or at the family tombs. The family dead are the most important spirits in the average villager's life; an introverted, death-oriented theme dominates the religion and forms i

The ancestral alter is placed against the back wall of the front room, facing the door. This is the location of the chief shrine in every Chinese building - temple, traditional home, or Christian home (where Christian statuettes and prints take the place of the traditional objects). On the alter are incense burners, plates of organes, and/or other sacrificial equipm There may be representations of other deities (major gods). Under the alter, or otherwise closely associated, is a display case with memorabilia - souvenirs, small cheap art objects, photographs, etc. This is the family museum and a memory-exhibit, where things of sentimental or artistic interest are kept for observation. The back wall of the front room is consecrated to the past; no one normally sits against it, or otherwise intrudes his presence into that domain, except to worship there and to keep the area dusted and arranged. This latter job is the first responsibility of the leading woman in the house, and is not so often delegated to daughters and other junior members as are other cleaning tasks.

Observances here consist of burning incense sticks every morning and evening; keeping at least some small offerings on the alter at all or most times; and holding, before the alter, the commemorative ceremonies that come at regular intervals after a death. The death of a parent is commemorated at seven day intervals, and on the seventh of these - 49 days after the death - comes a particularly big rite, at which the would of the dead is finally accepted into its place in the other world after the 49 day journey or probationary period (conceptualizations differ on just what it is). A hundred days after the death comes another rite, and the anniversary of the

death is also commemorated, especially for the first three years. At the end of these the mourning period is over. The funeral and mourning observances will be discussed more fully below.

On or near the ancestral alter - typically over it, hanging on the wall, with the censer for it on the upper part of the alter - will be the major household shrine to a god. Usually the god is Tua Peq Kong (roughly, "Great Grandfather God"). In Chinese religious belief, each area has its guardian locality-spirit - the house has a little one guarding it, the district has one, and so on up to the integration of all these into a worldwide "locality" deity usually known in English as the Earth God (though the Chinese - T'u Ti in Mandarin - means "locality"). Tua Peq Kong is a special aspect of the T'i Ti. The ordinary T'u Ti guard specific localities in the homeland, as a sort of manifestation of their integration and destiny. Tua Peq Kong performs this function for the dispersed community of Chinese in the Nanyang (Southeast Asia and other scattered communities). He is a locality spirit in a special sense - his locality is not defined by both alone. It is dispersed goegraphically, but integrated socially into a single unit, the overseas Chinese community.

This rather arcane "locality" is primarily a Hokkien conception, and Tua Peq Kong, a Hokkien name; but most of the Nanyang Chinese have picked up the cult. Tua Peq Kong is represented as are all Tiu Ti (who are both separate gods and aspects of the single, unified world spirit): long flowing white beard, white hair, pink face, and benevolent expression.

Other gods may occasionally be found here, the most frequent alternative being Kuan Yin (Hokkien, Kuan Im), the Goddess of Mercy. In these cases Tua Peq Kong may be worshipped somewhere else in the house, or to the side of Kuan Yin. Kuan Yin is a popular deity; houses where she is not worshipped

will often send representatives to worship at her temple, and often get her to ritually adopt their children as khei-children, or otherwise make her an important force in their lives. She is especially popular with women and children, but is highly regarded by all.

The minor shrines of the house are usually two: the tiny area at the side of the door (the right side as you go in) where the Locality Spirit that watches over the house is worshipped, and the shrine in the kitchen were the Kitchen God is worshipped. The latter may share his shrine with other deities, especially those worshipped primarily as a female cult. Moreover, when mourning for a parent drives the gods from the ancestral alter for a year, they may find refuge with the Kitchen God; in our household, Tua Peq Kong was so exiled, to be brought back in triumph at the end of the first anniversary memorial rites for the mother of our landlord.

Freedman (1970) has made a good case for the Kitchen God being the major god of the Chinese household. This is not so in areas known to us, and there is clearly a very great deal of variation. The boat people of Hong Kong, for instance, are far more concerned with their patron, the Sky Empress and so are many fishermen in Malaysia. In Kampong Mee, the Sky Empress was typically worshipped on boats or at her temple, not in the household; but - as in many other parts of China - the household's most important god (or god was (were) the Locality Spirit. Tua Peq Kong, in his capacity as Locality Spirit for the Nanyang Chinese, was far more a force in life, with much bigger celebrations and much more constant attention; and even the little individual house-spirit by the door had as much attention, usually, as the Kitchen God. The great stove in the center of the kitchen was the head of the Kitchen God, and as such was the defining attribute of the household - it belonged to one household, and other households renting into the same house

had to borrow space or use small kerosene stoves on the side - and thus the Kitchen God served as a focus for household worship. However, except for the well-known rite a week before New Year, when the Kitchen God's mouth is sealed with sweet sticky substance so that he may report sweet things of the family when he goes to the other world for the annual report, the Kitchen God received little attention - at best, incense sticks morning and night, an honor he shares with all the other deities of the household.

Last of all, for some religious services, one must go outside the village. The women of the household usually have this duty. Until the local temple was built, much ordinary worship, plus festival visiting, was done at the Snake Temple. The main temple of Kuan Yin, in central Georgetown, is also visited for requests, prayers for help, and the annual festival. Besides these deities, the tang-ki who can cure or help with problems live out of town and must usually be visited at their homes, though some will make house calls, e.g. to cure a bedridden patient.

In all this management of space and locality, there is little change from the assumed pre-Malaysian base. Locality is still important and sacralized; the house is still guarded in every room and main door; visits outside the village are still made when need arises for an exceptional event, but the village is self-sufficient usually, except insofar as tomb visits to the ancestors take the villagers to the cemeteries, away from the village but not far.

However, there have been some declines in emphasis. The local spirits are less focal to community worship than they are in at least some areas (rural Hong Kong, for instance). More signficant, the traditional science of site planning, known as feng-shui (Hokkien hong-cui), "wind and water," is a near casualty. This science involves siting houses and tombs such that

they are maximally protected from wind, water (rain and flood), and bad luck, and maximally exposed to good weather and good luck. The aspect of feng-shui relating to weather and drainage is simply good engineering, and is outside the scope of this chapter; the aspect relating to good and evil infuences is related to the religious aspects of location. Feng-shui has been described elsewhere (Freedman, 1966; Anderson, 1973a), and it is necessary here only to state that in all areas of traditional China, a great emphasis was put on having buildings sited such that they did indeed receive the best possible luck, while in Malaysia the Chinese generally put little stress on this. Traditional and well-to-do persons may do so, as did the richest man in Kampong Mee when he made sure that the temple was sited so as to give him good feng-shui; but the science is not a part of the life of the average villager. Mute but eloquent testimony to this fact is the bad siting of the houses - wind, flood, rain, sun and heat all have harsh effects on the buildin and grounds; it is sadly obvious that the practical aspects of feng-shui have been lost, and the religious elements are not much better remembered.

Taken in conjunction with other changes in the religion of the people, this can be seen as a slight decline in the importance of locality (in this new and different place where Tua Peq Kong has replaced T'u Ti) and a considerable decline in the closeness of the relationship of religion and everyday working life.

In the actual religious rites, independent spirit-mediums are more important, temples and organized worship less so, then in traditional areas for which descriptions are available. This shift of emphasis seems to accompany a general fragmentation of society; perhaps alienation is not too strong a word. However, more data must be collected from traditional areas before comparison can be made.

In the services request of supernaturals, changes are more evident. Few statistical analyses exist of the questions and requests made to the deities. Elliott (1955) included the best to date. In Singapore, he found that the vast majority of questions put to the gods concerned health, and the rest were fairly evenly distributed among a variety of personal problems or else involved simply "bad luck"; out of 168 questions to tang-ki that he recorded, 53 involved "miscellaneous illness," 32 "bad luck," and the rest included wayward children, gambling tips (only five requests), missing persons, erring spouses, etc. (Elliott, 1955:161). Singapore may have been less traditional at the time. In Hong Kong, I recorded questions put to spirit-mediums and gods as almost entirely concerning health (including luck when it involved good health and safety), and most of the rest concerned with success (whether and how it would come).

In Kampong Mee and Penang generally, health retains prime place. Major ceremonies are held to cure the sick or mentally diseased (often believed to have lost their souls, or parts thereof), and many questions involve cures and medicines. However, success as an issue has dropped out, and the rest of the questions tend to be personal in nature. In one typical session, nine questions about health were asked; four about missing persons; four involving control of family or close contacts (two cases of wayward children, one case of wayward boyfriend, and a case in which a woman wanted a tenant thrown out by the god - a request which the spirit-medium dismissed). Hopes of success and fears of bad luck seems to have been abandoned; hope in general seems to be a losing commodity. On the other hand, personal problems, especially problems with people very close to one, are major matters of concern. Missing persons (strayed or wayward, typically) undisciplined children, unquiet dead who want something from the living, and health of oneself or one's family these are the worries and concerns of the people.

Most important of all, however, is gambling. "Reputable" tang-ki - the sort who welcome foreigners at their seances - do not deal in gambling tips, or at least not when foreigners are watching, but we observed several tips being given out, though most of our knowledge of the phenomenon comes from statements by the villagers themselves. Judging from these, at least half the questions asked of the gods are related to gambling, specifically to the "numbers game" of Malaysia, known as "ekor" (tail) in Malay. This is a game involving the last few numbers in the code numbers of winning race horses. Gambling questions do not have the seriousness of questions about health, safety and discipline. On the other hand, they are important. As a temple, a woman will pray for success with her numbers; to a spirit-medium, she will request that he give her a number. If he is primarily involved in curing, he will still be asked - often by almost everyone at the curing ceremony - for numbers. In addition, dream-interpretation is common; almost everyone has small books that say (for example) that if you dream of selling noodles then the number will be 123, while if you dream of yams, the number will be 456. (These books, incidentally, make good cultural inventories; they are evidently based on actual dreams that are common in the population for whom they are designed, the lower-class and lower-middle-class Chinese.) Many other omen and charms are resorted to. Often the spirit-medium will give a number in a cryptic form that can be interpreted several different ways, thus hedging against failure. The almost universal failure of the spirit-mediums and omens to produce the number does not discourage the worshippers; every win that does occur (wherever it is in Malaysia) is rumored to have been based on a tip or omen, thus shoring up faith.

The position of gambling in Kampong Mee and elsewhere among the poorer Chinese of Penang is important and interesting. The Chinese are stereotyped

as gamblers, but no experience in Taiwan or Hong Kong (to say nothing of mainland China, where gambling is virtually abolished) prepares one for the situation in Malaysia. Many of the Chinese of Kampong Mee were compulsive gamblers, virtually all their spending above minimal survival needs going on for the numbers. Thus in the house in which we stayed there were two Chinese families, earning typically between $150 Malaysian and M$200 a month; this left about M$40 a month, on the average, above minimal expenses, and usually almost all of that went on the numbers, either directly as gambling losses or indirectly in the form of fees to spirit-mediums, cost of dream books, etc. These were prudent and thrifty families and so regarded in the village; many families went far more deeply into the numbers.

Another trend in religion is toward concern with invulnerability. A long-standing belief in the ability of the gods to make a person invulnerable exists in China; the Taipings, The "Boxers," and other militant sects had religious officiants who conferred supposed invulnerability on them. The cult on invulnerability is now insignificant in most of the Chinese world, but it apparently always flourished in Malaysia, and took an enormous leap after the inter-ethnic riots in Penang in 1968 and in Selanger in 1969, when Malays and Chinese fought so fiercely that there was considerable danger of civil war in the nation. The poorer Chinese of Penang believed that further and worse troubles were inevitable, and many - especially young men- provided for them by receiving invulnerability from a spirit-medium. Such a medium is dealing in black-magic powers, and as such will also give gambling tips; his life will be "hard"; he will be isolated and feared.

More generally, and without such close reference to actual requests made, there has been another major change in religious emphasis. This has been the emphasis on the dead. The focus on continuity has changed to a focus on the

dead past, the old way of life that is now gone. This change emerges most clearly from observations of festivals, and to these we now turn.

4

In regard to the aesthetic side of religion - the festivals and the art, the temples and events - the changes have been of two kinds. First, some things have changed outright. Second, some things have been reduced in importance and visibility - which other things have stayed as important as ever. These factors combine to produce a totally new configuration, without much obvious, spectacular change. (We have developed this idea elsehwere (Anderson, in press) in regard to temple fairs.)

The most spectacularly visible continuation - or even intensification is in the death cult. Funerals in Penang are the most colorful and splendid event that one is likely to see there. Performers - musicians, stilt-walkers, etc. - add themselves to the huge processions and the brilliant colors. Thousands of dollars are spent on larger funerals. Even the poor have large processions and expensive burials. After death, mourning is rigidly observed. The mourning costumes and grades (see Wolf, 1970) are observed down to the last detail, and mourning (with appropriate clothing, and year-by-year changes in clothing) is observed for the full three years stipulated by the most extreme Chinese tradition. Commemorative feasts for the dead are held frequently, with the eldest son officiating. Every change in mourning costume is ceremonialized with a major sacrifice rite - at great cost - by the whole family, and is one of the biggest festivities in the average person's life.

Last of all, Ch'ing Ming - the feast of commemorating the dead, coming on the third day of the third month of the Chinese calendar - has become the biggest annual festival - more important, vivid, and expensively observed than

New Year. This is quite atypical in Chinese communities, where New Year is typically a much bigger event.

By contrast, the fate of other life-crisis rites and annual festivals has been to become reduced in importance and changed in form. Birth of Children is little observed in ceremony; small private rites take place. Marriage remains a large and important ceremony, but is easternized; often an almost purely English-style wedding is observed, and even the smallest and most isolated Chinese communities have picked up some British wedding customs. Marriage is also less festive and expensive than the death rites. By the same token, many annual festivals are reduced to insignificance - such as Dragon Boat Day, important in traditional South China - and others are changed in form. Thus the temple fairs, held annually for the shen with each deity having its particular day of celebration, have not only lost considerable importance (all informants report a falling off in attendance and money), but have begun to westernize. Formerly all deities were allowed to see traditional Chinese opera or puppet plays. Now these old-time forms of entertainment are giving way to western entertainments; talent shows with electric guitar music, etc. The tastes of the gods are changing; some still demand the traditional events, now watched only by bored children, but many are following the tastes of their worshippers in rejecting all that is traditional Chinese and turning to entertainment ultimately derived from Britain and America. Significantly, Malay culture is totally ignored in this transformation; the first Chinese settlers borrowed a great deal of Malay culture, but now all borrowing is from outside Malaysia directly or indirectly.

In summary, the rites and sacrifices associated with death have not changed greatly, and in so far as they have changed, they have become more expensive and important than ever. On the other hand, the annual ceremonies

(except for Ch'ing Ming) have become reduced in importance. The life-crisis rites (except for those connected with death) and the temple fairs have begun to westernize.

This creates a new pattern or configuration of religious activity. Relative to its former position in the system, death (and the activities connected with death) has become far more important, far more significant, and far more a cultural rallying point. It is fair to say that the religion has changed from one associated with continuity - in which all life-crisis rites were equally important or at least comparably important, though in the Hokkien variant of Chinese religion funerals were always especially big - to one associated with the dead and the past. The decline of other festivals, even New Year, and the westernization of almost all important festivals that are not concerned with death, have left the death rites isolated as the last really important sacralizations of traditional Chinese culture.

5

This, finally, brings the discussion to the emotional and aesthetic impact of the religion. Here assessment is difficult to set down in precise phrases; the discussion must resort to vague impressionism. However, a few things are verifiable by anyone's observation, without recourse to interpretation. First, the sheer amount of food, colorful paper and other ornaments, incense, music and restivity is vastly less than at comparable events in Hong Kong, Taiwan or Singapore, except in the case of funerals. Second, the above-mentioned westernization is a matter of inspection; electric guitars and marimbas are not traditional Chinese instruments. Third, it is clear from observations that attendance at all rites except New Year and death rites is cut down in hours or in audience or in both. The

annual temple fairs in honor of the god of the temple in question are particularly low in attendance. Those which have westernized, with variety shows and western-style music, draw a fair-sized local crowd; those that cling to traditional action, however, draw perfunctory worshippers and bored children. Public events in general are much less important in Chinese communities in Malaysia than in other Chinese communities - partly because the Malaysian government views them with a very dubious eye after the riots of 1969, and has banned many events, even traditional religous ones. However, even events that are allowed fail to draw large crowds, especially if they are traditional Chinese diversions.

Getting into the home and observing the typical Kampong Mee family, one can see that attnetion paid to the dead is greater than attention paid to other classes of deities, but that is not unusual in Chinese homes. The dead may be treated, even in Kampong Mee, with a certain friently casualness. Thus in the house where we lived, on Hari Raya Ruasa (the feast at the end of Ramadan, a major Malay festival) some curry puffs were made - a vestige of Malay culinary influences. A plate of these was placed at the shrine of the mother of the household, dead a few months before. One of her granddaughters began to take a curry puff, put it back, then made a brief reverential gesture with folded hands, took the food and ran out. On the other hand, and quite apart from the sheer amount of activity and goods and money spent on festivals for the dead, it is clear from observation that these festivals have more emotional impact than others. On New Year, people will feast, drink a little, and lie relaxed and half-asleep for the rest of the day. On Ch'ing Ming, on the other hand, everyone is dressed up and serious, and no one relaces, at least until the family tombs are visited and honored; then the family returns home, has a larger and more expensive feast than New Year entailed, and spend

the rest of the day in better clothes and more active pursuits than had been the case at New Year. The event means more in personal terms. Similar observations could be made about other feasts of the dead.

The vivid life and color that traditional religion introduces to Chinese life (Anderson 1970) had gone from Kampong Mee, almost completely. There were no major public festivals at all. There were no festivals, public or private, that were characterized by the wild celebrations that are still typical of rural hong Kong; perhaps that is not a fair comparison, but the difference was so extreme that it requires at least some comment. (Hong Kong's westernization has been very different - it is the death and mourning ceremonies that have declined. The joyous festivals survive and flourish.) Temple fairs attracted only cursory attention - the women went to the Co Su Kong fair for an hour's worship, and that was all. Last of all, there is the case of the questions asked to spirit-mediums and gods; these indicate the emotional concerns of the questioners. The old configuration of health-wealth-success-luck has changed to a new one of health-personal trouble-gambling-invulnerability. Even the one common item (health) is not as uniform as one might think; the basic Chinese medical concern with staying healthy has been replaced in Malaysia by a concern with curing, and the questions we recorded were all about cures for a specific serious problem, not about maintenance of the harmony of the body. (Considerable research on beliefs about health and diet confirm and extend this observation.) Thus the contrast can be restated: health-wealth-success-luck versus sickness-personal trouble-gambling-invulnerability. The focus of emotional concern has clearly shifted. Formerly, the emotions bound up with religious life involved a celebration of the tinuing world, and a felt need for preserving and increasing harmony. Now, in Kampong Mee, the emotions are fear and retreat. The fading world of

the dead is sought, that it may provide solace and help against a dangerous, menacing, unharmonious world. Formerly, religious events were occasions for joy and celebration, with Dionysian feasting and drinking; in Kampong Mee, they are passive occasions, rather sober days of rest. Drink is little consumed, and the food is not managed for taste quality so much as for religious message - it is the appropriate sacrificial food, rather than food specifically intended to taste good.

6

Conclusions from the above are in the nature of a hypothesis, which should be retested in the field.

First, regarding religion as communnication, considerations of both structure and content are raised. Religion and other complexly symbolic channels are especially interesting in that the structure itself communicates a good deal, over and above the intentional content. Thus if we say that asking a spirit-medium about a cure for sickness is a communication transaction (and it obviously is), we must ask not only what the question was and what was intended by it, but why a spirit-medium was consulted at all, and what form of ceremony was used in invoking deity to possess him. Similarly, we must ask about a rite, not only the ostensible purpose for the rite, but also the way it is organized - paying specific attention to changes that occur in it over time. Structure and content can be considered together.

In Kampong Mee, both convey the same basic message: fear and social breakdown, the latter causing the former. The society of Kampong Mee was stressed by a number of things. The fishery was declining; more generally, the position of unskilled and semiskilled Chinese was low in Penang, both vis-a-vis better-off Chinese and vis-a-vis the Malays. The Chinese of Kampong

Mee believed the government to be hostile to them, and believed at the time of this research that they would be caught in civil disturbances in which the government would intervene against them. Moreover, traditional Chinese culture was breaking down under the impact of Malay, British and other ideas and technologies. This was perhaps no stress for the Chinese elite, who could pick and choose their mode of modernization from a position of power. For the poor, rural and uneducated Chinese of Kampong Mee, however, it meant the loss of autonomous social control mechanisms; the loss of traditional emotional satisfactions and enjoyments; the loss of effective local economic organization; the loss, in short, of both economic and psychological means of controlling destiny and averting disaster. Given the bleak economic and political situation which the citizens of Kampong Mee believed to be theirs, this loss of control over fate was terrifying and paralyzing to many. They communicated their fear in many ways and by many channels; the religious channel was particularly well structured and visible, but we have recorded other channels, and in addition we have a body of quite explicit statements by the people themselves, saying what had been said above, in rather less compromising terms. We are not inventing the above interpretations merely applying informants' own statements. If we are correct, the coming of better times since 1971 will have led to a decline in the death and mourning ceremonies. Thus this chapter's theme can be tested.

Summarizing the changes which stand out when one compares the religion of Kampong Mee with Chinese religion as described in existing accounts: First, there is the overriding concern with death, and the extreme conservatism in death-rites. This appears to be an attempt to cling to one major feature of the old culture, and one that ties the living most explicitly with a more hopeful, better, more harmonious time. The days of the ancestors

are often remembered as hard and troubled, but the world of the ancestors, - locked as it is into traditional Chinese culture - is seen as a world of harmony and happiness, in opposition to the present situation of the living. This in turn leads to a real worship of death or hope for death, or at least an absorption with that grim feature.

Second, the contrast of extreme conservatism in death-rites and extreme change in annual, community and continuity rites (as well as marriages) is significant. The major festivals not associated with death are losing importance and most of them are acquiring more and more western features. This appears to express quite definitely the cultural breakdown and uncertainty that has come to the community. Specifically, Chinese culture no longer provides status items to be emulated - <u>except</u> when it comes to death. Increasingly, the living target their status emulation toward the alien west. There is considerable explicit expressions of this - the puppet plays, for instance, are condemned in very strong terms as being old, traditional, and trash. Even in old times they were associated with poverty - tending to be a poor man's substitute for opera - but they were not so stigmatized as they are now. On the other hand, the fusion of western and popular-Chinese culture is regarded as high status, new, modern, desirable. In both the violent rejection of the old and the questioning pursuit of the western and new, one can read general feelings of insecurity; the old forms no longer provide satisfaction and help in an alien world. It is only in the last stable and secure core of life, the cult of death, that the old ways are still strong and satisfying.

Third, the requests to the spirit-medium are interesting and significant. The increased importance of the spirit-medium relative to the temples is itself interesting, showing the continued importance of individual provision

of security even though established religion fails. Similar evolution from organized, ceremonial religion toward individualistic, emotional, less highly organized rites has been described in many other cultural transformations (such as the Reformation in Europe). More to the point, the questions asked the spirit-medium are significant. Here we do have an actual quantitative base line - Elliott's findings in Singapore. Even so close in space and time to Penang, invulnerability was not a factor at all and gambling tips involved only 3% of the questions. The phenomenal rise in importance of invulnerability is clearly associated with the fears and insecurity attendant on the 1969 riots, and more generally on fears of Malay power - this is explicitly stated by informants, who say that the invulnerability cult was primarily a gangsters' affair until 1969. The rise in the importance of gambling, and especially in the passive sort represented by the numbers game. (Traditional Chinese gambling games of the mah-jongg type usually afforded a great deal of socializing, gossip, and general enjoyment for a relatively small money input. Passive forms of gambling also existed, but the present rise of the latter in Malaysia has paralleled a decline in the active and sociable forms. This in itself is evidently significant.) The fascination with playing the numbers has reached levels that would be called compulsive in some cultures; but also a great deal of psychological energy - and even physical energy, as when a Kampong Mee woman braves the bus ride to Georgetown (a rare undertaking for a woman) simply to pay a spirit-medium a high fee for a tip. Gambling on this scale is often correlated with insecurity and uncertainity about the future. When religion becomes in large measure a way of helping one's gambling chances, and when even the revered ancestors are questioned about the all-important ekor Number (as they often are, via secret rites at their graves), we believe that it can safely be said that the worshippers

have shown a degree of insecurity mounting fairly close to desperation - a combination of fear and feelings of hopelessness. Security in the traditional sense is not sought; what is sought is the one thing that the worshipper believes can solve his problems, a windfall from quite outside his world and his reasonable chances. (It should be noted that the odds in the numbers game are very long indeed; moreover, the citizens of Kampong Mee play through illegal brokers, who pay off the rare winner at very low discount - 1/3 or less of his actual winnings - if they pay off at all.)

Almost as interesting as the new purposes of religion are the old purposes that have dropped out. These cluster around community integration and emotional intensification, especially enjoyment. Kampong Mee has no public communal rites at all; nearby areas that have them have downplayed them, the worshippers contributing less and less time, money and energy as the years have gone on. The emotional and aesthetic dimension is harder to evaluate, but there is no question but that much less is done in the name of religion to produce color and splendor. New temples are small, painted monochrome, tiles; there is none of the exceedingly intricate, brilliant-colored, highly detailed and highly skilled craft work that went into the old temples. Feasts are brief and sober, music less and less heard. On the other hand, the ceremonial enjoyments that still are practiced are westernized in many cases. Both secularization and westernization of the pleasant side of life have occurred. The people of Kampong Mee find their enjoyment in other ways, not connected with religion or with community.

In summary, modern Chinese folk religion in Kampong Mee has different concerns from the traditional folk religion of China. The theme that runs through it is insecurity. All religions operate to minimize insecurity, but few are so clearly involved with representing and projecting the fear and

tension of a society. The dead are revered and envied, as ancestors, but feared as ghosts. (The Chinese have managed ambivalence about the dead by their division of the soul into two aspects, one of which becomes the worshipped ancestor and one the ghost.) Help with gambling is a major goal of worship. Some concern with uncertainty and death is found in all religi the point is that in Kampong Mee the other functions and concerns of religion have declined in importance as this one has increased.

Such turning inward, such concern with death and uncertainty, is not confined to the Chinese religion of Kampong Mee. It appears here and there throughout human history. Does it always come as a result of economic decline and social stress? Perhaps so; such connections have often been proposed, for cultures. Cross-cultural comparative material on this is needed.

If so, then observing such trends in the religion of a given community should alert us to search for the tension and fears that cause the trends. Among other things, this would provide useful insights into history, since religious concerns are better studied. It would also provide insights into the ways in which humans express, project, and communicate the things which are important to them.

Part 3

The Troubles of the Waters

. Overfishing

1

The fishermen of Kampong Mee needed more fish, to pay increasing costs, but they were getting less. Total catch held roughly steady, but this was due to a great increase in effort; catch per unit input and per unit effort declined steadily. Estimates by fishermen who had been fishing since the trawl fishery began in 1963 were that catch per unit effort was down 90% for the valuable fish and 70-80% for fish in general. There is no way of verifyin this, since the figures are unavailable and even when figures become available they are quite unreliable (as will be seen), but the agreement was impressive. Even if there is exaggeration (which is probable; it is claimed by fishermen that gross tonnage is at least down 50% from 1963), there is no question that the catch per unit effort has declines; fishermen and fisheries experts agree on this. Tables show no great change in quantity of fish landed per boat per day (see Table 1), though the net is now shot four times when it was once shot only once or twice in a day's fishing. The value of landings has dropped, because a higher and higher percentage of the landings is made up of tiny fish and miscellaneous sea life valued only for making fish-meal fertilizer, and therefore known as ikan baja (Malay for "manure fish," chao hu in Penang Hokkien). Kampong Mee possesses a plant to process this into baja ikan "fish fertilizer.") The more valuable fish made up a lower and lower percentage. This is not so true of prawns and is not true at all in the pelagic fishery (Kampong Mee's permanent fishery is demersal, with trawling the method of working, but pelagic fishermen use the port in season), but these facts do not offset the decline in value.

The universally accepted and overwhelmingly obvious reason for this is overfishing. The west coast of Malaya is heavily fished, especially the

stretch from Pentai Remis to Kuala Muda, and most especially the coasts of southern Penang state and northern Perak. Here hundreds of trawlers, based mostly in Penang and Pangkor Islands, vie with hundreds of bag-netters and other smaller craft for the production of a coast that is not naturally fish-rich (Ommaney, 1961). Just as Malaysia's soil, developed on granite and exposed to full wet-tropical conditions, is both poor and extremely vulnerable to erosion and leaching if any stress is imposed on it, so the waters of the Malaysian coast are poor in fish and easily made much poorer. Warm water dissolves less orygen than cold, and Malaysia's waters are very warm, so the seas cannot possibly support fisheries comparable to those of the northern seas. No upwelling belts of any significance occur, not do any major rivers or sea-currents bring in masses of nutrients. The many small, short rivers do bring in much silt; this clouds the water, making large-scale photosynthesis by plants difficult and limited to the upper waters. The silt also makes growth of coral impossible and buries all hard substrates to which marine growths might attach, thus eliminating the last chances for good fish environments to be produced. This is partially offset by the fact that the rivers do bring in some nutrients, and the silt creates enormous and complex mangrove swamps in which these are held and recycled. These swamps provide both rich food and safe haven; in their shallows and quiet waterways, fish and shellfish can live and breed undisturbed. Many fish that live in the deep sea as adults do their spawning in the swamplands and associated shallows. In short, the mangrove swamps are the only salvation of the fisheries, and the main fisheries are concentrated around them, especially at main rivermouths. This being the case, it is unfortunate that Malaysai has caught a virulent form of the worldwide epidemic of swamp-filling. The swamps, seen as useless hindrances to progress, are filled and factories built on them. This makes

still poorer a poor fishery, and the fishermen can more easily overfish it. Fish breeding areas are ever more restricted and thus more vulnerable to - and attractive to - intensive fishing. Moreover, erosion due to tin-mining, clear-cutting of forest for logging and plantation development, and the like is causing a great increase in siltation (Douglas 1970, as well as personal observation); this buries the spawning grounds and eggs there, fills the marshes, ruins harbors, and clouds the seas more than ever. It is no coincidence that traditional Malay patterns of land use kept erosion to a minimum - tree crops held the soil, rice paddies trapped the silt and let it fertilize the rice instead of fouling the harbors. The Malays evidently knew enough to hold their soil in place, and may have realized the beneficial effect this had on maintenance of the fishery that supplies so much of their food.

This, as well as other factors to be considered later, has lowered the productivity of west Malayan waters. Overfishing, however, is clearly the main cause of decline, as is well known to the Glugor fisheries research station at Penang (D. Pathansali, personal communication). The effects of overfishing are obvious to the trained observer if he but looks at a trawl-haul. Tne enormous preponderance of small fish and shellfish, most of them young, and the lack of big fish is obvious at a glance. The few larger fish - and anything over a few ounces' weight or inches' length is rare in the average haul - are still young, and are fat; they have no shortage of food; there are not enough fish to compete for food. The underfished pelagic fishery, especially on the east coast of Malaya, may be observed for comparison. Here the fish caught are good-sized, many mature or overmature, and many are big, large-headed and lean. They are competing severely for food; the fishery could stand more activity without reducing the crop, for the fish not caught would eat more

food and grow fatter. The pelagic fishery takes large fish, but rarely the fry. The demersal fishery of trawlers, bag-nets and their kind simply sweeps up everything in its way, everything on the sea-floor, and thus takes the young. Since the spawning grounds are naturally the richest grounds, the boats target to these, thus taking vast numbers of fry, and fouling and ruining the grounds, killing what they do not take. The trawlers, which simply drag huge nets along the sea floor, are the worst offenders, but the so-called "inshore" fishermen (the bag-netters and others with smaller boats) are not by any means innocent, as shown by the rapid decline of fish stocks in areas open to them but closed to trawlers. The waters off the town we call Sungei Ikan Mati have been rigorously patrolled by bag-net fishermen since the inception of the trawler dishery, and trawlers rigorously excluded, yet the fish decline; the enormous expansion and modernization of the bag-net fishery is quite sufficient to explain this.

Proof that overfishing and not a general environmental deterioration is at fault comes from the fact that it is the choicest species that are hardest hit, while other sea life is not so reduced. Some favored fish have been virtually exterminated locally, such as ikan kering, and ikan telubu (chi kaq hu in Penang Hokkien). Others, such as bawal (pomfrets) and sa-belah (soles), are vastly reduced. Many of these latter show up as fry in the trawl-hauls, but few survive to reach any size. Since the fry must be sold for fertilizer though the adults would command very high prices, the situation is doubly tragic. The highest-priced fish are being wiped out to produce fish-meal manure.

On the east Malayan coast this process has not gone far, and the fishery is now richer than in the west, though it was once poorer (it lacks the vast mangrove swamps). The worst hit band is that which extends from Georgetown south to Pangkor, an area with many Chinese fishing villages where intensive

modernization and vast expansion of fleets has been coupled with a lack of alternative sources of livelihood, forcing people to keep fishing as long as they can get a bare subsistence. (Recent expansion of industry in Penang state has drawn some of the pressure off the fish resource base by allowing young men to find preferred work in the factories, as shall be described later.) The Kampong Mee fishermen vie for fish with fishermen from Sungei Ikan Mati and many other large ports in a part of this band that was once particularly rich but is now particularly poor and overcrowded. This process of steady decline and steadily increasing pressure - more and more boats, fishing harder and harder - is the great ruling fact of life in Kampong Mee.

A number of minor problems add themselves to the major one of overfishing. Increased siltation and filling in of swamps have been noted. Pollution by toxic chemicals has also become a problem. The cities sewer directly into the ocean, and both living wastes and the chemical effluents of the Georgetown and Butterworth factories are concentrated in the waters between Penang Island and the facing mainland coast (where Butterworth lies). Since this area is one of the major industrial concentrations of southeast Asia, and the factories are inefficient at trapping and reusing chemicals, the problem is serious from Kampong Mee northward; indeed, fishing between Kampong Mee and the north extremity of Georgetown's built-up area has vitually ceased. Insecticides and chemical fertilizers have come into rural Malaysai in large quanitites with the "green revolution," and add their very considerable bit (Conway and Wood 1964; see also Conway 1969). The fishermen play a minor part in creating their own problems by a peculiarly misguided sort of artifical selection: they sort trash-fish out of the hauls and throw them back alive. The fish most helped by all these processes are the various species of the worthless and inedible marine catfish known collectively as ikan duri

("thorny fish," from their vicious fin-spines). Thriving on pollution that kills all other sizable fish (their filthy feeding habits are a main reason for their being avoided locally), they are the main beneficiaries of the throw-back-alive policy too. Thus, they have enormously increased according to fishermen's testimony, and they certainly are commoner around Georgetown than elsewhere. Indeed, they are the only fish regularly caught in numbers in the actual harbor of Penang between Georgetown and Butterworth. They have probably profited from relaxation of competition with other fish: the fishermen say they now out-compete and drive away choicer fish. We know of no evidence for or against this.

In short, the fishery is overfished, and other factors are adding themselves to intense fishing pressure to reduce fish stocks.

2

The logical solutions to this could be either of two types. A society with a strong government to regulate the fishery could keep the pressure down by law. In a perfect capitalist society on the Adam Smith model, by contrast, the fishermen would seek alternative employment when the fishery became unprofitable, and the pressure on the fishery would relax. Malaysia has a strong government, yet one that permits much free play in the economic system, and thus either of these strategies could be expected to work. Neither did so.

Laws were passed, but they failed to save the fishery. The principal ones in force during our stay were designed to eliminate competition between the trawlers and the "inshore" fishermen. The latter term covered all fishermen except the trawlers and the deep-sea, rawai (long-line) and pelagic (drift-net) fisheries: while these other fishermen, primarily bag-netters, did not always work inshore, they were more shorebound than the far-ranging,

larger trawlers. The ideal situation, in the government's eyes, was to keep the trawlers offshore and the inshore fishermen inshore. Therefore a law was passed to the effect that trawlers could not operate within seven miles of shore, and later a law that they could not operate at night, since enforcement of the first law was impossible at night. It is safe to say that no trawler observed these rules. No trawlers made any effort to observe them even when the senior author of this book was on board, and since we were usually considered to be linked in some way to the government it was obvious that the fishermen had gone far beyond any attempt to conceal their violations. The reasons for the violation were simple and straightforw there was not enough time in the day to make enough hauls to pay any more than minimal overhead, so running out at night and usually trawling at night were necessary; and there were few fish, especially of the profitable varieties, more than about three miles from shore. Moreover, the offshore grounds were neither well known nor charted nor explored. (Indeed, minimal survey of offshore grounds and banks would have paid off enormously, since they were known to exist - many fishermen had encountered rich pockets at varying distances offshore - but not well enough charted to be found again by the navigationally unsophisticated fishermen. This was true not only of the trawler fishery.) The fishermen uniformly agreed that they could not even pay operating costs if they observed the rules, and there was every good reason to believe them; the few trawl-hauls we observed that were legally far offshore were poor even in ikan baja and almost totally lacking in anything else. Moreover, their opponents, the inshore fishermen, admitted the truth of the claim. The government's marine police were present at Kampong Mee and elsewhere, but were simply unable to enforce the law because the government could not afford one policeman per boat - about the needed ratio. The police

boats were fast and the policemen able and reasonably honest (there were the inevitable tales of graft but no evidence thereof), but with 90 trawlers at Kampong Mee and many more at other ports, the police could do no more than harass the lawbreakers. Boats were able to spot the police from afar, and reel in or even cut loose their nets and make a run for safety. Boats were frequently caught and fishermen given stiff fines, but these fines were taken as part of the operating costs - one of the risks of fishing. Owners of boats, when the owner was not also the captain, were asked by the fishermen to pay back fines as part of the ordinary operating overhead of fishing. Spreading the risk (less than one arrest per day, among 90 trawlers) allowed most fishermen to keep operating in spite of occasional fines.

The other option, fishermen leaving an unprofitable fishery for more profitable jobs, was a dream of all fishermen, many of whom said "I would rather work for $100 on shore than for $150 in the fishery." This line had become almost a proverb, but is all the more likely to be a fairly accurate reflection of the perceived tradeoffs. Indeed, as industry developed in Penang, the fishermen did disappear in its direction, beginning with the poorly-paid ordinary hands. Any job that opened up in the Kampong Mee area was quickly snapped up. The problem with this free-market solution was that there were not many jobs. Unemployment among young unskilled men was high in Penang (McTaggart 1966). In Kampong Mee no able-bodied man willing to work was unemployed, but some were merely selling small snacks or working very occasionally in construction and fishing, and the ordinary seamen on the boats were often making too little to live on (except that they had their fish). The traditional Chinese ability to find something to do no matter what the economic situation was in evidence, but there was little in the way of well-paid work. The Tan family employed several workers in construction. Driving

fish trucks and other vehicles was possible for some men; small-scale hawki was a very limited option because of the poverty and small size of the community; industry was barely beginning to develop in the area. For the vast majority of the citizens of Kampong Mee, there was no alternative to fishing except unemployment. The fishermen would indeed have left the fish had there been anywhere to go.

Self-regulation of the fishery was impossible for the usual reason, the structural problem now widely known as "the tragedy of the commons" (Hardin 1968). Anyone practicing restraint simply allowed others to take a bigger share; he did not get the benefits of his actions. Other, less scrupulous people got the benefits. If anyone had been so honest as to observe the laws and fish in a conservationist manner, he would have been ruined within a month or so, and withdrawn from the fishery - leaving the field to the less scrupulous. Kampong Mee, then, was a microcosm of the world fishery (cf. Christy and Scott 1965). The problem was aggravated by the polarization between the trawlermen and the inshoremen. The adversary relationship had been defined by law - the laws were specifically designed to control the trawlermen, and are in part the result of inshoremen's lobbying - and thus institutionalized. The inshoremen, with the law on their side, went well beyond the law, attacking trawlermen. The latter reciprocated in kind, producing the conflict that will be examined in due course. Thus the conflicts and troubles of the fishery stemmed ultimately from the fact that too many fishermen are chasing too few fish; there are ever more fishermen (as the huge families of the fishermen grow up) and ever fewer fish; and in 1971 the situation seemed hopeless, all measures having failed. Laws to restrict net-mesh size had been proposed, but rejected, because the trawlermen claimed (rightly) that their regular, overhead-paying income came from the ikan baja

that would have escaped the net mesh, and that a requirement of large-sized mesh would be economically insupportable. The government had also tried to control the number of trawlers, but the trawlers had all concentrated in a few areas, thus defeating locally the spirit of the law; the bag-netters had greatly expanded operations in the other areas, thus taking up the slack and ensuring that the fish would be caught trawlers or no. Thus all the more obvious measures to control the fishing had been tried and found wanting, being either unenforceable or subject to successful lobbying against them. So the situation stood in 1971.

10. The Fishery

1

At this point it becomes necessary to describe the fishery that was so troubled. There are anywhere from 100 to 150 fishing boats in Kampong Mee's shallow, semicircular harbor on any given evening. All these are large (15-30') motorized craft, built rather on the lines of early-20th-century British boats of equivalent destiny, but often not well or accurately designed, and quite unsuited to Malaysian conditions. In any case, there are, with them, large and fluctuating numbers of rowboats (Hokkien Chinese in styling) and occasionally a few old Malay craft, still powered by sail. About 90 of the boats will be the stable core of Kampong Mee's fleet - the trawlers, biggest and most powerful fishing boats of Malaysian waters. The rest - anywhere fro three or four to sixty or more - will be the driftnetters, almost equally big These - the pukat jerut tuas boats of the Malays, the tua bang ("big net") boats of the Hokkien Chinese who man them - are pelagic fishers, following the great schools of scad that move up the coast toward Thailand and Burma. This fishery is seasonal. In midwinter most of the boats will be in or near Penang waters; by summer almost all are gone, following the fish north or returning to their infrequently-seen home bases in Pulau Pangkor and other down-coast ports. Since these fishermen are not a significant part of the fishery for most of the year, and since their home bases are not in Penang, we will have little to say about them. Our concern is with the trawlers.

A trawler [M. pukat rimau ("tiger net") or pukat udang ("prawn net"), a trawl net; H. hotau bang ("tiger head net")] is simply a boat that drags a big triangular bag of net over the sea floor to pick up anything there-fish, old bottles, seaweed, mud, rocks. The method is not indigenous to Malaysia; it was introduced from the western world, directly or indirectly.

Trawling started in western Malaya in 1962, inspired at Kampong Mee by the example of Thailand, whose trawler fishery developed spectacularly during the 1960's. A Kampong Mee fisherman heard about the beginning of its rise there, visited the country to observe and learn, and returned, beginning a trawler in 1962 and commencing fishing in 1962 or 1963. Independent or quasi-independent efforts at other ports further south had led to motorized trawling at these by the same time. The boats used are small (20-30'), stocky, and rather like British trawlers of a couple of generations ago. Large, modern trawlers, of the sort used today in Japan, Thailand and elsewhere (often big enough to load Kampong Mee's as lifeboats), were absent in the area until recently; by 1970 two or three had been built in Penang state, but none had come near Kampong Mee. Traditional Chinese trawlers, of the sort dominant at Castle Peak Bay and elsehwere in Hong Kong (Anderson 1970a), did not ever operate in Penang or apparently elsewhere in Malaya. (Accounts of traditional Malayan fisheries, irrelevant here because nonexistent or nearly so at Kampong Mee, are found in Burdon 1957, 1959; Kestevan 1949; Kestevan and Burdon 1952; Elliston 1966, 1967a, 1967b. Gibson-Hill (1952) gives a classification of boats used then in southeast Asia. See also the general accounts of fishing villages by Firth (1943, 1966), Fraser (1960, 1966), and Lee (1962). Firth's and Fraser's villages are Malay villages on Malaya's east coast, but Lee's is a Chinese village on the west coast, and thus more comparable with Kampong Mee.) The Kampong Mee fleet is thus homogeneous - small, old-style trawlers, run by diesel engines (usually used ones, of Japanese or British make) of about 60 (50-100) hp. manned by crews of 4 to 6 (usually 5 or 6), pulling nets individually rather than in pairs, and using small-mesh nets to catch anything and everything on the sea floor.

Poor maintenance gave these boats a lifespan of no more than 10-12 years; more commonly they were sold in ruinous state after six or seven. Engines did not last even that long, due to tropical conditions and the uninformed and oft-ruinous tinkering of boat crews and untrained mechanics. (There were no mechanics, repair services or shipyard services in Kampong Mee, and boats had to run up to the urban areas.) Engines often gave out after three years or less. Since, for tax purposes, boat depreciation is figured at about 5% per annum - reasonable, indeed very generous, if the boats were in temperate climates with good mechanical services available (the rates are figured on English bases) - taxes are unrealistically high. Since 1971, the completion of the fisheries training school at Kampong Mee has greatly changed and improved this situation, but no school can eliminate the problems posed by shipworms, line-squall storms, tropical sun, and the other inescapable stresses of the environment. Better boat design is needed, design more suited to local conditions; efforts have been made in this direction, but they had not affected Kampong Mee trawlermen or their shipbuilders. The lack of boat care was striking to anyone used to the Hong Kong boat people, who take exceeding meticulous care of their boats, varnishing them frequently, constantly caulking seams, burning off sea growth regularly, and learning and practicing the essentials of engine care.

By the nature of the method, the trawlers get many types of sea life, and sell all of them except the larger catfish. These are both almost worthless and quite dangerous to handle because of long, often poisonous spines (hence their collective Malay name, ikan duri, "thorn fish"). They are therefore thrown back alive as seen above - a dubious essay in artificial selection. Everything else organic and otherwise unsaleable is lumped as ikan baja and and sold to Kampong Mee's fertilizer plant, owned (like so much of the village)

by Tan Tik Soon, and converted to fish-meal fertilizer (baja ikan). The larger fish and the shrimps and prawns are sorted out separately by species after the trawl net is hauled in, iced down, and brought home to see at the beach. The ikan baja pay the overhead, or some of it. The other regular mainstay of the fishery is the prawn catch. A vast variety of prawns, collectively udang in Malay and he in Penang Hokkien (cognate of Mandarin hsia and Cantonese ha), are caught; most are Penaeidae. (The famous Macrobrachium rosenbergii, now a worldwide celebrity among prawn-growers (Balasz 1974) thanks to work done in great measure by the Glugor research station in Penang, is found too far up rivers for the Penang trawlers to catch.) These prawns are a reliable catch; they pay the rest of the overhead and sometimes even a small profit. In the early days of motorized fishing, i.e. ca. 1963, a trawler could catch up to 50 or 100 catties of large prawns - over 5 or 6 inches - in a day, as well as many more catties of small ones. Now they rarely catch any and never more than a couple of catties; the catch is below 4", usually well below, and no more than 20 or 30 catties per day. (At Sungei Ikan Mati, it is reported that prawns have increased due to fishing out their fish predators. This is not reported at Kampong Mee. Sungei Ikan Mati has no trawlers.) Since value is correlated with size (the smallest prawns are ikan baja, the largest extremely valuable) this represents a very disproportionate reduction in value, relative to the reduction in amount. Prawns are common only close inshore. Beyond the 7-mile limit that was legally the edge of trawling, there are very few and in some places none; this was the most important single reason for paching.

Among fish, the only species combining high value with fair abundance were the pomfrets (ikan bawal in Malay, chio: in Hokkien; Pampus spp. and close relatives). The commonest and the standard value of fish of the catch

was the white pomfret (P. argenteus), which was a sine qua non (amost literally) of Chinese business dinners and other special occasions, and thus commanded a ready sale at the highest price. Pomfrets had once been exceedingly common, but were by 1971 uncommon and decreasing. The fact that the ikan baja was composed in large part of pomfret fry was much of the explanation. The same was true of soles (ikan sa-belah), probably the next most common valuable fish and also all too well represented in the baja and correspondingly declining fast. Other fish, apparently always rarer, such as chi kaq and kuan im hu ("Kuan Yin fish", we never did find out what it was), had once been major value items in the catch but were now extirpated from the area. A great range of other fish - sharks, rays, skates, guitarfish, snappers, groupers, edible catfish, goldenthread, and odd tropical forms without common names - appeared in the catch but were none of them important. Other shellfish included mollusks - various snails and clams, but nothing of value except sotong (the collective Malay word, usually used by Chinese fishermen also, for squid, octopus and cuttlefish). These last were common but not very valuable. Some crabs were picked out of the catch and saved, but they were small and mostly shell, and usually wound up in the fishermen's lunch, being too worthless to sell. The sea urchins, mantis shrimps, sea cucumbers and other minor marine life were left in the ikan baja that remained after more desirable items were sorted out.

A typical day on the trawl fishery would begin at 2:00 to 4:00 a.m., when the boats slipped out to do a bit of illegal nocturnal inshore trawling. The net would be short four times and dragged for about 2½-3 hours a time; then the boats would run in, arriving back in port at about 5:00 p.m. The time when the net was out was spent in sorting the catch; when that was done, the crew would relax or eat a light lunch of rice, canned food and some of the

least valuable small items in the haul. Once the life of the fishermen had been easier; they would make one or two hauls a day, close to their home ports, as opposed to the present necessity of running far sougth or southwest (from Georgetown and the northern ports, boats run north) and shooting the net four times. At least there is rest in the warm tropical sun, and plenty of protein food. At the beach, the fish are sold through the cooperative to fish dealers from the city, except for the ikan lauk (the Malay phrase, meaning "fish to eat with rice," is universally used) - the few fish a crewman can keep for his own subsistence. Many crewmen keep the most valuable fish, sell them, and buy cheaper food with the proceeds - illegal by the cooperatives' rules (all fish must be sold through the co-op), but winked at, since a virtual necessity for survival of the poorer crewmen. The boats rest in port till the next morning. Bad weather almost never occurs to keep them in port; Penang is sunny and hot with afternoon and late-night showers on almost every day of the year. Engine trouble is frequent enough to keep boats in port many days of the year, however. Otherwise only sickness, major festivals, fear of inshoremen's attacks, or accident keep them in port.

The only other fishery of significance at Kampong Mee is the seine-net fishery for scads (kembong, pelata and other fish). Large boats - like the trawlers, they run up to 20 tons and 60 hp. or more engines - follow the huge schools of these fish that move up the coast, and catch them with large seines (pukat jerut; these are mostly daytime powered netters, pukat jerut tuas, tua bang in Hokkien). These boats are almost all based out of Pangkor, and none is based at Kampong Mee; they appear seasonally, in late or mid-winter, as noted above. Up to sixty of them may be in Kampong Mee harbor at this time, but by summer there will be none, or a very few (some fishermen are shifting to a regular base at Kampong Mee)

The schools of kembong are primarily year-old fish, and where they come from and go is a mystery of the sea; developing this currently expandable fishery depends in part on solving this question (D. Pathansali, personal communication). The economic and social arrangements of the pukat jerut fishery have been described with great accuracy, thoroughness and cogency by G. R. Elliston (1966), and need not concern us further here. The jerut men form a separate group in the village, renting rooms during their seasonal visits, but not otherwise entering the life of the community. A few bring their families and make friends, but most stay separate - leaving their families on the boats if they bring them at all.

Most of the fishermen of Kampong Mee are newcomers to fishing, having been lured in by the profits once made in the trawler fishery, but some came from other fishing activities. The initial trawling at Kampong Mee was started by a man who switched from operating a kelong - one of the huge semipermanent stake traps that often hold houses, pots of vegetables, and other goods. (For the kelongs and the lifeways of Chinese associated with them, see Chan 1963's Singapore data.) Kelongs, and the smaller but related ambai stake-traps, were once numerous off Penang's west coast, but have been outcompeted by the motorized boats. The few surviving ones are in ruins.

Aside from a few old men using cast-nets (jala), there are no other fishermen now at Kampong Mee. Not far away are long-line (rawai) fishermen; this fishery is done only by Malays in this area, and they say they preserve their monopoly by not teaching the lore to any Chinese - they are quite aware of the numerous devices by which Chinese have taken over other fisheries. Their catch is low in value (red snapper and similar fish, which are considered inferior in Malay) and their life dependent on finding uncharted grounds well offshore, a chancy proposition involving the consumption of much expensive fuel their great desire was for mapping of the good grounds.

On the mainland coast facing Penang Island, most of the ports have excluded trawlers and continue to use smaller boats. The most militant, and most economically important, of the fisheries in these ports is the tua bang fishery. (Tua bang simply means "large net" in Hokkien; it has been locally borrowed into Malay - pukat tuabang, "large-net net.") The net in question is a moderate-sized bag net or rather conical-shaped seine. Various minor species of seine and bag are involved along with it in the "inshore" fishery - the term is less geographical than a useful collective for all the types of demersal netters that compete with the trawlers. The tua bang boats go after the same fish the trawlers do, and are even more dependent on shrimps and prawns, at least since the more valuable fish species became rare. Several of the mainland ports are dominated by these smaller craft (up to 20' long with 20-30 hp engines). Only Port Weld and Kampong Mee still send out trawlers to the waters dominated by the inshoremen. The Kampong Mee fishermen usually avoid the warlike inshoremen, involved in several bloody clashes, of which we will speak in due course. The charges of overfishing by trawlers led the fishermen of Sungai Ikan Mati to begin from the start: in 1963 they captured and burned the first trawler at Kampong Mee, having heard from Thailand that trawling destroyed the fishery. As indicated above, it is not believable that the inshoremen have not done their share of depleting the fishery.

The nets for these boats are now Japanese nylon netting, custom-made in the villages into the required type of net. Kampong Mee has one main networker and two or three less noted ones, and they make good money - the principal man has one of the very few television sets in the village, marking him as relatively rich by Kampong Mee standards. (Liking to live alone, he had no family, and this was another part of the explanation. He used the television primarily to decoy children away from him - they loved to watch and

bother him at his work - by leaving it in the house where we stayed, which bordered on the one in which he rented a small room.) The coming of nylon netting was, if anything, an even greater revolution than motorization. The old vegetable-fibre nets were so heavy as to make large nets difficult to manage and large-scale trawling impossible, and they needed constant care by cutching, cleaning, etc. The new nets were far lighter, longer-lived and easier to care for without being much more expensive. Even so, a net set may cost up to $10,000 - no light loss if police chases mean a boat must cut nets and flee, though a more ordinary set would be much less.

Processing of fish within the village is limited to two fish-fertilizer plants, one owned by Tan (as noted above) and buying ikan baja from the fishermen, the other owned by a Georgetown tuna company and using the wastes of its Georgetown cannery. Some of the smallest prawn catch may be used for belachan, but none is made in the village. Belachan is shrimp paste - the shrimp are salted and allowed to digest themselves, the salt inhibiting bacterial ferment. The result is a purple paste, belachan in Malay, he kou in Hokkien - the latter means simply "shrimp cake," the former is a basic root word in its own right. This product is comparable to Philippine bagung; the thin, watery protein hydrolysate known as patis in the Philippines, nu'o'c mam in Vietnam, and by other names elsewhere in the region is not used in Malaya. Belachan is a major source of protein and especially calcium, however. (These products are not made by rotting or fermentation, but by autodigestion; see Uyenco, Lawas, Briones, and Taruc 1952.) Belachan was made off and on at a small plant in Telok Chantek, south of Kampong Mee; nearby was a plant that dried jellyfish for the Japanese market (jellyfish are not used in Malaysia). Neither plant was profitable enough to run regularly.

Some fish were dried and/or salted in Kampong Mee, mostly for home use, and shrimp might be boiled and then dried, but most drying and salting was done by the wholesalers who bought the fish. The fish from Kampong Mee were therefore almost all sold and taken as wet fish, iced down. The cost of ice was high enough to make the fishermen use the minimum, and the hot tropical climate ensured that the fish did not stay fresh long. They lasted until sold, becoming more off-flavor the while; even buying on the beach did not guarantee freshness, and the inhabitants of inland towns to which fish were consigned had to suffer.

2

It is worth briefly noting some alternatives - some fisheries that could be developed further to take stress off the trawler fishery while expanding the supply of cheap protein available in Malaysia.

We have already noted that the rawai and jerut fisheries of the west coast, as well as all the fisheries of the east coast of Malaya, could be developed further, as shown by the large number of lean and overage fish caught by them. Here, mapping and charting the grounds and discovering the maximum equilibrium catch is all that is needed; the fishermen are eager to expand operations. The same is true of the fishery for ikan bilis (Stolephorus, sp.) the tiny fish that are dried and fried as the universal accompaniment to a good Malay curry meal. These are caught by large boats, most of those in the Penang area being based northward at Tanjong Dawai. These boats much have huge boiling-vats on board and above them a huge drying roof, for bilis must be boiled and then dried the instant they are caught; the boats are thus large and of a striking appearance. These seem to be the fisheries most expansible in Malaya, but these too would soon be overfished

with further pressure. Expansion into Sumatran waters, currently not allowed by Indonesian authorities (though some fishermen do it anyway, allegedly bribing Indonesian enforcement personnel), would also be a stopgap measure.

The only long-run hope for providing adequate supplies of fish in Malaya is aquaculture. The traditional Malay practice of raising fish in ricefields has been ended by the new varieties - they take too short a time to mature (fish don't grow large enough to be worth the effort) and use too many chemicals fatal to fish. The green revolution in Malaya has enormously increased production of rice, but at the expense of protein. (Not only fish have decreased. Mechanization has eliminated the water buffalo - but a tractor too old to work is inedible, unlike the buffalo.) Specialized fish-farming and shellfish-farming must expand, and/or Malaysia must increasingly turn to livestock farming. Imports of fish or meat are simply too expensive to provide adequate protein for the ordinary Malaysian.

Aquaculture of a specialized sort is practiced near Kampong Mee, specifically at Port Weld on the mainland coast. Here tiny seed-clams (species of Anadara) are bought from small-scale fishermen and seeded on mud flats in mangrove swamps, then gathered when about an inch long or somewhat less. These clams sell cheap in the marketplace, but since yields are incredibly high, the farmers (ex-fishermen) make a good living. By 1971, they had been able to organize themselves into a highly successful and dynamic cooperative funding and marketing organization. They were threatened by pollution and filling of mangrove swamps, however. The swamps at Port Weld were in 1971 quite adequate for their needs, and also supplied a high yield of small shrimp, suitable for drying or belachan. Beds were rotated, since the clams ate enough food to reduce the growth rate of the nth crop - n being anywhere from the second on up to unknown figures, some beds being fertile enough that they showed no signs of exhaustion by 1971.

Another aquacultural enterprise with great potential is the growing of the native Malayan and southeast Asian prawn Macrobrachium rosenbergii. Methods of raising this superb and productive prawn were developed to a great extent at Penang's Glugor fisheries research station. The culture is now spreading through the world (Balazs 1974), even to the neighborhood of the present writers in the California desert (Audubon Magazine 1976)!

Pond rearing of East Asian carp has been adapted to tropical conditions in Malaysia, largely due to research at the Malacca fisheries research station (Hickling 1962). Hypophysization allows them to spawn there, a major breakthrough, since previously frv had to be supplied from China where these various carp breed naturally (Chen Chow and Sim 1969). The raising of these fish is an exceedingly efficient way of maximizing protein production (Anderson 1970c). Great interest in raising them is found among Chinese and some other groups (notably Iban in central Sarawak) in Malaysia, but very little government development was being carried out, the Tropical Fish Research Institute at Malacca having been cut back in funding and staff very considerably in 1971 from its previous levels. Discussions there and in Sarawak between fisheries research workers and us revealed that research was continuing but funds were inadequate for more than minimal effort. This appears to be due to the fact that the carps are of interest primarily to Chinese and Ibans, and the government was devoting its food-production efforts to fields more directly beneficial to Malays, notably rice cultivation. The fact that rice is universally regarded in Malaysia as the perfect food was also a factor in government policy; efforts on development of fruit, vegetables, meat and fish were then considered very secondary to efforts toward self-sufficiency in rice, the staple food of all and the staple product of the small cultivators (especially bumiputra cultivators). However, promising research on dairying,

livestock raising, and aquaculture continued - from government levels to such grassroots efforts as the clam development at Port Weld.

The aquaculture potential of Malaysia, with its vast tracts of swamp, marshy lowland and shallow seas, is fantastic - enough to provide protein for all southeast Asia if not all Asia. From sea turtles to carp, from prawns to Tilapia, much has been tried and proved workable in this field. As world concern with protein supply rises, the regions of coastal southeast Asia may well become a major supplier. At present, however, they are commit to a declining and problem-ridden fishery for wild stocks.

11. The Economics of the Kampong Mee Trawler Fishery

The Kampong Mee trawler fishery had once been extremely profitable - a gold mine where fortunes could be made. In 1970-71, the profits were falling off fast, and while fishing still paid better than many primary-productive activities in Malaysia, the profit levels had declined to a low level and were still falling. Comparison with the rising wages in industry and service sectors led to dissatisfaction. There were many methods of keeping profits up by manipulating the marketing system. The fishery looked like a bad investment, with input costs rising and output falling, so capital was becoming harder to find, though still available. Expansion and modernization, indeed anything experimental and risky, was the hardest thing to manage. The relatively low prices commanded by most fish were particularly critical, since only a few high-priced items were supporting the fishery, and, as we have seen the fishery naturally targeted toward these, such that they were overfished.

Unfortunately the manipulations referred to above all centered on interesting modifications of the figures released on profits, so that we do not know valid figures thereon, and in the interests of the safety of our friends we must appear even more ignorant than we are. For what it is worth, here are the figures for 1969 (at the time we left, the official collection for 1970 was not yet available). Note that the numbers of boats are cumulative totals for every month of the year, thus twelve times the number of boats actually fishing; in some months more boats fished than in other months, so the figures are not perfectly divisible by twelve. Cooperatives 1 and 3 are not based at Kampong Mee. Two other cooperatives besides 2, 4, 5, and 6 here were based at Kampong Mee in 1970-71. This table is copied literally from the officially released one for 1969. The official tabulation continued with

Table 1

TRAWLER FISHING IN THE STATE OF PENANG

STATISTICAL DATA FOR YEAR OF 1969 FOR THE SIX TRAWLER FISHING CO-OPERATIVES IN PENANG

KEY:

(a) No. of boats involved in the fishing operation for the period under review.
(b) No. of outings (fishing trips or days)
(c) Quantity of fish landed in piculs[1]
(d) Value of fish sold
(e) Value of ice used during the fishing operation
(f) Value of fuel and oil used duirng the fishing operations
(g) Value of drinking water consumed during the fishing operation
(h) Amount of handling charges incurred during the fishing operation
(i) Amount of premium paid for workmen compensation insurance
(j) Amount of food expenses involved during the fishing operation
(k) Total amount of operational expenses incurred during the fishing operation
(l) Amount of commission paid to the Co-operative as service charges
(m) Nett profit realized from the fishing operation
(n) Nett loss incurred from the fishing operation
(o) Nett amount of owner's share of the profit
(p) Nett amount of the crew's share of the profit[2]
(q) Weight of trash fish (ikan baja) landed

	Societies	Membership	(a)	(b)	(c)	(d)	(e)	(f)
1.	Georgetown	627	517	9,701	98,768.63	1,379,043.20	82,976.30	388,577.37
2.	Kampong Mee	285	411	7,688	91,839.01	1,189,771.76	69,043.60	328,951.70
3.	Tanjong Jambu	168	201	3,829	32,900.67	478,167.42	29,190.30	138,092.45
4.	Telok Chantek	106	86	1,239	9,769.45	155,980.42	7,682.05	48,363.03
5.	Telok Pisang	120	149	2,551	26,575.54	360,288.14	22,695.20	113,769.97
6.	Tanjong Kelong	150	86	225	2,602.50	28,577.95	1,560.40	9,449.60
		1,456	1,450	25,233	262,455.80	3,591,828.69	213,147.85	1,027,204.12

	(g)	(h)	(i)	(j)	(k)	(l)	(m)
1.	8,446.40	38,030.00	11,094.67	109,152.15	637,617.87	36,592.88	706,464.12
2.	10,670.90	30,172.60	---	109,124.30	547,965.10	32,122.13	61,060.14
3.	---	14,907.00	9,692.42	27,881.35	219,763.52	13,649.60	244,474.30
4.	1,257.90	4,936.00	---	26,698.12	88,937.10	3,358.65	63,818.06
5.	3,499.30	10,305.10	---	36,687.24	186,956.81	8,614.83	153,132.45
6.	385.20	1,007.00	---	3,488.73	15,885.93	579.31	12,065.93
	24,259.70	99,357.70	20,787.09	313,031.89	1,697,126.33	94,917.40	1,241,065.00

	(n)	(o)	(p)	(q)
1.	331.48	353,179.68	353,184.44	56,016.50
2.	920.56	305,332.16	305,339.99	40,128.00
3.	---	122,236.28	122,238.32	17,309.50
4.	134.39	31,998.52	32,008.52	5,903.25
5.	---	81,561.17	81,563.72	11,377.50
6.	152.63	6,037.95	6,057.97	2,105.00
	1,539.06	900,345.76	900,392.96	132,839.75

[1] 1 picul = 133 1/3 lb.

[2] Crew usually of six, sometimes five or even four. Thus division by somewhat less than six times the number of boats in (a) will give per capita income, but remember that ikan lauk is not counted in these figures and is substantial. However, the share system requires division into more shares than there are crewman, since skilled workers get 1½ shares; six or seven shares would be typical.

the averaged-out figures (Table 2). Trawler crews were larger in the past, and the last part (III) is calculated on the basis of an eight-man crew; see note above. In fact per capita earnings would be about $160-$200 per month. Both profits and losses are included, producing a rather strange-looking juxtaposition of figures in I h and I i; some boats lost in any given month but most showed a good profit. By and large, these figures show a substantial profit for all concerned, especially the boat owner. Since in some families there were several fishermen, and since fishermen did in fact make well over the indicated sums, the fishery was quite a good living in 1969, though not nearly as profitable as it had been a few years before. The Malaysian national income per capita was about M$900-1000 in 1969. Assuming each fishermen was supporting two non working family members (a wife and child, for instance), which is as close to the true ratio at Kampong Mee as one can get rounding off bits of person, the per capita income in the fishery can be roughly figured. In the Kampong Mee co-op itself, where the 1969 figures are highest, the official tally reports $146.06 per capita. Calculating seven shares rather than eight, the figure is about $167 per month. This would be an ordinary seaman's take; a skilled man would get half again that, for a total of $250.50 per month. Multiplying this out to a year figure and dividing by the assumed number of people supported on it (three), we get a per capita figure of $668 in a family supported by an ordinary fisherman, $1,002 in the skilled man's. This is small return for the work, investment, and skill involv but is reasonably food for a Malaysian involved in primary production. There are various factors to be considered that adjust the real wage up, however. There are also some negative factors. The wage may be good compared to a sm[illegible] farmer's, but the small farmer is feeding himself, while the fisherman has to buy everything except fish. Also, prices in Penang are at urban levels; food and other things are high (see page 151).

Table 2

Processed Average Data

KEY:

(a) Average number of boats in operation per month
(b) Average number of fishing days per month per boat
(c) Average quantity of fish landed per month per boat
(d) Average value of fish landed per month per boat
(e) Average price per picul
(f) Average operational expenses per month per boat
(g) Average % of expenses over gross income
(h) Average nett promit earned per boat per month
(i) Average nett loss incurred per boat per month

I. On "per-boat-per-month" basis

	Overall Average	Georgetown	Kampong Mee	Tanjong Jambu	Telok Chantek	Telok Pisang	Tanjong Kelong
a	124	43 boats	34 boats	17 boats	9 boats	12 boats	9 boats
b	17.05 days	18.8 days	18.8 days	18.8 days	15.3 days	17.7 days	12.9 days
c	149.71 piculs	191.42 piculs	225.09 piculs	161.27 piculs	120.61 piculs	184.55 piculs	144.58 piculs
d	$2,324.66	$2,672.56	$2,916.11	$2,343.96	$1,925.68	$2,502.00	$1,587.63
e	$13.66	$13.95	$12.96	$14.33	$15.96	$13.56	$10.98
f	$1,155.81	$1,235.69	$1,343.05	$1,077.27	$1,097.99	$1,298.31	$882.55
g	50.33%	46.23%	46.05%	45.95%	57.01%	51.18%	55.58%
h	$1,098.10	$1,369.12	$1,496.70	$1,198.40	$787.87	$1,063.48	$673.11
i	$2.18	$0.64	$2.26	$0.00	$1.66	$0.00	$8.48

Table 2 (Continued)

KEY:

(a) Average quantity of fish landed per outing
(b) Average value of fish landed per outing
(c) Average operational expenses per outing
(d) Average nett profit/earned per boat per outing
(e) Average nett loss incurred per boat per outing

II. "On-per-boat-per-outing" basis

	Overall Average	Georgetown	Kampong Mee	Tanjong Jambu	Telok Chantek	Telok Pisang	Tanjong Kelong
a	10.10 piculs	10.18 piculs	11.97 piculs	8.58 piculs	7.88 piculs	10.42 piculs	11.57 piculs
b	$134.05	$142.16	$155.11	$124.78	$125.86	$141.35	$127.02
c	$68.29	$65.73	$71.44	$57.29	$71.32	$73.35	$70.61
d	$63.53	$72.83	$79.64	$63.14	$51.06	$60.06	$53.85
e	$0.16	$0.03	$0.12	$0.00	$0.11	$0.00	$0.68

KEY:

(a) Average monthly nett earning per crewman per month

III. On "Per-crew-per-month" basis

	Overall Average	Georgetown	Kampong Mee	Tanjong Jambu	Telok Chantek	Telok Pisang	Tanjong Kelong
a	$118.08	$138.12	$146.06	$127.46	$97.75	$122.04	$87.07

The profits of the Kampong Mee boats, like those of most boats in Malaya, were allocated on the bagi dua system. Bagi dua means "give two," and implies a division of the net profits (no pun intended) into two shares, one for the supplier of capital and one to be split among the workers. The workers' share is further split according to skill: ordinary workers get one share, skilled workers, 1½. The category of skilled workers always includes the captain, usually the engineer, and sometimes an especially knowledgeable fisherman who is titled as "navigator," or "chief net man" or some similar term. Thus a typical six-man crew will usually have its half of the take divided into seven parts, the seventh part being divided again into two parts to give the captain and the other skilled crewman their 1½ shares. (Occasionally the captain got 1 3/4, the engineer 1¾, the rest one; rarely the engineer got a high flat fee of $220 per month plus a share on successful boats with good engineers.) It sometimes happens that the owner of a boat - i.e., he who supplies the capital and gets the full half of the net profit - is also the operator, getting his 1½ shares (as captain) of the crew's take. This is not as good a deal as it sounds, for such a person is invariably - in Kampong Mee at least - a local fisherman who has gone heavily into debt to buy an old and run-down boat that will incur enormous expenses and often be in repair, unable to run. More typically, the owner is a non-operator but is a businessman with a good deal of capital to invest and some link with the fishery. Such people in Kampong Mee included the local suppliers of fuel, ice and food to the boats, and relatives and partners thereof, as well as some of the co-op staff. A very few fish dealers own boats. Some boats are owned by capitalists of many and diverse interests who simply want to take a flyer in fishing. In any case, they get their half of the net.

During 1970, it became the rule, due to co-op action, for the owners to give the crews a bonus of $19.20 per crew if they caught anything about a

certain value ($70-$80 a day, depending on individual agreement). This bonus was split along with the crew's share of the profits, but was counted as an expense. Since expenses were deducted from the gross before the split between owner and crew, this meant that the crew would have gotten $9.60 of this money in any case! This practice superseded an earlier one of giving each crewman $1 per day for food. Both sums were intended to replace the time-honored custom of ikan lauk, an integral part of the bagi dua system, whereby a crewman gets fish for his and his family's food. ("Ikan lauk" means fish for eating with rice.") The fishermen tended to take the fish and sell it instead of eating it. The giving of a bonus did not stop this, though it made the fishermen somewhat less apt to take inordinate amounts of ikan lauk to sell. Selling of ikan lauk continued to be one of the worst abuses of the system - or one of the few ways the fishermen could make a living, dependi on whose side of the fence one was on.

The owner provides the capital - he pays for the boat, equipment, inputs (taking this money back from the gross profits when they accrue), etc. Since the trawler fishery is capital-intensive, the owner's 50% of the net profit seems fair to almost all concerned - even many fishermen think so, or say - though some, at least, disagreed when they felt safe in saying so to us (Elliston, personal communication). We found this true of owner-operators we knew. (Incidentally, rounding off of odd cents is always done in favor of the fishermen - hence the slightly larger shares in the fishermen's columns in the tables.) In other fisheries involving less expensive boats and equipme the owner's share is less: 1/3 in the long-line (rawai) fishery, 2/5 in the pelagic, 3/8 in the tuabang, etc.; in the bilis and fish-trap fisheries, the owner pays a flat price for fish, the catch being more reliable day-to-day.

All owners are Chinese, with one exception known to us.

Fraser and Firth in their books have discussed the share system, and Firth's (in Malay Fishermen) is particularly fine. His general conclusions apply by and large to the trawler fishery of Kampong Mee - in spite of the great difference between his east-coast Malay fishery and the Chinese fishery of Kampong Mee. Normally owners simply have captains, but on rare occasions, a fisherman rents a boat, in which case he pays a flat rent and takes the 50% the owner would normally get. Rent was $500/mo in the one case of this that we knew.

The factors that make Kampong Mee better off than these figures suggest are:

1. The fishermen can and do sell some of the best-quality fish from their ikan lauk. This is illegal under co-op rules, but winked at, since the fishermen need the money and the co-op officials are aware of this. (Some of these officials may get some benefits from it, also.) The loss to the co-op is small but the benefits to individuals are high. Obviously we have no way of knowing how high, since we got few honest reports on this, but observations indicated a fisherman might get anywhere from a few cents to ten or twenty dollars a day this way - say $50 a month, at an educated guess.

2. Fish can be consigned to a dealer without being reported to the co-op (illegal and rather easily detected), or, more commonly, the fishermen and the dealer can work out an arrangement whereby the fish are reported to the co-op as much worse quality than they are. Thus if the dealer buys $50 of first-quality fish, he will report them as third quality, worth far less. The fisherman then has to pay less to the co-op. This, again, is illegal, but the rule is impossible to enforce fully, particularly since the government sees fit to appoint co-op officers more on the basis of political services rendered

than on knowledge of the fishery or conscientiousness in enforcement. Accordi to reports by thoroughly trustworthy informants, catches may run as much as 50% higher in value than are reported to the co-op, and are rarely less than 10% more. Since expenses are reported in full (and if possible padded), this 10%-15% increase in value of the gross means a far larger proportional increase in the net take. Usually the boat owner, if a nonoperator, is in on the plan, and gets his half of the illegal margin, but sometimes the fishermen keep it secret and get it all. A fisherman if lucky can double his monthly income this way, but usually does not increase it by more than a fourth or fifth, and often not that much. There is the ever-present threat of getting caught, and there is the fact that very few first-quality or even second-quality fish are caught these days. The boats now make much or most of their income from ikan baja, and it is difficult or impossible to fiddle the figures on that bulky and unhideable commodity, especially since the treasurer of the co-ops is a member of the family that owns the fish fertilizer plant and is thus motivated to maintain accurate figures.

3. A legal benefit is that the crew is allotted up to $50.00 per day for food as part of the boat expenses, and a bonus of $19.20 is given to the crew as a whole if the boat earns a high figure ($75, $80 or thereabouts, depending on ownership and co-op) in a given day, this too being generally figured as expense rather than counted as part of the share. Thus each man gets about $5 over and above his share of profits. The bonus is supposed to make up for the restrictions against selling ikan lauk. The bonus does compensate for the reduced amount of sale thereof. Initially the fishermen were supposed to get no ikan lauk at all, and the bonus would compensate for lack of it. This was never taken very seriously, ikan lauk being a time-honored custom in Malaysia (cf. Firth 1966), and too clear a fisherman's prerogative to be

abolished. The $50.00 limit for boat expenses on food was imposed in 1970 by the co-ops to hold down expenses; most fishermen were eating too well and running food bills too high (see p. 239).

4. A number of other minor schemes for getting a bit of under-the-table profit have flourished at one time or another. Some will be noted as fuller discussion of the co-ops arises, but none are important or regular economically except the padding of expense accounts already noted. Some boats in the past would claim exorbitant sums for fisherman's food, supporting them for eating out in the coffee houses of Batu Maung, but the $1 a day fixed allowance stopped this. However, some crews still successfully claim from owners more money for food and high rates for other expenses too. This cuts into the owner's shares, as well as into the co-op's small percentage.

5. Smuggling is openly a major source of income at several mainland ports, but it is not common at Kampong Mee - not that anyone would tell us, but the obviously low living levels and considerable openness of the village made their denials believable in the main. Things are openly very different at, say, Sungei Ikan Mati, where one may see "fishermen" with Mercedes cars!

2

One of the main reasons that the fishermen say they would prefer $100 a month on shore to $150 a month in the fishery is the irregularity and unpredictability of a fisherman's income. (The other principal reason is the hard, demanding, unpredictable work, with its long hours, storms, breakdowns, arrests and all.) Some months a boat may lose money, and the fishermen have to live on their $1 per day food allowance and whatever fish they can get from the catch (a poor catch, obviously, if the boat lost money). This is not adequate to keep a person alive and working, and the fishermen must then dip

into reserves - if any! - or live off their families, or else borrow money from the boat owner or anyone else willing to lend. Usually they are not reduced to lending, but they can have a very rough month of it. Fortunately outright loss is rare, but profits fluctuate greatly.

Let us consider various figures for monthly catches by boat. (Table 3). These happen to cover the Telok Chantek cooperative's figures for October, November and December of 1970 - good average months. These figures are representative of those in other cooperatives, but the four Chantek co-op ran more smoothly and harmoniously than some, and expenses and other figures are probably more honest than most; there seems to be less finagling by both fishermen and co-operative staff in these than in other figures. The amount going to the crew would be split according to the bagi dua system in proportio to the number and skill of crewmen. No boat ran a loss, but one made nothing in October, and one got only $12.02 profit in December, leaving $6.01 to split perhaps eight ways. Assuming the smallest possible crew, four, we find that the ordinary seaman got a grand total of $1.00 for a month's hard work - though the boat did only make ten trips, being presumably laid up in repair most of the time. The cost of living in Batu Maung is high (see following section), and this is hardly a return worth the effort of seeking it. The best profit of any boat during these three months was $1,043.38, giving the crewmen well under $100 per share. The co-operative's boats may have been less lucky than most, but comparison with the earlier-quoted figures for 1969 show a decline from that year, and in general the poor state of the fishery is evident. Of course even this relatively less problem-ridden co-op concealed much income, and also some co-ops had more successful boats, but the figures here are probably as good and representative as we can get. Note that food is shown separately, so the fishermen could still eat - on the boats and this was before the $1 rule closed off a good source of cash.

Allowing for all dishonest ways of adding to income, and estimating the real incomes of fishermen given this added source, we would guess that the ordinary fisherman was getting about $50-$150 per month, plus the value of the unsold ikan lauk - perhaps another $10-$20 per month. The skilled workers would be getting 1½ times this, except that their ikan aluk would be about the same.

Less complete but suggestive figures are available for the other cooperatives, notably Kampong Mee. These tell a similar story of individual crewman getting $5 to $7 per trip, counting their shares of the $19.20, and thus $80-$120 per month. Appropriate adjustments for undisclosed income would make this about $150 per month; see Table 4. Again, recall that the average per capita income in Malaysia in 1970 was about $900 per annum or $75 per month. The fishermen are doing better than average, and of course the skilled workers, those with 1½ shares of the catch, are doing a lot better. However, if they have families to support, these would have to be averaged in - lowering the per capita income accordingly, as we have shown. Also, prices in Penang are high, and the wild fluctuations in the earnings of the boats make every fisherman afraid of a bad month or run of months. They also discourage planning. The local stereotype of a fisherman is of a young and rather rootless man who spends any spare money he gets on meals in the coffee houses and trips to the movies and entertainment quarters of Georgetown. This stereotype is not at all true of many fishermen, especially those with families to support, but it has a lot of justice for the many who are indeed rather rootless young men. It is difficult to see how they could do otherwise, however. Saving and investment are neither easy (Kampong Mee lacks any facilities except the floundering co-ops) nor a good prospect for men who never have much to save and cannot plan on even a tiny amount. A man on an assured $100

Table 3

Part 1: Telok Chantek Cooperative Figures for October 1970

# of Boats	# of Trips		Value	Ice	Fuel Oil	Drinking Water	Sampan	Food	Motor Oil	Other (Donations etc.)	Total Expenses	Commission	Profit	Split
2254	10	51.26	699.40	37.60	267.30	10.90	38.00	154.65	29.20		537.65	8.09	153.66	76.82-4
2573	10	80.76	726.20	56.40	178.20	12.00	38.00	145.90	33.50		464.00	12.11	2219.09	124.54-5
2732	16	128.28	1876.80	145.70	891.00	24.30	60.80	398.70	97.80	10.00	1628.30	12.43	236.07	118.02-4
2759	14	75.81	1159.15	84.60	504.90	21.10	53.20	281.15	54.20	.45	999.60	7.98	151.57	75.78-9
2911	16	140.31	1318.25	75.20	504.90	16.00	60.80	208.80	39.30		905.00	20.67	392.58	196.27-
2953	21	117.83	2118.05	79.90	801.90	24.70	79.80	416.80	33.70		1436.80	34.33	646.92	323.45-7
3007	18	99.51	1731.05	131.90	623.70	24.50	68.40	472.30	89.80		1910.60	16.03	304.42	152.21-
3048	19	104.02	1425.85	99.90	653.40	26.00	72.20	195.45	40.60		1067.55	17.92	340.38	170.18-20
3353	19	109.47	1820.15	84.60	663.30	26.20	72.20	429.85	127.60	3.00	1406.75	20.67	392.73	196.36-7
3364	10	101.97	1339.90	70.50	475.20	17.10	38.00	180.65	17.60		799.05	27.04	513.81	256.90.1
3372	18	90.04	1758.20	108.10	623.70	21.40	68.40	304.95	76.60		1203.15	22.77	432.28	216.13-15
3413	24	132.05	2237.15	122.20	801.90	28.30	91.20	264.75	91.50		1399.85	41.86	795.44	397.71-3
4360	17	95.15	2304.75	145.70	772.20	39.70	64.60	477.25	87.00		1580.95	36.31	697.11	348.55-6
4502	23	112.75	2525.95	155.10	1069.20	50.10	87.40	359.20	129.40		1850.40	33.78	641.77	320.88-9
4515	12	80.43	1052.05	65.80	475.20	12.00	45.60	171.05	83.10		852.75	9.97	189.33	94.66-7
4547	19	95.58	1759.70	117.50	801.90	18.20	72.20	592.40	65.00		1447.20	15.63	296.87	148.43-4
4566	18	124.12	1637.35	84.60	653.40	22.10	68.40	279.80	52.60		1160.90	23.03	452.62	226.31-
4611	19	102.26	1705.55	115.10	683.10	32.20	72.20	431.50	29.40		1398.50	15.36	291.69	145.83-6
4675	16	56.23	1623.65	75.20	534.60	25.50	60.80	365.85	12.00		1073.95	28.48	521.22	260.61-
4831	21	112.10	2450.45	94.00	653.40	27.80	79.80	418.75	78.40		1352.15	54.92	1043.38	521.68-70
1226	9	26.27	715.05	65.80	475.20	19.00	34.20	54.05	66.80		715.05	0.00	0.00	0.00
	349	2029.21	33894.65	2035.40	13107.60	498.60	1326.20	6378.80	1330.10	13.45	24690.15	461.56	8742.94	4371.35-50

Table 3

Part 2: Telok Chantek Cooperative Figures for November 1970

# of Boats	# of Trips		Value	Ice	Fuel Oil	Drinking Water	Sampan	Food	Motor Oil	Other (Donations etc.)	Total Expenses	Commission	Profits	Split
14	110.42	1118.50	47.00	445.50	11.81	53.20	298.60	30.30		886.40	11.60	220.50	110.24-26	
29	137.42	2600.10	150.40	1069.20	40.00	110.20	473.50	66.20	.20	1909.70	34.52	655.88	327.93-95	
12	114.63	1100.85	89.30	386.10	17.90	45.60	224.05	96.70		859.65	12.06	229.14	114.57-	
25	154.03	2513.95	155.10	1217.70	25.50	95.00	507.00	99.50	3.00	2102.80	20.56	390.59	195.28-31	
15	102.98	1444.85	84.60	653.40	25.80	57.00	347.30	57.60		1225.75	10.96	208.19	104.09-10	
20	120.95	1682.90	75.20	445.50	24.40	76.00	519.92	89.00		1230.02	22.65	430.23	215.11-12	
23	167.39	2020.20	94.00	980.10	21.00	87.40	208.75	35.80		1427.05	29.66	563.49	281.74-75	
15	132.41	1770.65	70.50	534.60	17.10	57.00	336.60	36.60		1052.40	35.92	682.33	341.16-17	
26	163.05	2365.95	136.30	742.50	26.40	98.80	505.50	40.80	.05	1550.35	40.79	774.81	387-40-41	
20	117.53	1393.00	84.60	594.00	33.30	76.00	173.10	59.90		1020.90	18.64	313.46	176.72-74	
21	143.59	1853.05	89.30	742.50	35.00	79.80	377.70	139.50		1463.80	1947	369.78	108.88-90	
20	162.81	2610.70	103.40	861.30	29.40	76.00	455.55	69.80		1595.45	50.80	964.45	482.21-24	
12	76.91	1147.90	42.30	445.50	16.60	45.60	241.70	23.40		815.10	16.62	316.18	158.08-10	
20	147.55	1878.55	98.70	712.80	24.90	76.00	395.95	44.60		1352.95	26.29	499.31	249.65-66	
25	160.30	2165.85	145.70	831.60	20.50	95.00	475.40	112.40		1680.60	24.26	460.99	230-48-51	
26	158.75	2379.30	117.50	1039.50	31.90	98.80	365.60	78.80		1732.10	32.36	614.84	307.41-43	
27	192.76	2185.10	126.90	831.60	30.20	102.60	486.60	83.90	19.20	1681.00	25.21	478.89	239.44-45	
16	122.95	1617.30	47.00	623.20	17.00	60.80	297.65	49.90	19.20	1115.25	25.11	496.94	238.47-	
19	196.50	1595.20	56.40	623.70	19.00	72.20	236.15	34.80		1042.25	27.65	525.30	262.65-	
24	114.85	2003.50	178.60	712.80	28.30	91.20	615.70	17.40	3.95	1647.95	17.78	337.77	168.87-90	
19	136.62	1744.65	89.30	564.30	27.70	72.70	311.30	63.00		1137.80	30.35	576.50	288.24-26	
428	2881.43	39192.05	2082.10	15057.90	523.70	1626.40	7863.62	1329.90	45.60	28529.22	533.26	10129.57	5064.62-95	

Table 3

Part 3: Telok Chantek Cooperative Figures for December 1970

# of Boats	# of Trips	Income	Ice	Fuel Oil	Drinking Water	Sampan	Insurance	Food	Motor Oil	Donations	Total Expenses	Commission	Profit	Profit to Boat Owner	Profit to Crew
2511	28	2210.05	61.10	683.10	22.80	106.40		352.45	71.20		1297.05	46.38	865.62	433.29	433.33
2573	9*	946.15	47.00	326.70	15.30	34.20		108.10	35.50		566.80	18.97	360.38	180.18	180.20
2642	14	1138.70	89.30	415.80	19.80	53.20		176.75	148.70		903.55	11.76	223.39	111.69	111.70
2753	21	1971.95	112.80	980.10	24.40	79.80		365.35	85.50		1647.95	16.20	307.80	1053.90	1053.90
2759	19	1587.95	108.10	831.60	31.30	72.20		387.45	60.30		1490.95	4.85	92.15	46.07	46.08
2907	17	1343.85	75.20	445.00	17.90	64.60		395.15	65.00		1063.35	14.02	266.48	133.24	133.24
2911	18	1393.10	70.50	564.30	13.60	68.40		258.85	23.50		999.15	19.70	374.25	187.11	187.14
2953	21	1996.05	61.10	801.90	21.40	79.80		391.15	50.40		1405.75	29.52	560.78	280.39	280.39
2980	14	1143.20	159.80	581.46	14.00	53.20		152.25	96.80		1057.51	4.28	81.40	40.70	40.71
3007	16	1592.15	89.30	594.00	21.30	60.80		459.85	41.60		1266.85	16.27	309.03	154.51	154.52
3353	23	1931.20	103.40	801.90	38.80	87.40		446.45	131.30		1609.25	16.09	305.86	152.92	152.94
3364	22	2090.75	103.40	980.10	31.50	83.60		384.80	40.60		1624.00	23.34	443.41	221.70	221.71
3372	26	2039.50	89.30	801.90	30.60	98.80		402.15	58.40	3.50	1484.65	27.74	527.11	263.55	263.56
3483	20	1613.80	103.40	653.40	22.10	76.00		274.45	25.60		1154.95	22.94	435.91	217.95	217.96
5460	10	785.65	75.20	356.40	6.90	38.00		255.90	40.60		773.00	0.63	12.02	6.01	6.01
4502	22	1751.35	103.40	683.10	20.90	83.60		276.45	64.20		1231.65	25.99	493.71	246.87	246.87
4515	11	781.90	42.30	297.00	11.10	41.80		242.60	11.60		646.40	6.78	128.72	64.36	64.36
4547	22	1916.70	84.60	831.60	25.60	83.60		314.95	63.90		1404.25	25.62	486.83	243.40	243.43
4566	26	2016.00	79.90	861.30	27.30	98.80		346.90	60.30		1474.50	27.08	514.42	257.20	257.22
4611	18	1674.05	126.90	475.20	24.20	68.40		417.75	34.80		1201.25	23.64	449.16	224.58	224.59
4831	26	2072.25	131.60	801.90	38.80	90.80		417.60	72.00		1560.70	25.58	485.97		
	403	33497.35	1917.60	13768.26	470.00	1512.40		6881.35	1281.80	3.50	25537.16 (Av. 1216.00)	407/38	7561.45 (Av. 360.55)	Av. 242.97	243.00

*went to Pongkon for reapirs

Table 4

Month	# of boats[1]	# of trips	# of fish caught[2]	Value	Expenses	Cooperative's Commission	Profits[3]
January	K 35	819	7213.44	99873.59	49979.52	2453.12	46560.88
	S 6	120	862.32	12459.65	7282.74	260.64	4952.27
		939	8075.76	112369.24	57262.26	2713.76	51513.15
February	K 35	503	B 2144.44 F 3196.60	67877.41	33267.47	1714.47	32907.82
	S 6	91	B 349.80 F 357.72	10564.45	3880.17	234.22	4450.06
		594	6048.56	78441.86	37147.64	1948.69	37357.88
March	K 35	653	F 2737.94 B 4379.00	98920.31	49013.11	2493.52	47413.68
	S 6	130	F 514.19 B 495.00	15160.60	8783.13	318.86	6058.61
		782	8126.13	114080.91	57796.24	2812.38	53472.29
April	K 38	639	F 2680.08 B 4372.50	85869.09	7787.49	1936.76	36691.74
	S 6	116	459.65 487.30	15160.60	47455.19	285.71	5427.79
		755	7999.58	99367.08	55242.68	2222.47	42116.53

[1] K = Number of boats in Kampong Mee cooperative fishing that month
S = Number of boats in Sungei Lama cooperative fishing that month

[2] B = fish
F = bajaikan = fish for fertilizer

[3] Money paid out from cooperative office

Table 4 (Continued)

Month	# of boats[1]	# of trips	# of fish caught[2]	Value	Expenses	Cooperative's Commission	Profit[3]
May	K 90	948	F 3708 B 4000	117060.86	67089.42	2502.74	47468.50
	S 15	271	F 1052 B 434	27771.90	17941.23	542.54	10305.73
		1219	9194	144832.70	85030.65	3045.28	57774.23
June	K 39	763	B 3526.00 F 2842.10	87444.21	53343.21	1560.36	29620.98
	S 15	251	B 462.00 F 981.00	26559.60	18450.76	421.35	7982.13
		1014	7811.20	111003.01	71793.97	1981.71	37603.11
July	K 42*	666	F 2366.90 B 2465.00	74279.55	47380.83	1353.54	25711.99
	S 16	206		21040.70	14768.40	322.78	6073.15
		872	4930.90	95320.25	62149.23	1676.32	31784.14
August	K 41	851	5597.40	90246.03	60408.44	1499.08	28439.26
	S 15	290	1662.60	28,642.80	21791.39	349.68	6658.35
		1141	7260.00	118888.83	82199.83	1848.66	35097.61
September	K 39	519	B 1712.00 F 3657.80	59032.02	37223.26	1099.62	20893.24
	1	5	--	537.75	515.45	1.11	21.19
	S 13**	126	895.10	11450.85	8775.17	140.48	2667.00
		650	4552.90	71020.62	46513.88	1241.42	23581.43

*three boats didn't go out.
**one went out only twice.

Table 4 (Continued)

Month	# of boats[1]	# of trips	# of fish caught[2]	Income	Ice	Fuel Oil	Motor Oil	Sampan (Rowboat)	Ayerminum (Drinking Water)	Food	Other	Total Expenses	Cooperative's Commission	Profit
October	K 36	706	F 2409.00 B 5061.40	79964.31	4949.10	24848.24	2682.80	1070.30	11226.85		70.00	47307.79	1632.20	31024.32
	12	225	1502.18	21430.14	1381.80	8143.08	855.00	389.20	3860.00		70.00	15496.58	302.39	5749.57
	S 3	24	174.45	3046.85	79.90	992.64	91.20	28.90	447.00		--	1720.44	66.38	1260.03
		955	6738.03	104441.30	6410.80	33993.96	3629.00	1488.40	15533.85		140.00	64,524.81	2000.97	38033.92
November	K 37	873	B 3120.72 F 2669.00	92613	6157.00	31461.20	3281.80	3317.40	1411.80	13147.30	--	58776.50	1692.31	32148.48
	13	269	1668.62	24727.60	1555.70	9493.42	843.60	1002.20	436.10	4282.50	--	17633.52	362.12	6878.31
	S 5*	116	710.24	10157.39	437.10	3317.16	337.60	440.80	171.50	1377.00	--	6076.16	205.63	3906.82
		1258	8168.58	127498.69	8149.80	44271.78	4463.00	4780.40	2019.40	18801.80	--	82486.18	2260.06	42933.61

*Includes boat with one extra week added because of accounting reasons (38 trips)

Table 4 (Continued)

Month	# of boats[1]	# of trips	# of fish caught[2]	Value	Expenses	Cooperative's Commission	Profit
TOTAL	K	7561	--	1,143,221.47	434,103.20	31,130.10	590,271.13
TOTAL	S	?	--	50,446.80	24,489.88	1,157.74	22,018.18

Table 5

Balance Sheet for Telok Chantek Cooperative

January and February 1971

	January	February
Balance in hand	$ 470.38	
Balance in bank	15,088.51	$ 7,996.19*
Total Beginning Balance	$15,558.89	$ 7,996.19
Receipts		
Sales	$11,103.25	$28,911.25
Truck Comm.	181.20	68.80
Ice	517.10	1,670.30
Oil	4,877.90	14,160.06
Sampan	478.80	1,299.60
Drinking Water	153.70	462.00
Food	2,262.50	6,273.25
5% don	107.43	435.71
		19.20
Total Receipts	$19,681.88	$35,240.77
	$35,240.77	$62,296.16
Expenditures		
Buying Fish	$10,439.30	$32,351.10
Ice	1,771.20	703.00
Oil	10,590.68	9,418.60
Sampan	730.60	703.00
Drinking Water	278.60	520.90
Food	1,941.00	4,273.99
Salaries and expenses (including $10 for security guard) and amount left in bank at end	7,996.19	11,611.36
	$35,240.77	$62,296.16
PROFIT		$534.56

*In February a boat quit the co-op to change to a pukat jerut, claiming $1,000 back capital.

Table 6

Katis of Fish Caught January and February 1971
(Telovchantek Co-op)

January	13 boats	126 trips	$10,439.30
February	21 boats	342 trips	$32,370.20

		January	February
1	Alu-alu	.12	.72
2		22.27	75.63
3		35.79	103.11
4		3.75	17.90
5	Baja	384.50	1,122.60
6		--	--
7		4.51	13.25
8		12.61	31.25
9		2.73	5.67
10		56.19	98.75
11		5.68	29.32
12		1.17	2.80
13		2.29	3.12
14		1.78	2.75
15		27.63	31.65
16		5.95	12.85
17		7.83	23.92
18		15.61	35.57
19		1.20	7.69
20		1.75	12.90
21		11.32	21.75
22		3.95	18.72
23		2.19	13.35
24		13.21	25.42
25		--	--
26	Sotong	15.83	45.90
27		9.63	13.80
28		6.59	18.65
29		12.95	26.71
30		98.78	259.35
31		3.67	18.95
32		2.85	27.83
33		6.73	11.85
34		1.05	2.10
35		4.97	15.90
36	Pelata	9.65	25.69
	TOTALS	799.79	2,177.50

Kati = 1 1/3 lb.

a month can plan what to do with it; a man on an uncertain $150 cannot. This is the root of much complaining. In this event, one might as well take any extra as a windfall, and spend it on the rather innocent and cheap amusements afforded by the small and sedate hot-spots of Georgetown. Few of the fishermen were unwise enough to get into debt or - as the old phrase had it "do things they would regret later." They merely wanted to get maximal return in utility for their bits of cash, and a night of escape from Kampong Mee was their maximal return. Much of this money was gambled away; it could be argued (but probably wrongly, since no one we talked to did so argue) that this is as wise an investment as any, for one can always hope of winning. In practice, rigged games and non-paying-off numbers rackets made this argument silly, and everyone knew it. On the other hand, they also knew, or heard rumors of, similar shell-games involving more orthodox investment and savings plans. A gamble in the cards or the numbers was more fun than a gamble in the market.

To sum up and bring the matter to a conclusion: fishing did not pay well and the returns were said to be declining. It was the decline, not the fact of low pay, that disheartened everyone in Kampong Mee. An ordinary fishermen could not make much and could not plan on making anything. A skilled man could expect to make enough to support a family, but not much more, and he too was unable to plan very definitely for the worrying future.

The owners of the vessels got more - their half of the profit - but they had to bear the initial investment and the taxes, and see their vessels depreciate at a rate much faster than was supposed to be the case. They still found it profitable to operate, at least if they could be in the village and keep a close watch on the boats and fishermen, but fewer and fewer people were investing in the fishery. Owner-operators were especially marginal cases, for

they had usually sunk everything they had in their boats and borrowed heavily; an unexpected problem ruined them. Owner-non-operators were often men with many interests, who went into fishing as a flyer or a tax-writeoff calculated to lose more often than not. In 1969, 1970 and 1971, fishing was no worse off than other food-producing activities in Malaysia, but no better off either; not for it the explosive success of fisheries development in Thailand, Korea and other Asian countries.

3

The tables given have shown the expenses of the boats; it remains to give some account of these expenses and how they came to be what they were. Boats cost several thousand dollars, dependong on size and newness (cf. Elliston 1967b). A new engine costs up to $15,000 (New Yanmar 60 hp diesel) or more, used one of 120 hp, about $8,000. Water cost 10¢ a tin (4 imperial gallons). Diesel fuel sold at Kampong Mee for 61¢ to 66¢ a gallon,[1] a figure that now - 1976 - looks like the Good Old Days personified but was then a high figure and a sharp increase from a few years before. Lubricating oil cost $5.50-$6. per gallon plus cost of the can. Sampans (rowboats) to carry fishermen and fish to and from boats cost $3.80 per trawler per day. At other ports it was cheaper,but at Kampong Mee, Tan Hiap-Oh had a monopoly on it. Ice costs $4.20 per block, representing a major accomplishment of the co-op bringing it down from a dollar or more higher, but still an appreciable figure. Ice

[1]The cheaper price is for good customers. One pays 54¢ per gallon for it and can make a profit at the lower price.

too costs less elsewhere, especially in places where there was an ice plant. It was claimed that Kampong Mee's fishery was too small and fluctuating to support an ice plant, which has economies of scale to worry about and must run at capacity or nearly to produce ice much cheaper than $4.20. As it was, the ice came from a large plant in Butterworth, and was locally supplied by Tan Hiap-Oh, though fishermen could go to Butterworth to get it if they wanted (along, unprofitable run for little benefit). The fishermen yearned for a local ice plant, but this was said by co-op staff to be impracticable for the reasons noted. One result of this expensive ice was that the fish were under-iced, and came to market in no remarkably fresh state. (After a few more changes of hands and expensive ice, the fish arrived in such inland markets as Kuala Lumpur in a most unfresh state indeed. This dod not serve to keep fish prices high.) The high costs of fuel and ice are the most often mentioned complaint of the fishermen, partly because Tan Hiap-Oh's monopoly calls, but in fact there are other, more serious problems to contend with; nor were these fuel and ice prices out of line by Malaysian standards. The trucks that carried fish to town and returned with the payment money charged 2¢ per kati, or less by larger units. One cost <u>not</u> usual at Kampong Mee was protection money to local gangsters - a major expense in Georgetown, and, indeed, the reason for Georgetown's small fishery relative to Kampong Mee! Most surviving boats at Georgetown were well-connected with the "secret" societies" (Chinese gangs). Netting cost $6.00 per kati plus high costs of (100 per fish net) local making-up in nets to order. Big cable rope was $2.70 per kati.

A complaint among owners is the fact that the government allows only 5% depreciation on boats. It is impossible to calculate the lifespan of the 30- to 50-ton boats in the trawler fishery, since they had been operating

for at most ten years and rarely more than five, but all showed signs of great wear and some were no better than hulks. The 5% figure had evidently been based on the experience of similar trawlers in temperate climes with adequate maintenance. The all-destroying Malayan climate and the nonexistent or incompetent maintenance available in Penang made a figure of 25% more realistic, according to at least one owner, and our more conservative estimate would be that the lifespan of a boat would be seven to eight years. This agrees with figures from other parts of Malaysia and is based on the lifespan of such boats as have gone to the wall; of course the longer-lived boats are still fishing and may last long enough to change the figure. A depreciation of 10% p.a. would have been more realistic. The problem has now been solved, or at least alleviated, however, by the construction of an excellent modern fisheries school in Kampong Mee; proper maintenance of boats and engines was conspicuously stressed in plans for it, right from the start.

Profits were normally too low to tax, for both fishermen and owners - at least the declared profits were.

The question of food expenses has already been touched on (p. 223). Food f consumption on the water is counted as an expense in the bagi dua system, and i deducted from the gross before shares are cut. Thus in effect the fishermen pay half the cost of the food, the owner the other half. This means the fishermen are in fact getting food half price. Such a system is obviously open to abuse, and was abused regularly, as the fishermen would take expensive food alon and also eat in the local coffee houses after the day's work and charge it as expenses. The co-ops in 1970 imposed a $50 per week limit per boat and were thinking of stricter limits. The fishermen complained that this let them buy nothing but rice and oil, and was making them too weak to work, or, as one of them said to us, "too weak to fight off the inshore fishermen." This

allegation can be taken with a large grain of salt, and in any case nothing beyond rice and oil and a little salt and soy sauce was needed, since the fishermen always ate a lot of the less valuable items from the catch.

There were $250 fines for fishermen caught breaking marine laws to content with. A few minor expenses - contributions to local temples, or to families of slain fishermen - occurred, but were insignificant. Fishermen often agreed to assess each boat for such - e.g., $20 per boat per month, to help replace boats burned by rivals and mount legal action, was being assessed in 1970-71.

Other expenses seen in the tables are self-explanatory, as are the gross totals. The most interesting fact, in hindsight, is that the fishermen so seldom complained of the expensive and poor repairs they got or did themselves. They did complain, but much less than they did about the objectively less unfair and less important items of fuel, ice and food. The reasons were that most fishermen felt they could do the repairs themselves, and/or with help of friends, and thus had only themselves to blame when things were badly done; also that they were true gamblers, with gamblers' confidence that each repair would be the last and the boat would run perfectly henceforth. Fuel, ice and food, on the other hand, were obviously always necessary, and were supplied by monopoly or near-monopoly purveyors in Kampong Mee. Fuel was monopolized by Tan Hiap-Oh, ice available only from him and/or the co-ops (in practice the same, since he was treasurer of all of them), and food came primarily from the village's largest store, whose owner was also a sometime member of co-op committees. There were thus identifiable persons who were "responsible" for the high prices, and the fact that prices were not much lower at ports with more competition among suppliers was not weighed heavily. A cent or two of difference in fuel prices per gallon was important in a marginal operation using a lot

of fuel. We can only wonder about the effect of the soaring oil prices of the 1970's on the Kampong Mee fishery; they must have been utterly disastrous.

4

The marketing structure and above all the effective consumer demand for fish were more relevant to the low incomes of the fishermen than were the level of expenses. At the beach, the fish were auctioned off and consigned to dealers, usually in Georgetown (especially in the area around Chowrasta Road Market[1]). These dealers often had representatives and/or buyers on the ground in Kampong Mee, operating as semi-independent agents, sometimes for more than one urban dealer. There were 7 such firms, small and struggling (earning perhaps $100-$200 per month and sharing office space and even staff. Primarily, they handle the pelagic fish. However, there were no true "fish assemblers," i.e., men whose business is to buy fish at the port and sell them to urban dealers - usually wholesalers who normally sold a few fish retail, many wholesale to retailers, and others to other wholesale dealers. The nearest approximation was a small firm that did what it could - serving as agent for urban dealers, buying fish for local sale on a very small scale (e.g., cooperating with or selling to the local fish-hawker), and now and then drying a few fish. Some retailers and hawkers bought directly - though urban hawkers often bought from retailers. Otherwise, fish went to Georgetown, except for ikan baja and the

[1] At the end of 1970, 33 at Chowrasta Rd. Market, including the principal firms,
6 at Campbell St. Market, mostly salters,
4 at Kuantan Rd. Market,
3 at Central St. Market,
3 at Beach St. Market, local fish, small scale

Total 49

much more significant tonnage of trash fish bought by the local fertilizer plant owned by Tan Tik-Soon.[1] This latter enterprise actually took most of the tonnage of fish landed, as it took virtually all the ikan baja, but most of the value went through Georgetown. In Georgetown the best of the fish were bought by restaurants, the rest marketed in Penang or

[1] Almost all fish not used for fertilizer were for fresh fish. It was graded into 3 broad categories. Fish brought in early in the afternoon brought a higher price than later landings, other things being equal. Some notes on processing the rest may be added. Fish is salted in Georgetown, especially near Prangin Road Market. Fish are salted with 40%-50% of their wet weight in coarse salt. They are gutted, rubbed with salt, put down in barrels, taken out, and dried for two or three days, often in the playground intended for the children of this slum area but taken over by fish salters and driers (the children preferred to play in the street anyway, but the Georgetown urban council was annoyed.) Red snapper was the main salting fish because it was common and good, not too wet in flesh, and commanded too poor a price to be worth icing and selling fresh. Most snapper was taken on long lines, so the Kampong Mee fishermen did not contribute much to the salters.

Fertilizer was made at Tan Tik-Soon's factory built in 1967, by cooking the fish down in huge vats, drying them, and crushing the brittle result to course powder or meal. The last of these steps was done elsewhere, not in the Kampong Mee factory. All trash fish went here except for some sold to duck and pig farmers.

Drying involved simply leaving split fish in the sun for four days or so, sometimes with a bit of salt dusted on. Gelama was the main Kampong Mee fish dried.

More complicated or sophisticated processing did not affect this fishery, but tuna was canned in Georgetown and the cannery wastes converted into fertilizer in Kampong Mee (by the same process as that used for making fish meal, but by a different factory, a subsidiary of the cannery). Quick-frozen shrimp were produced on the mainland and exported - a promising new business. Fish and fish curry are canned in Singapore and other large cities of southeast Asia, but not in Penang. An industry in quick-frozen fish and fish products could well be developed there, to the enormous benefit of the whole region.

Parang and some other fish were flaked by retailers for production of fish balls and fish cake (hupia: in Hokkien), staple fresh-fish production in Chinese cuisine.

consigned on down to Kuala Lumpur and other west Malaysian cities; occasionally it went as far as Singapore. A telephone network, cemented by a social network (dealers had friends and relatives in these other cities, often in the same line of business), kept the dealers posted on demand throughout this area. The fascinating world of these urban dealers does not concern us, however, except in so far as it is directly related to the fishermen of Kampong Mee, and interested readers are referred to the brilliant study of Ooi Sang-Kuang (1970).

The main conclusion of this study is of direct relevance to us. Ooi found that the fish dealers, though friendly enough to each other and linked by formal and informal ties (including an association of wholesalers and processors), were numerous and strongly competitive. Offering the same services and based at the same point, they could neither marginally differentiate nor (because of their numerousness and independence) cartelize. This and the lack of a true fish-assembler pattern meant that the middleman's share of retail fish prices was shaved to about 30%-40%, a figure comparable with those found by George Elliston (1967b and personnel communication) in his extensive and painstaking study of middlemen in the Malaysian fishing business. (It rose to 50% in some cases, but only if expenses were also high. Cf. the 85% or more of retail price that go to middlemen in the U.S. food economy.) Ooi and Elliston agreed in personnel communication to us that the middlemen were not exploiting the fishermen, in the sense that they were taking untoward profits and paying the fishermen artificially low prices. (Ooi thinks auctioning instead of the present consigning system would raise prices paid to fishermen, but not much.) Also, since the boats were owned primarily by capitalists rather than the fishermen themselves, and since there was no tradition of interaction between wholesalers and fishermen or

boatmen, the fishermen were rarely in debt to the wholesalers - and never in serious debt. In all these ways the Malaysian fishery stood in striking contrast to the situation we found in Hong Kong, in which fish assemblers formed cartels that kept the price of fish to buyers high but prices paid to the fishermen exceedingly low, and also loaned out the money for new boats, engines, etc., to the fishermen. Dealers do loan to fishermen, but take low or no interest, though attemptong to insist on loyalty and low price requests from such fishermen. A Malaysian wholesaler who wants to get involved in the actual business of fishing will buy his own boat, rather than financing the would-be operator in the purchase. This is due in large part to the fact that the wholesalers are in the city, where the fish are sold, rather than at the port where they are bought. (In Hong Kong, the urban wholesalers are equally uninvolved in the fishery itself; it is only the fish assemblers, at the ports, who are or were.) Of this comparison, much more anon (cf. Anderson 1975). Here it is important only to note that the wholesalers did not often supply capital to the fishery, did not get the fishermen indebted to them, and did not take more than a necessary operating margin. Their 30% of retail prices was almost or quite inadequate to cover their operating overhead - rental of business quarters, telephone bills, trucking bills for dispatching the fish to retailers, and so on: these would typically run 25-30% of the retail price. Only when the retail price was high would the middlemen eat well - as, of course, was true of the fishermen. The high price of inputs relative to the price of fish had them both in the same kind together.

The relatively low prices of fish then stand as critically important to fisheries economy of Penang, and must be considered here. Briefly, the ikan baja that made up most of the catch was worth a few cents a kati - say 4¢/kati,

or 3¢/lb., on the average. Ordinary fish brought the fishermen 5¢ to 80¢/lb. Very high quality items - white pomfret, especially large shrimp, some crab - could bring $2.00 to $6.00/lb., depending on size and quality, with the last price being very rare indeed. Ordinary shrimp, the money-spinners of the fishery by and large, were worth about $1.00/lb., more if large, less if small (the $1.00 price would go for shrimp about 4" long, the $6.00 for shrimps of 10" or more). Approximate prices for other major fish, based on averaging prices paid for them in Kampong Mee at the end of 1970 (averaging the last weeks of 1970 and the first of 1971), may be found in the tables 7. These tables are included with the warning that average prices do not tell the whole story. Grading of fish, based mostly on species and size but also to some extent on freshness, meatiness and general saleable appearance, is an art, not a science. The buyers on the ground do much of it; the co-ops have tried to do it but have not the expertise. The buyers or agents are thus in a fine position to conspire with the fishermen to tell the co-op that a fish is low-grade when it is actually high-grade. They then pay the fishermen the high-grade price, but the fishermen pay the co-op their cut according to the low-grade one. The difference is not great - perhaps 50¢/lb. on the average, more for the few high-priced items but less for the vast majority of ordinary ones - but it is satisfying to the fishermen, over and above any financial advantage, to feel they have got the better of the co-op in matters of personal business. Since the dealer has competition from other dealers who can take the fishermen's catches, and since the fishermen - unlike the co-op men - are sophisticated in matters of grading, the dealers are far less apt to try the same "low-grading" technique on the fishermen. The fact that the fishermen are not seriously indebted to the dealers and thus not a captive clientele is a related consideration in keeping the dealers relatively (if not totally) fair.

Ooi's work, in the context of Elliston's, makes further excursions into the world of dealers unnecessary, except for the brief note that the fishermen must pay the trucks (lorries) that deliver the fish from Kampong Mee to the wholesalers. This function has been taken over by the co-op, which uses this to justify part of their charge to the fishermen, for all fish dispatched via the co-op. Firms or agents at Kampong Mee who actually buy fish are responsible for this consigning charge. Ultimately, of course, the fishermen pays in any case, since these latter firms simply pay the fishermen less. The charge is small: $1.00 per pikul to Georgetown (100 kati, i.e. 133 lb) for quality fish that need careful handling, $1.00 per pikul or sometimes less for 3rd-grade and trash fish that can stand delays, rough handling and careles icing. There is only a nominal consignment charge for trash fish in Kampong Mee, since it is virtually all used there. The wholesaler must pay the further costs of consigning the fish on to their ultimate destinations.

In general, it may be said of the middlemen that they are not making any great profits either (several firms went bankrupt in the years just before 1971 and others were floundering - no pun intended). They are certainly not gouging the fishermen. They do not take an inordinate cut of profits nor inordinate debt-repayments and debt-servicing payments from the fishermen. This stands in stark contrast to the situation at Castle Peak in 1965-66 (Anderson 1970) and indeed to the situation in many of the fisheries of Asia, where the middlemen are engaged in practices that benefit them at the expense of the fishery.

This fact of life is important to stress because the Malaysian government's whole thrust in its original plan of co-operativization was to eliminate the exploitative middlemen. This plan could not work for the simple reason that there were no exploitative middlemen to eliminate. The chain was shorter than

in Hong Kong (where fish assemblers are critical and indeed predatory). Fierce competition among wholesalers - 49 in Georgetown alone, not counting small ones operating sub rosa - kept exploitation down, since the fishermen were relatively (not totally) free to negotiate with any firm that could get someone in Kampong Mee to act as agent, buyer, or consigner. Thus a plan that worked extremely well in Hong Kong, i.e. forming co-ops to replace the middleman, failed in Malaysia. It failed for other reasons too, as we shall see, but this was the main one - a conclusion independendly reached by several researchers working in the fishery at the same time (Elliston, personal communication).

5

The person who was actually exploiting the fishermen was, in a word, the consumer.

Eggs were 10¢ apiece in Kampong Mee - about $1.20 or more a kati. Chicken cost $1.00-$2.00/kati, meat as much or (if fatty) a good deal more. Yet kembong cost as little as 10¢/kati, and the other fish caught by the migrant purse-seiners even less. (The seiners may get 20¢/kati at the start of the season, 2 or 3¢/kati at height. We sometimes got our favorite fish, pelata minyak, free, because no one would buy it.) The ordinary product of the trawler fishery retailed at anywhere from a fraction of a cent to $1.00/kati. Only very special products, chiefly pomfret and large prawns, went above that. Such excellent and commonly-caught fish as red snapper and sole brought only about 70-80¢/kati in the markets of Georgetown, and then only if large and fresh. Yet the inputs to fishing were high, as we have seen. It was the low price of fish relative to the inputs that kept the fishery down. (By the opposite token, the high price of meat relative to its inputs kept

the meat industry relatively undeveloped; few could afford meat on a large scale and they were satisfied by casual dooryard production or only incipiently intensive farming that would not have paid except for the high price.) The low price of fish obviously represents a low level of demand; the consumers did not want fish much and were not willing to pay much for it. The exceptions - large promfrets, large prawns, some crabs and a few minor items - are interesting enough in themselves to deserve special consideration.

Fish is the main source of animal protein in the Malaysian diet, especially the diet of the less well-to-do. Meat, in the sense of mammal and poultry meat, has traditionally been a feast food. It is also the usual animal protein source for the idolized and ever-imitated Western world. The associations of fish are with peasants, backwardness, poverty, the dull everyday routine of the working folk, and traditional life. The associations of meat are with festivals, feasts, major celebratory occasions, the West (hence modernity, enlightenment and progress), the rich and the British (hence with high status generally). The result is inevitable: everyone who is willing or able to pay a high price for a protein food will buy meat, not fish. Fish prices normally must top out at about the bottom level of meat prices - fish going up to but not over about $1/kati, meat never less. Among the Malays and Indians, this is an almost invariable rule, the major exception being large prawns, which are choice items to everyone. (This is not to say the Malays and Indians treat all fish alike, but they favor some species, such as horse-mackerel, over others. They are still unwilling to pay much for any fish, and the fact that fish goes into the daily curry - there to have most of its flavor masked by spices - does not help to create differentiation.) Among the Chinese the situation is more complex.

Chinese cooking is calculated to bring out the flavor of main ingredients more than Malay and Indian are; more attention is paid to this goal and more care is given to ingredient selection. More to the point, however, the Chinese brought with them to southeast Asia a high regard for choice sea food. In China, sea food was the most prestigious and carefully chosen of all foodstuffs (except for such exotica as bears' paws or pangolins), and commanded the highest prices. Extreme differentiation in price occurred; fish fit only for duck feed cost less than 1% as much of the choicest food fish, and indeed the very choicest fish - kept alive in special well-smacks in specially chosen or purified water - cost about 100 times as much as the lowest grade of ordinary food fish (Anderson 1970a, 1975). Choice sea food was an integral part of a banquet, and (in areas where good fish could be obtained) the climax of a banquet was and is often a whole fish in piquant sauce. Such patterns could not fail of introduction to Malaysia. However, in Malaysia the meat pattern had its influence (especially on Chinese less well enculturated into their "great tradition") and many of the homeland fish were not available. The pattern did persist, though, in regard to a few fish. Sea bream and sole command prices well above the average for fish and as high as ordinary meat. Crabs and large prawns go higher than that, and increasingly lobster (spiny lobster) is also, under Western stimulus. Most important of all is pomfret (bawal in Malay, ch'ang in Mandarin), especially white pomfret bawal puteh, pai ch'ang; Pampus argenteus). Always a choice fish in its range in China, this has become the prestigious fish in Malaysia's Chinese community.

In Chinese business and social life, all important transactions must involve a dinner, and this dinner must include fairly prestigious ingredients (see earlier in this volume, and also Anderson 1970a). Given the fame of

Penang's sea food among conoisseurs, it is only natural that in Penang a Chinese dinner of any importance at all invariably includes large prawns, white pomfret and/or something comparable (e.g. sea bream - only if pomfret is unobtainable or the dinner is a minor one, say a light lunch). Given the size, wealth, importance, and activity of Penang's Chinese community, especially in business and trade, it is only natural that vast numbers of such dinners are given.

Somewhat similar patterns of important dinner-giving among the Malay, Indian and other ethnic communities of the island and these dinners normally include some sea food also, usually large prawns - but often few of these and nothing else aquatic. Here the choice is fairly straightforward, but the Chinese preference for pomfret is less easily explained. However, it can be explained by reference to Chinese historical ecology.

The fish liked by the Chinese are white-fleshed, tender, juicy, very delicately flavored, flaky rather than dry or mushy, and not at all oily. Such fish are usually demersal hunters; they rest on or near the bottom and make quick sallies after prey items. The fish least liked are the strong-flavored, oily ones; such fish are all pelagic hunters, actively swimming constantly to keep themselves up and active, such as tuna, mackerel, kempong, or pelata minyak. These the Chinese regard as virtually inedible; we were often told, with gloating delight, how clever it was of the fish merchants to send tuna to America from Penang, thus getting Americans to pay good money for this worthless trash fish. Our defense that Americans actually like tuna was not believed. The Malays and Indians tend to prefer such pelagic hunters to other fish, but will not pay much for them. All communities agree on the inferiority of soft or mush-fleshed white-fleshed fish (typically demersal scavengers or scroungers) and white-fleshed fish with strong-flavored,

dry flesh, such as the red snapper (these tend to be active but demersal or deep-water forms).[1] Chinese will say that pomfret and the like are "sweet," "crisp," and "good-tasting" (kan, ts'ui^4, hao mei in Mandarin, respectively); i.e. that they are not strong-flavored but with some delicate flavor, and juicy but firm flesh. (The English translation labels are singularly misleading for the Chinese terms, especially ts'ui^4, usually translated "crisp" but meaning anything from crisp to simply firm and non-mushy, as well as connotations of general freshness in age, flavor, etc.)

Preference for these fish is due to their amenability to Chinese modes of cooking, especially the Chinese pattern of brining out flavors by subtle use of delicate flavoring agents and of rather bland vegetables. The more strong-flavored fish overwhelm these other ingredients. Habituation also enters into it. The fish first known to the Chinese were evidently fresh-water forms, since the original Chinese culture-area was well inland, and fresh-water fish have continued to be important. Among these fish the best are certainly those that fit the above criteria. Pelagic hunters are rare. (Western and Malay tastes are presumably both conditioned by the availability in their respective worlds of great quantities of superb pelagic fish - herring and mackerel and tuna in the Western case, horse-mackerel and Carangids in the Malay.) Experience with the sea and assimilation of shore peoples did not change the pattern, for the commoner and better fish along the Chinese coast

[1] The differences in flesh derive from the different energy and motion requirements of these different styles of hunting; e.g. the pelagic hunters need high energy stores to keep them warm and swimming, hence their high oil content. In particular, the darker parts of their meat are part of a heat-maintenance system lacking in demersal fish. These dark parts are especially flavorful and also spoil easily - both minuses in Chinese reckoning.

do usually fit it. Other fish were uncommon (like most pelagic free-swimmers) or scavenging and muddy-flavored (like catfish). The taste and the cuisine grew up together, related to what was familiar and available.

In transfer to the Malay world, the Chinese pattern of preference continued. The items that fit it best there are pomfret, large prawn, and a few types of crab. Spiny lobster and red snapper are too tough and strong-flavored, the pelagic fish too oily and strong-flavored. A wealth of demersal fish, including the pomfret so familiar and beloved in the southeast Chinese homeland of most Malaysian Chinese, were easily available until overfished. Everyone was used to eating fish, and the more sophisticated immigrants' preference patterns "trickled down" to the rest, in so far as the patterns were not shared. The Chinese do not pick up Malay traits for the reasons outlined in Section 1 of this book.

We thus find that the development path of the fishery was determined by the taste of the consumers. The anthropologist's goal is to show how such tastes and their translation into effective demand are determined. This goal we have achieved, in a general way, but we had no opportunity to follow up our findings with systematic exploration of consumer preferences and actual consumption. This should be done: it is the logical next step. However, the following points stand clear:

1) Taste is heavily conditioned by considerations of status. The low status of fish in general, especially among Malays and Indians; the high status of large prawns in general; and the high status of certain fish among Chinese - these are creations of ecology. What is cheap and always available naturally come to have no high status, while the desired but hard-to-get must be of high status. All mankind wants protein, and the more hard-to-get forms of protein are the status foods of much of the world - steak, caviare, pomfret.

2) Taste is also conditioned by habituation, or more generally by knowledge of, selection of, and habituation to what is available. This is hardly a striking discovery - everyone knows it - but it is rarely applied to considerations of economic development, except in the naive and wrong-headed belief that tastes are irrational and conservative and counter-developmental. Tastes are usually rational enough and often change incredibly fast, as the westernization of the Malaysian Chinese diet shows. A science of history and society will explain these changes and also explain intervals when no change occurs. Such intervals are not due to blind conservatism but to a dynamic situation that is, at that particular time, operating to maintain a system - as the spinning of a top keeps it standing upright. In the present case, the interaction of tastes developed in China and brought to Malaysia with fish available in Malaysia and the status and interaction games of the Chinese community there singled out the white pomfret as the fish above all other fish. Many a good fish fell by the wayside, either because it was rare or unavailable in Malaysia (like the groupers so loved in south China) or because it was unsatisfactory in the new land (e.g. hard to obtain fresh).

Thus the price of most fish was pegged to the price of other protein sources and kept lower than the others. The only fish that could be profitably pursued, given this fact and the high costs of inputs, were those that could be obtained in enormous quantities (ikan baja for the trawlers and bagnetters, kembong and pelata for the pelagic fishery) and those that were exceptions in that they commanded a high price and could be reliably caught (prawns above all; pomfret to a lesser extent; crab, sole, and a few less common fish to a still lesser one).

Naturally the fishery targeted toward the latter high-value species. Since all of them had the misfortune to be ecologically similar, the same

fishery got them all. We have shown that their ecological similarity was no coincidence; Chinese preferences in fish derive from ecology, with the demersal quick-strike hunters producing the kind of fish-flesh the Chinese prefer. The fishery thus specializes in methods that can rapidly sweep the bottom to capture these, and in areas that concentrate them - specifically the shallows around river-mouths and slough-mouths, where food is abundant and spawning takes place. Overfishing then is inevitable. The slight "negative feedback" effect - the expansion of prawns as their predators, the demersal hunting fish, were fished out - is but a slight drag on the downward progress of the resource base, given the overfishing, and the pollution, landfill, and other environment-ruining effects of human operations.

The methods of fishing used, as we have seen, are wiping out the fry of the choice species. Thus the final analysis can be made: the narrow range of fish that are worth catching makes the fishery narrowly based; the narrow base of the fishery makes overfishing inevitable. The low price of other fish means that major, productive fisheries - the pelagic and rawai fisheries, in the Kampong Mee area - are underfished while the trawler fishery is seriously overfished. The pattern of effective demand makes rational use of the fish resource base impossible - unless "rational" is defined circularly as "anything that fits the demand pattern." (It would be better defined as we have used it in the last sentence: providing maximal protein available without depleting stocks.) To the problems of the fishery, the monopoly of key inputs, the lack of good repair services in the port, the lack of knowledge of fishing and maintenance, and the lack of good mapping of grounds or studies of fish resources all contributed. All of these could and would have been easily overcome, however, had the price of fish been competitive with that of meat. If it had been (as it is in much or most of the world),

the small "unnecessary" expenses involved in getting monopolized inputs and dubious repairs would have been borne, and - more important - the economic success of the fishery would have caused government and private sectors to take a more active role in developing it. As it was, elastic demand for fish meant that as fish got rarer the price did not increase; fishermen were simply forced out of business or cut in profits.

12. Attempts at Development:
The Government and the Co-operatives

1

The obvious importance and obvious troubles of the fishery had caused the Malaysian government to take action. Given the British background of Malaysian government organization, and the success of British-style and British-inspired co-operatives elsewhere in the region (notably Hong Kong), it was natural for the government to work primarily through the Ministry of Cooperatives and only secondarily through the Ministry of Agriculture and Fisheries. However, both these ministries affected the fishermen, almost entirely through their local offices or representatives in Georgetown and in Kampong Mee. The co-operatives dominated the politics and much of the political economy of the fishery. The Fisheries personnel had no such local power; they came to Kampong Mee only as visitors, and though locally known were not of much effect compared to the co-ops. The Marine Police were the other government body normally impinging on the life of the fishermen - there was a post there. They were, of course, perceived as a basically antithetical force because they tried to enforce the laws that the fishermen so diligently circumvented on the water. Still, the police were not viewed with very much hostility - the usual claims and counterclaims of "corruption" and favoritism were traded about, as they are no doubt in every community in the world that has police, but the fishermen could live with the Marine enforcers. This was possibly because the Marine Police did serve to protect them against the inshoremen. The latter were thus much more critical, alleging that the police had been successfully bribed to side with the trawlers - a story which, of course, was not accompanied by the

production of evidence. The police did not have any policy-making function in regard to the fishery, and thus we may leave them and turn to the more significant roles of government.

The Fisheries branch of the Ministry of Agriculture and Fisheries had less power but more sympathy - in accord with the rule, so common in human societies, that government bodies with a regulatory function are disliked by the regulatee, but government bodies with a purely advisory function are considered helpful, friendly and sympathetic, in so far as their men on the ground seem so. The Fisheries officers in Penang were considered by most fishermen to be not only userul but also helpful and dedicated people. Complaints about the police and co-operatives were directed to them (as well as to the Co-operatives personnel). Their prime function in regard to Kampong Mee was not of great direct importance, however, They collected statistics from the Co-operatives authorieies and kept them; they introduced new ideas. Their most important function in Penang was probably the management of the research station at Glugor, an excellent, modern research facility - one of the best in southeast Asia. From here, from the literature, and from any and all sources the personnel of the main office collected ideas for propagation among the fishermen. They were the official source, in short, of the actual technology of development. Their conservationist ideas were not always appreciated, but their help in regard to new methods of fishing were both appreciated and - when feasible - adopted. There was no barrier either from dislike of the Fisheries personnel and no actual sanctions available to bring to bear on the Kampong Mee fishery. The day-to-day details of life there were handled by the co-operatives, under a different Ministry. Thus a consideration of

government's role in the Kampong Mee fishery must really begin with a discussion of the co-ops.

2

Of these there were six: five regular co-ops and one Muhibbah co-op. "Muhibbah" means "tolerance" (in Malayized Arabic), and is a word given much prominence in the wake of the Selangor riots of 1969. The government had formed Muhibbah societies to bring Chinese and Malays together throughout the nation, and revivified the co-operative movement by starting new co-operatives. The five regular co-ops were older, larger, better established, and united by their common local leadership. The Muhibbah co-op was newer, smaller, and somewhat of a struggling latecomer, but in some ways better run than the other five; thus it maintained itself as a somewhat separate agency, but was becoming more and more like the others as time went on.

The reasons that one village had six co-ops were that inshore fishermen had chased the trawlers out of all villages where the inshorement were more powerful, and that Kampong Mee's good facilities and large operation had attracted the trawlermen of the smaller Penang ports. Thus the trawlers of Sungei Ikan Mati and Sungei Nipa had come to Kampong Mee for refuge, complete with their large co-ops, while the trawlers of Telok Chantek, Telok Nyior, and the various small ports north and south of Georgetown, had all rallied to Kampong Mee - leaving only two other ports, Georgetown itself (Weld Quay area; 43 boats), and the large and flourishing port of Telok Bahang (262 members, about 26 boats) on the north coast, with substantial trawler fisheries outside Kampong Mee. The fishermen of these small ports had organized into the regular co-ops (at Kampong Mee) of Telok Chantek and

Telok Ketam, and the Muhibbah co-op (24 boats). (The latter two were made up primarily of trawlermen from north of and south of Georgetown, respectively, but other fishermen from other areas joined occasionally.) A Kampong Mee fisherman would normally join the Kampong Mee co-op, naturally the biggest of all and the general pace-setter and trend-setter, but he might join the Muhibbah co-op or even one of the more sharply localized others. (The Muhibbah co-op nominally served Glugor, but had little membership actually from there, serving rather to unite fishermen from the whole southeast coast of Penang.)

The trawlers must join the co-operatives to obtain licenses; licenses are unobtainable except through the co-ops. The other fishermen of the area do not need to do so, and do not join. Thus the co-ops include all the trawlermen and few if any of the others. They also include a few nonfishermen who formerly fished. There are many more shareholders than actual fishing and formerly-fishing members (about 2 to 1); businessmen and white-collar workers in the area have been encouraged to buy shares in the hope of dividends and in the general spirit of aiding development. Kampong Mee had 36 boats and 250 members, Muhibbah 150 members and 23 boats, Telok Chantek 106, Sungei Ikan Mati 125. Many non-members had shares. The other co-ops were much smaller, fluctuating around 30-50 members or less. Numbers fluctuated as boats came and went. Many more shares than members are out; Kampong Mee co-op had over 700 shares sold. Muhibbah, on the other hand, had sold only 135, mostly (75%) to nonfishermen. Co-ops require an initial deposit (for joining) of $500 or so (range $300 - $1,000, but only $2 in the Muhibbah co-op) varying by co-op and pay dividents. They make accounts and prices public, though this is changing. Most capital comes

from shares bought by local businessmen (in Malay co-ops, the government provides most capital).

In addition to licenses, the co-ops supplied a number of services, several of them - like licensing - critical to the fishery. They manage the accounts, dispatching, and statistics. Fish as landed are recorded by co-operative representatives at the beach: the fish are weighed and graded there, the co-op man records the weights and grading and values, and the fish are then dispatched to the city. The trucks, as we have seen, bring back the payment - to the co-operative office. Here it remains. The co-op staff handles the division of the money, and pays the fishermen weekly, normally on Sunday. The main (Georgetown) office tried to limit food expenses, as noted in the previous chapter, and thus aroused great conflict and threat of further cheating. The business manager (Tan Hiap-Oh is business manager for all the co-ops except the Muhibbah one) oversees and manages the whole accounting and paying procedure. (Some of the other co-ops had gone bankrupt through mismanagement, hence the co-managing.) The co-op deducts 5% of the net profits to pay for its services. The co-op also collects a commission on oil (fuel and lubricating) and ice - interesting, since the business manager of most of the co-ops is also the supplier of these. The result is enough to allow the co-ops to pay shareholders a small divident in most years; in 1969 the Kampong Mee paid 6% on capital, and would probably pay about as well for 1970. This was a high return, especially given the state of the fishery.

The co-ops also provide the fishermen with an organized, politically authoritative voice. They effectively channeled common fishermen's complaints (especially about laws and about the fishery conflict) to the

Ministry for Co-operatives office and to the Fisheries office and Marine Police too - indeed to any immanently impinging government agency. They continually and vocally protested the limits and rules on trawling, and successfully got the prohibition on night trawling repealed at the end of our stay. They had protested against high inputs prices and succeeded in lowering them - ice had fallen from $4.70-$5.00 to $4.20 a block at Kampong Mee, and this price was under pressure as well; it was lower at some other ports. The co-ops also create jobs and make Chinese and Malays work together; these are their main functions, according to some.

Each co-op had a head person and a committee. Kampong Mee has a committee of ten: five Malay, five Chinese. Telok Chantek had 12: 10 Malay, 2 Chinese. The head was appointed by the government and was always a Malay, often with no fishing or business experience but with good connections with the government and/or the United Malay National Organization (UMNO), the ruling political party of Malaysia. The committee was elected by the shareholders; in practice they were self-maintaining and to be selected by local businessmen and boat owners (who were leading shareholders, naturally enough). Various politically active nonfishermen were on the boards. Businessmen who supplied inputs to the fishery and also owned boats were especially interested in such posts. The main food supplier to the fleet sat on the Kampong Mee board. Tan Hiap-Oh had become business manager of all the co-ops after mismanagement and dishonesty had reduced them to a condition of need. He had straightened the business affairs out and made the larger co-ops profitable again, but the fishermen were disturbed at the fact that the man they saw as their chief exploiter was running their financial affairs. Some of the Malay staff agreed. However, the

post probably kept the co-ops better run and Tan more honest than could otherwise have occurred; Tan was certainly the most experienced and sophisticated money-manager in the village, was well connected in business and political circles of the district, and was prevented from the worst forms of exploitation by the fact that he was well watched, was dependent for dividends on the co-op making a profit, and was dependent for business and political "face" on the co-op being well run. His involvement with the fishery, via his boat-owning and input-supplying, prevented him from becoming a mere bureaucrat who was indifferent to the fate of the fishermen as long as he got his salary (as some of the other co-op staff undeniably were). Thus he was in a sort of double bind, permitting him considerable honest profits and fees and a fair rate of under-the-table ones, but preventing him from the more destructive forms of peculation. If he had not been working for the co-op he would probably have been working against it, and his acumen and local connections would have given him a devastating ability in that field. Thus his presence on the board was viewed by many as a necessary evil, though by no one we talked to (outside the Tan family) was it considered much better than that. The fishermen continually complained about the lack of fishermen on the co-op boards, and some alleged that fishermen had been forced off the boards. This was a serious charge. Again, it is unquestionably true that the fishermen lacked both business knowledge and political connections, and could not have been effective in key jobs. However, the co-op boards, apart from the head and the business manager, had no vital functions, and served solely as overseeing committees that could discuss issues and set board policies. The lack of fishermen on the boards was against all ideals of the co-operative movement,

of course. More pragmatically, it meant that the boards were more conservative, less quick to pick up fishermen grievances (though they did pick these up fairly fast), and more prone to follow the official government policy than they would have been with more fishermen representation. Conflict between more conservative, "Malayist" Malay board members and more progressive, noncommunalist ones caused some disunity and uncertainty about policy among the politically dominant Malay Board members.

Thus given the political system in Penang, the co-ops were doing about as well as could be expected. The Muhibbah co-op had started under somewhat more politically change-conscious auspices with a politically very well-connected chairman, and at first had tried to bring the fishermen into the decision-making process more, but had eventually come to copy - with rather less financial success - the other co-ops. Everything turned on business and political connections. The co-ops would ideally have been independent organizations of fishermen, run by fishermen, dealing directly with retailers or at least with the urban wholesalers. However, the need for full-time office staff with great business talent and with pre-existing connections in the business world made this impossible. The political climate of Malaysia, in which Malays with UMNO connectsion were preferred for such minor bureaucratic posts as co-op head, made it doubly difficult for the fishermen (Chinese, and leftish politically) to serve so. Some of the Malays had fished and all tried to serve the government loyally, but their lack of knowledge of the contemporary fishery and their split loyalties (government vs. fishermen, when conflict arose) made this difficult. More serious was the open sympathy with the powerful businessmen and politicans and the open lack of sympathy with the fishermen shown by high

levels in the Ministry of Cooperatives office in Penang. This sympathy led to widespread and unusually circumstantial rumors of graft and corruption at these higher levels - allegations of a sort both more serious and more well-evidenced than any ever made about other ministries and authorities we have discussed or about the local, Kampong Mee staff in the co-ops. Whatever the truth may be, it is noteworthy that we and all other scholars investigating the Penang fisheries were prevented from examining the records of the Georgetown office of this ministry, in sharp contrast to the striking and warm cooperation from the other offices and officials contacted. Beliefs such as were widespread, coupled with such behavior, only served to reinforce the doubts among the fishermen about the value of co-ops that set the local inputs suppliers to manage the fishery. Since the fishermen felt the inputs suppliers were their main opponents in the game of business, they naturally extended this attitude of opposition toward the co-ops. This was a main factor keeping fishermen off the co-op boards; by 1970, things had reached a state in which no fishermen would serve on the boards, and those on them had resigned. Being on a co-op board stigmatized the fishermen in the eyes of his colleagues. There is no question that the fishermen were unfair in their judgments, but it is true that the co-op's split loyalties were a source of conflict.

Much more serious a problem for the co-ops, however, was the fact that they had been set up under a misconception. They were not doing the job they were intended to do, because that job did not exist.

As we have shown, the economic problems of the Kampong Mee fishery derived from the fact that fish were cheap and inputs were expensive. (One

is reminded of the Newfoundland fishermen's song containing the line "fish is low and flour is high" - describing a very similar economic situation.) The problems were not derived from inordinate profiteering by middlemen or from inordinate numbers of links in the chain of middlemen. This is a rather anomalous or atypical situation in Asian fisheries. Far more common is the situation we found and described in Hong Kong (Anderson 1970a), in which several middlemen intervened between fisherman and consumer, and the middlemen dealing directly with the fishermen were indeed a cartel of gouging profiteers (to put it as mildly as possible!), exercising de facto monopsony and serving as loan sources at exorbitant interest. Here, the government simply substituted co-operatives for these cartelized and rather supernumerary fish assemblers, and at one stroke solved the economic problems of the Hong Kong fishery. The fact that the fishermen were involved at every level and that the government's liaison officers were usually responsive was relevant, but more important was the fact that Hong Kong fish demand was exceedingly high. Both consumption of fish and prices for fish were high and rose steadily and rapidly in the late 1960's and early 1970's. Moreover, any unsuccessful fishermen could and did leave the fishery to work in the factories, which were booming at that time. In 1974, when economic recession and the high fuel prices that caused it partially reversed this rosy picutre, the fishermen were secure enough to weather the economic typhoon as well as they weathered the more tangible typhoons so common in their waters. They were unhappy but they survived. Removing the middlemen and substituting co-operatives both to market fish and to loan capital had not only allowed the money to go to the fishermen; it had released a spectacular burst of modernization and development, since

the fishermen promptly invested therein the money that previously had been siphoned off by the fish assemblers. Thus cooperativization worked, in spite of the colonial situation and other countervailing factors. These latter kept the fishermen from making really secure or substantial livings, but the fishery did flourish.

In Kampong Mee there were no strong fish assemblers, no cartels of middlemen, no exorbitant interest rates extracted from fishermen, and no striking redundancy in the fish-marketing linkages. There were also no high prices, no high demand, and no alternative job openings to speak of. Thus there was neither the great amount of capital being siphoned off nor anyone siphoning it off. There was not only no body of businessmen for which a co-op could substitute, there was no great amount of capital that such a co-op could release for the fishermen! A truly well-run, well-organized cooperative system with dedicated and efficient business managers and a highly competent marketing and retail sales development branch could have done as well as the Hong Kong cooperatives did, but such a vast and sophisticated linkage would hardly have been possible in the Penang of 1970-71. A more radically opganized co-op, with full fisherman leadership, even if politically possible would have been unviable because of lack of marketing expertise.

Were the co-ops, then, not earing their keep? Their role as dispatchers, record-keepers, organized representatives with a voice in government, and general mediators in the fishery guaranteed that they had much value. Did this justify their taking 5% of the gross profits of the fishery? The co-op heads though so, others on the boards were not always sure, and the fishermen almost or quite uniformly thought not. In the absence of reliable

statistics it is, of course, impossible to resolve the question. Let us then consider instead what the fishermen did about it.

The fishermen's attitude was clear and uniform: the middlemen were exploitative but not seriously so, the inputs suppliers were a worse group, and the co-ops were worst of all, especially since they were managed by the inputs suppliers and run by the Malays. The Malays, as noted in section 1 of this book, were hated and feared, and especially the "Malay government" was hated and feared, by the fishermen. This dislike of the co-ops did not prevent the fishermen from using the co-ops for everything possible in the way of both clerical services and spokesman or representative capacity. There was a wary feeling that one should make use of them but not sympathize. The opposition came out in trying to save as much as possibl from the 5% commission charge. The methods are those described in the preceding chapter: underreporting fish quantity, selling ikan lauk, charging as much as possible for food and other expenses to bring the net profits as low as possible, and working out sub rosa deals with truck drivers and the small-scale local fish assemblers to sneak the more valuable fish through. Collusion must extend to the middlemen and to local fish-buyers for this to work. The co-ops were quite aware of it, in consequence, since nothing this major could be hidden. They ignored it because it had to remain fairly small-scale and was impossible to control completely, and also, one must say, because the co-op heads sympathized up to a point with the plight of the fishermen. (Some of the officials told us they simply did not have the heart to stop the selling of ikan luak except when it got to be really out of line, i.e. when sums of money beyond those necessary for ordinary subsistence expenses changed hands.) The business manager of

the five co-ops was also involved in the fishery as a boat-owner, and so were several of the board members, and these people naturally had their loyalties and sympathies in that direction - or at least their interest in their own profits. However, the reliable reports we got indicated that underreporting of net profits could conceal half or occasionally all the profits made, thus holding the commissions down drastically. The net profits were so small in any case that a poor day's net profit could be turned into a net loss by merely downgrading a few katis of fish. Large catches, and hence large profits, were more difficult to hide, though - so the co-op got more of its share when the share was large enough to worry about. There were no doubt also co-op men and agents who were paid by the fishermen to ignore violations. It would seem, though, that the system had leveled off - a certain amount of illegitimate profit-hiding could be tolerated as long as the co-ops broke even and the fishermen needed the extra money. No one was happy with the result; co-op personnel constantly complained of the deception, and fishermen constantly complained of the co-ops. Relationships were not cordial and were cooling during the year we were there.

Another function of the co-ops, and one even less popular with the fishermen than the 5% commission, was one newly imposed. The government had recently decreed that trawlers must have half Malay crews. This attempt to raise the status of the Malays by governmental fiat was universally condemned by the fishermen as both dictatorial and openly biased (no decrees told Malay fisheries that their crews must be half Chinese). Since some Chinese members of the co-op boards agreed with this position, it proved difficult to enforce at Kampong Mee. In practice, boats with stable crews

kept their crews. New boats, or boats with vacancies, had to hire Malay crewmen until half the crew was Malay. However, if no Malays could be found who would serve, the law could not be expected to hold and was not enforced. Therefore the Chinese on the boats usually made it just as unpleasant as they possibly could for any Malay crewmen (there were partial exceptions, but none where the Malays ever achieved skilled posts or really equal treatment). Tactics ranged from a sort of "work-to-rule" policy in which the laws against selling ikan lauk were enforced on Malays and the Malays were not given any cut of the hidden profits up to active harassment and openly intolerant behavior. No actual violence occurred - no one would have dared to do that - but verbal aggression, sticking Malay crewmen with the worst jobs, and such infuriating (to a Malay) items as deliberately cooking everything in port fat or with pork were standard. There was no attempt made to hide the sub rosa profits, but few if any Malays ever got a cut of them. Malays usually did not apply for jobs and never stayed long on jobs they got. The co-op heads, being Malays, were not pleased with these practices. There was little they could do about it. The whole conflict contributed greatly to the cooling relationship between the co-op boards and the fishermen. The latter feared it was a way of converting the co-ops from an institution to help them into an institution to harm or even destroy them.

It may be legitimate to wonder, in view of the fact that co=ops were the channel for acquiring licenses and increasingly themeans of enforcing decisions and laws, whether the government viewed them primarily as helpers of the fishermen or as enforcers of policy on the fishermen. Whatever the truth, the fishermen feared that such a change of purpose was taking place.

There seems little doubt that the co-ops had originally been idealistically intended to help the fishermen help themselves. Fishermen had taken the incentive in beginning to organize co-ops in the early days of the fishery (about 1965 at Kampong Mee) and the boards had once had many fishermen members - in some cases actual majorities (according to undocumented claim). A progressive change away from fisherman control and toward high-level governmental policy-setting was certainly evident.

In any case, given the original misconception on which the co-ops were based - i.e. that they could supplant middlemen - the co-ops could not quite work as planned. In other fishing ports co-ops had attempted to replace wholesalers and deal directly with retailers. These attempts had ended in failure; the co-ops could not co-ops could not command good prices, manage the business ably, or form successful marketing links. The fishermen had trouble selling their catches, and often could not get as high prices as they had before. It is possible that government auctioning and general governmental control of the whole fish marketing system could have changed this, and the government was indeed attempting during our stay to set up a new fish marketing structure, but this did not come to fruition during our time there. There was scepticism among the fishermen about it, and even among several co-op board members. Here as in other details there was not unanimity on the co-op boards.

In conclusion, the government impinged on the fishery primarily through the marine police, fisheries staff, and above all the co-ops. Relations of fishermen and co-ops were close but strained, and a number of unfortunate stereotypes had been created among the fishermen. The co-ops were not supplanting middlemen as they had done in Hong Kong and elsewhere, but were

serving a number of useful and important purposes. However, the fishermen tended to blame them rather unfairly for failing to provide higher income levels, and to hold them in suspicion because of their government affiliation. Relations of fishermen and government, more generally, were conditioned by the total political climate of that time in Malaysia - just after the 1969 troubles, but before the recent economic successes that have helped to alleviate Malaysia's problems. It was a time of questioning and worry. Into this already problem-ridden scene came the far worse troubles described in the following chapter.

13. The Trawler-Inshore Conflict

On December 23, 1970, about 50 trawlers of unrevealed port origin were trawling illegally inshore off the Perak coast. They were challenged by (or perhaps they challenged) ten inshore boats, bag-netters, from Perak coast ports. The trawlers chased these, caught one, burned it, slashed two captured crewmen with knives, and left them to sink or swim (they survived). On December 26, aggravated by this and by threat of further trawler-licensing and further illegal fishing, over 50 inshore boats from the Perak ports chased trawlers and caught a Kampong Mee boat. The crew of five promptly got off into the water. Two could not swim. One was caught and slashed deeply on the arms with a large cleaver, but managed to escape and cling to a net-float. One was forced into the water and never seen again. The trawler was burned; the hulk, burned to the waterline, was towed to Kampong Mee, where the injured fisherman told his story while waiting for the ambulance.

This was the most serious event that occurred during our stay, but not the only crisis. About May 1, two Kampong Mee fishermen were speared by inshoremen. A Kampong Mee fisherman was killed about November 20. Other chases and clashes with minor injuries and an occasional burning of a boat occurred during the two years 1970-71.

Kampong Mee was peripherally involved in something close to a real war. The major contenders were the coastal ports of northern Perak, southeast of Kampong Mee on the mainland coast. This area is the center of the west Malayan fishery, and has the most intense fishing activity and the worst overfishing problem. The fishing villages there are old, isolated from the

rest of Malaya by vast and impenetrable mangrove swamps (they are reachable only by long dead-end roads from one direction, or by boat), and essentially 100% Chinese in population. The coming of trawlers to these ports, slightly after their rise in Pangkor and Penang, led to sharply increased overfishing, but the proliferation and mechanization of bag-netters, which compete for the same fish, was probably as serious a factor. (Pollution did its share also.) With the fish declining, conflict was inevitable. However, these were no meek, orderly and well-controlled fishermen like the Kampong Mee men. The north Perak coast was the heartland of smuggling (mostly from Indonesia during the Confrontation, but also from and to Thailand) and out-and-out piracy. Secret societies were powerful and the filthy and squalid shanty-towns hid many fortunes; one could see Mercedes cars parked outside ramshackle huts on sewage-filled dirt-rut roads. These crime-filled rural slums were exceedingly populous, with many fishermen. As the conflict developed, the trawlers were successfully forced out of all the Perak towns except Port Weld. The big trawlers came to Kampong Mee. Most of the Port Weld boats were small, with 25-hp engines or occasionally up to 60 hp. (Kampong Mee boats were in the 20-30 ton class with 60-120 hp engines.) Many or most were converted inshore boats. Over 2000 fishermen made their livings on these, and many more worked the profitable cockleshell farms and other fisheries of Port Weld, serving as allies to the trawlermen. The other ports remained in the hands of the inshoremen. Center of the illegal activity and of the bag-netters was Kuala Kurau, which served as the staging area of the inshoremen's side of the war, though Sungei Ikan Mati and several smaller ports were heavily involved.

This conflict reached its peak in 1971, though many incidents had occurred over the preceding few years. In the peak year, October 1970-October 1971, at least nine fishermen were killed (counting the two above) and well over 40 boats sunk. Probably the real figures are considerably higher. Injuries were beyond reckoning. The climax came on August 31, 1971, when a fight between over 50 Port Weld and Kuala Kurau boats led to the deaths of four men and the destruction of several boats. The Malaysian government, realizing that police and other action hitherto invoked had been inadequate, sent a thousand soldiers into the Perak towns at dawn on September 4, arresting and jailing some 20 men without trial. (Some were among our better informants - since the soldiers naturally picked community leaders to capture. Others were pirates sought a long time, though the "pirate king" escaped.) A peace commission was then formed, by national government fiat, involving fishermen, co-op authorities and government peace-keeping functionaires. A truce of sorts was patched up, but only the threat of force majeure kept the fishermen quiet, and indeed there were clashes after the peace mission was set up. (This occurred after we left Malaysia, and the information is supplied by our field assistant and by the newspapers, especially an article in Singapore's New Nation of October 5, 1971, pieced out with items in Penang's Straits Echo and the Singapore Straits Times.

In addition, trawler-police conflicts occurred on occasion, exacerbated by the problems here. Moreover, just to add insult to injury, tralwers and other boats did not dare fish close to Indonesia or Thailand, because both pirates and government boats would seize them, for robbery in the first case, for enforcement of national limits in the second. (Some fishermen said,

however, that the two were not totally non-intersecting sets.) At least 18 boats were caught and fined by the Thai authorities - who claimed for their part that "fisherman" and "smuggler" were not always non-intersecting sets either, a claim not wholly denied by fishermen - during our time in Kampong Mee. One police fight arose when police stopped a Kampong Mee trawler for illegal fishing, and the resulting language used by the fishermen was outrageous enough to cause one policeman to strike a fisherman, producing complaints through the co-ops.

The Kampong Mee men avoided the struggle when possible, but fishermen from Perak ports (Pangkor and Sungei Ikan Mati, especially) working out of Kampong Mee considered this attitude detestable, and considerable bad blood was generated between these two groups of fishermen. The Pangkor men urged the Kampong Mee locals to fight back or take the initiative in capturing, burning and cutting inshoremen, and may have had something to do with the original December 23 episode. (The boat burned December 26 was a Sungei Ikan Mati boat, originally, but this apparently was not known to its attackers, who were simply out after any trawler they could catch. The captain was a Pangkor man, but the slain fisherman was a newly-arrived man from Singapore.) The Kampong Mee men preferred to work through the co-ops. After the December 26 episode, when the Kampong Mee men fought shy of retaliation, the two groups had little to say to each other and never cooperated. The Kampong Mee group continued to press via the co-ops for more police protection. The Pangkor men stayed out of the whole issue.

At about that time a minor Saturday-night sort of fist fight broke out in Kampong Mee between fishermen on a crew in the village and somewhat celebratory. An Indian was seen at the periphery. A rumor spread that "Chinese and Malays were fighting" (or "a Chinese and a Malay," as one

prefers, since neither language has a plural marker) and suddenly the whole village was running to the scene, the young men with any weapon or stick they could find. On discovering the truth, the crowd melted away, but the result if it had actually been a Malay-Chinese fight was clear: there would have been a communal fight of considerable seriousness.

Set about with such conflicts, the Kampong Mee fishermen found more and more of the waters unsafe to fish, more and more attention by police paid to their fishery (with the incidental effect of making it more difficult to trawl illegally), and more and more fear and uncertainty. Any small episode could spark a serious clash. Everyone seemed to be an enemy: Malays, co-ops, police, other Chinese fishermen. The co-ops at least provided a forum for complaints, and meetings with their staffs and meetings of all their staffs with higher authorities were invoked. However, in late 1971 (after we left Kampong Mee), a petition from twenty Kampong Mee fishermen to the national headquarters of the Ministry for Co-operatives led to a meeting in Penang between fishermen, co-op staff and local political leaders, with the fishermen airing grievances about the lack of fishermen on the co-op boards, the dominance of business management by the main inputs suppliers in the village (i.e. primarily Tan Hiap-Oh, but also the main food seller, a storekeeper nicknamed "Sweet Potato"), and general corruption and peculation. Nothing substantive was accomplished, but the multiple polarization of fishermen and fishery came out clearly, and the fishermen did attract state-level backing from political figures.

There is little more to say about conflict, except to note that it was the conflict, coming on top of declining incomes and uncertain future, that reduced the fishermen to the state of worry and pessimism described in Part 1

of this book. Incomes were still fair by Malaysian standards, living conditions no worse than in most Asian towns, food available; on the face of it, the fishermen were not badly off. But given a declining economic situation and no hope for the future, depression would be expected in any case. The real problem, however, was derived from the fact that the fishermen were locked in a conflict - and a losing conflict, as they well knew - with the Malays, the inshoremen, the law, and each other. In 1970-71, not only livelihood but life itself was becoming more and more uncertain. The fact that the main conflict, between trawlers and inshoremen, was due to the declining fish resource base was evident. The logical corollary was that as the fish declined further the conflict would worsen. This did not occur, due to government intervention, but the intervention came after our stay; during 1970 and most of 1971, the conflict was indeed worsening.

14. In Wider Perspective

The problems of Kampong Mee have now been laid forth. It remains only to put them in wider context. The present chapter will discuss the place of Kampong Mee in the Malaysian fisheries economy. The succeeding and final chapter will trace implications for development in general.

Returning from field work in Hong Kong in March of 1975, we were surprised to find an article about Kampong Mee in Japan's Mainichi Daily News. Pran Chopra reported from Kuala Lumpur the same sad story we have detailed above - the overfishing of demersal stocks, the underfishing of pelagic ones, the decline in catches and incomes (30-40% since our field work, according to the article), the poaching and violent clashes, the expanding fishery that overfished as fast as it expanded. Hope was held out, however, by the renewed activity of the Fishing Research Institute at Glugor and the new Fishermens' Training Institute at Kampong Mee - that institute which was merely a flat piece of ground, being graded, when we left. With rising skills a rationalized, developed fishery could come about - more capital, more modern boats, more fish resources available for economic pursuit. The article did not mention the high cost of oil, but did note that fish prices had doubled (due, evidently, partly to inflation, but also to some real increase). Evidently the worst problems still existed, the new training institute had a way to go, and the situation was only slightly improved from 1971. However, industry had come to south Penang meanwhile (Patrick 1974), and the Kampong Mee fishermen at least had alternatives to choose.

Outside of the band from Penang state south to Selangor state, fishing is less bedevilled, but also less developed. The trawlers, from the small

converted bagnetters at Port Weld up to the huge new experimental trawlers at Penang, are concentrated in that band. So are other mechanized boat types. Elsewhere on the west coast, the waters are intrinsically less rich but the fishermen far less numerous and almost equally mechanized. Thus such ports as Pantai Remis, Kuala Muda and Kuala Kedah have more success. It is instructive to note that some of these ports had effective, well-run, profitable co-ops. The fact is that when times are hard and incomes declining, a war of each against all naturally ensues, and the cheating, conflict, bitterness and lack of development that we have noted at Kampong Mee takes over. When times are improving, such things may also go on, but often groups and individuals will see that it is to their self-interest to be cooperative (genuinely) and develop. Even in the midst of decline, a group can be dedicated enough to cooperate for development, like the cockle raisers at Port Weld. Even in the midst of a fishery with much potential, problems like those of Kampong Mee can arise due to incompetence and dishonesty, as at several Malaysian ports with fair potential fisheries (e.g. Elliston 1966). But the tendency is for a profitable-seeming fishery to call forth a better response from all concerned. Thus at the northward ports we found few problems. The optimism extended to domains apart from fishing; these ports were clean, houses were well-built, local ice factories opened, infrastructures in general were better maintained than at the ports in the troubled-waters zone.

On the east coast of Malaya and in Malaysian Borneo, development was much less advanced. Many boats were nonmechanized. There were few large trawlers, and many very traditional gears of types displaced by trawling on the west coast. Some displacement was taking place. Thus in Sarawak

(for those fisheries see Elliston 1967b) trawlers were raising mud and silt, catching out fry and so on, and in general ruining the less intensive local fisheries - and also an ever-widening part of the whole fishery (Lucas Chin, personal communication). Firth found little change in his field work area in restudying it (Firth 1966), but mechanization had come, middlemen had more power, the marketplace was displacing traditional arrangements, and in general "rationalization" and modernization were in full swing though not far advanced. We observed similar conditions at other east-coast ports. Fishermen still sold their catches on the beach to the local people in many areas; sailing canoes were common; villages were isolated and scattered; cooperatives were few and at incipient stages at best. The east-coast fishery was one of considerable potential. It is to be hoped that the mistakes made on the west coast can be avoided on the east.

Development of large trawlers, with Thai assistance, was slow and not very successful. Penang's large tuna industry (Thillaimuthu 1970) flourished, but was entirely in Japanese hands, and the Japanese, Korean and Taiwanese boats supplying the tuna were but birds of passage in Penang. Malaysian boats would be later starters and probably could never be competitive, given the rapid modernization and high capitalization of the tuna fishery.

As noted in Chapter 9, the real hope for Malaysia lies in aquaculture. Fishing has come close to peaking. The article by Chopra notes that fish landings have reached 5¼ million tons in the south China sea (from all nations fishing it) out of a potential 8 million - most of the latter pelagic and unavailable to the present fishery. The eastern Indian Ocean has a lower potential and its Malaysian portion is getting extremely depleted

indeed. Expansion by other nations, especially Thailand but also every nation from Singapore (with a small but strongly government-supported fishery) to Vietnam, is filling whatever vacancies are left. Malaysia has no hope of substantially increasing its wild-caught fish landings.

The potential for aquaculture is, on the other hand, incalculably large. Research at the main station in Melaka state has progressed but slowly and with limited funding, and such smaller stations as the one near Kuching in Sarawak have been even more limited in support. Singapore has done far more with pond fish, mostly because of the large export trade in ornamental aquarium fish. In general, though, Malaysia's case is all too typical of the indifference paid in southeast Asia to the only technology that offers serious hope of providing an adequate long-term solution to the shortage of high-quality protein.

The general course of Malaysian development has been touched before. It remains to summarize the general picture of Malaysia's development strategy, as it affects the fishery. Further details on the fishery in general and its development can be found in the Asian Development Bank's survey (1969) and the works of Elliston, including - we hope - major works yet to be published; no one is so well qualified as Elliston in this area.

In Malaysia's post-independence development strategy, fishing and fisheries development have not received a very high priority, nor has their development been ideally managed. To a great extent this is a heritage from the British, as are most of the problems of the west-coast fishery. A fisheries expert called in by the government in the early 1920's, David G. Stead, reported as long ago as 1923 that overfishing with too finely-meshed nets was threatening the fishery and that the Chinese fishing villages

were notably lacking in sanitation, health, transport and other services (Stead 1923). In 1956, just a year before Merdeka (Independence), a Committee to Investigate the Fishing Industry reported the need to develop aquaculture and the promise of shellfish culture including cockles; the silting problem in breeding grounds and harbors; the lack of alternative employment in the fishing villages; the overfishing; the conflict between uses of different types of gears; the lack of health, transport, and other facilities at the villages; and the need for better training, gears, insurance, capital facilities, and rescue services. It also advocated co-operatives and a comprehensive marketing plan (Malaya, Government, Committee to Investigate the Fishery, 1956). If implemented at the time, these recommendations would have averted the problems of subsequent years! We found the books by Stead and the Committee after completing field work, and it was somewhat unnerving to find that most of the specific needs of the fishermen had been realized as far back as 1956 and many in 1923! Clearly the situation has continued as before.

There have been changes since independence, however. Co-operatives have come in, but have been more effective at providing bureaucratic jobs than at providing better lives for the fishermen. Vast increases in boat size and power, and consequently in overfishing, have taken place. Siltation and pollution have vastly increased. The more worthwhile functions of the co-ops have partially offset these problems, and the research stations have done an amazing amount of excellent work in spite of support that would be inadequate to keep open even a small office in most of the developed world. The trend of catches has been steadily upward, but problems have also increased.

In looking over the past, one comes to the inescapable conclusion that fisheries have been neglected, and that much higher investment in research and development in this sector would have paid off handsomely (cf. Asian Development Bank 1969). In particular, protein supply for the poor would have been greatly increased (cf. FAO 1965 on this point and on aquaculture). Work with Anadara cockles (Pathansali n.d.), for instance, should have been applied at Port Weld - but no one followed through. Work with various carps and with Macrobrachium rosenbergii (a prawn) done in Malaysia is benefiting other countries, but not bringing much benefit to Malaysia; the United States is now farming M. rosenbergii and may well reap the benefits of work done in Penang. Why is this so? Why was the Melaka experiment station taken over by the Malaysian government from an independent (part British-sponsored) authority and then cut to a fraction of its former staff and support? Why have the co-operatives been allowed to decline? This is particularly interesting in view of the fact that Malaysia, unlike other southeast and south Asian countries with rural majorities, has a post-independence history of steady, rapid, widely based development, with spectacular strides in many fields - from urban development to oil-palm planting and rubber cultivation and technology. Malaysia has been the success story of the region (always excepting wholly-urban Singapore and oil-rich Brunei, both formerly part of the same British colony and succeeding for some of the same reasons). Yet it has not seen fit to invest much in fisheries or other protein production (for livestock, cf. Gosling 1958, and Malaysia, Government, Veterinary Division of Ministry of Agriculture and Co-operatives 1967). Development effort has been heavy and sustained in rubber, tin, and palm oil, and significant in regard to pineapples;

all these are export crops. Among non-export food products, though, almost all effort has gone into rice.

The reasons for this are not far to seek. Malaysia depends on the exports for foreign exchange and on the rice for subsistence. Rice is regarded by almost the entire population as the perfect food, and other foods are mere flavorings for it, as we noted in Part 1; thus government officials, who share much of this deep-rooted east Asian attitude and must in any case please their constituents, will regard rice as a key in development, but not other foods. Export crops - rubber, oil palm, sugar, pineapples, and all - are grown on huge plantations that are potent political and economic entities as well as main foreign exchange earners. They are also easy to modernize, and politically supportive of efforts in that direction. How much easier to work with them, and get hard foreign currency in return, than to work with a dispersed, ill-educated, restive, government-fearing group of fishermen! Even the smallholders who grow most rice and much rubber are at least primarily Malay and primarily pro-government.

Thus hard economics determines that the government should support research and development in the export crops sector, and local beliefs about rice determine the same for the basic crop. "Self-sufficiency in rice" was a goal that, in 1970-71, was treated as an almost religious mission, and only in 1971 were there voices pointing out to reasonably ready ears that it would really be better for all concerned to buy some rice - total self-sufficiency would produce occasional gluts that would drop prices too low for the farmer, and the land could better be used for higher-value crops that would produce money to buy much more rice from countries with

better rice-growing climates. There were, meanwhile, other factors working actively against the development of the fishery.

One was a sort of prejudice against the peasant and small-producer sector. This was seen most clearly in the matter of fruit, where Malaysian native fruits were neglected while exotic fruits were subjects for research and development, but it was true also in fisheries. Much more important, though, was the fact that the forward sectors of the fishery were in non-Malay hands. The Chinese did the trawling and the Chinese and (in Sarawak) the Ibans did the aquaculture. The government's stated intent to work with the Malays, to raise their levels of living to those of "other communities" (i.e. the Chinese, essentially), discouraged the government from working in Chinese-dominated sectors. The downplaying of aquaculture, for instance, was clearly for this reason. Yet the Malay fisheries, e.g. the rawai fishery of Penang (to name one based near Kampong Mee and with extremely high potential return for a very little research and development), were also neglected. Thus we must invoke other explanations. Part was the fact that fish were not very high-priced nor was there much market. Part was due to the belief that what the fishery needed was not so much technological research as cooperativization and marketing schemes. The government really had invested enormous amounts of time, money and effort in these - with the distinctly disappointing results that we have looked at before. Much of this was due to previous poor research. Right from the beginning, in British Malaya, too much stress had been placed on social and infrastructural problems and not enough on the low price of fish, the weak development of markets, and the need for research in fisheries. Yet the need for study of new gears, grounds and methods, and for aquaculture, had been mentioned in early studies.

One must come to the sad but inescapable conclusion that there is no way to explain completely the government's neglect of fisheries unless one acknowledges that the government, in general, had followed a policy of solid, active support for the rich and their revenue-spinners, the plantation crops and tin (as well as urban and industrial sectors), but disregard and neglect of the rural poor. Rice was increased because rich and poor alike wanted it; Malays were helped at the expense of Chinese because this was very popular with the Malay electorate, including the poor and rural Malays (though they tended to support opposition parties anyway, at that time, because of dislike of the government's support for the well-to-do). But measures that would have greatly helped the poor without much benefit to the rich, such as development of cheap yet protein and vitamin-rich foods, were very low in priority. (This policy was consistent, not limited to the food-producing sector of the economy.) Yet development of the fishery would have helped the Malays by improving their health (they lost many more workdays than other groups, because of ill health; Morgan 1971b) and would have helped the rich and poor alike if more export operations like the tuna-canning one in Penang or the shrimp-freezing plants on the mainland could have been developed. As it was, development all too often benefited the foreigner. In 1967, the most recent year of record but held typical and perhaps fairer in Malaysia than 1970-71, "60% of all profits accrued to foreign-owned firms; 70% in wholesaling; two-thirds in retailing, supposedly dominated by the Chinese. In plantations, almost all the largest and all the most profitable were in foreign hands. Thus British, Americans, Japanese, Singaporeans - almost everyone except Malaysians - benefited from Malaysia's development (Morgan

1971a; The British held the largest share then, followed by the much smaller but increasing shares held by American and Japanese multinationals).

Economists and development experts more conscious of the big picture than we are may find much grist in Malaysia for their mills that are currently grinding the multinationals exceeding fine. Radicals may find much to censure in the government's position re communities, multinationals, business interests, and the rural poor. It is not our intent in the present book to discuss these wider issues, but only to show how it came about that the fishery became the poor relation of the Malaysian economy. It is impossible to do this without at least touching on the extreme importance in Malaysia at that time of (on the one hand) developing the most profitable but most foreign-profiting sectors of the economy, and (on the other hand) developing the rural sector primarily by helping the Malays against the Chinese, and by supplying social devices like the co-operatives that might achieve this goal but did not improve the rural lot. (Similarly, there were many land-opening schemes but few schemes for improving yields or developing marketable crops on the usually poor-soiled and remote areas thus opened.) Many Malaysian politicians at the time advocated a policy of helping all the less well off, rather than helping the Malays specifically. Some charged that the latter course helped primarily rich Malays who needed little help, and left the poor, Malay or non-Malay, in a worsening poistion. Be that as it may, the lot of the fishermen (Malay and non-Malay) was indeed bad and was not being alleviated by the government's plans.

It was not that the government did nothing, or inhibited development; it was simply that the government's measures were not always well-calculated to help the situation. The co-operatives were a mammoth but ill-planned

attempt; they produced many benefits, but not enough to offset the effects of overfishing. The government's research was all to the good, but not enough. The benefits of other plans tended to be offset by the government's introduction of industry, landfill, pesticide use on farms, and the like - in fact, the government's more effective development schemes produced unwanted and unplanned side effects that offset much of the government's less effective ones in the fishery. The government had succeeded in stimulating industry, chemical use in agriculture, and the like; this led to pollution and runoff that damaged the fishery, and landfill that eliminated rich grounds. The net effect was to offset much of the benefits brought by research and co-operativization.

In the absence of plans based on cost-benefit accounting, one can only wonder what would be the benefits of reducing such unwanted side-effects of modernization. One can also do nothing but wonder about the return on providing good diet -including high-quality protein! - and good health care services to the villages of Malaysia, as advocated as early as 1923 (Stead 1923) for the fishermen, and about the possibilities of exporting high-quality fisheries products. The one thing that is certain is that a day of reckoning is coming, when the sea fish become totally inadequate to support the population, and Malaysia must turn to aquaculture or to high-priced imports - or let the ordinary people suffer the lack of protein.

15. Conclusions

1

A number of considerations, ranging from the lack of funds and time on our part to the hostility of one locally-based researcher, kept us from achieving any definitive, unquestionable results at Kampong Mee. However, we have absolutely no doubt that our conclusions as given above and below are correct. We have not only our own findings from over six months of continuous participant observation, but also the fully corroborative findings of many other researchers (only one was unhelpful !), with whom we discussed the world of Kampong Mee at exhaustive length while based in the field (see Acknowledgements in Preface). However, we want to present the final conclusions of our work not as a closed, formal document but as a sort of summary of the evolution of our ideas.

When we went to the field, we went to test the theories of cultural ecology then current in anthropology against each other. On one hand were the ethnoscientists, advocating a complete, linguistically sophisticated cultural grammar. On the other stood the various cultural materialists, the most extreme being Marvin Harris, who advocate that people do what they do because of materialist considerations - food, clothing and shelter being the end result of cultural behavior. These theories had been posed as antithetical. The ethnoscientists view, or are said to view, cultural ecology as being the study of people's mental maps or plans for behavior toward the ecosystem. The materialists view cultural ecology as the study of how cultures have worked themselves into a successful balance with the environment, or, failing that, how short-term material pressures have warped them out of it.

We found these to be limited in application at Kampong Mee - very limited indeed. Ethnoscientific techniques continued to serve us in the field, in studies of foods, food attitudes, medical beliefs, and above all fish names and fishing techniques. There is absolutely no substitute for ethnoscientific frame interviewing for getting at the meanings of words in such down-to-earth domains. We found cultural materialist "research strategies" (Harris 1968) invaluable in guiding our attention always to the ultimate payoffs of activities. Both bodies of theory were eminently useful to us; they were not mutually exclusive; they were not even in competition. Unfortunately, they also were not adequate - indeed, they were so far from adequacy that, in the end, neither has been more than mentioned in passing in this monograph.

The problem was that the lives of the fishermen and even of the powerful local leaders in Kampong Mee were not their own. For all we could study rational decision-making, cognitive maps, materialist strategies or energy flow, we could not understand anything that happened in Kampong Mee this way. The fate of the village was determined by forces outside their lives and outside their control, and not very accessible to us for study. These were: 1) the nature of the fish resource base (ideally studied by all schools of cultural ecology, but rarely well covered in practice, and not very well covered in this research either, we fear); 2) the demand structure of the economy (which we did study using prices and ethnoscientific techniques); 3) the policies of the government at national and state levels (which were determined by people unavailable to our study). The ways in which these outside forces intersected at Kampong Mee to produce the observed situation were more available through standard,

dull, old-fashioned economic statistic-collecting and participant-observation interviewing than through any more elaborate new technique. Thus we found the theories and their associated bodies of methodology to be useful to us in the field - supplying us with methods for finding out what name went with what fish, or for calculating calorie consumption and flow of energy - but of no use in seeking out ultimate explanations for the observed situation. (Naturally, any good cultural ecologist of any persuasion will get all relevant information - whether his "school" tells him to or not - and thus, say, Harold Conklin or Marvin Harris do much better than they say.) The trouble is that most theories in anthropology premise a closed community or at least a closed culture. We were in a situation where not only was there no closure, but a "community", hardly existed at all, and certainly was not solidary or gemeinschaftlich to any degree. People were not really Kampong Mee people, they were Penang or Perak Chinese, Kampong Mee or Telok Chantek Malays. They could not be discussed very meaningfully at any lower level, if one sought really effective explanations for their lot, because they were not so much free agents as pawns of the power politics of Malaysia, and sufferers from the contradiction between low effective demand for fish and high input costs for the fishery. Thus this ethnography has fallen into economic jargon and into using economic concepts - for which our training never prepared us. The moral is that anthropologists studying complex societies must know economics or perish. It is all very well to say that formal economies can't work for nonmonetized societies, but Kampong Mee was actually more completely monetized than almost any American community. Even the neighborly mutual aid, sharing and unreckoned good fellowship of an American suburb or

more typically Malaysian kampong was often replaced by marketplace transactions. In any case, even the most "substantive" of economic anthropologists have been forced to admit that at least the Marxian models are valid for all societies, if they are valid anywhere. As a matter of fact, we have found Marxian models very helpful in understanding the world of Kampong Mee, but have been eclectic, drawing heavily on the writings of Hayami and Ruttan (1971), Wharton (1968), Mellor (1966) and other American standards. Also, such works on fisheries economies as Christy and Scott (1965) have influenced us. This has, unfortunately, been no substitute for hard economic analysis. Such is almost impossible for the average anthropologist without special training, unless he has the good fortune to be married to an economist - as Hugh Gladwin was to Christine Gladwin at the time they did what must be the best study of fishing yet done in anthropology (Gladwin 1969 and personal communication), in cooperation with David Kronenfeld (personal communication) and Naomi Quinn (personal communication). (As all those "personal communications" show, this work has never been published, to the great loss of anthropology and economics.)

Being, thus, indifferent economists and somewhat manqué anthropologists, we can contribute items of value only in so far as we bring economics and anthropology together, using the one to supplement the other methodologically, and using the one to weed out the theories of the other on a more general level. The enormous literature on Malaysian economic development was of little use to us except as background reading, for little of it is concerned with fishing or, indeed, food production of any kind (except a little on Green Revolution changes in rice-growing). Fortunately, discussion

with people more knowledgeable in such things than we are - George Elliston and Milton Barnett are particularly expert in this field - allowed us to see the broader context of our work.

It is worth spelling out the ways in which economics and ecological anthropology fed back on each other.

1. Most important is the fact that most economists and certainly most economic development agents in Malaya believe resources to be infinite or at least infinitely substitutable. The ecologist's perception of the world as a "spaceship earth" of very limited and easily exhausted resources was simply nonexistent. Even the obvious realities of overfishing mean nothing to economists; there would always be new fishing grounds, and even if Malaya exhausted its fishery Malaysia could import fish from other regions. Similarly, soil erosion and pollution simply did not exist as problems among economic experts in Malaysia. This misperception of reality is slowly changing under the extreme stress of late-20th-century reality, but one still meets many economists, Marxian and capitalist, who believe it literally as an article of faith. Even the slighest acquaintance with ecology is enough to dispel this dream - especially in such economic subsystems as the fishery (for wild fish), in which total exhaustion of the resource base and subsequent collapse and ruin of the industry is common, often with ruinous results for thousands of people. Aquaculture could save us from this fate for the near future, but expanding population must make fish and all protein sources very scarce relative to need, in the near future. The present situation, in which aquaculture is little practiced and a huge percentage of southeast Asia's (and the world's) population relies on wild-caught fish for critical protein, is suicidal.

It has been brought about, in great measure, by the lack of meeting of minds between nutritionists and fisheries experts (on the ecological side) and economists.

2. The anthropologists' correspondingly fatal error is to believe that choices are simple, clearcut, and more or less determined by the environment (at least if one is a materialist). The whole process of weighing costs and benefits, so difficult, tricky, and constantly recurring for a fisherman, is reduced to something like "obviously the people needed to worship cows because the cow was valuable...." As in mathematics, all the interest and all the difficulty of the analysis is hidden in the "obviously" step. It is no accident that some of the best and most important analyses of decision-making in anthropology - such as the work of Firth (1966), Forman (1970), Davenport (1960), Nietschmann (1973) and the above-cited work of the Gladwins and associates - has been in studies of fishing. Fishermen must make complex decisions every day: where to fish, when to come in to port, what gears to use, and so on. They must make these decisions taking into account not only the facts of nature (storms, sharks and all) but also the facts of the market. Analysis of their decisions should go hand-in-hand with analyses of their marketing, which latter was actually the focus of much of the work of the Gladwin-Kronenfeld-Quinn group. Since we did not forward-link into marketing much, leaving that in the more capable hands of Ooi Sang-Kuang, we did not face these problems. The fishermen of Kampong Mee had their decisions constrained for them by the need to fish or perish, and by the rest of the factors detailed in the past six chapters.

3. Our real need, the real factor limiting the value of our findings, was more information on the way the political system impinged on the people of Kampong Mee - especially the sub rosa arrangements that were only partially obvious to us (and must, in the interests of protecting our friends, be suppressed in this book). It is patently obvious to everyone who works in small Asian villages, but apparently not to economic development experts and many anthropologists, that such villages are at the mercy of the powers-that-be in both legal and illegal fields. (As a matter of fact, many or most economists and anthropologists are well enough aware of the problem, but, like us, can neither collect really full data on it nor publish what they have got.) In Kampong Mee, this problem with the impinging government goes back long before Merdeka. It is extremely significant that the British themselves are having the same problems exactly that we found in Kampong Mee, as described in Newsweek by Nicholas C. Proffitt (1976). The whole set of policies established by the British, both by stressing some things and - perhaps more important - by neglecting others, has been criticized in its time, as noted in previous chapters. Since independence, Malaysia has continued the old policies, adding a new set that stresses even further than the British did the separateness, competition, and adversary relationship of the main ethnic groups, and strongly favoring the Malays - or rather some of them. In any case, the political situation cannot be ignored.

4. Last of all, economists and anthropologists have not learned each other's trades well. We needed to know what statistics to collect and how to process them. Economists need to know more about the actual workings of communities - who makes the key decisions, how these are implemented or

blocked, and how such variables as health, nutritional level, and local struggles for existence and subsistence confuse the issue. Anthropological techniques - basically, a combination of sophisticated interviewing and long-term observation including continued observation of key economic processes and transactions - should be combined with economic analyses. Such work has begun in many areas, but no one has published definitive studies backed with the data, as of this writing. The main costs of this are: economists do not always appreciate the rationality of peasant and other poorer people's choices, because they do not see all the factors of a situation; do not always see the licit and illicit political and social constraints on choices; and do not always appreciate the desperate need of such poorer people for more social equity and more income - together, as part of the same system of change.

It must be pointed out that the problems noted here have been greatly alleviated since 1971. Developers are far more conscious of anthropology and its findings, and anthropologists have "discovered" ecology and decision-making. The major needs today are for economists to learn in depth about the communities they wish to develop, and for anthropologists to learn sophisticated methods of managing data. (We are the first to admit that we did not know these when we were in the field, and thus do not have the data or the analyses needed.)

This may stand as sufficient comment on the "state of the arts." We can now turn to more substantive, or substantial, conclusions of research.

2

These fall more or less under three heads: contributions to cultural ecology, to economic development of Malaysia, and to knowledge of fisheries and food production development.

To begin with anthropology and cultural ecology: the finding that most interested us was the degree to which the Chinese culture of Kampong Mee was affected by the political and economic pressures to which the Chinese were subjected. Proud, but on the bottom of both ethnic and economic scales, the ordinary fishermen had lost much of what makes Chinese culture so distinctive and successful: wide networks of voluntary association, mutual aid and reciprocity; spectacular festivals and religious rites, with all the traditional arts and foods; good, tasty, nutritious diet; a general sense of happiness in spite of problems; and the entrepreneurial hope and effort that has made Chinese so successful elsewhere. In the Fukienese world from which their ancestors came, most of the ancestors had surely been too poor to have all of these things either, but there they could have and doubtless did take part in the community rituals with their color and splendor, eat a much better diet, and in general feel themselves part of an ongoing community where one could succeed if he could only get a shadow of a chance. They took advantage of a change of this kind by coming to southeast Asia. In Malaysia they began to adapt, to blend into Malay life, picking up clothing suited to the climate, and adapting curry styles and other culinary localisms. A new "nonya" culture began. But with the increasing economic "rationalization" of the twentieth century, the richer Chinese that had previously served as community organizers, culture-brokers, organizers of huge festivals and rites, standard-setters, and formers of the voluntary associations became increasingly alienated from the working-class Chinese. The rich were becoming westernized - Britishized, more accurately - and were even more able than they had previously been to oppress and exploit the poorer. Previously, they had been able to reap some benefits

by helping the community as a whole - if not always sincerely, at least in the spirit of fattening the goose so that it would be better for slaughtering (or even golden-egg-laying - a process less destructive to the goose, yet more beneficial to the rich). Also, the British policy of "divide and rule" drove the Malays and Chinese farther and farther apart. Cultural borrowing ceased and oppression began. After independence, the Malays increasingly consolidated their hold and developed a communally-based society in which Chinese were expected to make way for Malays - a process perhaps overdue in some ways, but bearing extremely heavily on those Chinese least able to bear it and least deserving of such attention. (The Chinese fishermen had never been notably better off than most Malays.) The situation in the sixties became increasingly more hopeless - the rich grew farther from the poor and the Malays grew farther from the Chinese; force replaced mobility. The culminating explosions in the riots and political actions of the late sixties were inevitable. Our field work came at the lowest point in Malaysia's history, the black aftermath of the riots, when a new and untried head of state, Tun Abdul Razak, had to hold the country together as best he could. Due to the incredible sensitiveness and political skill of Tun Razak - one of the statesmen of this century - the disaster was averted and Malaysia came once more to the path of reason and due process (at least by southeast Asian standards). But the economic inequalities and the sharp separation and competitiveness of the ethnic communities continues.

The breakup of the community under capitalist modernization and the ethnic and class politics of Malaysia left the fishermen of Kampong Mee without much hope and without much fun. Economic opportunity was limited,

and all the methods of self-advancement - especially the methods involving co-operation for mutual benefit, so beloved of southeast Asian Chinese - were abandoned. The co-op, organized so hopefully, was lost to rich input-suppliers and Malay bureaucrats. After that, why try? Better to wait for the vision of industrialization and better jobs on an assembly line. Over and above this rational assessment, there was the mood of fear and helplessness that followed on the 1969 riots and the sharply communalist Malay-decreed polities that followed (restrictions on Chinese acquiring Malay citizenship and an education were the worst worries). A large part of Kampong Mee believed that the Malays were planning genocide. Some of the writings and public pronouncements of leading Malay political figures were taken as evidence of this. In more organized and cohesive villages such as Sungei Ikan Mati, groups of Chinese trained in weapon use and martial arts; at Kampong Mee most people merely became paranoid. It is hard, at this remove, to recapture the mood that swept Kampong Mee that year. To the fears inspired by the political troubles of Malaysia were added the more direct and immanent fears inspired by the conflicts of the fishery, with its declining resource base, its dwindling future, and its viciously bloody battles. The effects of this mood of dread have been outlined in the first part of this book. They extended to all aspects of life: to demography, diet and nutrition, arts, religion, politics, planning and entrepreneurship, and every aspect of life. Expressive culture and organized community life suffered worst; the nuclear family suffered least, as people sought more and more the shelter and security of their own homes. (Thus kinship behavior was much like that described for other Min-speaking communities in Fukien and Taiwan, except that the larger groups declined in

importance, whereas religious life - for instance - differed in that it lacked all the big community festivals, the complex cosmology, the light and sound and brilliance and color known from southeast China.) The efforts of migration had begun this breakdown process, by drawing mostly on the poor and by scattering people widely, and everything in Malaysian life had exacerbated it.

It follows from this observation that anyone who studies the ecology of a community without regard to its struggles with the outside world is surely missing much. Kampong Mee was admittedly the extreme anthitesis of the "little community" of Redfield and other anthropologists; few communities are so completely subjected to the wider economy and society of their nations. But no community is isolated, and today no community can avoid the impingement of modern economic and political systems. In Kampong Mee the impingement was greater than usual, and thus more visible; but no community can avoid this impingement and its effects. We are not arguing merely that the anthropologists must pay the lip-service not always paid to the "outside world." We are arguing that every community in the world today has been and is being profoundly altered and stressed by the wider systems that increasingly subsume and incorporate such communities.[8] No longer can an anthropologist study any part of any person's life, anywhere in the world, without taking into account the effects of the wider society - and except in those last few refuges of "The Primitive," with which refuges anthropologists are so obsessively concerned, the effects will be profound.

In Kampong Mee most of the changes were not good, though one must note that infectious disease, maternal and childhood deaths, and the like were fairly well controlled. Elsewhere in the world the record may be better.

Of course in Kampong Mee the changes had brought nothing but good to the Tan family - catapulated from isolated, poor farmers to enormously rich landowning squires, and parlaying that into even greater success by acquiring higher education and modern-sector jobs for thier scions. The Tan gain was a loss for many fishermen, however; Kampong Mee was not a zero-sum game, but it was not very far from one. (Indeed, as the fishery diminished, it was becoming worse than one. The game had a diminishing sum of all possible wins.) Modernization opportunities in the area were steered to the Malays (who needed them) and the rich Chinese (who did not.) Elsewhere in Malaysia, the decline in the resource base is rarely so critical. The poorer Chinese fishermen of the central western coast were an especially unfortunate lot - uniquely bedevilled in a country otherwise quite successful. We are not claiming that the Chinese of Kampong Mee were typical Malaysians or typical villagers of the Third World. They were not. Many other villages in the world have the same combination of diminishing resource base and decreasing outside opportunity, but certainly not the majority - nor did Kampong Mee continue in this doldrum, for increasingly sensitive and competent governments at state and local level did pour development effort into the area (industrializing it) and the fishery (providing an excellent training facility at Kampong Mee). We happened, by sheer bad luck, to study a uniquely bedevilled area at a uniquely stressful time.

Yet in this there is clearly much that is relevant for the rest of the world. The things so obvious at Kampong Mee are present in other communities - probably in all - but in less severe and therefore less obvious form. The anthropologist would do well to watch for them.

Ecological, economic, and political pressures all combined and were all especially severe in that bloody year; but every group of people on earth must constantly contend with, and be affected by, such combined pressures. Everyone on earth finds their choices constrained by such extrenally imposed realities.

The corollaries of this study for the development of Malaysia are fairly obvious on the surface, and we do not intend to take them beyond the surface, since there are better qualified Malaysians who should be - and are - doing the development job. We do not intend to prescribe, especially given our ignorance of conditions in Malaysia outside of one village during a time of crisis. But we must stress one point: Malaysian development has paid too little attention to ecology. This is, in fact, due to their paying too much attention to quick GNP increase at any price - a problem universal in the world today, and well attacked in the enormous recent literature on development (see, especially, Schumacher 1973). GNA does not measure welfare, as everyone knows. In the peasant nations it usually does not even allow for the importance of subsistence cropping. The easiest way to increase GNP is thus to make people pay for what they once got free - wild goods, their own household production, and eventually even breathable air and drinkable water. (Malaysia has not gone that far yet, but soon it may catch up with Tokyo, where one must pay for oxygen to keep functioning in the street.) Quick GNP increase tends to be easily achieved, also by drawing down resources - and this includes ruining the resource base by treating renewable resources as if they were nonrenewable, and drawing them down on a one-time basis. Malaysia has treated its timber and fish and topsoil exactly as it has treated its tin - as wasting assets

to mine out. There was, indeed, rather more talk of "conservation" to tin deposits than of fish or forests. The justification for this sort of thing is the same as it was in 19th century America: there is always plenty more, and anyway by using so much now we get wealth we can invest in more profitable pursuits. The justification is incorrect. There is obviously not plenty more - of fish certainly, and of any other resource either - unless something is done to create it. Resources are substitutable up to a point, and resources can be created, invented, or discovered - but someone has to go to the trouble of doing it. As to the wealth argument: the wealth acquired by drawing down the fishery is exceedingly limited; it would pay better in the long run - and not a very long run - to conserve the stocks. Moreover, most of the wealth acquired has been reinvested in the fishery (poured down a rathole), blown in conspicuous consumption or much-needed recreation (whichever one prefers to call it), or destroyed in fights. No one has gotten the benefit of it; almost none of it has been reinvested in more promising lines of enterprise (though we have little data on what is, we have traced the fate of most of the wealth); and many people are vastly poorer for the loss of the fishery.

The most directly and obviously reasonable thing to do with this wealth would have been to invest it to develop more capital-intensive, modern sorts of fishing: deep-sea fishing, aquaculture and the like. We have shown why this did not happen: lack of government support; conflict and oppression locally and at higher levels; and above all the low return expected. Attempts at large-scale deep-sea trawling and at aquaculture were being made locally, though not at Kampong Mee, and we traced them down and interviewed the entrepreneurs or their managers. The obstacles to success were many, the return low; here as in all fishing, inputs were high and fish prices were not.

Under the circumstances, the fishermen may have been as rational in their investment policies as anyone else: they gambled their money away on illegal numbers rackets. As Arthur Young wrote of English farm-workers in the late 18th century: "For whom are they to be sober? For whom are they to save? Such are the questions for the parish. If I am diligent shall I have leave to build a cottage? If I am sober shall I have land for a cow? If I am frugal shall I have half-an-acre of potatoes? You offer no motives!.... Bring me another pot!" (Quoted in Salaman 1949:513). Things were not quite that bad in Kampong Mee - the fishermen could get fish and had secure rental of houses, and some could even own their boats - but the opportunities for investing their funds certainly did seem, on the whole, less promising than the hope of winning a lottery. And a few, like Arthur Young's laborers, found that what they could have of "the good life" was the only investment that seemed to produce a return. This phenomenon is by no means limited to Malaysian fishermen, and one wonders if the proponents of drawing down resources to get wealth for investment really want to benefit the liquor, gambling and related industries that much. (Cf. the behavior of American oil workers and oil executives in Alaska.)

In any case, the general point is clear: it is better for all concerned and in every way and in almost every case to conserve important renewable resources than to let them go to waste. With the fishery, the wild fish stocks should be managed on a sustained-yield basis for the good of the fishermen and the nation, and aquaculture should be pushed with all possible intensity.

The most important reason for this is not economic but another bit of ecology: Malaysia is running in danger of a protein shortage, and fish is the most obvious source of high-quality protein. Of this enough has been

said before. The gap between nutritionists and economists is particularly sad in the tropical countries, unbalanced and rapidly-worsening as their diets so often are.

The more general implications of this study for development are, by and large, the same as those for Malaysia. Conservation - in the sense of wise used here, but preservation for scientific research should not be forgotten - is not a luxury but an absolute necessity for survival or at least continued economic viability in the Third World. (The self-serving liars who maintain that conservation is a luxury and fit only for the rich nations are usually all too directly interested in getting the benefits from the resources - leaving the Third World poorer.) Planning and development should be carried out with an eye to conservation, management and in general good ecologics, not forgetting the nutrition of the workers, who can hardly produce much if they are protein-deficient. There are many humanitarian reasons for feeding people decently, just as there are many aesthetic reasons for conservation; this should not be taken to mean - as many developers take it - that there cannot be any hard-nosed economic reasons. Quite the reverse; man is so constituted that his best interests in the long run are often congruent, whether aesthetics, human kindness, or economics is taken into account. The conflicts come because people often try to maximize short-run advantage at the expense of all the long-term interests. ("Long-term" here means anything from four or five years on up; conservation measures taken in or by 1968 or so would have saved the fishery without costing anyone much, because the fishery was neither heavily overfished nor heavily overmanned then. But things were allowed to slide till the choices became agonizing - at which time it was hard to choose

the long-term strategy, since it would mean so much hardship in the short run, and for some people in both short and long terms. Such situations are all too typical.)

The way to set up a condition of development-with-wise-use is to remove all constraints that force people to act more foolishly than they know, and to encourage wise policies while discouraging obviously foolish ones. Over-direction is neither necessary nor beneficial; it cannot work, since people will poach, as the fishermen did when the government tried to stop resource overuse by outlawing night trawling and close-to-shore trawling. The government had boxed the fishermen in so that they could not do much but overdraw the fish, and its only solution was to box them in more. It should have made capital available for modernized fishing and aquaculture, and pushed aquaculture research and development, instead. The trawlermen of Port Weld, faced with the same situation as Kampong Mee's but more directly threatened by violence, were switching to aquaculture on their own initiative; government help would have reinforced this thoroughly desirable trend and caused it to spread, but instead the government's only recognition of this work was to protest that it did not involve Malays - surely a point against it, but hardly to be cured by bringing sanctions against the whole development, which in effect is what occurred. By and large, in Malaysia as everywhere else, the best way to manipulate a situation is to make it in the best interests of the people on the ground to do what is also in the best interests of everybody - to make the short-term and long-term interests coincide. This is not as difficult as it sounds, though it is not easy either. In the west Malaysia fishery, it would have to include rewards and sanctions controlling pollution from

mines and factories, for instance - a cost to the mines and factories, but worth reimbursing them for, since the benefits to society as a whole from a healthy fishery would be so great. A strong aquaculture would produce a large class of people whose immediate interests would lie in controlling pollution - thus making wise control strategies feasible, and eventually leading to conservation of resources now wasted as pollutants. Aquaculture, always, is the key - the only hope for the central west Malaysian coast. Without it, no agriculture or industry can ever replace the fishery, and the future of the fishing towns can only be to sink further and further into squalor and decay. Kampong Mee was lucky enough to be near an industrial area, but the other villages of the coast are not so lucky.

Policies of favoring big industry and plantations over small producers - and this was the policy of Malaysia in 1971 - are usually justified, or excused, by saying that the returns are bigger and more reliable. This has been questioned as a factuality, to say nothing of the humanitarian concerns. It seems clear - ecologically at least - that a country that allows its people to be put in danger of malnutrition and its renewable resources to be wasted cannot but suffer. At the very least, a malnourished workforce cannot serve well in the factories, not is it easy or safe to depend on imports of such things as fish and timber. A country rich in both these resources and in human resources should not be led astray by smooth-talking businessmen and development agents preaching the gospel of drawdown-for-investment.

We seem to be singling out Malaysia, but only because it was the site of this research. Malaysia has a far better record of conservation than many, if not most countries: excellent national parks; a heritage of good

forest reserve, a fine scientific infrastructure with excellent personnel, and other appurtenances, even to a small but active and very well-informed conservation movement. The forest reserv been allowed to go downhill, the Malacca aquaculture station was run down y t more, and sea life conservation (especially of turtles) remains a hard-fought but sadly unsuccessful issue, but such things - regrettably - occur everywhere. The United States, to name only our particular home base, has set a perfectly execrable example by wasting its resources in the most flagrant way, and producing many official pronouncements of the old lie that conservation is antithetical to development. The nation knows better - without intensive conservation activity our forests, topsoil and other basic resources would have been gone or almost gone by now, given wastage rates of the early part of this century. But conservation is unpopular now, as it has been at times before, and both our preaching and our example are almost the worst possible things for the rest of the world.

The more oppressive the political and social climate, the less chance there is of people making reasonable choices, because they are increasingly constrained. If the government is all-wise, it can centralize all choicemaking and never make mistakes; otherwise the choicemaking is best left to the people on the ground, and thus social and political equality and freedom become necessities of economic development. This can still be combined with a good deal of censorship and restriction of expression, as in China and Singapore, but at least in the productive sphere the actual workers must be maximally able to innovate on their own initiative - always given that the center does take a hand to ensure that the rewards favor strategies with long-term advantages. In the present case, where not much

could be done about the high inputs/low fish prices problem (though the price of fish did indeed rise after we left - along with the price of inputs), the center should have directed its efforts to finding cheap, successful methods of farming the waters of the central west coast. There was some effort in this direction - the Glugor research station was known world-wide, indeed - but much more could have been said.

Last of all, we plead for more knowledge and more data on primary production in such small communities as Kampong Mee. Our data are woefully inadequate; other data on such communities are scattered, and implications are often not traced. In particular, we need more basic economic data - we certainly wish for more of the basic statistics on catches, incomes and expenditures at Kampong Mee, and for more accurate statistics. But also there is a need for more studies of the effects of political and social tension and inequality on individual decision-making and entrepreneurship. The current conventional wisdom on this subject is that people make rational choices more or less in a vacuum, or else make "irrational" choices because they are too lazy or tradition-bound to be "rational." Our thesis is that the main factor influencing choice is the whole climate in which the choice is made, in which the demoralizing effects of fear and hopelessness must be taken into account, as well as illegal activities, government pressure both overt and covert, and the hard facts of who profits from a given course of action. (If the benefits of a new demanding or expensive technique go not to the peasant, but to the tax collector and shopkeeper, the peasant will not adopt the technique, and will seem "irrational.") Essentially all recent anthropological studies in this field agree that if peasants, fishermen or any others seem excessively lazy or tradition-bound, they are assessing the situation rationally enough, and finding that the risks are

high or the rewards will not stick to their fingers. The rewards need not always be monetary - the Chinese dream of making people work for social solidarity and social improvement rather than for individual profit is not unreasonable, if difficult to work - but there must be some hope of some benefit. A climate in which hope is hard to maintain will kill effort or channel it to other and often destructive ends. All this is trite enough, yet surprisingly often forgotten.

In any case, we call here for much further data, and much harder and more reliable data, on the specific ways in which impingement by the outside world constrains choices at the individual-producer level. Decision-making studies take too little account of the wider world, usually, while broad-guage studies neglect the hard calculus of the persons who must, in the end, make the key decisions and bear the final costs - the actual producers. Observation and study of their decision-making and of their total culture, including the expressive domains - art, religion and the rest - which often communicate their deep concerns, should be much more extensive and informed.

In the end, then, ecology cannot be separated from politics, economics, and society. Because the British invoked a successful strategy of divide and rule, the fish are running out in the tropical waters of Malaysia. These various factors meet in a nexus far more basic than the "cash nexus," the minds of the fishermen and fish buyers as they decide what to do. They must weigh considerations of ecology, politics, and nutrition (or at least getting enough food) as well as orthodox economic costs and benefits. Anthropologists and developers should do so as well, on their larger if less committed scale. Without such broad and informed decision-making, and without an atmosphere in which it can flourish, there is no hope. The world's resources will be squandered, and our children will starve.

Epilogue

As we finish this manuscript, the following appears in the Far Eastern Economic Review (June 11, 1976, pp. 105-106), under a Penang dateline, in two articles by Ho Kwon Ping. Kuala Juru is across the channel from Kampong Mee. Further comment is superfluous.

"Malaysia: The high cost of growth"

"Striving for higher agricultural output has always received high priority in Malaysia, and agricultural products now make up a third of exports. But a growing number of Malaysians are urging stricter controls on the pollution that is accompanying the processing of palm oil, rubber and other rural products...."

"Gloomy pall over Kuala Juru"

"The old people sit around chatting; the children play instead of going to school. The fishermen rarely put to sea in their sampans. Yet underlying the apparent life of ease in Kuala Juru is a pervading feeling of despair. There is little work because there is hardly any fish left for this 150-year-old fishing village 10 miles from the port of Butterworth

Although it has been slowly dying for several years, the plight of Kuala Juru only recently became the cause célèbre of Malaysian environmental groups and sympathisers such as Penang's Chief Minister, Lim Chong Eu.

In February, a villager complained to the Consumers Association of Penang that nearby markets refused to accept his fish because of the oily smell, and that the villagers' petitions to the authorities had brought no response.

The Consumers Association took up the case and sent fish and water samples for chemical analysis. The water samples contained suspended solids and oil and grease nine times above the official health limit. Chemicals were also found in the fish.

Since then, the Chief Minister has visited the village, given its 270 inhabitants emergency financial assistance, and publicised the village in a recent conference on the marine environment.

Kuala Juru's problems began in 1968, when the newly-built Tun Abdul Razak bridge across the Juru River on the Ipoh-Butterworth trunk road cut off upriver fishing. But it like a dam, the bridge also slowed the river flow, causing silt to be deposited along the river banks and mouth rather than out at sea.

In a few years, the river mouth became too shallow for the fishermen to take their boats out except at high tide.

In 1971, the 2,000 acre Prai Industrial Estate and Free Trade Zone began operations immediately north of the village. Thirty-nine factories producing synthetic textiles, industrial chemicals and gases, palm oil, insecticides, fertilisers, light metals, plastics and drugs all discharged their effluents into a tributary of the Juru River.

Within two years, there were dead fish floating on the water and the villagers, initially ebullient about the easy catches, complained about the stinking fish. Markets soon began to reject Juru's catches. Reduced to coastal fishing - where supplies are falling anyway - the fishermen's incomes dropped and their children stopped going to school.

Prai Industrial Estate is still not fully established: Some 12 factories are under construction and 26 are yet to be built. Yet no action has been taken on anti-pollution measures.

Kuala Juru's plight is representative of similar predicaments facing kampongs and fishing villages throughout Malaysia. And the problem looks like worsening: There are 34 industrial estates on the west coast, concentrated around Penang, Kuala Lumpur, Johore and Malacca. On the drawing boards are 18 more industrial estates, of which eight are planned for the still undeveloped east coast."

Appendix

Penang Hokkien Terms for Common and/or Economically Important Sea Life of the Batu Maung Area

Penang Hokkien is a poorly-stabilized dialect, deriving from the Hokkien (Southern Min) dialects of the south Fukien-north east Kwangtung coastal area. These dialects are more or less intermediate between standard Amoy Hokkien (and its immediate relatives) and the Teochiu-Swatow group of dialects; they share some features with the former, some with thelatter. They are quite close to, and easily mutually comprehensible to, both these groups. In Malaysia, the dialects have tended to fuse; Penang in particular displays this, since its Hokkien population is of long standing and no one dialect group is distinct. Hokkien speakers from Lam Ua: (Nam Wan Island, not far from Swatow, in Kwangtung) have converged toward the north, Henghua Hokkien (from just south of Amoy) toward the south, and so on; a mixture has more or less stabilized. To this have been added many Malay loanwords, now long accepted and sometimes not even recognized as loans. However, individuals vary in usage. "Fish" is usually hu (as in Teochiu, Lam Ua: and other southerly Hokkien areas) but often hi (as in Amoy and other northern parts of the Hokkien world). Squids are usually so thong (from Malay sotong), but sometimes bak thau (rustic Hokkien) or, especially if dried, iu (the Hokkien form of the standard Chinese root for squid - Mandarin yu). Eel may be mua (southerly Hokkien) or more rarely moa (northerly, "standard"). Some useful differences between the southward dialects and standard Amoy and Taiwan Hokkien may be noted: as above, /u/ may replace /i/ terminally; /u/ may replace /o/ medially or initially.

Also, /e/ and especially /e:/ may replace /i/ and /i:/ respectively. /Ui:/ almost always replaces vocalic /ng/: standard Amoy Taiwan png "rice" becomes pui:. (On the other hand, sng "ice" usually stays that way, and is rarely sui:.) Other sounds are heard, including some strange ones; hi "fish" is usually hu, but sometimes hɨ with a strange surd ɨ vocalically. Shrimp are usually he, as in standard Amoy, but sometimes ha as in Cantonese and (we think) Teochiu.

Given our poor ears and our lack of training in Hokkien dialectology, especially Teochiu (a closed book to us with its distinctive features and its Cantonese influence), we must admit that the following readings are exceedingly tentative and many are sure to be wrong or nonstandard. They approximate at least some Kampong Mee fishermen's prounciations, but we have variant readings - due to mishearing and individual differences - for most of them. Where we have characters and/or the Malay names, we can at least come to a fair accuracy of reading and a good accuracy of identification. Tones vary greatly; we have standardized to Amoy Hokkien tones in some cases, but tried usually to give usual Kampong Mee tones.

In regard to the classification: Like almost all folk classifications, including Cantonese fish classification (Anderson 1972, Berlin, Breedlove and Raven 1973), three levels are found: a broad one, a narrow "generic" one, and a specific one made up of taxa evolved by modifying generic names with adjectives to distinguish members of one Hokkien "genus." Several taxa are what was called "incertae sedis" in Anderson 1972 - single, free-standing, unrelated taxa. The worldwide abundance and importance of three-level-and-shorter taxonomies, including the free-standing taxa, has been thoughtfully discussed by Randall (1973). In Hokkien sea-life taxonomy

are usually things that are really quite distinctive, such as hau "horseshoe crab" - the Chinese recognize its distinctiveness, while English, foolishly, lumps it with the quite dissimilar crabs. Others are animals not worth bothering to classify in detail, because useless - so the fishermen explain it.

There is not much new to say about Penang Hokkien fish classification. It is very close to Cantonese, and the same things that apply to the latter apply to the former; the difference is usually no more than the different reading of the characters, except where a Malay word has replaced a Chinese root, and then the carryover is plain enough. Chinese, Malay and scientific fish nomenclatures map onto each other easily, especially at the species level. Each species of fish and other sea life have a characteristic ecology and behavior pattern; fishermen must know the ecology and behavior of each; thus they are forced to recognize the viological taxa, and they usually name them. Differences between Chinese and scientific nomenclatures will appear below. Chinese taxonomic terms are usually binomial and speakers always so use them - making monosyllabic names bisyllabic by adding hái - "sea" - à "little," or the like. This is indicated here in as needed.

Malay names are mapped onto scientific names via the wonderfully thorough, complete and accurate list in Scott (1959:150-164), except as local usage differs. Batu Maung usage - Hokkien or Malay - has always been followed when we know it to differ from Scott. We have not bothered to give Mandarin or - usually - Amoy Hokkien readings, as scholars will use the characters when available, and will easily translate from Penang to Amoy Hokkien otherwise.

We will begin with the few names of "higher" vertebrates found; then proceed to give taxa in biological order of the "beginners." We fall back on a biological ordering because there is no ordering of the higher taxa in the Hokkien system. Names are alphabetized within wide taxa.

chúa 蛇 'snakes'

hai chua 海 ~ 'sea snakes." Sea snakes are uncommon but well known. They present a minor hazard; they are peaceable enough to be picked up and slung back in the water. In spite of their use in Chinese folk medicine, they are not usually kept; the hazard of dealing with them on shipboard is too great.

ciàu 鳥 'birds'

hài ciau 海 ~ 'sea birds.' Collective for gulls, terns, etc. Of no importance or interest to the fishermen.

hīng 鷹 'hawk, eagle.' A pair of White-bellied Sea-eagles (Haliaeetus leucogaster) lived at Kampong Mee, feeding on fish dropped as the boats came in. The term when used, usually referred to them. It also covered kites, hawks, etc.

Lower forms of life.

téi cui 一水 ' - water' Phosphorescence.

thē —?— 'jellyfish.' Ordinary binomial for reference;

hài thē 海 ~ 'sea jellyfish.' Large ones are

tūa thē 大 ~ 'large jellyfish.'

Hài sia: 海參 'sea ginseng; = sea cucumber.' Amoy: sīm. or siang. Also called - some kinds, at least - hài huân cú 海薯 'sea sweet-potato' from the shape; Malay ubi laut 'sea yam.'

hài cao ciu: 海 ~~ - - (no chars.) 'sea - - .' A dirty grayish sea-worm.

thàng 蟲 'worms.' A hairy sea-worm, with irritating bristles, is

mó thang 毛 ~ 'hairy worm.'

hài chi: 海星 'seastar." Starfish. Not used but common in trawl hauls. Usually che: ~ in Penang Hokkien. Also gò chiào 五手 'five - (fingered) hand,' gò cài: 五指 'five finger.'

sue: jiu -?- / -?- 'sea urchin.' Also chí kíu 刺球 'thorny ball.'

gío-à 蛤仔 'small clam.' Small hard clam. Gathered from mud. Very "cooling."

hám 蜯 'cockle.' Anadara spp., the exceedingly common small cockle raised commercially from tiny ones at Port Weld. A widely eaten food in Malaysia; popular with Teochiu. Said to be "cooling" in medical system.

lé 螺 'snail.' Various kinds, including:

bag le 肉 ~ 'meat snail, pork snail' (probably tr. from Malay

siput babi 'pig snail'; the meat is chewy and porklike).

Bailer shell. Also called chǒu suān. -?-

hûa - ? - lé ~ 'bullseye snail.'

lé gù -?- 'fig snail.'

Many other small snails are known; we have heard names tentatively advanced and of obscure scope of reference. No snails are used much except for the bailer shell, used mostly as - naturally enough - a bailer.

cui 鰂 'squid.' Squid go under various aliases. This seems to be a common term. The standard Amoy Hokkien term cíu 'squid' (binome: cíu hú ~ ~ 'squid fish') is used for octopi and/or squids collectively.

The term iu 魷 (iu hu), cognate with Cantonese iau, is heard, especially for dried squid as opposed to caught ones. It is a south Chinese regionalism, without a character; it is written with 犬, 魷 or 觸. Most common of all Penang Hokkien words for squid, however - and a word used also for octopus and cuttlefish - is a loanword from the Malay sotong 'squid, cuttlefish.' It is pronounced variously; the changes are rung on sō thòng, sĭu thòng, sũa thòng, etc. It is phonetically written 小東, because these characters (meaning 'small east') are pronounced siu tung in Cantonese. Other transcriptions are also found.

bâk thau 墨頭 'ink head.' Cuttlefish. Occasionally bak is nasalized to mâk.

háu 蝦蛄 'horseshoe crab.' Rare. (Binome: hai hau 海蛄 'sea horseshoe-crab.')

hé 蝦 'shrimps, prawns.' Malay udang. Many varieties; spiny lobster is liũng hé 龍 ~ 'dragon prawn,' mantis shrimp is he kŏ ~ 姑 'shrimp woman,' mud-lobster is hé kŏ thau ~姑頭 'mantis shrimp head' (it has a big head). hé a ~ 仔 'small shrimp' is any small one. Among the many kinds of hé recognized are:

chê: khâk he 青殼 ~ 'green shell shrimp.' (Amoy chi: 'green' is always chê: in Penang.)

he po ~ 婆 'old woman shrimp.'

ciam he 尖 ~ 'pointed shrimp.'

hue he 花 ~ 'spotted shrimp.'

ke liung he 加龍 ~ 'kelong shrimp,' from its frequency in the Malay state trap (kelong).

ô he 烏 ~ 'black shrimp.'

pêq he 白 ~ 'white shrimp.'

suá he 沙 ~ 'sand shrimp.'

tŭa he 大 ~ 'big shrimp.' Any big one, notably large o he.

úi: he 黃 ~ 'yellow shrimp.' (Standard Amoy Hokkien ng; as usual, vocalic /ng/ replaced by /ui:/ in Penang Hokkien.

ui: ki he 黃枝 ~ 'yellow branch shrimp.

hái 蟹 or cím 蟳 'crab.' Certain varieties; other varieties are chhîq. -?- We confess complete defeat in trying to understand what name goes with what animal. Within the terms, crabs are called according to color. Small spider crabs are hai ti tu 海蜘蛛 'sea spider.'

Fish

General terms for miscellaneous items, too small to bother sorting:

cắp hú 什魚 'miscellaneous fish; if saleable fish;

cau hu 臭 ~ 'rotten fish' or, better, 'fertilizer fish': assorted nearly worthless sea life for making into fish-meal fertilizer.

áng hú 紅魚 ~ 'red fish.' Red snapper, Lutjanus spp. Considered too coarse to be a good fish by the Chinese; sels for a low price, retailing at M 50¢-70¢ in 1971. Very common in rocky waters offshore; good potential for expansion of fishery if better market and better knowledge of grounds permitted.

áng zŏu hú 紅鰽 ~ 'red snapper fish.' Grayer or yellower varieties of red snapper (Lutjanus spp. and rels.), as opposed to the all-red ones, áng hú. Malay Ikan jene hak.

ang̍ ko͘ lèi (ang ku li, etc.) 紅姑鯉 'red woman carp.' Threadfin bream, Nemipterus spp. (Malay kerisi). A fish name in Cantonese is pronounced almost exactly the same, ang ko lei ~ 'parrot carp; parrotfish.' This appears to be pure coincidence, however. There is certainly no resemblance between threadfin bream and parrotfish.

ang̍ nî hú 紅姨 ~ 'red girl fish.' Red mullet or goatfish, Upeneus spp. (Malay biji nangka 'jakfruit seed'). Scott gives the Malay name as applying also to the threadfin snapper Lutjanus nematophorus. The Chinese name does not seem to be so extended.

bâ chìq (bâq chīq?) -?- A small carangoid, seen once; name uncertain.

bāq hú 肉 ~ 'meat fish; pork fish.' A carangoid, caught commonly by the pelagic purse-seiners, but never by the trawlers. It accompanies the schools of kembong. The name derives from the quality of the meat - chewy and oily, like pork. By far the best fish of Kampong Mee to our occidental palates, it was loathed by the Chinese, who prefer more tender, delicate, bland fish. It was thus worth only 5¢/kati to 20¢ (depending on season). The Malay name was given as pelata minyak. This is not in Scott, nor could anyone we spoke to identify this fish for us.

bè kâ 馬力 'horse increase.' Tenggiri, Scomberomorus spp., horse-mackerels or Spanish mackerels. Rare on the west coast, common on the east (see Firth 1966). Not liked by the Chinese, who will not usually eat it, because of its dark, oily, strong-flavored flesh. The strange name is so written and pronounced in Malaysian Hokkine; it is a dialect version of the standard Hokkien name be kau 馬鮫 using the standard Chinese root for horse-mackerel (M chiao[1], C kaau). Embree (1973:10) gives both pronounciations, and writes the character 鮫, which we assume to be a Taiwanism.

bok kheng -?- Unidentified; a small silvery fish.

bok khok 木擊 'wood-knocking fish.' Gizzard shad, Dorosoma chacunda Malay kebasi).

cha hu 柴 ~ 'firewood fish.' Tunas (Germo, Euthynnus and related genera). Name a translation-loan from Malay ikan kayu 'wood fish.' Not caught at Kampong Mee, but wastes from the tuna cannery in Georgetown are brought to Kampong Mee to be made into fertilizer. The cannery has its fertilizer plant at Kampong Mee to avoid polluting Georgetown; Kampong Mee is polluted instead.

che: lan 青鱗 'green scale.' Sardines and/or anchovies; Malay tamban 'sardine'. (Clupea supp., Dussumieria spp., fide Scott; we think the Chinese name may be used even more widely).

chi hu 刺 ~ 'thorn fish.' Spiny catfish of various species. Malay ikan duri, ikan otek, etc. Includes o teq, q.v.

chiq khak 市殼 'chiq shell' (characters apparently used to transcribe sounds of a word, not for meaning). A sardine, Clupea macrura (and relatives); Malay terubok.

chiu: hu 鯧 ~ 'pomfret.' Malay bawal. Dial. var. chio:. Common one is the white pomfret, peq chiu:, Pampus argenteus (Malay bawal puteh). Black pomfret o chiu:, 烏 ~ Parastromateus niger (Bawal hitam), is also fairly common. Both are being fished out rapidly, however. The white pomfret is the favorite Chinese fish of Penang, commanding a high price, M$6.00-$9.00/kati depending on size. Hue chiu: 花 ~ 'spotted pomfret' is Drepane punctatus, Malay dain baharu.

ci a 止仔 'little anchovey.' (The first character, meaning "only," is "only" used for the sound.) Small mullets (Mugil spp.), Malay kedera.

ciâm à hu 尖仔～ 'little sharp-point fish.' Sting rays.

ciâm cú 尖薯～ 'sharp (-spined) potato.' A kind of spiny catfish.

ciŏuq thâu hú 石頭～ 'stonehead fish,' or 'stone fish.' Also ciŏuq thâu ló ～爐 'stone stove.' Grunts Pomadasys hasta and probably other spp.; Malay gerut-gerut.

giēng-ciou hú 莒蕉～ 'bananafish,' alias bĭng jīo hu 明鮫 'bright ray fish' (apparently a corruption of the former name). Caranx armatus, Malay rambai.

gîn hú 銀～ 'silver fish.' A small silvery fish; unidentified.

hāng hú 赤～ 'ray fish.' Rays and skates, Malay ikan pari. Kinds include pĭ: hāng 扁～ 'sided (i.e. flat) ray' and o baq hang 烏肉～ 'black-fleshed ray.' The former is worth only 20-25¢, the latter about 30¢ per kati.

hò hú 虎～ 'tiger fish.' Scorpionfishes, Scorpaenidae; Malay lepu. Embree (1973:89) gives the term.

hu lâm à 魚南仔 'gelama.' Jewfish, croakers (Pseudosciaenia spp. and relatives). Malay gelama, of which the Hokkien is a straight borrowing, the characters being used as rough phonetics.

kâ kàu hu 加九 'add nine fish.' A kind of sole (one of those called sa-belah in Malay). The name appears to be a transcription of some non-Chinese word. Unidentified.

kâ saî 加西 'kasai.' Anchovies, various spp. (Thrissocles spp., etc.). Malay kasai (cf. kasi-kasi, apparently var. of same term), of which the Penang Hokkien is simply a loan, the characters being arbitrary.

kâm bông 甘望 'kembong.' Rastrelliger kanagurta, the Malay kembong or temenong, a pelagic mackerel. The commonest fish landed at Kampong Mee;

pelagic; caught almost exclusively by the purse-seiners. Worth only a few cents a kati, at least in season. Very popular with Malays and Indians for curry, and used by Chinese for curry also, though the Chinese do not like it especially. The Chinese characters used for ir are, of course, quite arbitrary, merely reproducing approximately the sound of the Malay name: by accidental poetry, they mean "sweet hope."

kâng hú 江～ 'river fish.' Ikan bilis, Stolephorus spp. Boiled, dried, and eaten with curry, this is one of the most popular and nourishing Malay foods, popular with Chinese when the latter eat Malay style. Not caught at Kampong Mee, but common up the coast.

kàu bù hú 狗母～ 'dog's mother fish.' A cylindrical, blunt-headed, brown fish. The Malays call it mengkarong, which Scott (1959:157) gives as a term for Theraponidae, or more specifically ikan ubi 'yam fish' or butu Hindu 'Hindu's penis' - the latter a humorous and scoffing name, but predictably commonly used. Used for several species of fish in Amoy Hokkien; see Embree 1973:126. The butu Hindu is quite common at Kampong Mee; it brings a low price.

kâu hu 猴～ 'monkey fish.' Large groupers, Epinephalus spp. and relatives, Malay kerapu. The Hokkien may be derived from the Malay; one would expect ciŏuq pân 石斑 , as in standard Hokkien (Embree 1973:32), with cognates in other Chinese languages. Sometimes the Malaysian term is ciŏuq kâu 石猴 , which is closer. Groupers are rare at Kampong Mee, but command a good price.

kē lîng à hú 吉嚨仔～ 'Tamil fish.' Name derives from "Kling," an old term for south Indians. Serlumbu (Malay), Lactarius lactarius.

kêk kêk 𣍐𣍐 'kikek.' Name is loan from Malay kikek or kerêk, Leiognathus spp. Pronunciation varies: kǐ kêk, kěk kêk, jǐ kêk, kî kêq, etc., etc. Fairly common fish.

kía: hú 鏡 'mirror fish.' Several silvery, iridescent fish are collected under this name. Scott (1959:152) gives the Malay chermin - of which kia: is a translation - for) Caranx carangus and Alectis indica. At Kampong Mee it is also used for small John Dory - and pomfret - like fishes of all sorts.

kîm kò hu 金鼓 ~ 'golden drum fish.' Malay ketang; Scatophagus argus.

kim sua; hu 金線 'goldenthread fish.' Malay given as biji nangka, which would make it an Upeneus. It may however be a Nemipterus; it looks like one, and the English name of Nemipterus is "goldenthread."

kúi à hú 鬼仔~ 'little ghost fish.' Puffers; Malay buntal: Tetraodon spp. and relatives. Embree (1973:149) gives kúi hí for puffers.

liōng bûn 良文 'good markings: very marked.' Guitarfish, Rhinobatidae. Malay yu keminyan (and variants). Rarely caught.

lū kāng 魯江 'lukang.' A catfish with a square-ended tail; name said to be Malay; not in Scott.

múa 鰻 'eel.' Malay malong, collective for eels, esp. conger eels. ō múa 烏~ 'dark eel,' uí: mua 黃~ 'yellow eel,' and other color-names are used.

ngē buì 硬尾 'hard tail.' Megalaspis cordyla, Milay chencharu. buì 'tail' is bè in Amoy Hokkien.

ngo hu, ngo a hu (no char. for ngo) -?- 仔~ 'threadfin.' Senangin in Malay; Polynemus spp.; Embree (1973:186) gives "four-rayed threadfin, Eleuthronema tetradactylum."

ō tēq 烏土𠯿 'otek.' Malay otek; a catfish, Tachysurus otik.

pâ lâng hú (no chars.) 'parang.' Dorab, the Malay parang-parang, Chirocentrus dorab.

pěq tŭa 白帶 'white ribbon.' Ribbonfish, Trichiurus spp. Malay ikan timah.

pěq zóu hú 白鰽~ 'white snapper.' Malay given as gugut (var. of gerut?) Unidentified; looks like a grunt or croaker.

phâq thîq pòu 打鉄漙 'hits iron stingy-one.' Malay pechah periok, which may well be the source of the odd name. Lobotes surinamensis or Scolopsis vosmeri (Scott 1959:158).

pì: hú 扁~ 'sided (i.e. flat) fish.' Soles and flounders; Malay sa-belah and lidah. Given by Embree (1973:202) for various species of flatfish.

pŏu thaú hú 斧頭~ 'axehead fish.' Gerres spp., Malay kapas.

sâi tôu 西頭 'west knife.' Chirocentrus dorab; Malay parang-parang. Cf. pâ lâng hú. The present, Chinese, term is commoner. We have heard it used for a trigger fish as well as for the dorab.

sâ: khî 三牙 'three tooth.' A Hokkien name for certain croakers of the Pseudosciaenia group, but essentially replaced in Penang Hokkien by the loan-word hú lám à.

sîk lât 色辣 'selah.' Malay pelata selah, a scad; Selar sp. (Is the scientific name too from the Malay?)

sîng à hú 成仔~ 'singha fish.' Various marine catfish (Malay ikan duri), feared, disliked and avoided because of spines. Not used.

sîo phăq hù 相打~ 'fighting fish.' Siamese fighting fish, also, more relevantly, the sea robin. Not used; thrown overboard if caught.

sûa hú 沙～ 'sand fish; shark fish.' Sharks (Malay yu). Many kinds recognized, including pĕq sûa 白～ 'white shark' (hammerheads); chê: sûa 青～ "green or gray shark" (white shark and others); sua kiam ～劍 'shark (with) sword' (sawfish Pristis cuspidatus, Malay yu parang - whence this name, by translation; Amoy Hokkien is kú hún 鋸鱘 (Embree 1973:149).

sûa bùe 沙尾 'shark tail.' Catfish-eels, Plotosus-Paraplotosus group, the Malay sembilang. Most catfish of this group are usually called thó sât.

sûa cŭi: 沙纘 "shark imitator.' Whiting, Sillago spp., Malay bolos-bolos.

tãq à hu 達仔～ "taka fish.' A triggerfish, Malay lemu or lumu; unidentified; not in Scott.

têk sõu 竹木束 'bamboo comb.' Barracudas, Sphyraena spp.; Malay alu-alu (large) or kachang-kachang (small).

thó liŭng 土龍 'ground dragon.' An eel, apparently a moray, Malay malong tanah.

thó sât 塘塞 'catfish.' Sembilang, esp. sembilang karang, catfish of the Plotosus-Paraplotosus group. Cordially hated by the fishermen, and thrown overboard when caught - which, of course, selects for them, biologically. The name may mean "pond stopper" or perhaps "passer of the pond frontiers"; it originally applied to the walking catfish Clarias (Embree 1973:287), which can migrate between ponds.

tũa mâk kũ hú 大目古～ 'big-eyed old fish.' Third word and character obscure; probably wrong here, but so given in Kampong Mee. Also given as khang, written 孔 Malay beliat mata; not in Scott; unidentified.

úi: bùi 黃尾 'yellow tail.' A yellow-tailed scad, Malay pelata; Selar or Selaroides.

Tone Marks and Characters for Chinese Terms, Except Fish Names

(Mandarin, Hokkien and Cantonese)

a-kôu (H)何舅

a-pêq (H)何伯

a-tī (H)何弟

bī (H) denasalized from mi.

bǐ 米 bǐ hùn 米分

chia^{1} (M) (M kā) 家

còk (H)族

dáng-kī (H)童乩

feng-shui (M)風水

hé kôu (H)蝦蛄

hía:-tī (H)只弟

hó thâu bāng (H)虎頭綁

hōng-cùi (H)風水

hui^{4} (M; H huē) 會

khěi (H)契

kông (H)公

kuá : (H)寒

kúa: zuâq pē: (H; pē: is Penang Hokkien - Amoy = pī:)寒熱病

kùe (H)鬼

kui 鬼

kung^{1}(M)公

kuo^{2}-yü^{3} (M; H kók-uē) 國語

lām-iú: (H)南洋

liěng (H)冷

mī (H) 麵

mou saan (C)巫山

mou si (C)巫師

p'eng^{2}-yu^{3} (M; H pieñg-iû) 朋友

sâi kông (H)士公

shen^{1} (M; H sín) 神

siŏu-tī (H)小弟

thaú kê (H)頭家

tiùq kàm (H)得儉

tuā bāng (H)大綁

tūa pêq kông (H)大伯公

t'u^{3} ti^{4} (M)土地

zuâq (H)熱

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