Orokaiva production and change
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11

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Janice Newton

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Abstract

The central task of this study was to identify and set out the basic structures of economic organization in Koropata 2, an Orokaivan village in Papua New Guinea. Through the understanding of these the links with the outside capitalist economy can be gauged more effectively.

Working from the assumption that production is of prime importance, the study analyses the impact of colonialism, the organization of subsistence and cash production, and the relevance of life-crisis ceremonies. Two major patterns of economic activity emerge: one based on regular household activities and the other on group co-operation for irregular activities. These activities are found to be underpinned by a particular sexual division of labour. These basic characteristics of Orokaivan life-style have been able to survive through certain historical circumstances and because of the wide limits imposed by colonialism and capitalism.
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Preface and acknowledgments

Evidence for this study was collected during two main periods of fieldwork among the Orokaiva people in Koropata 2 village, Northern Province, Papua New Guinea from October 1977 to May 1978, from May to August 1979 and during a shorter visit in August 1982. As almost all households contained a person speaking English, this language was the main medium of communication. Hiri Motu, Pidgin and some Orokaiva language were employed occasionally. To supplement field observation general historical references, government files and archival material from Port Moresby, Papua New Guinea, Canberra, Melbourne and Brighton, Victoria were used to place Koropata in time and historical context in Papua New Guinea.

The following people have gone out of their way to help me in my research and in the writing of the thesis on which this monograph is based. Koropata 2 villagers warmly welcomed me as a guest for both field trips. Special thanks should go to Stanton Haiva, Stafford Ameme, Olive and Napoleon Simbuga and Stephenson Kareka and family. These people helped to make my physical conditions in the village pleasant and, with every Koropatan household, co-operated enthusiastically in the relation of histories and legends and information giving of every sort. Substantial oral evidence was provided by Luke Harapa (Waseta), Thomas Ake, Flora Amaupa, Apolis Egahun, Stanton and Timothy Haiva, Ambrose Hove, Jackson Jombure, Stephenson Kareka, Joshua Keire and Maxwell Karonga (Koropata 2).

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Melbourne, 1984

J.N.
A note on currency

All pounds £ and dollars $ referred to after 1906 refer to Australian currency. Before 1906 pounds are in UK £ sterling. In April 1975 the Papua New Guinean Government established its own currency of 'kina' and 'toea' (100 toea = 1 kina). At the time of research the value of the kina was approximately $1.25.

A note on Northern (Oro) Province

The Orokaiva Area was included in Northern Division, divided into Buna and Kokoda Districts until 1909. The same area was known as Kumusi Division until 1920, then Northern Division again until 1951 when it became Northern District. On self-government and independence in 1973-75 Northern District became Northern Province. Even more recently the Province has been renamed Oro Province. I have referred to the area as Northern Province throughout most of the contemporary analysis as this is what it was known as during the main period of fieldwork.
Chapter 1

Introduction

Much of the economic anthropology of Melanesia focuses on exchange systems, trade, the circulation of valuables and the use of the post-contact medium, money (see Salisbury 1962; Pospisil 1963, 1968, 1972; Epstein 1968). While adequate as descriptive analyses of certain sectors of the economy, such studies fail to address problems of changes in basic structures following the impact of colonialism and capitalism. The major purpose of this monograph is to identify and set out the basic structures of a village economy in such a way that, through study of them, change since colonization can be analysed.

Although theoretical debate has substantially marked and conceivably impoverished the formalist and substantivist schools of economic anthropology, the empirical analyses by both schools have made valuable contributions to economic anthropology (Goodfellow 1939; Robbins 1932 (1968); Burling 1968; Polanyi 1968a; Dalton 1968). Substantivists explore types of socially embedded economic exchange systems and formalists apply maximization theory, taking care to incorporate social variables (see Edel 1969; Prattis 1973). Dowling (1979) claims that the primary assumptions of formal economics, those of diminishing utility and self-interest, are appropriate to all societies but that secondary and tertiary assumptions like monetary theory can obscure differences between capitalist and traditional societies. He believes that some of the 'substantive' theoretical models could profitably be applied to all societies (Dowling 1979:300). Before looking at an example of such a theory it is useful to set out the work of a few formalist economic anthropologists who have had considerable influence in modern studies of Melanesia (see Connell 1979; Amarshi, Good and Mortimer 1979).

Goodfellow, seen as a father of formalist economic anthropology, claimed that it was useful to look at aspects or rudimentary forms of western economic institutions in traditional society but that it was more useful to look at the overall functioning of economic behaviour (1939:8). Formalist economic anthropology in Melanesia, however, has concentrated on the former. There has been a concern to show institutional similarity between traditional and modern economic institutions.
Pospisil (1963, 1968, 1972) in his work on the Kapauku of West Irian found evidence of nearly all modern economic institutions: true money, savings, speculations, market, paid labour and leased contracts (1968:381-92). The result was an emphasis on capitalist tendencies and a playing down of reciprocity and conspicuous generosity. T.S. Epstein (1964, 1968, 1970) developed her study of the Tolai people of New Britain, Papua New Guinea, along similar lines. She held that institutional similarity in capital, savings and entrepreneurship facilitated economic development (1975-76:41). 'The Tolai big man, like a true capitalist invested his resources in order to increase his wealth' (1968:28). When she admitted that new institutions were needed among the Tolai to follow through the initial Western economic success aided by traditional institutions predisposed to capitalism, Epstein revealed a basic fallacy in this type of analysis. Fundamental differences between Western capitalism and traditional society can be obscured when institutional similarity is stressed. Superficial similarities may be founded on radically different structures and would not therefore be usefully analysed with a formal economic method developed for Western monetary society. On the other hand there has been a case presented for wider application of a model developed for traditional societies.

Several anthropologists have noted the potential for the application of Sahlin's (1972) typology of primitive exchange to modern society (e.g. Jayawardena 1976:242-3; Dowling 1979:300). Sahlin constructs a typology of reciprocity, generalized, balanced and negative, which can be placed on a continuum of social distance. Generalized reciprocity implies only long-term repayment and generally occurs within the nuclear family or household. It can however be extended to the social circle beyond the household when the giver has higher rank or greater wealth and when the gift is food. Sahlin believes that there is something in the nature of food which encourages a sharing of it all over the world. Balanced reciprocity implies an equal return within a measurable period of time and applies not only to households associated with markets but also between larger more distant units in uncentralized, segmentary societies where, for example, feast-giving may be a peace-keeping institution. Negative reciprocity occurs between strangers and those people considered most distant on the social scale. It is characterized by market haggling and even theft (Sahlins 1972:185-275).

1 Finney (1968:406) also claims that success by Gorokan New Guinean Highlanders as business leaders can be attributed to a simple transfer of the traditional pattern of individual achievement to the modern context.

2 Dowling (1979:298) criticized this application of tertiary assumptions though he claims formalist primary assumptions are universally applicable.
Although he claims no relevance to modern society Sahlins' reciprocity continuum does seem to imply that modern exchange in the market economy falls clearly on the negative pole. In fact his description of negative reciprocity, despite its moral overtones, fits well into the maximization model of a capitalist entrepreneur, where scarce resources are used to obtain maximum benefit (usually monetary). Those people who exchange within the terms of negative reciprocity are beyond the pale of kinship and social relations so all effort is made to make short-term gains, often with no regard to the continuation of the economic relation. In the nuclear families, communities and clubs of modern society too, there is evidence of social distance affecting exchange relations in the opposite direction.3 Sahlins' typology could well be used as an indicator of social change towards the Western capitalist type economy. As the occasions of negative reciprocity increase and generalized and balanced reciprocity are restricted within a tighter, closer social field, the observer can expect household alienation and could apply formal economic theory to the dominant sphere of negative reciprocity.4

Such a form of analysis helps to order and classify description but does not reveal the actual processes involved in the change from a traditional economy to a capitalist economy. It brings us back to one of the main problems of economic anthropology. Although the ethnographic work of both formalists and substantivists is thorough and wide-ranging, most theoretical models emphasize exchange to the detriment of production. Forms of reciprocity, redistribution and resource allocation are the bases for paradigms, continuums and models. The formalist emphasis on the self-interested behaviour of individuals and the substantivist emphasis on patterns of exchange and circulation between individuals and groups, although stressing embeddedness in the social milieu, may actually obscure the infrastructure, the essential aspects of the economic background which may strongly influence exchange behaviour.

Reference should be made here to the work of Gregory (1982) which concerns clan-based gift economies as opposed to class-based commodity economies. Gregory's study drew theoretical inspiration from the political economy of Quesnay, Smith, Ricardo and Marx, and ethnographic stimulus from economic activity in modern Papua New Guinea. The anthropological ideas which he finds most relevant are from the work of Morgan, Mauss and Levi-Strauss.

3See work by Davis (1972, 1973); Shurmer (1971).

4It could be said that Bohannan and Dalton (1962:1-25) have already attempted this form of classification with their continuum of West African societies based on involvement with the market principle and with market places. The above criticisms of Sahlins also apply to Bohannan and Dalton in that patterns of entrance into the market economy could not be readily identified, save that land and labour gradually enter the market.
Unlike other scholars drawing on the ideas of Marx (see pp.7-8), Gregory maintains that, while the essential structures of capitalist society are based on production, this is not the case for the traditional gift-based economy. Here consumption is primary. Though acknowledging that clan- and class-based societies are defined by the people/land relation, he quickly moves beyond this to elaborate on a theory of goods. The 'concept commodity, which presupposes reciprocal independence and alienability, is a mirror image of the concept gift, which presupposes reciprocal dependence and inalienability' (Gregory 1982:24).

Gregory, like Meillassoux (1981:49), sees human reproduction as central. He extends his analysis to include the notion of exchange of women (women-gifts) in the long-term reproduction of the social unit. Classificatory kinship terms and marriage rules are incorporated in his partial categorization of the gift economy into those with restricted exchange, delayed exchange and generalized exchange (of women) and, respectively, balanced, incremental and tributary exchange (of gifts).

Although Gregory's approach is novel and bold (and contentious in parts) he does not draw out the full implications of what he acknowledges to be at the base, that is: land and objects are not commodities in a clan-based society; colonization has not succeeded in transforming land into a commodity; and land/person relations are central. His conclusion, 'that the essence of the PNG economy is ambiguity. A thing is now a gift, now a commodity, depending on the social context of the transaction' (1982:115), though a useful aid to description, is not very helpful in understanding the essential structures of change. It is worthwhile to return to the basics.

Firth has stressed the importance of the elements universal to all societies — worth, time and labour (Firth 1968:73) — and some anthropologists (Salisbury 1962; Sahlin 1972) have used these as a basis for analysis. Salisbury (1962) looked at change in technology among the Siane of the New Guinea Highlands. He computed savings made in labour time for subsistence following the substitution of stone for steel axes. Rather than increase production for household consumption the Siane invested freed labour time in large ceremonial exchanges. Although Salisbury's ethnographic analysis has had a wide influence on subsequent students, the French Marxist school and Sahlin's have developed the most thorough theoretical expositions based on production. Sahlin set out his argument in the essay 'The Domestic Mode of Production' (see Sahlin 1972).

A major structural feature of what Sahlin terms the domestic mode of production is its underproduction. Resources are under-used, particularly in the slash and burn technique of agriculture, according to evidence from Africa, Brazil, the Philippines and the New Guinea Highlands (1972:42, 43). Actual populations are far
smaller than the environment would allow. Sahlins criticizes those who would use demographic pressure on resources as the sole factor to explain diverse economic and political developments. The 'producers' access to sufficient means of livelihood' is more important and this 'clearly is a specification of the cultural system — relations of production and property, rules of land tenure, relations between local groups and so forth' (Sahlins 1972:49). From the evidence presented this aspect appears well worth consideration in an ethnographic study.

The under-producing domestic mode is also characterized by under-use of labour power. Sahlins uses evidence from Africa and New Guinea to show that producers not only work for a few hours a day on alternate days, but in some societies producers have a limited working life owing to late marriage and early retirement (1972:53-8). Sahlins' statistics are however less striking when work other than gardening is considered and it must be remembered that all estimates of under-use of labour, or free time in a traditional economy, present difficulties for the analyst. The 'Work of Gods' (ibid.:64), ceremonial, ritual and so-called leisure activities could be seen as essential work for the reproduction of the society and of its economic structures. Full use of labour power in Western society provides tax and income so that several vital societal functions can be carried out indirectly in the working day. For instance, in an eight-hour day a Western worker may in fact, through the payment of taxes, be providing child care, political stability, education, health care and economic planning as well as his family's subsistence requirements. Undoubtedly several of these functions will be carried out by a producer in a subsistence type economy during those hours when he seems to be at leisure, but when in fact his discussions and arguments and his active role in ritual are contributing towards stability and social reproduction. I attempt to quantify these activities in order to have a more thorough understanding of the requirements for social reproduction.

There are, then, problems in establishing the under-use of labour power when work other than the provision of food is considered, but there are fewer difficulties in accepting Sahlins' reiteration of what Firth and Gluckman had found: production is for use, in the domestic 'economy of concrete and limited objectives' (Sahlins 1972:65). People produce for their own livelihood (p.68).

A third aspect of under-production in the domestic mode is household failure. 'A fair percentage of domestic groups consistently fail to reproduce their own livelihood, although organized to do so' (1972:69). Production organized by domestic groups is on 'a fragile and vulnerable base' (ibid.:74) owing to accidents of birth and death in the household. Some have a good producer-consumer ratio but all are subject to the threat of failure some time in the developmental cycle of the household. Sahlins does
not mention here social mechanisms such as adoption or extended visiting to even out long-term imbalances between producer and non-producer and this could reduce the strength of the argument. The temporary imbalances caused by the life cycle however are universal and in a society in which the household economic unit is most important could conceivably cause a permanent structural weakness.

It is these structural weaknesses which Sahlins goes on to outline in a framework in which he sees the economy as a function rather than a structure of society (1972:76). It is here that he challenges much of the emphasis of the work by some Marxist scholars who stress the clan, lineage or primitive communist basis of traditional societies (see Hindess and Hirst, 1975:22; Terray 1972:101, 159-60; Meillassoux 1960, 1964). For Sahlins the household is the dominant production institution of the domestic mode, which in itself represents a particular 'appropriate technology and division of labour', a 'characteristic economic objective ... specific forms of property; definite social and exchange relations between producing units and contradictions all its own (1972:76).

The household is concerned with the task of production and the organization of its labour power to meet its own requirements. 'Its own inner relations, as between husband and wife, parent and child, are the principal relations of production in society' (Sahlins 1972:77). In this model Sahlins chooses to equate the domestic group with the family and to minimize the importance of co-operation beyond the household, although he acknowledges that there are variations in the integration of domestic group with family and that some local techniques demand lineage or village co-operation. On this latter point he justifies his stand in the following words: 'Larger work parties are in the main just so many ways the domestic mode realizes itself'. Domestic division of labour is performed side by side with other family groups, and 'the collective effort thus momentarily compresses the segmentary structure of production without changing it permanently or fundamentally' (Sahlins 1972:78). Here, then, Sahlins finds fault with the work of Meillassoux (1964) and Terray (1972) in which cooperative forms play the most significant part in the characterizing of mode of production. Co-operation to Sahlins is a technical fact.

Sahlins goes on to explain why, at base, the household is the dominant unit in tribal economies. The dominant division of labour — sexual — lies within the household. Tools can be managed by households. In fact they usually are for individual use. Production is for use rather than exchange. The household is not organized for output above the producers' requirements. This is in line with the hypothesis of Chayanov on peasant production: since the household has limited objectives, the greater its relative working capacity, the less the members work (Sahlins 1972:87).
In spite of larger groups or higher authorities having ownership rights 'the household retains the primary relation to productive resources' (ibid.:93). The family has use-right determining on a 'day to day basis how the land shall be used' (Sahlins ibid.). It appropriates and disposes of the product. Within this primary group there is a pooling, or household distribution of goods and services that transcends, for instance, the reciprocal functions of male and female labour. Eating together is a 'daily ritual of commensality that consecrates the group as a group' (ibid.:94).

The ideal domestic mode of production is an anarchy, anticipating no social or material relations between like households. 'Nothing within this infrastructure of production obliges the several household groups to enter into compact and cede each one part of its autonomy (1972:95). The mode is inclined towards maximum dispersion. Splitting resolves the social problem of binding and in doing so contributes to under-exploitation of resources (Sahlins 1972:95-8).

The second part of Sahlins' argument concerns causal mechanisms for the intensification of production. It is here that he definitely parts company with the Marxists, maintaining as he does that the generation of surplus is dependent on the type of political system. He develops his argument from Chayanov's hypothesis and shows, ironically perhaps considering his previous arguments, that households are, of course, in a wider social system of production. Cultural, superstructural forces enable economic intensification and furthermore formal economic graphs can indicate 'specific structures and inflection of household labour intensity' (Sahlins 1972:101-3).

Descent and alliance systems of kinship should encourage co-operation beyond the household and production beyond what is required for household consumption. Sahlins believes that there is a permanent contradiction between the household economy and the more embracing society but that this contradiction becomes apparent in crisis situations and clues to its existence can be found in certain, for example, Maori proverbs stressing self-interest over concern for others, and in the kinship distance of reciprocity (Sahlins 1972:123-7).

Sahlins (1972:85) claims also that the structural essence is revealed in crisis situations. When a Western and traditional society mix, the finite objectives of the latter are revealed when the people refuse to sell their labour, react 'irrationally' to price change and insist on production for use.

The French Marxist school, although using production as a basis for theory, developed quite different perspectives to Sahlins but deserve mention in that their influence has been obvious in certain areas. Under the inspiration of Marx's Capital, scholars such as Godelier (1972, 1977), Meillassoux (1960, 1964, 1981),
Rey (1969), Dupré and Rey (1978) and Terray (1972, 1975) have attempted to construct models for a 'primitive' or pre-capitalist mode of production. Agreement between them, and the applicability of their theory to the ethnography have been hindered by their concern for orthodoxy in the particular political school to which they belong as well as their over-reliance on a limited ethnographic area in Africa. None the less, aspects of their models have inspired some of the liberal economic anthropologists whom they criticize and, more recently have been taken up seriously for the Melanesian ethnographic area in a collection of essays entitled *Inequality in New Guinea Highland Societies* (Strathern 1982). In this collection Modjeska and Godelier look very carefully at access to means of production, appropriation of surplus product and so on. Sahlin's too has borrowed freely from Marxist concepts (*Stone Age Economics* 1972). His stress on cultural relations of production and property, rules of land tenure and so on is very similar to the outline of forces of production given by Meillassoux (1964)\(^5\) and Terray (1972). Sahlin's borrowing however is selective and idiosyncratic according to Cook (1974:363, 358) and in spite of his emphasis on productive forces he maintains that cultural and social structures, rather than the conditions of production and reproduction of material life, are the determining forces in the evolution of societies.

Sahlin's hypothesis of under-production in the domestic mode gets tentative approval from Cook (1974:365). He claims that there are problems associated with establishing what is 'under-use', what is 'labour power', what are the 'different parts of the labour force' and what are the 'particular tasks' which are important for calculation. Cook hypothesizes that, using Sahlin's terms, there is likely to be more under-use of labour power in Western society than in traditional society (ibid.). Cook's rejection of Sahlin's argument on production for use is less helpful. He claims that Marx says that the germs of capitalist development are in pre-capitalist forms, hence the formula $M - C - M'$ (money being used to buy a commodity which is sold in order to make more money) can exist in 'primitive' society. Without these rudimentary forms of capitalism he claims that there would be no explanation for a society's growth and change towards capitalism (1974:368). This argument is identical to that of Goodfellow (1939) and offers little insight for an understanding of real difference.

Another problem with Sahlin's material is his contention that fundamental essences are revealed in crisis situations. It may be that a crisis situation distorts essential structures or places stress on one element to the detriment of another. Such a hypothesis seems equally valid to that of Sahlin's so this study

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\(^5\)Meillassoux (1981:67) criticizes Sahlin's on the basis of broad over-generalizations which take inadequate account of historical period, level of knowledge, techniques and mode of exploitation of land.
works from the assumption that essential economic structures should be sought when a society is operating under normal rather than crisis conditions. My debt to Sahlins and my deviations from his model are set out in the following discussion.

First, while I accept that the household is extremely important I reject the notion of Sahlins that co-operation is a mere technical fact. Here I give more credence to the views of Meillassoux (1964) and Terray (1972) on the importance of co-operation, so I attempt to measure this while at the same time making a rigorous test of the constitution and role of the household in the Koropatan economy. The investigation of those structures binding the households together is equally important to an investigation of the household itself. Such a plan is in fact in harmony with the work of Hawkes on the Binumarian of Eastern Highlands, Papua New Guinea.

Hawkes (1977:459-83), in her attempt to test aspects of Sahlins' 'domestic mode of production' model, actually makes use of his ideas on the sociology of primitive exchange. She persuasively argues that the form of co-operation is not related to the structural units of Binumarian society, agreeing with Sahlins that the latter develops against the basic organization of production. She finds that kinship distance,\(^\text{6}\) rather than residence, kin groups or age grades, is the relevant variable for co-operation beyond the household. She claims that this evidence supports Sahlins' contention that the household is pre-eminent in its position opposing the polar tendency of social co-operation.

I agree that co-operation may not be the exclusive preserve of, for example, a lineage or subclan. A co-operating group may be formed out of domestic household relations and the first order links beyond it, but this does not belittle its importance \textit{vis à vis} the importance of the household. The co-operating group is theoretically important in its own right, whether it is formed on the basis of kinship, affinity, residence or exchange relations.

Where Sahlins' concern is to establish the historical, evolutionary development of societies as different as Polynesian Hawaii and Melanesian Kapauku, mine is to look for essential units of analysis that can be applied to a subsistence-based society in the past and to such a society following links with the world capitalist economy. Sahlins' major strengths are also his major weaknesses. He draws on many schools of anthropology to construct grand theories and thought-provoking models contributing to an understanding of the evolutionary development of societies. His

\(^6\)Hawkes' more recent contention that there is a genetic base to this selection of co-operative partners, I find much less convincing (1983:345-63).
polemical arguments serve a major purpose in drawing attention to unsubstantiated ideas that have come to be accepted as facts. The weaknesses are that contrary evidence is sometimes ignored and that ultimately some of the more general hypotheses are unverifiable. The idea that political institutions gradually assume control of the domestic economy and the notion that it is leadership that influences intensification of production are such problematic hypotheses (1972:130).

Although I have in a sense frozen one part of my analysis in the pre-contact era in order to tease out the central structural changes brought about by colonialism and capitalism, there is no reason why my approach should not allow theoretical analysis of historical transformation of Papua New Guinean societies through the millennia of time, since Melanesians first arrived in the island of New Guinea as hunter gatherers. Both Modjeska (1982) and Golson (1982) have worked in a historical dimension while looking for similar central structures. Modjeska claims that historical transformations can be reconstructed by comparing Central New Guinean societies across space. A most recent concern of this French-Marxist inspired anthropology has been with the historical development of big-man systems in the Highlands and its relation to aspects of a mode of production: intensification of horticulture, the embodiment of value in pigs and relations of production and so on. Though much of the evolutionary schema is reliant on conjecture and spatial comparison, the detailed examination of the operation of economic structures and processes invites comparison with the Orokaiva material and, like the work of Sahlins, encourages a closer look at the level of the individual society.

Amin (1978:121) claims that Sahlins' analysis of evolutionary change does not contribute to an understanding of change instigated by colonialism and capitalism. However, as he deals with essential relations of production in small-scale societies and decries the uncritical acceptance of concepts such as lineage co-operation within small-scale societies (cf. Hindess and Hirst 1975; Terray 1972), his line of analysis can complement theories directed at an understanding of world-wide economics in terms of broad patterns of production and appropriation of surplus. The aspects of traditional economies which the Marxist political-economist takes for granted to some extent can be studied in a more detailed and critical fashion in the light of Sahlins' work, in spite of the fact that both parties work from different basic premises. Hence the emphasis on production of Sahlins and of the Marxist political-economists can allow a limited marriage of their forms of analysis. Although not the central aim of this monograph, an understanding of the form and character of the links between traditional and capitalist economies is an important secondary aim, impossible to ignore given the ethnographic material. Therefore it is of some value to consider dependency theory and theory of a colonial mode of production.
Andre Gunder Frank's work (1967, 1969, 1970) on under-development has been a major stimulus for discussions of economic theory pertaining to a world altered by colonialism. He and his followers criticized structural-functional theories which clouded the true exploitative structural links between Western countries and the undeveloped world, and set out models showing that capitalist metropolitan centres extract surplus value from undeveloped satellite agrarian economies (Hoogvelt 1976:62, 65-6; Alavi 1975:1245, 1257; Asad 1973:108-18; Frank 1970:5).

According to Alavi (1975) and Banaji (1972), when the pre-capitalist society has significant links with the capitalist metropolitan centre it should be seen in terms of a colonial mode of production rather than a slightly altered pre-capitalist mode (Alavi 1975:125; Banaji 1972:2498, 2499, 2502). Integration with capitalism means neither the installation of capitalism nor the conservation of pre-capitalist society but the formation of a colonial mode.

One of the major figures in the development of this kind of analysis has been Samir Amin (especially 1974, 1976, 1978). Amin developed the appreciation of colony and colonizer, centre and periphery as being part of a single hierarchical world structure (Amin 1974:378). He outlines the basic features of the pre-capitalist mode which he calls 'primitive communal mode of production' (1976:14), and here, like the French Marxists, he stresses communal co-operative aspects but also incorporates the household of Sahlins. Production is organized both on a nuclear family and collective basis. The principal means of labour — land — is owned collectively and is granted freely, though not necessarily equally (1976:14). On this point Amin differs from Sahlins but he cites no ethnographic justification. However Sahlins is mainly concerned to show that practical ownership or use right is at the level of the household and would be the first to admit that tribe, village or clan may hold land rights at another level. In some respects the difference between Sahlins and Amin is one of emphasis, with Amin stressing communalism. Amin also adds that there is no commodity exchange and that the distribution of products is carried out according to kinship rules. The absence of commodity exchange may seem an unusual characterization, particularly when applied to an area such as Melanesia where exchange of pigs, shells, feathers and other valuables is an extremely important activity. But here Amin is referring to what Sahlins, following Marx, termed production for use-value (Sahlins 1972:83). Production in the pre-capitalist tribal society is for livelihood and material goods are not strictly commodities as they are not exchanged in order to realize profit or surplus value in a theoretically unlimited field of transactions (Mandel 1973:10). As for 'distribution along kinship lines' (Amin 1976:14) it is here that there is need for further definition and elaboration if the true mechanisms of production and distribution are to be appreciated. To this degree Sahlins has already attempted to show that distribution patterns
in Polynesian chiefdoms and Melanesian 'big man' systems are more explicable in terms of the leadership pattern than in terms of the kinship systems, although the two can be related.

Along with most of the French Marxists Amin claims that the superstructure of pre-capitalist societies is more important than the economy for the reproduction of exploitation (1978:24). However, it is not this 'exploitation' that Amin is interested in. He appears to spurn the attention given to male-female, old-young economic relations in order to concentrate on imperialist exploitation (ibid.:121). While I acknowledge the importance of the latter I hold that the links cannot be understood properly while there is a vague or inaccurate typification of elements of the pre-capitalist mode of production. Therefore much of this monograph is involved in detailing these elements.

A useful strategy of Amin's is to set out the conditions that lead to the formation of a rural bourgeoisie (1974:366) and to the proletarianization and accumulation of money capital necessary for the development of a capitalist formation (1976:31). Unlike the centres of metropolitan capital which saw natural evolution to capitalism, in peripheral capitalist areas the primitive communal mode need not be destroyed. The capitalist mode is dominant, subjecting, subordinating and transforming other modes but not destroying them (ibid.:22).

Amin's attempts to pinpoint the links, the mechanisms of change between the 'primitive communal' mode and the capitalist mode have been duplicated in ethnography to some extent by scholars influenced by Frank. They look at, for example, the interaction between ideology and economic structures (Wolpe 1975); the complexities of peasant entrepreneur dependence in relation to the larger notion of class formation (Long 1975); and the essential changes in land and labour created by colonial law and leading to a changed socio-economic formation (Barnett 1975). This form of analysis is similar to that used in the more recent work of the French Marxist school, as exemplified in Seddon (1978), Terray (1975), Godelier (1977) and Meillassoux (1981). Both groups are concerned with finding essential structures and links between capitalist and pre-capitalist modes of production, but the dependency school works from a macro perspective, from the outside in; and the French Marxists from the micro perspective, from the inside out. Meillassoux in his most recent work, Maidens, Meal and Money, 1981 (originally Femmes, Greniers et Capitaux, 1975) has presented a grand scheme to demonstrate how all historical modes of production have been built on the domestic community, most fully exemplified by cereal producing self-sustaining societies. The domestic community, by preserving its land, has provided the capitalist

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7See also Hindess and Hirst (1975:13-14); Godelier (1972:95); Meillassoux (1978b:321).
world with cheap labour and commodities. In capitalist societies it is represented by the family which reproduces labour power at little cost to capitalism.

Root crop planting societies, with subsidiary hunting and gathering, are seen as an historical advance on hunter-gatherer societies. Here there is filiative kinship, and connections through time are seen as important. Basing his analysis on Amazonian societies, Meillassoux describes a domestic mode which is characterized by uxorilocality, warfare and female abduction and has a poorly developed political capacity. Although there are some parallels with Papua New Guinean social structure Meillassoux's central notion that women remain in their natal group after marriage ("gynecostatic") presents fundamental problems for the generality of his model. Sahlin has in many ways been more successful in presenting the detail of economic organization of production in a form which offers promise for relation to Melanesian ethnography.

It is indeed naive to attempt a study of Papua New Guinea society without acknowledging that it is now tied to world markets and world capitalism in an asymmetrical relationship. The latter sets limits on the ability of poor countries to develop, whatever their internal structure. However, it is still vital to have a detailed knowledge of the internal structure. The values and institutions existing in Papua New Guinea villages today must be understood in order to plan for further change: whether it be grassroots change emanating from a dissatisfied rural population or change implemented by a central government under the influence of various pressure groups. The effect of the limitations imposed by world capitalism must be calculated at the village level. It is essential to continue detailed analysis of village economies for both practical and academic reasons. There is a danger of re-importing models from Africa\(^8\) which could obfuscate rather than elucidate the reality in other parts of the world. To counter this there must be careful, in-depth analyses of processes and structures in real social communities. An understanding of the outside monetary capitalist economy, while necessary, is not sufficient. It is a rare occurrence when world capitalism totally supplants a traditional pre-capitalist economy. The distortion of both the capitalist and pre-capitalist societies should be viewed in the situation where they interact. The situation of this interaction should be studied carefully, always acknowledging that the pre-capitalist societies interact from an inferior position in the relationship.

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\(^8\)e.g. Meillassoux on planting economies (1981:10-32). See also A. Strathern (1982:35-49) on the second wave of African models in the New Guinea Highlands.
The bulk of this study should serve as complementary material for a macro political-economy of Papua New Guinea, but the section on history (Chapter 2) and conclusion do address issues concerning the broader scheme of colonialism and world capitalism.

Before outlining the content of the chapters it is appropriate to discuss aspects of my methodology. The main surveys carried out during the fieldwork period (October 1977 to May 1978; May to August 1979) concerned differential time put into various activities. My rationale for adherence to this form of research follows. There is a sense in which time studies can merely supplement sound description. The gathering of accurate figures is fraught with what appear to be insurmountable difficulties. There are practical problems involved in the actual observation of people working. Following a man or woman to the garden may be socially inappropriate. The worker may feel obliged to entertain and feed the recorder, thus altering typical work patterns. The recorder must make decisions about how to classify work-related activities such as travel to work, resting, chatting, washing on the way home and so on. Further, there are theoretical problems regarding the definition of work. The Western definition of productive work generally has to ignore magic and religious rituals and exchanges which may, for example, be designed to ensure continued fertility through harmony with the ancestors.

There are difficulties involved in constructing a concept of work that is cross-culturally measurable. Perhaps time spent in the garden is not time spent 'working' in the Western sense. There may be distinctions between different types of work in that toil or hard work such as tree chopping, the daily monotony of food harvest and feasting work may be conceptually differentiated. I intend to show that such distinctions can become even more apparent through the use of regular quantification and observation. There is considerable value in a time-based study of economic activity.

Anthropology is by definition ethnocentric in its methodology. It attempts to explain and categorize other cultures according to the tenets of its own Western scientific or philosophical methods. Linguistic and symbolic anthropological studies may appear to be centred on a particular culture with all explanation

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9See also Cook's discussion of neo-classical and Marxian economic anthropology. As both have their origin in Western capitalist thought, both are open to charges of ethnocentricism. 'Consequently, the basic task of economic anthropology is to selectively apply concepts and principles, models and paradigms drawn from the various traditions of western economic thought in order to refine, clarify, elaborate or reject them a posteriori; in the context of the analysis of non-western economies rather than negating their applicability a priori' (1974:358).
made in terms of that particular culture, but they too are ordered in terms of Western epistemology—in terms of Western notions of logic and structure.

If it is important to be aware of a particular cultural interpretation of behaviour and of meaning of life it is just as important to remember that anthropologists order this and classify it as a belief system or ideology rather than as a reality. There are limits to the explanatory power of cultural relativity in a social science. Hence, in order to understand the multitude of changes that are set off around the institution of work after contact with colonialism and the West, it is beneficial to attempt an analysis of work in the subsistence context, in terms of a universal category such as 'time'. Such an analysis offers potential for understanding of greater structural significance than the statement that there has been a breakdown of traditional economic structures and work patterns.

The difficulty of doing work-time studies effectively raises more problems than the theoretical justifications for them. Many studies leave themselves open to criticism because of narrowness or selectivity in data collecting. Studies that base important hypotheses on the male task of cutting trees (Salisbury 1962:147, 216-20; Modjeska 1977:212) are limited for cross-cultural study if clearing is a small part of regular daily garden activity; if tree cutting is of limited time importance in secondary forest; and if the bulk of the most time-consuming aspects of clearing, shrub and creeper clearing, is often performed by women and children. Another problem arises if a wide variety of detailed survey material is produced, unsupported by a balance of qualitative material. The work of Waddell and Krinks (1968) provides comprehensive and valuable information on production and distribution among the Orokiva. It incorporates a mass of quantitative data but suffers from a lack of theoretical analysis. The figures which have the potential to show so much say little without the addition of guiding and relating hypotheses drawn often from subjective observations.

Finally, ethnocentric definitions of work may lead to unsound hypotheses about time available to perform new activities. As already discussed, there are problems with the definition of the under-use of labour, but such notions have had major influence in the field of economics. E.K. Fisk has been an extremely influential economist working on Melanesian economic development. He finds it necessary to separate economic activity from ceremonial activity and to treat the latter as leisure in his oft-cited

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10 cf. Schwimmer who also worked among the Orokiva. He tries to demonstrate that 'Time is ... a highly inappropriate measure of useful activities in Orokivaian gardens' (1979:302). Schwimmer's main concern is to use language and symbols to reveal basic structures in Orokivaian society (1973).

The categorizing as 'leisure' of magical and religious activities, which may be seen as essential prerequisites to social reproduction, can distort comprehension of free time available in the society. According to Fisk (1966:41) the traditional Papua New Guinean economy had a lot of surplus labour above that required for subsistence production. Since technological innovation this surplus has increased. Some of it was used when the colonial administration required village men for the building of roads and rest houses. Fisk holds that much more of this surplus labour could be used in the cash sector if luxury goods were available for purchase and if technical guidance and a little financial aid were given (1966:42; 1962:468). By ignoring ceremonial activities and their potential role in the recreation of the conditions for the satisfactory functioning of the economy, economists can over-stress the availability of time for cash related activities. However, as I set out later, Fisk is indeed correct in suggesting that men were able to do compulsory road work without their subsistence work suffering. The reason lay more in other effects of colonialism than in traditional patterns and in new technology.

To counter the problems of definition of work and scope of data collecting I have concentrated on time spent by people rather than time required for a particular activity. I have used a wide definition of work, incorporating those activities contributing to economic functions and the reproduction of these in the future society. The theoretical advantage of having a universal economic category has encouraged me to use information from time surveys as a basis for several of my major arguments.

The six separate week-long surveys were carried out on three different clan-residential sections of the village. These sections varied in size from twenty to fifty productive individuals. All adults who worked at all and children over 15 were considered as productive individuals. At two-hourly intervals from 7 a.m. until 5 p.m. I noted the whereabouts of each producer and from my central position in the village was able to modify and add accuracy to many of the results by observing the exact time of departures and returns. As I used the material to compare the work input of various categories rather than to establish potential time available for cash enterprise, the figures were presented as raw time absent at working place rather than as exact minutes of time actually spent working. Detailed observations were made of eight individual producers, representatives of different age and sex categories, and these confirmed that the bulk of time absent was spent in travelling to gardens, performing garden activities, cooking midday meals and washing clothes rather than in leisure pursuits such as visiting and resting.
Outline of argument for Koropata

In order to place Koropata within the context of its historical experience, I give in Chapter 2 an overview of the history of the region of Northern (Oro) Province. I discuss in particular the mechanisms of colonialism which have had a direct influence on the village economy. Stories and early reports allow a hypothetical reconstruction of the economic organization of the society before European contact. This exercise provides a valuable construct for comparison with the present-day situation. Using historical references I am able to trace the development of events and legislation which placed barriers upon the functioning of the village economy and the concurrent development of ideologies which incorporated models of economic behaviour.

Chapter 3 essentially represents the culmination of the previous chapter as well as an introduction to the detailed village study, in that it sets out the physical features and organization of the village and environs today. Description of social life enables an appreciation of the involvement of Koropata in the wider social and economic institutions of Papua New Guinean society. An understanding of kinship structures contributes to the more detailed analysis of the kinship-economic tie in later chapters.

As it characterizes traditional society and is the dominant area of economic activity today, subsistence production is dealt with first in some detail in Chapter 4. Within this chapter some aspects of Sahlins' domestic mode of production are presented in the context of a discussion of the constitution of the household, of ownership of the various means of production, and of units of production for various activities.

Having established the form of co-operation for certain irregular subsistence activities, in Chapter 5 I elaborate on the significance of this co-operation in a number of activities which take on vital functions in the long-term reproduction of economic structures. A detailed discussion of these life-crisis activities reveals mechanisms of co-operation and distribution and patterns of consumption. The importance of woman as producer and reproducer is brought out, as well as the role of kinship as rationale for and pathway to the establishment of economic relations. The chapter contributes to the development of the central hypothesis on essential patterns of economic organization as well as revealing the important role of cash in life-crisis activities. Both these aspects are developed further and described in more detail in Chapter 6.

Cash activities are treated similarly to subsistence production in that basic production units and redistribution channels are revealed. Information and assumptions resulting from the colonial experience are discussed in relation to imposed models
for economic behaviour among the villagers. The notion of certain forms of economic organization for regular and irregular activity is supported by information on the cash sector. Knowledge of the distribution of cash contributes to the understanding of the limitations imposed by a centralized government.

To complete the analysis of the economic organization of Koropata in Chapter 7 the most basic domestic producer relations and the measure of inequality between households, ages and sexes are outlined. A discussion of belief systems supporting the essential inequality completes the analysis.

The conclusion in Chapter 8 draws together the total picture of Koropatans economic organization, bringing out the essential elements and pinpointing the links established with capitalism in post-contact history.

Throughout this study reference is made to the Koropatan economy and Koropatan economic organization. Although my understanding of the term 'economy' is revealed to a certain extent through my analysis of the ethnographic material it is worthwhile here to explain my use of the term.

Like Goodfellow, I aim for theoretical categories that can be applied universally: 'For the phenomena of social science are nothing if not universal' (1939:4). Some French Marxists (see Terray 1972) also claim universal applicability of the concept of mode of production derived from Marx's *Capital* but they acknowledge that social, political and ideological relations are intertwined with economic relations within the mode of production. In this sense they agree with Dalton that it is 'impossible for the anthropologist to describe the economic, without at the same time showing its relation to the social' (1968:155). They also agree with the substantivists in their belief that pre-capitalist economic organization is essentially different from capitalist economic organization (Dalton 1968:144; Terray 1972; Hindess and Hirst 1975). But while the substantivists, working from their emphasis on exchange, say that the structures and processes are essentially different, the Marxists working from a stress on production say that the basic units and processes are similar; they are merely organized differently.

I follow the Marxists and Dowling (1979) in that I draw on elements of both substantivism and formalism. I believe it is worthwhile to look for universal models that can help explain the essential difference between capitalist and pre-capitalist societies but that any explanation requires an understanding of social factors. Like Polanyi I believe that 'economic' concerns man's relationship with his natural and social environment in the process of supplying him with the means to satisfy his material needs (Polanyi 1968:122) but unlike Polanyi I search for the structures or patterned relationships mainly in the sphere of production.
This method of studying economic factors is quite different from the method outlined by Firth, in which all social action is studied in relation to its economic aspect and to the choices which are made in the disposal of resources (1951:122-5). It also implies a different outlook from that of Sahlins, who sees the economy as a function rather than a structure of society (1972:76). I treat the economy as a set of organizational principles and structures dealing with production, distribution and exchange in a society. The role of social activities in the long-term reproduction of these structures is taken as given. The practical use of the word 'economy' in relation to 'subsistence', 'money' or 'Koropata' in no way implies a closed system, merely a system whose aspects can be clarified in some contexts if treated separately.
At contact

Early European observers in what is now the Northern (Oro) Province of Papua New Guinea remarked upon the endemic warfare and the fluid nature of group settlement. According to Orokaivan legends, migrants came from the sea in groups of canoes, some being pushed inland to become bush people. Old men's stories, collected by the early observers, tell of the movements and the changing political fortunes of tribal groups following the initial settlement of the area. Intergroup hostility and mobility thus have their origins well back in the history of the region (Monckton 1922: 58; 1934:211-15; Benson 1957:9-12; Chinnery and Beaver 1917:158-61).

In the process of this continual fighting, some tribes were virtually exterminated, the only survivors being captives who later intermarried with the victors. Other tribes whose numbers were depleted by warfare amalgamated and gradually lost their cultural-linguistic distinctiveness. There was no pattern of permanent alliance. A single tribe could not be relied upon continually to side with another, nor could it even avoid the outbreak of hostilities between the clans of which it was composed.

In association with this process of alliance and mobility of social groups the Orokaiva developed a system of several types of settlement pattern. Old men's stories and the reports from the early administrators describe different forms of physical settlement

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1I have followed Williams (1930) in my use of the word tribe. The Orokaiva people consisted of at least nine tribes or groups of people who lived in reasonably distinct regions and used a minimally distinct dialect of the Binandere group of languages. Minor cultural differences could also be found (1930:6, 151). Waiko (1972a) claims that only four of these tribes could justifiably be called Orokaivan. 'Clan' is usually a collection of one or two lineages who share a common ancestor and may be known after the name of an important man of the recent past (Williams 1930:101; Waiko 1972a:3).
Figure 2.1 Papua New Guinea, showing Northern (Oro) Province and major towns (adapted from Baxter 1973:24)
among the Orokaiva, responding to the different pressures and demands of hostilities. Around 1900, large stockaded villages of 500 or more people were located along the Mambare, Gira and Ope Rivers. These settlements often had houses in trees and cliffs as lookout posts. Along the Upper Kumusi River, at about the same time, as many as nine villages were clustered together and, in the middle reaches, a long line of twenty-one villages was reported by the Resident Magistrate.²

All these settlement forms were likely to be found where hostilities were endemic. On the other hand areas where there had been no fighting or where recent fighting caused the complete defeat of a group, settlements were small, often consisting of only two or three households (Luke Harapa (Waseta), oral evidence; Walker 1902:57). The 'new' tendency for families to hive off into small groups noted by Beaver (1917:49) was more likely a continuing process than something initiated by colonial pacification.

Some descriptions suggest that the purpose of warfare may have been to secure better land, but this was by no means always the case. Many wars were over the breach of tribal boundaries and the violation of hunting rights (Chinnery and Beaver 1917:158, 160; Waiko 1972a:12, 24).

Good land and security from attack almost certainly affected choice in area of settlement. However, the Orokaivan area is not densely populated so land shortage cannot be posited as a main cause of warfare.³ The uncentralized fragmentary political system relied on buffer zones between hamlets and villages. Tracts of unused land were therefore a feature of this system, marked by dispersion, splitting and war, and could be seen as exemplifying the under-use of resources which Sahlinns (1972:42-51) claims for his domestic mode of production.

Factors other than land shortage encouraged fighting. Youths may not have 'lusted for a fight' or 'burned to distinguish themselves' (Chinnery and Beaver 1917:159, 160) but homicide was the mark of an initiated man. A death usually demanded vengeance, so the cycle of killing and revenge was self-perpetuating. Quarrels could begin with minor matters such as garden theft, or wife beating when the wife's kinsmen came to her support. The various Orokaiva groups constantly sought to maintain their own structural position, their strength and authority, while simultaneously attempting to limit the dominance of other similar groups. Thus, fighting was an important means by which a social group continued to survive (Waiko 1972a; Chinnery and Beaver 1917:158-60).

²Maguire (1903:123, 124); Chignell (1911:319); Papuan Annual Reports (PAR) 1901:87-90; 1902:48, 54, 57.
³Sillitoe (1972:53, 58) claims that it was never a cause for the Orokaiva.
Figure 2.2 Part of Northern Division of Papua, showing tribal divisions of the Orokaiva (adapted from Williams 1930)
Fighting was not the only form of inter-group political relationship. The maintenance of stable relations between groups smaller than tribes involved feast-giving and large-scale exchange. It is difficult to estimate the incidence and scale of such feasts prior to the imposition of Pax Brittanica, but there is evidence to suggest they were a frequent occurrence in the Orokaiva social system. These feasts were designed to maintain harmonious relations within residential groups as well as between potential enemy groups.

Early travellers commented on the abundance of food in the Orokaiva area. Government reports describe large feasts given for the initiation of young men and women, involving the placation of ancestor spirits with food offerings and the construction of several buildings. Monckton reports that some villages had an abundance of food to offer after he had made friendly contact. Some had up to a dozen tall bamboo poles supporting coconuts from the base to the summit. In 1900, Maguire saw extensive gardens along the Mambare and Gira rivers. He also reported that, despite nervousness, men were eager to trade large amounts of taro, bananas, sago, sugar cane and betelnut to obtain tobacco, paper and calico. Thus, Orokaivan economic organization must have been efficient enough to allow for the release of time for warfare and for the release of food for feasting.

As with the neighbouring Binanderere, described by Waiko (1972a), the Orokaiva had a culture of fighting, with organized strategies and specific specialized fighting roles. In some of the intra- and interclan fights, a woman would fight alongside her husband or act as weapon bearer, but the vital roles were carried out by men. Much Orokaivan fighting reflected a narrow moral universe. Orokaivans effectively defined who were fellow human beings by exchange and feasting relations. Legends and stories show that those beyond the social pale of exchange relations could be treated as animals, specifically pigs. If the exchange and feasting were to break down, the moral horizon would shift, and former human partners become like wild animals, to be hunted and killed. European contact was to alter radically two major facets of pre-contact Orokaivan life. Forced pacification and compulsory labour would inhibit the scope of feasting and fighting. It would also open the path for the more regular association of different clans and tribes in the context of voluntary market exchange and government carrying and road work. This wider, peaceful association would modify the narrow moral universe. This was also to be challenged by the introduced missionaries, who would call on people to love all fellow humans.

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4Monckton (1922:137, 139); Maguire (1902:123); Flint (1926:44); Chinnery and Beaver (1915:72); Haddon (1920:250); Murray (1912:99).
5Williams (1930:161-77); PAR 1897:29; 1901:94, 92; 1902:12, 55.
Early contact

Violence and desire for material goods marked early Orokaivan relations with European settlers from administration, commerce or mission. The Orokaiva were eager to gain access to the Western goods that each of the three types of foreigner could provide, but violence was the prominent feature of early contact between the Orokaiva and the representatives of administration and commerce. The three types of newcomer generally lacked respect for each other, but nevertheless worked out a *modus operandi* of compromise, and to a certain extent relied upon each other.

In 1884 the British formally took charge of British New Guinea (Papua), but even before this official annexation, many men from southeast Papua had experienced plantation labour in Queensland, Fiji and Samoa. In 1888 Papua became a Crown Colony, and to administer the new possession, Sir William MacGregor arrived and began to carry out a program of exploration and pacification (Hastings 1969:42-7; Griffin, Nelson and Firth 1979:7).

In 1890 a police force was formed and a Resident Magistrate was appointed for each of the administrative divisions of Papua. In the same year, the Reverend Albert Maclaren was accepted as the first missionary for an Anglican sphere of influence along the northern coast of Papua. He travelled with MacGregor from Collingwood Bay, south east of Oro Bay, to Mitre Rock (see Figure 2.3) to see the country and consider the possibilities for establishing a mission. Maclaren spent a short time raising funds in Australia, then returned to establish a mission at Dogura, south of the Orokaivan area. Lack of finance, sickness and death among mission personnel prevented the rapid expansion of this mission and, to the chagrin of the administration, most of the Northern Division remained unconverted and unfriendly for many years (King 1901:6-12; Hastings 1969).

The Administration's exploration of the Northern Division began when MacGregor took expeditions along the coast in 1890, and up the Kumusi River in 1893-94. He anticipated no trouble and, in fact, some groups were friendly and gave coconuts to the party. Along the Kumusi River, however, there were groups dressed for war, waving and posturing with their shields. In general, Orokaivans either hid or presented themselves armed until a brittle peace was

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6Resident Magistrates were administrative officers with a multitude of roles. They acted as policemen, explorers, roadbuilders, health inspectors, social workers, prison warders, prosecutors and judges. Resident Magistrates and their assistants tended to be a motley group of adventurers, varying greatly in their concept of humanity and their methods, but all adhering to their 'civilizing' role (Wolfers 1975:19; Nelson 1976:161, 162, 164; Wetherell 1977: 35, 67).

Commercial interests followed soon after and this contact was marked by considerable violence. The discovery of gold near the Mambare River in 1895 justified the arduous exploratory journeys of the prospectors. In the same year, by this river, a prospector named Clarke was tricked and killed by the Binandere men carrying for him. It was believed they coveted Clarke's trade goods. This murder of a white man opened a new phase in the initial contact.

Miners combined and took 'illegal and unnecessary vengeance', destroying houses, canoes and coconuts and plundering pigs and poultry in villages which had nothing to do with the murder (Monckton 1921:78). Government officers in association with miners killed up to ten local Binandere men in the Tamata Creek, Mambare River area (Nelson 1976:97, 102). Two years later the Binandere retaliated by attacking the new government camp at Tamata, killing about twenty-five people. More Binandere were killed in clumsy police attempts to arrest the attackers; a new station was erected and a troop of police was posted there (PAR 1895:14; 1897:xxv; Nelson 1976:95-7).

As the miners and carriers moved into Gira River and Yodda Valley districts there was more violence between villagers and intruders. Over a period of about 18 months, large numbers of Kumusi villagers joined with the Kokoda people to attack miners and storekeepers nearly every week. Resident Magistrate Armit intervened in an attempt to reduce the tension, but in various encounters with parties of Orokavians armed with stones, spears and tomahawks, he shot between fifty and sixty.

Monckton took charge as Resident Magistrate in 1900. He was young and confident, and his relations with the native people were marked by a combination of 'confidence tricks' and ferocity. He gained a reputation for bloody pacification patrols. He imprisoned Binandere fight leaders, then trained them for his own police and armed them. During confrontations between police and villagers, he either lost control or gave his police permission to kill unhindered, standing aside while they slaughtered members of enemy groups. 7

Pacification in Northern Division was carried out in association with the development of goldmining. Protection of Europeans was not the only consideration. The Administration developed a positive policy of encouraging the fledgling gold industry. Government agents in Northern Division were also gold

7Nelson (1976:xviii); PAR 1900:xxi; 1901:90; Monckton (1921:22; 1934:78, 209); Elliot(1901:G91, 6577, 684c).
Figure 2.3 Northern Division showing government posts and some Orokaivan tribal divisions (adapted from Williams 1930)
wardens. Government prisoners cut a track down to the gold-bearing Mambare River and government stations opened at Bogi, Papangi and Kokoda (Fig. 2.3) to protect miners, carriers and property. Armed police escorted miners who wished to venture into new and probably dangerous areas. It was hoped that exploratory patrols by Armit, Elliot and Monckton would help the gold industry. Monckton organized local villagers to cut an access road to the goldfields in the Yodda Valley. 8

The official promotion of goldmining reflected the expectation that gold exports would be a way of reducing Papua's reliance on outside grants. The importance of gold to the Papua Budget can be seen from Tables 2.1 and 2.2.

Table 2.1

<table>
<thead>
<tr>
<th>Place</th>
<th>Year</th>
<th>Miners</th>
<th>Oz. of gold p.a.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tamata</td>
<td>1895</td>
<td>8</td>
<td>200</td>
</tr>
<tr>
<td>Tamata</td>
<td>1897</td>
<td>100</td>
<td>n.a.</td>
</tr>
<tr>
<td>Tamata</td>
<td>1898</td>
<td>150</td>
<td>10,000</td>
</tr>
<tr>
<td>Tamata</td>
<td>1900</td>
<td>n.a.</td>
<td>15,000</td>
</tr>
<tr>
<td>Yodda</td>
<td>1903</td>
<td>100</td>
<td>n.a.</td>
</tr>
<tr>
<td>Yodda</td>
<td>1905</td>
<td>n.a.</td>
<td>12,000</td>
</tr>
</tbody>
</table>

n.a. Figures not available.


Although bêche de mer, copra, rubber, pearl shell and sandalwood were also exported, gold was the major factor contributing to the growth of Papua's favourable balance of trade. 9 Changes in the fortune of the goldmining industry are borne out in the gross export figures (Table 2.2). For example, the slump in the value of exports in the year 1900-01 reflected the mining out of the Gira area and the sharp rise in 1903-04 reflected peak production following the opening of the Yodda goldfields.

By 1911 the cumulative customs return from gold was £1,166,947 but the miners averaged only £200 a year, and along with their

8PAR 1896:75; 1898:xvii, xx; 1900:45; 1901:xxi; Monckton (1934:54; 1922:178; 1921:193, 195); PAR 1902:58; 1905:11; Monckton, PAR 1905: 34.

9High import costs were incurred for items such as beer, boats, flour and hardwear (PAR 1897-1901).
Table 2.2
Value of Papuan trade in UK£ 1888-1906, Aust£ 1907-10

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1888-89</td>
<td>11,108</td>
<td>5,943</td>
</tr>
<tr>
<td>1889-90</td>
<td>16,104</td>
<td>6,455</td>
</tr>
<tr>
<td>1890-91</td>
<td>15,530</td>
<td>8,434</td>
</tr>
<tr>
<td>1891-92</td>
<td>23,755</td>
<td>11,289</td>
</tr>
<tr>
<td>1892-93</td>
<td>25,261</td>
<td>14,966</td>
</tr>
<tr>
<td>1893-94</td>
<td>28,501</td>
<td>14,952</td>
</tr>
<tr>
<td>1894-95</td>
<td>28,367</td>
<td>16,215</td>
</tr>
<tr>
<td>1895-96</td>
<td>34,521</td>
<td>19,401</td>
</tr>
<tr>
<td>1896-97</td>
<td>51,391</td>
<td>35,654</td>
</tr>
<tr>
<td>1897-98</td>
<td>46,971</td>
<td>49,850</td>
</tr>
<tr>
<td>1898-99</td>
<td>52,170</td>
<td>68,496</td>
</tr>
<tr>
<td>1899-1900</td>
<td>10,821</td>
<td>56,167</td>
</tr>
<tr>
<td>1900-01</td>
<td>n.a.</td>
<td>49,659a</td>
</tr>
<tr>
<td>1901-02</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1902-03</td>
<td>52,571</td>
<td>62,891b</td>
</tr>
<tr>
<td>1903-04</td>
<td>n.a.</td>
<td>75,506b</td>
</tr>
<tr>
<td>1904-05</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1905-06</td>
<td>79,761</td>
<td>80,290</td>
</tr>
<tr>
<td>1906-07</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>1907-08</td>
<td>n.a.</td>
<td>80,616</td>
</tr>
<tr>
<td>1908-09</td>
<td>94,680</td>
<td>79,692</td>
</tr>
<tr>
<td>1909-10</td>
<td>120,177</td>
<td>100,599</td>
</tr>
</tbody>
</table>

a Slump
b Yodda production peak
n.a. figures not available


Labourers, experienced much illness and a high death rate. In 1903-04 the goldfields had miner death rates of 10-20 per cent. In 1906 it was claimed that the 22 per cent mortality of carriers had been reduced to 17.79 per cent (Waiko 1972a:41); PAR 1906:12.

In 1903-04 the goldfields had miner death rates of 10-20 per cent. In 1906 it was claimed that the 22 per cent mortality of carriers had been reduced to 17.79 per cent (Waiko 1972a:41); PAR 1906:12.

Murray (1912:33); Waiko (1972a:4); PAR 1898:103; 1899:45; 1900: xvi, 86, 93; 1903:32, 33; Monckton (1934:40); Nelson (1976:112).
The Anglican mission which had been set up in the southern part of the division was moderately successful. By 1896 six small branches of the Anglican Church were established around Dogura, despite illness and high death rates among mission personnel. The missionaries saw it as their duty not only to bring the Gospel to the people, but to assist the Administration in its great 'civilizing' task. Without the missionary 'the efforts of the Government officers to establish law and order would be in vain' (Feetham 1917:5). Early missionaries claimed that their attempts to impress the people on the sacredness of human life aided government pacification, and it is true that the government was generally relieved of pacification problems in mission areas. 12

The initial contact between the tribes of Northern Division and the missions was not marked by the kind of violence that was a feature of commercial and government relations. Missionaries saw their primary task as bringing Christianity by peaceful means. Nevertheless, they were nineteenth-century white men in a strange, threatening environment and, like other white men, they were armed with firearms. Guns were used by missionaries to shoot birds and animals. On occasion, the possession of firearms enabled a missionary to demonstrate superior power, 13 and there was always the knowledge that the Administration would intervene and punish Papuans who harmed the missionaries. 14

Armed clashes and the threat of use of violence were, of course, not effective means of achieving pacification. Government, commerce and the missionaries all used gift-giving as a method of establishing some kind of modus vivendi with the local people. The missionaries were most likely to handle threatening situations by giving goods such as cloth, iron, tobacco, beads and mirrors. They lamented that their Christian message was taken by the people as secondary to their provision of medical aid and goods. The Administration also made some use of the giving of gifts as a placatory technique. MacGregor and Monckton used presents suspended on trees or left on paths to avert trouble. However, in riskier situations, government officers would not hesitate to use firearms (Cecil King 1934:13; Chignell 1911:6, 140, 226; Wetherell 1977:32, 159).

Desire for Western goods was thus an extremely important element in the initial contact phase. It was a double-edged

12PAR 1895:14; 1896:xxv; 1901:49; Feetham (1917:5); Benson (1957:12); Wetherell (1977:240).

13S.R.T. Gill, when invited to a 'cannibal feast', demonstrated his shooting on a pig, 'making a profound impression on the men of Bobo who had not seen firearms before ...', and therefore caused no trouble (Feetham 1917:35).

14R.M. Monckton threatened villagers with destruction if they hurt Bishop Stone Wigg (Wetherell 1977:38).
desire because in some cases it promoted tolerance of the foreigner and in others it led to his death. Aside from the murder of miners such as Clarke, there were more grandiose attempts to obtain goods. A Binandere man poisoned a well in order to kill the Europeans and appropriate their wealth (Monckton 1921:178, 179). On the other hand, local people remained tolerant of missionaries as long as they were a source of trade goods. The prevalence of theft and of violence committed to aid theft, and the eagerness to trade or merely receive iron and tobacco through gifts or payment of labour, demonstrate the strength of the local desire for new goods.

The Anglican mission originally opened up by Maclaren struggled along for some years. In 1898 Bishop Stone Wigg arrived, ending some uncertainty and formalising mission operations. His staff of twenty included European priests, teachers, nurses, and skilled tradesmen and South Sea Islander teachers. Bishop Stone Wigg encouraged hard work and began teaching trade skills. On the other hand, later bishops, Newton and Sharp, stressed theology and spirituality and the teaching of manual skills was neglected. By 1900 there were 700 children going to mission schools but only ninety-five had been baptized and thirty-two confirmed by the mission staff of thirty-two (PAR 1897-98:xxx; 1900-01:134; Wetherell 1977:219, 220).

The Administration shared with the mission the knowledge that pacification was easier when the latter was established. Missions, to some extent, depended on administrative support to ensure their safety and this dependence, on occasion, meant that they had to ignore incidents in which Papuans were flagrantly ill-treated. However, having little dependence on the commercial Europeans, missions were able to criticize behaviour and ambitions of which they did not approve. The commercial people, for their part, resented attempts to interfere with their trading, but so long as the missionaries left them alone they seemed to have a certain respect for the work that was done (Cecil King 1934:21-2; Feetham 1917:10-11).

Copland King, a priest who arrived at the Anglican mission in 1891, was once refused access to a stockaged village as he had no iron to offer (C. King 1934:13; Wetherell 1977:32).

PAR 1894:6; Monckton (1921:179; 1922:15, 16, 42; 1934:53); Chignell (1911:6, 140, 226); Murray (1912:327); Cheesman (1935:100); Wetherell (1977:155, 159); Nelson (1976:90, 91, 121); Feetham (1917:15); Cecil King (1934:15, 16).

See Figure 2.4 for spread of stations by 1942.

PAR 1901:49; Shevill (1949:74). Thus, missionaries made no public protest over Monckton's massacre of the Paiwa people, nor over the rape of an Orokaivian girl by three Administration officers (Wetherell 1977:247, 249).
Thus far I have looked at the colonizing of the Orokaivans from the outsider's point of view. Orokaivans, of course, were not mere passive recipients of this colonization, but adopted various strategies to accommodate newcomers and their activities into familiar patterns of behaviour. They stole from and killed those classified as enemies and accepted presents and initiated exchange relationships with those from whom they expected friendship, peace and reciprocation. They also attempted to apply their patterns of alliance in warfare.

Several Orokaivan groups, along with the neighbouring Binandere, tried to use the foreigners in alliances against former enemies. Both Monckton and MacGregor were aware of this strategy and used it to their advantage in the gradual pacification of an area (Monckton 1934:78, 209; Griffin, Nelson and Firth 1979:15). Orokaivans were also keen to become government police. Men from all over the Northern Division tried to join the Papuan Armed Constabulary (PAC) and by 1904 constituted the largest contingent in the force. By 1911, there were 235 members of the PAC of whom almost half came from Northern Division (PAR 1904:45; 1904:35; 1911:54).

This pattern of alliance with, or fighting against, the Europeans was similar to the traditional pattern of warfare outlined above, but the fighting arena had changed. The Europeans represented forces and institutions fundamentally different from anything the Orokaiva had hitherto encountered. In response to the trauma of initial contact and the frightening power of firearms, Orokaiva River villagers extended their social horizons further than they had needed to previously. An example of this can be seen in incidents described by the Assistant Resident Magistrate at Bogi, A. Elliot. Dwellers on the coastal side of the Kumusi River united with those on the other side to assist their 'daily' fighting of the white man. According to Elliot, between seven and eight thousand attended a feast after the death of carriers and whites (Walker, PNG Archives 1901, G91, 6577, 684c; PAR 1900-01:11).

The police who attempted to manipulate European administrators in the pursuance of their own traditional enmities and alliances had short-term success, but they were bound by the requirements of their new masters. If they overstepped the lines drawn by the newcomers they were subject to punishment as much as any ordinary villager.

Part of the setting up of a governmental organization was the establishment of gaols and the punishment of villagers who infringed the laws and regulations. By 1903, 100 Orokaivans had been committed for trial on charges ranging from murder to breach
of school regulations. Kokoda gaol alone had seventy-nine prisoners in 1905 and 168 in 1906. Speaking of one of the groups who inhabited Northern Division, Wetherell observes that this time they had 'brushed with a tribe they could never conquer'.

The Orokaivans did not initially realize the extent of their disadvantages. At first, both administrators and missionaries received insults challenging their position. It would have seemed to hundreds of Orokaivans that a party of three or four Europeans with carriers were puny opponents. Gradually, because of the violent confrontations they experienced, they felt the humiliation of powerlessness, but they also felt drawn to the powerful in order to obtain the desirable goods. Many Orokaivans were ready 'to yield to the newcomers who possessed unprecedented knowledge and power. Some Papuans thought the [whites] were landless sea people; others hoped they were returning ancestors. All knew that the people in the ships had somehow obtained a wealth and power beyond their grasp'.

In their initial clashes with the newcomers, some Orokaivans lost their lives. Others gave up some of their food in exchange for gifts or in the face of threats. As the government extended its control in the area Orokaivans had to learn that they no longer controlled their own destinies. Perhaps, most important of all, they no longer felt secure in their understanding of the mechanisms at work in their own social universe. Natural disasters such as famine, flood, earthquake and volcano had occurred before, but the irruption of the Europeans meant that there was so much more to be explained and, if possible, managed: firearms, unfamiliar goods, new foods, new diseases and a strange new type of human being.

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19 An ordinance of 1897 made it compulsory for children aged 5 to 13 to go to the nearest school three days a week. Failure to comply meant a 3-day gaol sentence for a parent. In 1917, an ordinance was passed allowing for the whipping of truants (Wolfers 1975; PAR 1902:49).

20 Wetherell (1977:38). See also Nelson (1976:97); Waiko (1972b: 8, 24); PAR 1903:5-10; 1905:37; 1906:43; 1909:74.

21 Wetherell (1977:155, 159); Cecil King (1934:17); Feetham (1971: 9); Shevill (c. 1950:6-7); Monckton (1921:306, 192); Nelson (1976: 132).

22 From the earliest accounts these natural disasters appeared to have occurred quite regularly (PAR 1895:xxi; 1896:xxvi; 1914:2; PNG Archives G91, 6549, 402; PAR 1921:47).

23 Early records contain frequent references to epidemics of whooping cough and influenza, as well as to outbreaks of venereal disease (PAR 1895:xxv; 1896:xxvi; 1900:32; 1911, 1914:57; 1916:38).
Thus, in the initial contact period, there were two major influences on the Orokaivan social order. First, the narrow moral universe of pre-contact days was widened. Orokaivans united in attempts to repulse the European intruders and also began to modify their traditional magic to improve taro. New spiritual rationale and ritual for these taro cults quickly spread through the Division after pacification. Some Orokaivans united with Europeans as armed constabulary or as friends and defenders of the missionaries.

Organization for warfare was still appropriate for the early years of contact, but was not successful as a strategy for coping permanently with the newcomers. The consolidation of colonial power and subsequent pacification produced the second major influence. Even as formerly hostile Orokaivans began to unite, they realized that they could not defeat the powerful newcomers. Alliances with Europeans were not equal, so organization for warfare underwent a fundamental change.

On the other hand, the Orokaivans' offers of large quantities of food in exchange for highly desirable Western goods denoted a continuing organization for a feast: an allowance for food production above daily subsistence needs to be used in exchange between unequal partners. The useful goods offered by the powerful partners, however, were willingly incorporated into the garden technology, diet and domestic life of the Orokaivan. The end of warfare, the continuation of the organization for the production of food for feast and exchange, and the absorption of the Western technology are all aspects of the early colonial impact which directly influenced the basic economic patterns of Orokaivan society. These changes occurred within a context of general bewilderment among the people. Many new elements in the Orokaivan social universe demanded an explanation which seemed unattainable.

Colonialism before World War II

When the Papuan Act was passed in 1905 by the Australian Commonwealth Parliament, it provided a legal framework for the Australian Administration in the whole of the Territory, of which Northern Division was a part. Ordinances whose provisions had a particular relevance for Northern Division were those that imposed a tax and made cash cropping, carrying and roadbuilding compulsory.

In spite of lobbying from Europeans, a tax on the indigenous population was not imposed until 1918 when a £2 head tax per annum on adult males was instituted (Griffin et al. 1979:23; Wolfers 1975: 34, 37; PAR 1894:v, vii, viii).

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24 Early cults aimed at improving taro spread well beyond the channels of close cultural co-operation of pre-contact times.
Cash cropping. The initial ordinance requiring villages to plant coconuts was passed in 1894, the intention being that the cash income would benefit the villages. Despite the fact that the planting of the communal stands was difficult to enforce and that the copra brought little cash return, by 1914 there were 10,000 planted palms in the Buna area. In 1918 the Native Plantation Ordinance set out more clearly new mechanisms of operation. In accordance with this, in 1921 the Crown started buying land for Native Plantations. Able-bodied men within 5 miles were required to work 60 days a year in lieu of tax. Failure to do so meant that they had to pay tax and, in addition, risk a fine or imprisonment. It was originally envisaged that the produce from the plantation would be divided between villagers and government but, in practice, the produce was sold and the money divided between the villagers and the government. The government's share was to be spent on works benefiting the Papuans.\(^{25}\) This part of the scheme was never fully implemented.\(^{26}\) Villagers' returns from the copra sales remained very small and occasionally they expressed their anger at this.\(^{27}\) Coffee planted under the scheme gave better returns and, by 1939, the areas planted with this cash crop around Higaturu were producing 84 tons of hulled coffee a year.\(^ {28}\)

So far as the Orokaiva were concerned, the effect of these various schemes was that they were forced to devote part of their labour time to a non-subsistence task for which they received in return a new exchange medium, cash. Under the Native Labour Ordinance of 1893, Orokaivans were also required to carry under the direction of government officers.

Carrying. In the early days of contact, both government and commercial people depended on carrying by Orokaivans for the

\(^{25}\)Hubert Murray, Lieut.-Governor, 1908-40, believed that cashcrops would benefit villagers as access to cash was seen to be inherently beneficial and later proceeds would go to health and education. He hoped they would not always be menial workers (Griffin et al. 1979:26, 27).

\(^{26}\)Griffin et al. (1979) claim that a little of the plantation and tax money was spent on village health services and mission schools and the Papuan Village newspaper was produced. Crocombe (1964:27) however said hulling, marketing and administrative costs were paid from the Native Education Fund. No money was spent directly on schools in Northern Division, only a few small subsidies paid to mission schools. When World War II broke out there was an unspent balance of £26,199 in the Native Education Fund (1964:15).

\(^{27}\)In 1939 a demonstration occurred when the money paid out for plantation coffee at Higaturu was thrown on the ground by the recipients (Crocombe 1964:19).

transport of goods. By 1902 approximately 1200 men had carried on Buna road. There was some protective legislation but beatings and intimidation were commonplace, and carriers were frequently attacked by villagers whose territory they were traversing. Regulations provided that a carrier be required to carry no more than 50 lb for 12 miles, but this limit was still uncomfortably high.

Villagers were bound to meet officials' demands for carriers, and if potential carriers ran away, as they often did, the officers were likely to punish them by looting their gardens and killing their pigs. If they deserted, they were likely to be hunted down and imprisoned. Non-Administration people had to obtain carriers by arrangement with an Administration officer or by recruiting men and signing them up on contracts. In addition, recruiters signed up labourers for plantation work. Around 1910 they received £3 to £6 per labourer delivered.29

The Orokaiwa were understandably confused about the legal situation vis à vis government and non-government labour recruitment and they were sometimes frightened into signing labour contracts. Not all were coerced into undertaking contract labour: some wanted to sign on in order to receive the desired trade goods in payment. Once villagers had signed a labour contract, desertion was punished in the same way as was desertion from government carrying. Thus carrying, like cash cropping, withdrew the men from subsistence labour for some time, but some Orokaiwa returned with labour-saving tools such as the steel tomahawk (PNG Archives G91, 6550, 422).

Roadmaking. Road building was planned exclusively for the benefit of Europeans, but an 1884 Ordinance provided that local villagers should keep roads in order. Orokaiwa did apparently perceive advantages in having roads, appreciating the neutral ground between former enemy territories. They moved freely to visit kinsmen and set up small markets for the sale of food. However, it was not until 1915 that R.M. Beaver could claim that the upkeep of tracks was 'now recognized as a tribal obligation'.30

Villagers were expected to maintain the section of road next to their own territory but longer roads through uninhabited areas required the conscription of road gangs. Nelson (1976:132) notes that labourers appreciated the goodwill generated by communal

30Beaver (1917:49). See also Wolfers (1975), Monckton (1934:41, 63); PAR 1904:vii, viii; 1911:134.
labour, the payment in tobacco and the greater efficiency of the new steel tools, but the number of desertions, official reprimands and punishments testify to the onerous nature of the road-building task.\(^{31}\)

In sum then, the mechanisms of pre-war colonialism included a compulsory tax, compulsory cashcropping, compulsory carrying and roadwork. Rewards consisted of tobacco, steel tools and cash, among other things. Results for village production were periods of enforced absence of men and, presumably, an increased efficiency in men's labour due to steel axes. Women's work continued without labour-saving devices and often without the help of the men. Food and labour came to be seen in certain extra-village contexts as a unit of value immediately repayable by another unit of value, such as tobacco or money.

Roads, taxes, carrying and compulsory cashcropping all tended to benefit the European population in the long run, though some benefits for Papuans were also envisaged. A system of 99-year leases was introduced by the Australians in 1906, but land alienation was restricted in an effort to protect Papuans. Land bought\(^{32}\) from the Orokaivans or claimed as waste and vacant was leased to Europeans on condition that they made improvements. On such land several plantations were established in Northern Division.

<table>
<thead>
<tr>
<th>Year</th>
<th>Acres leased</th>
<th>Acres planted</th>
<th>No. of plantations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1909</td>
<td>n.a.</td>
<td>45</td>
<td>2</td>
</tr>
<tr>
<td>1910</td>
<td>10,940</td>
<td>290</td>
<td>9</td>
</tr>
<tr>
<td>1911</td>
<td>364,088</td>
<td>395</td>
<td>7</td>
</tr>
<tr>
<td>1913</td>
<td>n.a.</td>
<td>1233</td>
<td>12</td>
</tr>
</tbody>
</table>

Sources: PAR 1909:76; 1911:5, 15, 96; 1915:32.

Rubber and coconuts were the first plantation crops. In addition, timber showed such great promise in the early years that in 1913 Papuan Timber Industries proposed to lay a tram line to 'open up the division'. A sawmill was established in 1914 and a timber licence on 75,000 acres near Buna granted to the company

\(^{31}\)PAR 1904:vii, viii; 1911:134; Archives G91, Box 6548, 399d; PAR 1897-98:xx; Archives G91, 6549, 412.

\(^{32}\)The Administration made their own arrangements to pay for land they wished to use, but there is no evidence that the Orokaivans understood that they were agreeing to permanent alienation of their land (see Archives File 412, 6549, G91).
In 1914, Colonial Sugar Refinery representatives travelled through Northern Division to assess the potential for a sugar industry and, in the 1930s, serious attempts were made to set up such an industry. A number of speculative companies were set up and some investors lost their money. When sound investment finally made the setting up of a sugar industry likely, the Australian sugar monopoly would not permit Papua to participate in the scheme for British preference and the project was abandoned (Lett 1945:119; PAR 1916:54).33

None of the cash crop or natural resource industries developed in the Division had fulfilled expectations. Nevertheless, the mining industry had survived, the number of plantations continued to grow and the resident European population increased. All of these factors influenced the working habits of the Orokaians, in spite of the fact that they still controlled the bulk of their village land. A considerable number of Orokaiwan men went to work on plantations, in mines and in European houses. In 1924 a Resident Magistrate commented that a large number of the male population had already worked on plantations or in stores, or had been members of the police force (see Table 2.4 and Flint 1926: 44).

By 1915 the cumulative total of labourers from Northern Division was 6000 men. The Division contribution to the whole Papuan workforce ranged from 5 per cent in 1909 to 10 per cent in 1920. This involvement in wage labour had a substantial influence on the economic foundation of the Orokaiwan pre-contact society (PAR 1909:27; 1916; 1921:81).

Village Constables. The suppression by force which had marked the early contact phase gave way to a form of 'indirect rule' through the appointment of Village Constables. The earliest Village Constables were the strong, leading men who had confronted the Europeans as warriors. As time passed war leaders were no longer a feature of the society, but patrol reports indicate that by and large Village Constables were influential and effective in the maintenance of law and order. The position of Village Constables was an uncomfortable and interstitial one. They had the difficult task of attempting to juggle the interests of their relatives and exchange partners and of the Administration, so that both sides were reasonably happy most of the time. Between 1907 and 1914 the number of Village Constables in the Northern Division rose from fifty-four to eighty-three, indicating that this system of administration was satisfactory to the Australian authorities. The Village Constables were concerned with enforcing legislation which impinged upon many aspects of daily life: burial of the dead, upkeep of roads, construction of latrines, neatness of houses

33Information on sugar was compiled by J. Horne, Agricultural Officer, N.D. Land Titles Files, M.S.S. Set 105, Popondetta.
Table 2.4

Contract labourers engaged in Northern Division and district

<table>
<thead>
<tr>
<th>Area</th>
<th>Year</th>
<th>Agric.</th>
<th>Mining</th>
<th>Timber</th>
<th>Seamen</th>
<th>Carriers</th>
<th>Storemen</th>
<th>House duties</th>
<th>Pearl-shell fishing</th>
<th>General</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N.E.</td>
<td>1910</td>
<td>160</td>
<td>43</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>6</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>218</td>
</tr>
<tr>
<td>Kumusi</td>
<td></td>
<td>513</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>14</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>538</td>
</tr>
<tr>
<td>Mambare</td>
<td></td>
<td>6</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>-</td>
<td>3</td>
<td>-</td>
<td>19</td>
</tr>
<tr>
<td>N.E.</td>
<td>1911</td>
<td>233</td>
<td>13</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>259</td>
</tr>
<tr>
<td>Kumusi</td>
<td></td>
<td>875</td>
<td>54</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>19</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>960</td>
</tr>
<tr>
<td>Mambare</td>
<td></td>
<td>10</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>21</td>
</tr>
<tr>
<td>N.E.</td>
<td>1913</td>
<td>488</td>
<td>137</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>12</td>
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<tr>
<td>Kumusi</td>
<td></td>
<td>830</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3</td>
<td>14</td>
<td>-</td>
<td>65</td>
<td>-</td>
<td>922</td>
</tr>
<tr>
<td>Mambare</td>
<td></td>
<td>60</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>6</td>
<td>-</td>
<td>9</td>
<td>-</td>
<td>85</td>
</tr>
<tr>
<td>Kumusi</td>
<td>1915</td>
<td>129</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>26</td>
<td>-</td>
<td>163</td>
</tr>
<tr>
<td>Mambare</td>
<td></td>
<td>85</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>5</td>
<td>-</td>
<td>11</td>
<td>-</td>
<td>102</td>
</tr>
<tr>
<td>Buna</td>
<td>1917</td>
<td>206</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>21</td>
<td>7</td>
<td>240</td>
</tr>
<tr>
<td>Kokoda</td>
<td></td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>Northern Division</td>
<td>1921</td>
<td>312</td>
<td>10</td>
<td>-</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>31</td>
<td>6</td>
<td>370</td>
<td>4</td>
<td>743</td>
</tr>
</tbody>
</table>

and so on. Failure to obey these regulations could lead to imprisonment.³⁴

Hospitals and schools. The mission during this period seemed more detached from and independent of the Administration and commercial interests than it had been previously. However, structurally the mission became strongly tied to the Administration in the areas of medicine and education. The government encouraged such humanitarian activities as they improved relations between the colonized and colonizers but, lacking finance itself, was relieved that the mission took on most of the responsibility. So the Administration merely gave some financial subsidy and promoted the use of the growing mission services.³⁵ Government reports in 1909 stated that twenty-four schools were operating in the Northern Division. The first mission hospital was established at Buna in 1913. In 1930, medical services were provided at six other small mission stations: Eroro, Sangara, Duvira, Gona, Isivita and Ambasi (see Fig. 2.4 and Wetherell 1977:241, 276, 311; Feetham 1917:13, 15; Shevill 1949:112, 110).

These mission activities brought large numbers of Papuans under Christian influence but few of them became confirmed Christians. Whether confirmed or not, Papuans in the Northern Division willingly attended festivities associated with Christmas, Easter and saints' days. These festivities physically extended social bonds but were also intended by the missionaries to promote a wider humanitarian ideology of the beliefs of peace and brotherhood between all people. Exposure to the universalist Christian message provided a basis for uniting Orokaivans beyond traditional kinship and residential links (Shevill 1949:110, 112).

Colonialism in Papua under Hubert Murray (1908-40) was a benevolent kind of regime, but there had been little change in the conditions and pay of indentured labourers between 1910 and 1940 (Griffin et al. 1979:62), although indications are that the cost of living may have almost doubled.³⁷ Despite this there seems to

³⁴PAR 1900:28; 1905:37; 1911:94, 138; 1914:111; 1915; Oelrichs (1912); Fowler, Muscutt in Archives G91, 6548, 399).

³⁵'The Papuan administration had little money. Its total revenue (including Commonwealth grant) was £85,000 in 1913-14 and £166,000 in 1938-39' (Griffin et al. 1979:29).

³⁶Some sources imply that the hospital was at Boínai (Feetham 1917:15).

³⁷The concept of cost of living for an Orokaivan villager is problematic as few items had to be bought. The Retail Price Index for Australia rose from 97½ in 1910 to 159 in 1940. As most PNG consumer goods were imported from Australia, it is conceivable that the rise in PNG was consistent with that in Australia (Australian Bureau of Statistics, pers. comm., April 1982).
Figure 2.4 Extent of Anglican missions in Northeast and Northern Divisions of Papua, 1942 (adapted from Wetherell 1977:333)
have been a certain amount of enthusiasm for signing a contract in order to seek adventure or obtain trade goods. Some of this enthusiasm could be accounted for by the necessity to have cash for tax or for steel tools, which now replaced stone tools, but plantation life also had its advantages. In their free time, workers learned to communicate with people from other areas, and a certain amount of cultural exchange took place: songs, dances, magic, new plants and medicines spread throughout Papua as a result of this social interaction (Griffin et al. 1979:63).

Cults designed to improve taro harvest made more sweeping progress than Christianity and, as they were not led by the colonizers, caused consternation among the latter. Baigona (snake) medicine men from the so-called Baigona cult of 1911 spread all along the northern coast and up the rivers of the Kumusi subdivisions. The Kebesi and Taro cults of 1914 lasted well into the 1920s and were spread into Aiga country from the coast by Ihipa, the interpreter of the Government Anthropologist, F.E. Williams. Orokaivans who formerly behaved as enemies now obtained magic and adopted ritual from each other. The scale of this activity in all probability far surpassed pre-contact relations of this nature.38

Thus, from the Orokaivan villager's point of view, the period from 1910 to 1940 gave the ordinary man a wider perspective on the world, through Christianity, plantation and indigenous cults. He was forced to participate in a cash nexus and to provide wage labour. The money gave him access to highly prized trade goods such as tobacco and cloth, and to new steel goods which eased some of the labour in subsistence production. Villagers retained their land but had to cope with long absences of menfolk. In contrast to the early contact phase, the convergent interests of government and commerce drew gradually away from the mission. All of these developing patterns were violently shaken or swept away when World War II reached Papua New Guinea.

From World War II to Independence, 1942-75

In December 1941 the Japanese entered World War II when they bombed Pearl Harbor. In January 1942 they captured Rabaul and the next month they attacked Port Moresby from the air. The battle of the Coral Sea in May thwarted a sea invasion, so the Japanese attempted a land invasion of Port Moresby. In July 1942 they landed between Buna and Gona on the Northern Division coast (Robinson 1979:12). Individual battles such as those on the Kokoda Trail, which became part of the Australian national mythology, have merged in the minds of Papua New Guinean villagers.

However, the war has become a most important division in contact history, marking the beginning of a new era.

The war affected different areas in Papua New Guinea in different ways. Some areas experienced bombing raids, evacuation into the bush, or hardship in the performance of subsistence work through the lack of men. Others saw the massive build-up of Japanese headquarters, witnessed the beheading of those who disobeyed, or sickened or died from overwork.

Those in the Northern Division saw the Japanese invasion, bloody fighting and occupation by Allied forces. This led to the peculiar position where the Orokaivans were seen as 'fuzzy wuzzy angels' as well as traitors and murderers. 'Fuzzy wuzzy angel' was a nickname given to conscripted carriers who demonstrated remarkable solicitude for the wounded whom they carried during the battle on the Kokoda Trail, and who showed considerable endurance in carrying both men and supplies for the Allies over the four months from July until October 1942. The Japanese presence in Northern Division did, however, lead to a reassessment of loyalties on the part of the Orokaivans and the consequent betrayal of some Allied personnel.

There was a general call-up of European males in Papua and New Guinea in January 1942. Five thousand 'badly trained and undisciplined' (Army File 5/3/34) soldiers arrived from Australia. Following the first Japanese raid on Port Moresby in February 1942, civil authority broke down and supreme power was invested in the military (Grahamslaw 1971a:77).

The Europeans in the Northern Division, both administrative officers and others, were in a state of confusion after seeing refugees from Lae and hearing conflicting radio instructions, but by February 1942 most of them had left for Port Moresby. The missionaries stayed after heeding the exhortation of Bishop Strong: 'No, my brothers and sisters, fellow workers in Christ, whatever others may do, we cannot leave. We shall not leave. We shall stand by our trust. We shall stand by our vocation' (Tomkins and Hughes 1969:28; Army File 5/3/174; Creswick and Shevill 1949:17).

39Bert Beros, an Australian soldier, sent a poem he had written about Papuan carriers to his mother. She sent it to the *Australian Women's Weekly* which published it, thereby giving national renown to the 'impromptu angels with their fuzzy wuzzy hair' (Inglis 1969:503).

40In July 1943, 21 Orokaivans were executed at Higaturu for murder and treason (Army File 85/1/671). See also Inglis (1969:503); Johnston (1944:237); Grahamslaw (1971b:113, 119); Tomkins and Hughes (1969:45, 56); Cranswick and Shevill (1949:128-9) and Army File 5/3/147.
The Orokaivans were of course even more confused, as the Administration left them stranded without any particular instruction or advice as to how to cope with the Japanese. They lived without outside authority for a few months then, on 22 July, a considerable Japanese force\(^4\) landed on the Gona coast, disembarking from two destroyers and two transports. An attacking force of 900 men moved quickly down the Kokoda road towards Port Moresby. This move took the Allies by surprise and only one company of Australian soldiers and 300 men of the Papua Infantry Battalion were scattered in various positions around the Division. At Awala, a small force engaged the Japanese, but had to retreat through Koropata, Wairope and down to Kokoda, blocking roads and destroying stores, buildings and bridges on the way (Milner 1957:61; Macarthy 1959:122-5). A few Papuan soldiers individually infiltrated Japanese lines to attack them, but in all other major encounters with the Japanese the European allies were on the defensive (Cranswick and Shevill 1949:67; Macarthy 1959:124, 125). Villagers guided parties of mission, army and air force personnel through the area but, in this situation of overall confusion and fear, would sometimes help and sometimes betray the escaping Europeans. For example, four such parties totalling twenty-one people were handed over to the Japanese, and only one man survived. For the Orokaivans, there were many real problems in trying to explain these events. Some maintained that 'the day of the Europeans in Papua was over; that the spirits of the dead relations were returning dressed as soldiers and that soon ships and planes would come bearing great quantities of valuable cargo' (Tomkins and Hughes 1969:59).

Despite explanations such as this, support for the Japanese as saviours was less than wholehearted. Some Orokaivans risked their lives to reconnoitre behind Japanese lines and to guide Australians to safety. Sometimes Orokaivans betrayed Europeans after having sheltered them but, from evidence produced, decisions like this were not taken lightly. The merits and shortcomings of different avenues of action were carefully discussed by all concerned. The people were overawed by the number of ships and people in the area and the scale of the equipment. In the face of this, many Orokaivans felt it was in their interests, or they had no choice but to work for the Japanese. In addition many were impressed by the initial generosity of the Japanese and their concern to break down racial barriers (Tomkins and Hughes 1969:59-62; Cranswick and Shevill 1949:118).

After fierce fighting on the Kokoda Trail, the Allies began to push the Japanese back. In defeat, when sick, wounded and hungry, the Japanese turned on the Pauans and forcibly took

\(^4\)The force was made up of 1800 soldiers, 100 Formosan naval labourers, 1200 New Guineans from Rabaul, and 52 horses (Milner 1957:61).
Figure 2.5 Some paths of retreat and attack during the Buna campaign, World War II, 1942 (adapted from Milner 1957:127)
food from the villages as they moved back. They pillaged native gardens indiscriminately and chopped down trees in order to obtain a few coconuts. The final battles at Buna and Gona in December 1942 led to the defeat of the Japanese, but began a new phase of hardship for the Orokaivans (McCarthy 1959:330; Mayo 1975:180; Johnston 1944:238).

During the heavy fighting, most villagers had fled to garden houses where they could hide safely. However, in June 1942, there was an order made that 'any native might be conscripted to serve anywhere in the Territories or Papua or New Guinea, more or less on any conditions imposed by the District Officers'.\(^{42}\) Carriers had worked so well during the Kokoda campaign that officials of the Australian New Guinea Army Unit (ANGAU) were keen to recruit more (Army File 285/1/680A; Benson 1957:18; Ryan 1969). Those men who were able to avoid the physical confrontations of the war by hiding in rough garden shelters for the duration could not avoid the consequences of the war. They became subject to conscription for work on plantations, for carrying, for malaria control and for clearing and construction work until the war was over (Army File 5/3/147).

During the war period, Orokaivan men were absent for even more extended periods of time than had previously been the case.\(^{43}\) They met Europeans who appeared generous and brotherly in comparison with the plantation, Administration and missionary personnel they had known before. They learned that there were different white races and, even more amazingly, that there were black as well as white Americans. They also saw unbelievably large quantities of equipment and supplies such as excavators, tractors, bulldozers, rollers and graders. Fifteen airstrips were constructed at Dobadura and petrol was pumped 15 miles from the wharf to these strips (Bodger 1944:151; Army Files 5/3/143, 5/3/167, 42/401/640; Hastings 1969:81).

Among both the Australian soldiers and their Papuan helpers there was a general expectation that the end of the war would bring better times. In some cases where closer relations had been developed between soldiers and Papuans there were probably more specific promises. Papuan New Guineans did receive compensation for damage to life, houses and so on, but in addition ANGAU provided seeds, pigs and rations for villagers who had lost gardens and pigs. However, many villagers had expected more goods and bigger changes, and the amounts of monetary compensation seemed disappointingy

\(^{42}\) Ryan (1969:540). In December the minimum pay was 10s. per month (Army File 285/1/680A).

\(^{43}\) In March 1945, 2286 were employed in the Dobadura, Oro Bay, Buna area, 857 by the armed services (Army File 285/1/680A).
It was generally spent on such items as cutlery, watches, bush knives, lamps and tinned food.45

During the war period 2008 Papuans in service with ANGAU died. Forty-six of the dead indentured Papuans were killed by enemy action, and another ninety-one wounded. Of the Papuans in the armed forces, 132 died. Sixty-eight died or were missing believed killed as a result of enemy action, and 110 were wounded. Almost half of the soldiers who died, and the great majority of the indentured workers who died, appear to have died as a result of illness ('other causes') (Robinson 1979: 189, 190).

In many ways, the specific Orokaivan experience exemplified the experience of many areas in contact with the enemy and/or Allied forces (see Griffin et al. 1979:70-99). The most significant and widespread influence on the Papuan village economy was the prolonged withdrawal of men's labour. There was some over-recruiting although the limit was supposed to be not more than 40 per cent of able-bodied men (Army File 285/1/680A).

During the war, between 49,000 and 55,000 men from the Territory of Papua and New Guinea were employed, of whom 24,000 were from Papua.46 Where the chief subsistence activities were dominated by men, large-scale absenteeism caused problems with food supply. Even in the bulk of Papuan villages where the day-to-day garden labour was done by women, the men were needed for clearing land and their prolonged absence became even more noticeable when fences, houses and roads needed repair.

The incidence of wounding, starvation, and some illnesses such as dysentery (Army File 5/3/167) increased during the war, but ANGAU's establishment of hospitals laid the foundation for improved health services after the war. The military administration took over responsibility for the health of the local population and this was no longer the exclusive preserve of the missions. Between 1943 and 1945, 82,547 Papuans were treated by Army medical patrols and 116,588 were admitted to hospitals. The greatly increased scale of medical care is illustrated by the fact that there were four hospitals in Papua before the war and twenty-three after. The four before had twelve European staff, and the twenty-three after had sixty-one. In addition, the number

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44 Relatives received £20 compensation for a dead person and £5 for a pig (Griffin et al. 1979:107).
46 According to Griffin et al. (1979:96) the Army employed about 55,000 at the height of recruiting. Robinson (1979:23) puts the figure at 49,000.
of Native Medical Orderlies increased from 47 to 350 (Army Files 285/1/680A).

The military administration became involved in many activities which had formerly been the province of missions and commercial interests: schools, hospitals and plantations. The governmental concern with areas such as health and education continued after the resumption of civilian administration.

During the war, plantations were taken over by ANGAU, but some owners remained as managers. The Production Control Board allocated Papuan and New Guinean labourers to the plantations, but overall production still dropped sharply (Griffin et al. 1979:107).

After the end of World War II, there was a 'new deal' for Papua New Guinea entailing much larger grants of money.47 J.K. Murray, the new Administrator, directed that the Department of Agriculture was to put 'interests of the natives paramount' rather than concentrating on rehabilitation of the plantations (Griffin et al. 1979:108). New centres and stations were established for the dissemination of information about agriculture. Rural Progress Societies were formed for the pooling of community resources; and projects for pig and chicken breeding, cocoa and rice growing were set up in different districts (ibid.).

Co-operative schemes were also promoted by the Administration and, in the Northern District, the Anglican Church took the lead in the establishment of these schemes. Between 1946 and 1951 the Reverends Benson and Clint headed the Christian Co-operative Evangelist Movement. They preached the virtues of co-operation, encouraged cultivation of village plots on which rice and peanuts were grown, and hoped to establish a store. The movement, actively spread by mission teachers, reached Kokoda and inland Orokaivan areas. The message that the Christian teachers thought they were giving was not always the message that the Papuans were getting,48 however.

The missionaries were amazed at the eagerness with which the people accepted co-operatives, but they were not necessarily aware of the value Orokaivans put on it. Belshaw notes the faith that 'if certain procedures were adopted, certain results would follow'

47The direct subsidy 1945-50 was £13 million compared with £212,500 between 1936 and 1941 (Griffin et al. 1979:108).

48Belshaw (1951:250) reports that there were rumours that the King had ordered the formation of co-operatives, having recovered from his anger with the Papuans who had killed Europeans during the war. Furthermore, bosses appointed by the mission teacher were to work towards a situation where the whites would leave and the Orokaivans manage their own affairs.
The investment of the movement with religious value is not surprising, given that Reverend Clint insisted on the association of Christian ritual with co-operative action. Meetings were closed with prayers, tools were blessed at church, and seeds were blessed at the garden.

The people built small co-operative gardens, and a co-operative house for communal eating after work. In 1947, the Administration appointed a Co-operative Officer to regularize collection of funds and complete lists of members. 'In accordance with official policy the money was then handed back to the contributors, with the promise that contributions would be collected again when the people were ready for it' (Belshaw 1951:250; Dakeyne in Schwimmer 1969:86).

Reports from Co-operative and Agricultural Officers stressed cultish activity rather than the striking enthusiasm for the projects. Commercial white attitudes were critical and destructive. Private shipping firms refused to carry goods from New South Wales in Australia to co-operatives on the north coast of Papua. Thus Gona people were unable to get a rice huller because of the shipping bans.

The Administration was initially enthusiastic about the co-operative movement, but later cooled toward it. Some officers opposed 'communal planting'. Others were sceptical about the practicality of extending co-operation beyond traditional economic units. Papuan co-operative leaders, like all people who collected money or extended credit, were liable to punishment if funds were not kept intact. Some were gaoloed. After 1950, when the Co-operative Societies Ordinance was passed, the Administration no longer allowed the uncontrolled setting up of co-operative societies and in 1953 patrol officers in the Northern District were actively dissuading villagers from setting up co-operatives to market copra.49

The movement had already failed, however, as a result of leadership problems and a natural disaster. Benson went on home leave in 1947 and Clint's illness meant that he had to leave the Northern District in January 1950 and go to Australia. With the departure of these two prominent leaders, the Christian Co-operative movement faltered (Tomkins and Hughes 1969:104). On 21 January 1951, the long dormant volcano, Mt Lamington, erupted. There had been some tremors and warning signs beforehand, but the District Commissioner, on advice from the Chief Justice, decided that danger was unlikely, and Administration officials and

Anglican priests attempted to calm the fears of the people. When it occurred, the eruption was swift and devastating, resulting immediately in the destruction of everything within a radius of 8 miles. The government station at Higaturu and Anglican Mission station at Sangara were totally destroyed, and 4000 people died from inhalation of hot dust. Ash from the exploding gas cloud spread much further, choking water supplies and spoiling gardens.\textsuperscript{50}

Immediate efforts were made to help those whose lives had been disrupted by this disaster. Five thousand Orokaians were evacuated. 'The war time miracle — the rapid mobilisation of resources — was repeated' (Belshaw 1951:242) in the face of the disaster. Given that the people could not return to the villages, the Administration began various experiments in community development in the refugee camps at Oro Bay and Ilimo.\textsuperscript{51}

The Orokaians, of course, needed a conceptual framework to cope with this disaster. Some early explanations held that traditional spirits blazed out their anger.\textsuperscript{52} Most of the explanations, however, were related to Christianity. God was seen to be punishing the Orokaiva for sins ranging from attending church improperly dressed, to having betrayed Australian allies to the Japanese. The specific sins were finally generalized as lack of co-operation with mission and government plans for development.

The traumatic experience of public hangings of those Orokaians tried as traitors during the war, and the volcanic eruption only a few years later, helped to induce a widespread sense of guilt among the people. As part of an attempt to atone for what was now interpreted as past ingratitude, many Orokaians embraced Christianity. 'Christianity, wealth and wage labour [were] perceived as part of the same complex' (Schwimmer 1969:130). \textit{Iji Eha} (a new day or time) including Christianity, local government and economic development were widely talked of.\textsuperscript{53}

In 1947 the villagers of the Sangara area offered a generous amount of land to the Anglican mission so that a secondary school

\textsuperscript{50}Belshaw (1951:241), Tomkins and Hughes (1969:86), Schwimmer (1969:8, 9, 10), Benson (1955:6) and Keesing (1952:16).


\textsuperscript{52}See Schwimmer (1977) for a detailed analysis of the explanations. Mt Lamington, called Sumbiripa, may have been seen as a kind of cosmic centre for the Orokaians, a source of origin myths and so on.

could be set up; the Martyrs Memorial School commemorates the deaths of Anglican missionaries during the war. The school was destroyed and staff and students not absent for the holiday period were killed in the Mt Lamington eruption. The villagers of Agenahambo subsequently offered an area of more than 200 acres for a new Martyrs Memorial School. This became and remains a highly regarded school with excellent staff and standards. By 1951 the Anglican mission was reaching most Orokaivans through church services, school and Christian co-operatives. The move to embrace Christianity after the eruption did a great deal to extend the influence of the mission throughout the area (Tomkins and Hughes 1969:80, 81, 89, 115; Shevill 1949:140).

Immediately after the war, mission and Administration worked together to support co-operative economic ventures and the development of medical and educational institutions. In addition, in the aftermath of the eruption they were drawn together in disaster aid programs. The two, however, moved further apart as the Christian Co-operative Movement failed and as the Administration gained more and more control over schools and health services.

The Administration continued to promote economic development as well as to aid the rehabilitation of both Australian and Papua New Guinean ex-servicemen. Land bought by Australians immediately after the war was used in 1958 for a scheme to provide land and credit for ex-servicemen. The loans to the 131 Papuan and New Guinean servicemen totalled £112,550 whereas loans totalling £3,120,000 were given to 141 European ex-servicemen. The Europeans in the scheme had large 400-500 acre blocks of which there were twenty-nine in Northern Division, whereas the Papuans had small-holder blocks of 25 to 30 acres, of which there were seventy-eight in Northern Division (Howlett 1965:4, 5, 9, 56).

In the mid-fifties, villagers too felt the impact of the Administration's promotion of economic development. Native Local Government Councils were set up with elections by secret ballot to be held every two to three years. In 1956 such a council was set up among the Orokaivans, although they had not asked for it. Local Government Councils were used not only as a means of political education, but also as a vehicle to promote economic schemes. The promotion of cash crops led to problems with traditional concepts of land ownership and in the Northern District Administration officials, in consultation with the Council, developed schemes to register individual ownership of cash crop land. The 1964 Land (Tenure Conversion) Ordinance allowed for the registration of 20-acre blocks under an individual name (Healey 1961:490; Jinks 1968:31, 28).

The Orokaivans enthusiastically accepted the plans to have individual blocks possibly carried away by enthusiasm for Iji Eha and their continued concern to do as mission and Administration personnel said. Individualization of land went ahead despite
considerable conceptual and practical difficulties with the scheme.\textsuperscript{54}

Recommendations from a United Nations Visiting Mission in 1962 resulted in Local Government Councils becoming less dependent on advising officers in the decision making. As Local Government Councils were extended and as exploratory patrolling continued, more and more Papua New Guineans were expected to pay taxes, either to the local Councils or to the Central Administration in the form of a head tax (A. Pingo (Land Titles Officer, Popondetta) pers. comm., 1977; Kelloway 1972:1111-13).

In 1951 there was an advisory Legislative Council for Papua and New Guinea comprising twenty-nine members. In this there were four appointed Papua New Guineans of whom one was a public service official. In 1964 there were elections to the first House of Assembly with thirty-eight Papua New Guineans elected and twenty-six expatriates nominated or elected (Grosart 1972:531-3).

Australian government aid had increased dramatically but commercial enterprise remained firmly in the hands of expatriates. The big three, Burns Philip, W.R. Carpenters and Steamships, continued to be dominant in many of the commercial activities throughout the country and continued to export profits to Australia. The development of the copper mine in Bougainville, mooted in 1964 and finally ratified in 1969, continued the pattern of dominance by large overseas companies. According to Donaldson and Turner (1978:11), in 1974 100 per cent shares in market agriculture and 96 per cent of shares in mining were owned by foreigners.

Despite the continuing economic dependence, steps towards political independence continued apace: self-government arrived in December 1973, and independence in September 1975. The new government inherited control of a population 67 per cent of whom were subsistence farmers, cultivating 90 per cent of the arable land. What had formerly been Crown land now became government land. Following self-government in 1973, the Papua New Guinea Government set out the Eight Point Improvement Plan (Donaldson and Turner 1978:5) which stressed small-scale village industry and self-reliance, but in spite of this the governments in power have encouraged large-scale development and the replacement of small foreign-owned businesses by small locally-owned businesses.

The church in the Northern Province in this new political environment returned to the practical approach of the first Anglican Bishop, Stone Wigg. Concerned at the encroachment of multinational interests and the alienation of the villager from his land and work, church personnel encouraged what could be

described as a 'counter' economic program of small-scale development. They encouraged people to grow protein-rich beans and to tend chickens rather than buying tinned fish; they offered information on local production of sugar and new cooking techniques; they taught school children how to work cash crops in order to help finance their own education. It could be said that they were attempting to implement salient features of the Eight Point Plan in the face of central governmental concern for large-scale development.

Despite the fact that such a large proportion of the population is still involved in subsistence agriculture, villagers' lives have been significantly transformed by their experiences over the last 80 years. Through their experience of wage labour, many have widened their moral horizons and have replaced items in their subsistence economy with Western goods. Women have had to adapt to the periodical absence of men, generally by bearing a greater part of the burden of subsistence work. The teachings of Christianity and contact with huge displays of material goods, especially during World War II, have led to a profound reinterpretation of central values.

Koropata — one village's experience

The history of Koropata village is a microcosm of most of the trends of post-contact history of the Orokaiva. The 1893-94 government expedition up the Kumusi River passed close by the site where Koropata village was then located. Members of this expedition met some people who were willing to trade, but others appeared to be frightened and some were observed to be dressed for war (PAR 1893-94).

When Europeans arrived in the Koropata area, the settlements were apparently very small. Luke Harapa, a very old man from neighbouring Waseta village, recounts this story which he heard from his parents. 'When the first Europeans came to Orokaiva places they saw only small groups of houses — only two or three households. They said "Where are all the people from your villages?". The people answered, "Some of them kill each other. Others have escaped and are living with relatives from other villages".'

Small scattered settlements of houses built on the ground were apparently the commonest form of residence but there were also some very large villages which were often fenced or stockaded for defence. R.M. Walker, who patrolled through the area around 1901-02, observed that it looked as if the Kumusi people were in constant turbulence (Walker, in Archives G91, 6557, 684c). Stories of fighting in this early period generally show it as a pattern of long-term hostility between clusters of settlements or as
revenge for the killing of a member of a community. Enemies who were captured were often ill-treated and the bodies of those who were killed were cooked and eaten. This treatment of the enemy demonstrates the way in which the moral universe encompassed only the small community: those outside were regarded as being on a par with wild pigs.

Despite widespread hostility Koropatans did host large feasts to which they invited neighbouring villages. The preparation for these feasts required months of planning; the gathering and treatment of puga and okari nuts and the preparation of extra gardens.

Thus, at contact, Koropatan residence and political patterns exemplified the fluidity already discussed with reference to Orokaivans in general. Friendships and enmities between groups changed according to situation and settlement forms varied in response to these shifts in alliance. The co-operation needed to organize fighting and feasting was a very important factor making for group cohesion and group strength so that the group could continue through time.

Luke Harapa recounts this story of the first contacts with Europeans:

At the first village Bogi they gave people a small piece of salt on their hands to lick ... everywhere the people loved salt and salt made friends. It was salt that made the way ...

When the first white group reached the coast they told the coastal villages at Buna there was to be no more fighting, killing or eating each other. First of all they killed a village man with a rifle. They said, if you fight, kill and eat men we will kill you with a rifle like this or cut your head off ... They were teaching a lesson.

In this short statement, Luke Harapa sums up the dual aspects of violence and desire for goods in the initial contact period.

Koropata\textsuperscript{55} is mentioned frequently in accounts of the early contact period in the region. It was situated between the government camps at Bogi and Papangi (Papaki). When R.M. Armit went to Papaki in 1900 he recruited some Koropatans as guides. These men thus witnessed the shooting of thirteen people at Papaki and possibly heard of the forty-one others killed close by during the following four weeks of the patrol (PAR 1899-1900). The people along the middle reaches of the Kumusi gained a reputation for

\textsuperscript{55}Koropata appears in some early references as Koropahambo or Korobambo and refers to a village, a series of small hamlets near the junction of the Kumusi and Embala rivers and to the group or people in a 5-mile radius around the village.
attacking carriers on their way to the goldfields and actually killed two miners, Campion and King, 1901. 56

Koropatans believe that the men killed were missionaries and some explain that the subsequent attack on Papaki was instigated by the kin of the dead men. Nelson, however, claims that Elliot, an administrator who had been a miner, joined the employer of the men who had been killed in leading a punitive expedition. In the first three days they shot forty men and left seventeen with broken legs (Nelson 1976:122, 123).

Koropata was one of the earliest inland Orokaivan villages to co-operate with the newcomers. Their men carried for patrols in 1901, and around 1902 village policemen or constables were appointed and the government claimed a reliable friendship with the community. In 1905, a patrol house was built on 2½ acres of village land at Koropata. Village men were used to build the house and make gardens for which they received tobacco and other goods (Griffin, in File 412, Box 6549, G91; Elliot in 6548, 684C, G91).

In 1902 Village Constable Baiva asked his new allies for help, as he feared an attack. 57 The Government Officer Walsh appreciated Baiva's competence and obedience, but did not answer his call. In December 1902, Koropata was in fact attacked and destroyed. The official reprisal was to shoot fifteen people who had actually had nothing to do with the incident (Nelson 1976:143). The alliance that the Koropatans believed they had made with the powerful strangers was not honoured. This was yet another instance of the disappointment Papuans experienced when relying on Europeans.

Officers on early patrols gathered people together and promised peace and the Koropatans responded with large offerings of pigs and taro. Administrators commented on the generosity of food gifts in the area. As well as gift-giving, there was exchange, particularly with the miners. Taro, bananas, fruit and pig were offered in exchange for tobacco, rice, meat, clothes, knives, tomahawks and salt. The advantages of steel axes and shotguns were so great that many villagers believed that white

56 Nelson describes the incident in some detail implying with Monckton (1921:317) that it was close to Papaki, but Annual Reports point to its occurring closer to Koropata (20 miles above Bogi) (PAR 1900:7). Walker said that at least three tribes and up to 5000 people on the right hand bank of the Kumusi combined to murder the miners. Elliot believed it was Kario, possibly of Uhita, who killed one miner (PAR 1900-01:12, 48). Koropatans say that a man from Harange (Koropata 1) or Hungiri killed one miner.

57 Some Koropatans claim that Baiva began the trouble by pretending to fight Waseta with wooden rifles. Waseta people retaliated by killing Koropatans.
people were their returned ancestors, bringing them tools to lessen the difficulties of their life. The desirability of these goods is further demonstrated by the early occurrence of thefts by Koropatans. In 1905 thirteen of approximately twenty-five in prison at Kokoda were Koropatans. They had been sentenced to three months' hard labour for stealing goods from the Kumusi store (Nelson 1976:143; Griffin in 413, 6549, G91).

The initial generosity and willingness to help soon declined as villagers began to see the disadvantages as well as advantages of association with these newcomers. At first, patrol reports commented favourably on the Village Constable for ensuring that the village was clean and the road well maintained. In 1905 fifty Waseta and Koropata men volunteered to carry for the Resident Magistrate on a trip to Buna. They later became frightened of a giant man-eating snake reputed to be living on a nearby mountain and refused to leave for carrying. They had to be persuaded at length before they agreed to carry. In 1908, police were sent to Koropata to arrest men who had deserted from Administration carrying (Bellamy in 414, 6550, G91; Griffin in 413, 6549, G91; Beaver in 418, 6550, G91). This marks the beginning of the pattern of alternating enthusiasm and non-cooperation which lasted until World War I.

As in the general Orokaivan case, Koropatans experienced friendly exchange and violence in early encounters with Europeans, but soon learned of the greater power of the latter. Pacification encouraged some widening of moral horizons. Men who joined the police moved out of their home areas and brought back stories of other places and people with different lifestyles. The Koropatans were particularly attracted by salt, clothes, axes and shotguns, and valued associations with Europeans as a means of obtaining them. Related to this attraction and to an indigenous belief that spirit ancestors had pale faces, is the fact already noted that some people came to believe that the whites were returned ancestors who had come to make their life easier.

As Koropatans' experience of colonial government continued, there was an increase in the documented cases of arrests and punishments for the neglect of new duties for the Administration. In 1912 Koropatan men refused to carry and were arrested under the Native Labour Ordinance. In 1914 Koropata's Village Constable Heru, together with all the able-bodied men from Koropata, were charged with wilful neglect. In the same year, Waseta villagers were charged with inciting men from Waseta and neighbouring villages to refuse to carry stores to Buna. They had spread the story that people would be forced to sign contracts with private employers. These Waseta villagers expressed such fears to the government officers, but were told not to take any notice of anyone trying to frighten them into signing.58

58Cardew, 421, Box 6550, G91; Muscutt, 399D, Box 6548, G91; Chinnery, 421, Box 6550, G91; Jackson, 1914, 399D, Box 6548; PAR 1911:129).
Patrol reports from 1915 to the 1920s note regular satisfactory reporting by the Village Constables despite variations in the standard of housing, village cleanliness and road maintenance. Occasionally police would have to deal with disobedience against the colonial authority. In some cases the non-compliance stemmed from confusion about changed regulations but at other times the people deliberately avoided their obligations to carry for the government. In 1918 the Koropatan Village Constable enquired if carrying was still to be compulsory. He was probably confused following rumours of new legislation on carrying conditions. In 1919 and 1924 men in the area ran away when requested to carry (Bowden, 423, 6550, G91; Baker, 3995, 6548, G91; Flint, 402, 6549, G91).

The 'Koropata' referred to in these reports was not one village but consisted of 8-12 settlements each comprising 3-11 households. Each little hamlet was involved in the compulsory cash crop scheme, planting rubber and coconuts. Between 1915 and 1920, Koropata planted 520 rubber trees and 215 coconuts.59

By the 1930s many Koropata men had been to gaol for disobeying one or other of the Native Regulations. Tax had been introduced before World War I and the consequent need for money was a powerful impetus for the planting of village cash crops and continued signing on for plantation work. In this decade more Koropatans were recruited to work on Kokoda rubber plantations, thus coming into contact with other Papuans. More of the villagers were becoming familiar with Papuans from other areas. The mission was known only by rumour until 1928 when the Anglicans bought 5 acres at Baravaturu. During the 1930s the more mobile Koropatans became acquainted with a kind of white man whose activities and objectives seemed to differ from those they had previously encountered, the missionary more interested in their beliefs than their labour power (Files 407, Karius in 409, 411; Box 6549, G91).

In the period before the war, however, it was the taro cult rather than the mission that introduced new ritual and new ties with other Orokaivans to the Koropatans.60 Ihipa, a man from Koropata, was an acknowledged ritual expert or taro man in the cult. According to Koropatans, he had obtained his knowledge from a Doboduran villager, recompensing him with food gifts and sealing the association with an exchange of pigs. He spread the knowledge through the Kokoda district and Aiga country, receiving some

59 In the whole of the Kokoda area in the same period 7169 rubber trees and 4523 coconuts were planted (PAR 1920-21:48). See also Fowler, 399, Box 6548; Blythe, 400, Box 6548, G91; Bowden, 423, Box 6550, G91; Baker, 399J, Box 6548, G91; Berge, 401, Box 6548, Flint, 402, 6549, G91; 406, 409, 6549, G91.

60 The taro cult has been described at length by Williams (1928).
traditional valuables in return. The magic involved songs, dances and special medicinal plants and may have included the chewing of raw taro and certain other ingredients to induce hallucination, shaking or spiritual contact. The aim was to grow excellent taro and prevent sorcery-induced disease (Williams 1928:18-19).

In these various ways, Koropata had become increasingly involved, not only with many aspects of the colonial structure, but with Papuans from many other areas. The involvement in a wider world was greatly accelerated with the coming of World War II to Papua.

The first engagements between the Australians and Japanese in Northern Division took place at Awala, close to Koropata, in July 1942. Koropata men carried for the Japanese and later carried wounded Allied soldiers on the Kokoda Trail. Some worked for the Australians at Port Moresby and a few served in the armed forces, but the bulk of the young men, women and children scattered and hid in the bush around Koropata. These returned to a devastated village.

During the early fighting, Koropatans were terrified, not only by the actual gunfire, but at the sight of so many foreigners. The villagers could not understand why two white races should fight each other. As the conflict went on, Koropatans in common with other Orokaivans experienced hardship as a result of having their gardens destroyed. When the fighting receded, men were conscripted by ANGAU and were absent for much longer periods than had been customary when they signed up for contract labour. Like others in Northern Division these men, while working for the Allies, had to come to terms with the startlingly new experiences of different peoples, vast arrays of equipment and so on. They too, while working with Papua New Guineans who had been conscripted from all over the Territories, saw their social horizons widened even further.61

The mission became important to Koropata after the war. Perhaps the most significant short-term involvement with the mission was Koropata's participation in the Anglican Christian

61 In general, the Koropatan experience fits the wider history of Northern Division and, indeed, of Papua New Guinea as a whole, but the oral sources do stress one or two things. The large food distributions, parties and thanks given after the war are remembered clearly. Greater access to steel and iron after the war was helpful. The acknowledged guilt of the men hanged for treason and murder and the sadness of the occasion both impressed the Koropatans. The conception of the actual permutations of the battle are fuzzy and there seems to be a feeling that deception and trickery and breaking the rules of the fight influenced the eventual outcome.
Co-operative Movement. Four clans worked together after getting seeds from the government. Much co-operative work was carried out to clear the ground properly and care for the rice. It was a very good harvest and tasted excellent, but it appears that the rice huller was taken by an agricultural officer and that Mt Lamington's eruption destroyed the remaining rice seed.62

When the volcano erupted on 21 January 1951, Koropatans noticed the dark smoke and cloud and saw ash and stones carried through the air. The survivors including the sick moved to Wairope on the Kumusi bridge. A married couple from Koropata, Stephenson Kareka and Flora Amaupa, evoked the scene: 'There was no water and no food as both had been spoiled by the lava and ash. The government supplied food. They flew in rice and fish. The people stayed at Wairope for three months. After that time, Bishop David Hand sent the people back to the villages as the volcano had finished ...'

After this time, the words of the government and of the Anglican Bishop became increasingly important to Koropatans. In response to the latter's instruction, the little polygyny that existed virtually ceased. The villagers utilized the new health facilities and the school provided by the mission. They also participated enthusiastically in the new development projects encouraged by agricultural officers on the local Government Council.

By the early 1960s an Anglican primary school, trade stores and a private plantation were within two miles of Koropata. The village had 26.5 acres of coffee and 5 acres of cocoa. When the Land Tenure Conversion Scheme was mooted, the people were extremely enthusiastic. In 1965 about 350 people came from the area between Hohorita and the Koropata villages for a meeting with an agricultural officer: 'The people were unanimous in one thing: they all wanted registered blocks planted with Malayan rubber ...' (DPI Titles File 12-l-3B).

In the seventies, many adult men tried their hand at trade stores and contributed to co-operative business ventures. They watched their country become independent and grew to appreciate their increased mobility and access to medicine. As their reliance on money for taxes63 and school fees, as well as for food, clothing

62 It is unclear which event came first. Oral evidence is that the huller was withdrawn before 1951, but patrol records suggest that the rice huller was removed through lack of use well after the volcano in 1953 (Northern District Patrol Reports 1953-54, File 30, No.4, Higaturu, p.11).

63 Before Independence in 1975, taxes were collected regularly. In 1979 only five Koropatan men had paid their K10 tax, but the machinery for tax fines and courts was beginning to operate and Local Government anticipated receiving all taxes. Primary school fees were K8 and secondary school fees up to K79 in 1979.
and other household staples increased, they began to complain about their lack of wealth. They watched as truck businesses and trade stores faltered. They sold their timber rights to the government and wondered what had happened to the big money they had anticipated each time. Most recently, they have joined the current development project that has been promoted in the province, the Oil Palm Scheme. The potential economic effect of this massive, well-organized scheme can be better appreciated if both the social organization of the village and the patterns of economic organization are understood.
Chapter 3

Village setting

Koropata has emerged during the discussion of its history as a village whose experiences have been representative of many in Papua since contact. It is particularly interesting from a theoretical point of view because its economic organization is still adjusted for the most part to traditional subsistence production, despite the fact that it has experienced almost the full gamut of the economic intrusions associated with colonialism. The historical movement of colonialism has frequently been associated by anthropologists with the destruction of traditional forms of organization. Descriptions may refer to gradual development of differentiation and accumulation (Wilson 1945:5); the replacement of kinship ties with new organizing principles (Mair 1965: 243, 244); or the shattering of traditional values and principles by the technologically efficient Western civilization (Firth 1938: 157, 175).

In Papua New Guinea, according to Amarshi (Amarshi, Good and Mortimer 1979), the world capitalist system has progressively dislocated the economy. The people have experienced change as a 'process by which their culture has been disrupted, their society made more unequal, their countryside more dependent' (p. xvii). The 'vast majority of productive citizens remain poorly paid wage workers or even less well off peasant producers' (ibid.:57).

In this section Koropata will be described in some detail so that a subsequent investigation of the reason for the persistence of subsistence production in the face of the influence of colonialism can be carried out more fruitfully. Discussions of kinship organization, marriage and leadership serve as background material to an appreciation of the role of kinship in economic production and in value systems and of the extent of household differentiation in the village unit.

Koropata is part of the Orokaivan linguistic division which according to Williams (1930:7) numbered about 9000 in the 1920s. The Orokaivans live mainly in the Saiho Census Division which is the most densely populated part of the Northern Province. In the 1980 census the population of this division was 8715 (National
Statistics Office 1980:14). The Saiho Census area covers the rich volcanic plains around Mt Lamington, criss-crossed by numerous streams and rivers, notably the Kumusi River. The thick dark brown topsoil combined with a thin layer of volcanic ash produces extremely fertile soil. The warm humid climate and very high rainfall (2000-3500mm per annum) mean that the land is excellent for subsistence gardening and offers some of the best prospects for agricultural development in Northern Province (CSIRO 1954:4, 10-12).

Koropata can be located not only geographically but in differing historical contexts (see Fig. 3.1). During the 1890s and early 1900s it was a point between the patrol posts of Bogi and Papangi (Papaki) along the Kumusi River. In the days of the

Figure 3.1 Map showing Koropata as midpoint in roads and river
gold rush to the Yodda Valley it was almost halfway between Buna and Kokoda and was used as a base for supplies and as a pool for carriers. During World War II, Koropata was very close to battles between the Allies and the Japanese on the same road. More recently, Koropata has become a village about 2.4km off the road which runs from Kokoda to the provincial capital, Popondetta, which is about 35km away. The side road from the village comes out opposite the Anglican mission station and school at Waseta. Koropata itself is the most distant community from Popondetta to become involved in land tenure conversion (LTC) and village oil palm.

The 'Koropata' referred to in this monograph is officially known as 'Koropata Number Two' on the east bank of the Kumusi River. There is a 'Koropata Number One' on the west bank, from which people need canoes or rafts to gain access to the road to Popondetta. This barrier to communications and development accounts in large part for the growing differences between the two communities. Koropata 1 has a population of about 400 with its own school and Anglican chapel. The villagers grow coffee and sell some vegetables at the market. The barrier of the Kumusi River does not inhibit their rare visits to sell coffee, but it does discourage them from making regular visits to the market. There were previously many kin ties between the two Koropatas, but these appear to be disappearing.

Koropata 2 has a population of around 500 living in 70 households. At any one time, about fifteen children will be temporarily absent attending secondary school. Adult absentees, usually working in Port Moresby, number around thirty though they are not always the same individuals. The physical organization of the village has always been quite flexible. Old coconut stands as well as patrol reports testify to the number of separate hamlets identified as Koropata in the 1920s. After the volcanic eruption of 1951 there was strong official encouragement for hamlets to amalgamate into large neat villages consisting of two long lines of houses with a sports area in the centre.

In the 1960s both Koropata communities appeared to follow this pattern, but in the late 1970s only Koropata 1 showed some resemblance to this ideal village model. In 1978 people in Koropata 2 exhibited a very different settlement pattern, the product of about a decade of household dispersion into hamlets (see Fig. 3.2). It appears that the Land Tenure Conversion scheme beginning in about 1965 introduced or reintroduced conceptual justification for living in small settlements, although explanation for movements were often given in terms of sorcery accusations, damage by pigs, rent being demanded for the establishment of trade stores and so on.

In 1972, fourteen adults and their families (seven households) of Endi clan moved out, followed in 1976 by two households,
and in 1977 by eight more adults (four households). The migrating Endi households tended to settle in one new area. On the other hand, when sixteen households belonging to Ambotohane clan moved out in the period 1971 to 1973, they tended to cluster in small settlements of two to three households, each clustered on the LTC block belonging to a senior kinsman of the group. Settlements are named after physical characteristics or historical incidents associated with the area and many were in fact old settlements before the amalgamation in the 1950s.

In 1979 those members of Endi or Ambotohane clan who had remained in the village appeared to be moving out to join the three or four large settlements into which the smaller household clusters were amalgamating (see Table 3.1).

Most of the detailed information in this work pertains to the village of Koropata 2, although frequent visits were made to the settlements on LTC blocks, particularly for life-crisis ceremonies. Block settlements are from 20 to 60 minutes' walk away - through aromatic coffee plantations, eerie stands of old
Table 3.1
Koropata 2 settlements: comparison between 1978 and 1979

<table>
<thead>
<tr>
<th>Settlement name</th>
<th>Number of households</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1978</td>
</tr>
<tr>
<td>Ahouharí</td>
<td>2</td>
</tr>
<tr>
<td>Havenita</td>
<td>4</td>
</tr>
<tr>
<td>Penderete</td>
<td>1</td>
</tr>
<tr>
<td>Saumpe</td>
<td>1</td>
</tr>
<tr>
<td>Hegasusu</td>
<td>5</td>
</tr>
<tr>
<td>Simonota</td>
<td>2</td>
</tr>
<tr>
<td>Taiha</td>
<td>1</td>
</tr>
<tr>
<td>Bettisusu 1</td>
<td>4</td>
</tr>
<tr>
<td>Bettisusu 2</td>
<td>1</td>
</tr>
<tr>
<td>Singitoke 1</td>
<td>2a</td>
</tr>
<tr>
<td>Singitoke 2</td>
<td>3</td>
</tr>
<tr>
<td>Pavotekari</td>
<td>13</td>
</tr>
<tr>
<td>Total settlement households</td>
<td>39</td>
</tr>
<tr>
<td>Core village households</td>
<td>33</td>
</tr>
</tbody>
</table>

a Polygamous household: two wives maintained separate houses.

b In the intervening period, four households left the village to join smaller block settlements, and two widows were absorbed into other households. Two wage labourers returned and set up households; a Tohane man who had been living uxorilocal moved back to Koropata; a young couple broke away from the stem household, and a woman estranged from her husband returned to her father.

untapped rubber, and some lush forest from which one occasionally hears the call of the Bird of Paradise.

Houses in both the village and the settlements consist of a framework of saplings roofed by sewn and thatched sago palm and walled by hand split timber palings nailed slightly overlapping. Floors are lashed sections of a hard but flexible bark. Houses are raised above the ground by strong timber stumps around which pigs and chickens wander in search of food scraps. All households have steel axes, aluminium cooking pots, enamel plates and cups and cutlery, evidence of the importance of Western technology.

Before 1972 Koropata consisted of a neat rectangle of houses crossed diagonally by the rough road which comes from the Wasetta mission down to the Kumusi River. It is still possible to visualize this pattern, although grass has grown high in the central part
and houses of clan groups now tend to form circular or semi-circular patterns in one section of the rectangle.

The village can be seen to consist of two sets of two clans physically opposite each other (see Fig. 3.3) and, as we shall see, socially partnered in ceremonial and business activities. The detailed sketch map (Fig. 3.4) shows the clustering of houses occupied in 1978, the relative isolation of two (1 and 3), and the separation of three others (13, 24, 25). The aid post is opposite the Seva cluster, ten minutes' walk from the main village.

![Diagram of clan residence: Koropata 2, 1978](image)

Figure 3.3 Diagram of clan residence: Koropata 2, 1978

The source of water for bathing, cooling and washing clothes, dishes and coffee is a short steep walk to the clear water of Hembe Creek which bubbles into the Kumusi River close to Koropata 2. Gardens are between five minutes' and one hour's walking distance from the village. Seva and Tohane clans have the bulk of their clan land close to the village and reserve their LTC blocks for coffee growing. Ambotohane and Endi on the other hand tend to use their blocks for gardening as their clan land is too distant and difficult of access for regular work.

Taro (colocasia) is the main subsistence crop but the quick growing sweet potato is becoming a major secondary crop, dominant in some gardens. Other common crops are bananas, German taro (xanthosoma), sugar cane, pitpit, corn, yams, with some pumpkin and watermelon. Green vegetables grow wild in the gardens or in
Figure 3.4 Sketch map of Koropata 2 showing households and stores, 1978 (adapted from sketch map made by G. Vaso, Malarial Health Program)
the surrounding forest, though some aibika\textsuperscript{1} and green beans are cultivated. The diet of Koropatans is sometimes supplemented by fish and small bush animals, but is increasingly varied by additions of canned meat and fish from the trade stores. Coffee in small quarter-acre plots and some crops of pineapples or spring onions are grown specifically for cash.

Most households have one or two pigs which are fed some pawpaw and inferior sweet potato or taro and obtain the rest of their food by foraging around the outskirts of the village. A few chickens are also kept. The consumption of both of these is reserved for feasts and special occasions.

Williams considered the Orokaivan patrilineal clan a fairly well-defined group (1930:101), but used the English term to designate it as there was no particular Orokaivan word to coincide with the social grouping. Schwimmer (1973:194) follows this terminology but suggests that the words \textit{javo wahai} (one name) can be translated as 'clan'. This is the kinship group identified through a common ancestor which in the past acted as the smallest viable military unit and had its own leader. Agnatic connections need not actually exist as the clan name is important as a symbol of political identification (1973:196).

Koropatans readily cite a four-fold patrilineal clan structure as the basis for their village organization and in general I have followed this usage. These four clans are Endi, Ambotohane, Tohane and Seva. They are considered clans as ideally all members claim patrilineal descent from a common ancestor, but, as will become apparent, the system is so flexible that the clan name as symbol of political identification is of equal structural importance to actual patrilineal ties.\textsuperscript{2}

The word used by the Koropatans to describe this unit is the English word 'clan' (Pidgin \textit{klen}). The concept of clan has been widely used as a tool of colonial administration in order to settle matters of land ownership and this usage could well have influenced the reality of the functioning clan as well as the Orokaivans' perceptions of it. The fact remains, however, that clan is not an artificial construct and does have current relevance. Formation of new villages, conversion of land tenure, sale of timber rights and establishment of businesses have all been organized on the basis of the four clans.

Closer investigation shows that the actual composition of the village is more complex than this four-clan division. Tohane

\textsuperscript{1}Probably \textit{Abelmoschus manihot} (Murphy 1966).

\textsuperscript{2}Schwimmer's note on the non-existence of agnatic links and the importance of the name for political identification thus applies.
clan is a very new clan consisting of three clan segments, probably the remnants of formerly separate clans (see Fig. 3.5). In addition, the clan includes some recently adopted immigrants. Tohene is the bark from which salt ash is made and the clan was named after those who had this skill. The ancestors of present Tohane people came from Ope or the Mamba River area and settled in the Koropata area before 1900. Of the ten households making up the clan, only number 10 is acknowledged to be 'true Tohane'. It has, however, recently incorporated household 9 which in turn was originally welcomed into the Sarahu section. The head of household number 8 is descended from the sister of the remembered ancestor of household 10. Three households (1, 2 and 3) belong to a clan segment called Sarahu. Household number 7 was incorporated into Sarahu segment through a fighting partnership two generations ago. Households 4, 5 and 6 constitute the Notuhu whose ancestors came from Ajeka (see Fig. 3.7) about two generations ago. In the past there were many intermarriages between the Sarahu and Notuhu, but this is no longer permitted save between simbo. The Sarahu and Notuhu have many cross-cutting affinal ties with the rest of Tohane but nevertheless are all considered part of one clan, using land which is under the guardianship of the head of household 10.

The origin of Ambotohane, Endi and Seva clans is quite different. They came from the area around Koropata 1. There is a story that these three clans, together with some other clans, moved to the eastern side of the Kumusi River when a man and his wife found a plentiful supply of edible snails and good flat land there. Some of the smaller clans are now incorporated into Seva, Endi and Ambotohane.

Ambotohane is at present a large strong clan which includes those who used to belong to the small Sangara clan. Of the six Ambotohane households in the village, the heads of numbers 18, 19 and 20 are from a single lineage. The head of number 13 is also from this lineage but his brothers who have moved to the LTC blocks choose to call themselves Kombu. The head of number 11 belongs to a different lineage, being descended from a brother of the other lineage ancestor. The head of number 23 was adopted into Ambotohane after his mother left a nearby village to marry an Ambotohane man.

There is only one household (25) from Endi clan in the village now. The head of household 24 generally supports the Endi householder though he claims to be a member of Hojane clan. Other villagers, however, say that he is 'really' a member of Garepa clan.

3This named clan sector also occurs in neighbouring Waseta.

4Kombu was one of the clans which remained in the Koropata 1 area. These brothers have a matrilateral link to Kombu clan.
Figure 3.5 Diagram of clans showing some segments of former clans

Members of Seva clan have generally stayed close to their land: four households (29, 31, 32, 33) together with a Hojane household (28) and a Birengi\(^5\) household (30) are clustered together about five minutes' walk from the main part of the village. In 1978, the Aid Post Orderly also lived in this part and had been there for 16 years. One Seva household (14) had left the cluster and moved to the main part of the village after an argument with the leader. Kombu households 12, 17 and 21 have been incorporated into Seva; that is, members of these clans are as likely to identify themselves as Seva as Kombu. Three households (15, 16, 22) belong to Baruhu clan\(^6\) but usually support Seva. The division of clans into segments of former clans is presented (see Fig. 3.5) so that residential clustering of segments can be visualized. Although the segments themselves are distinct, their clustering in distinct major clan groups is also obvious, particularly in the case of Tohane and the lower Seva section.

The structure of the clans and the incorporated clans within them appears confusing because it is difficult to freeze the units in time and to decide whether they are merely political

\(^5\)The descendants of Birengi were in a group of clans which left Koropata 1 for the good land in Koropata 2. They now live with Endı clan and side with them in affairs concerning the village and the four major clans.

\(^6\)Baruhu was one of the three clans that remained at Koropata 1.
affiliates or whether they are more permanent structural incorporations. From 1977 to 1979 Sarahu was structurally incorporated into Tohane and Birengi structurally incorporated into Endi. In both cases however it appeared that the smaller units were beginning to enlarge their numbers and to define themselves as separate entities. It is conceivable that in several years they may claim that they are major clans in the village. On the other hand, Baruhu's association with Seva clan was more in the form of an alliance for certain activities. The Baruhu of Koropata 2 still kept up rights and commitments with their clan of origin in Koropata 1 so they could only be seen as recent political affiliates with Seva. Much of the distinction between political affiliation and structural incorporation can be made only in terms of the length of time in the association.

Koropatan genealogies are shallow and it is not always possible to find the ancestral links or adoptive ties between clans. The teasing out of the four-clan model produces a complicated pattern of adoption-acceptance of non-clan members and of separation and definition between clan members descended from different brothers. Such patterns are not strange to Melanesia (cf. Kaberry 1967, 1971; Lawrence 1971), and exemplify the flexibility of kinship systems, the importance of residence and the usefulness of being associated with a large group for activities such as fighting and feasting. The Administration also appreciates the convenience of clustering Koropatans into larger groups for certain occasions, such as individual land tenure conversions and allocation of compensation for use of timber. Despite the flexibility and shallow genealogical knowledge, present-day networks are known and the ideology is quite strongly patrilineal, with stress on the need to reproduce clan numbers and to rally to a clan brother.

Post-marital residence in Koropata follows the patrivirilocal rule. Information was collected on 261 marriages within the last three to four generations in Koropata 2 village and settlements. Of these marriages, 119 or 45.6 per cent were made within the village. The pattern of marriage shows a strong link between Ambotohane and Endi clans (twelve marriages), stronger if one includes the incorporated clans (twenty-five marriages). Affinal bonds between Tohane and Seva are not so obvious, there being only two marriages between them (four when incorporated clans are considered). On the other hand there are ten marriages between Ambotohane and Tohane (seventeen when incorporated clans are considered), and five between Ambotohane and Seva (twenty-one when incorporated clans are considered). Within the larger clans, Ambotohane and Tohane, there are some intragroup marriages. Many are termed simbo marriages, a simbo being a cross-cousin. Immediate first cross-cousins are not marriageable partners, but if two adults call each other the brother-sister term (du) extended classificationally, their children call each other simbo and they are encouraged to marry each other. Although no quantification is
available this practice was reputed to be quite widespread in the past. Ideally, cross-cousins should never occur in the same clan, but amalgamation of clans have made this possible. I was unable to trace the genealogical links of *simbo* marriages where both partners were from the one clan. Ambotohane, with its incorporated clans, has fourteen intraclan marriages, but when acknowledged amalgamations and adoptions are considered, the figure can be reduced to nine, the majority known as *simbo*. Tohane and the clans incorporated within it has eight intraclan marriages, all but one of which can be explained if Sarahu, Notuhu and Tohane are considered separate clans. The age structure of Koropata 2 (Fig. 3.6) illustrates the high potential growth of the village and may reflect the effect of medical care for infants. The average number of children per reproducing female is 5.4 (the total fertility rate for Papua New Guinea in 1979 was 7.6 (Skeldon 1979:31)).

**Leadership**

There were traditional Orokaivan leaders called, literally, 'men who hold their eye on the land', or clan land leaders. These leadership positions are still found in Koropata and are ideally passed on from father to first-born son. In the past there were men who were prominent in organizing feasts (*embo pondo*) and in hunting (*embo ki*). Another type of leader was *embo ke* ('talk man'). They were orators who could speak on formal occasions and use allusive speech. Such speech involves references to past myths, legends or events in such a way that the speaker offers opinions or solutions to current problems. Nowadays those who are *embo ke* may be English speakers, and thus some are able to act as contacts between Koropata and the outside world. Institutions such as schools, church, business and government provide forums for claims to leadership. The Local Government Councillor can use his influence to obtain improved roads and bridges and to use available funds for items such as communal coffee pulpers. In 1978, the new office of Village Magistrate was created, carrying a small salary. This office had the potential to influence villagers' lives in enforcing village cleanliness and prescribed housing standards.

7The one remaining concerns a marriage partner from Tohane clan in the Aiga area.

8Females are included if they have started to reproduce and if they are still breastfeeding what is generally considered to be their last child (assumed when the child is about 4 years old and the mother claims menstruation has ceased).

9It was unclear as to what extent this potential was reached as the officer incumbent was gaol during the 1979 fieldwork period.
Figure 3.6 Age structure of Koropata 2 village in 1979
Marriage

It must be stressed that extra-village links are not merely a post-colonial phenomenon. Marriage ties have always provided a basis for further economic and political relations. Villagers with some affinal links invite each other to feasts and attend mourning rituals. In the past, some men would have two or three wives, but polygyny was not particularly widespread in Koropata or in the general inland Orokaiva area (PAR 1922:22; Williams 1930:92). Marriage is now virtually always monogamous as a result of Koropatans' desire to abide by this major tenet of Christianity, brought to them by the Anglican mission, stationed nearby since the 1950s.

Marriages are initiated for the most part by the couples eloping in the night. Subsequently the relationship is ratified by the transfer of brideprice. A few couples have also chosen to have a Christian ceremony. Of the marriages for which information was collected, 142 (54.4 per cent) were to outsiders. According to elderly informants, traditional extra-village marriages took place with people from Waseta, Sasembata, Koropata 1, Sui, Ajeka and Mumuni. Information collected is congruent with this and shows that 86, or 60.56 per cent, of outside marriages were to people from neighbouring villages. Main marriage links are as follows: Waseta (17), Sasembata (8), Koropata 1 (15), Mumuni (3), Ombesusu (8), Garambe (4), Kiorota (4), Papaki (3), Isoge (3), Kendata (3), Awala (3), Huvivi (3), Togohau (3). Most recent marriages tend to be concentrated in the large post-eruption villages of Kiorota, Ombesusu, Mumuni and Sasembata. Figure 3.7 shows the position of neighbouring villages linked by affinal ties, as well as indicating villages concerned with a particular death (see p.152ff), and stations providing medical and educational services.

Some more recent marriages (25, or 17.6 per cent) have been made within the Northern Province but beyond the local network. Main centres for these outside marriages are the coastal areas (Gona, Oro Bay) and villages in the Kokoda region. There are also thirty-one recent cases (21.84 per cent of outside marriages) to areas beyond Northern Province. These are mainly marriages of Orokaivan girls to men from Lae in the Morobe Province, and from Gulf Province.

Mourning ceremonies for the death of an adult involve visits from people with present or former affinal ties, so the villages involved are those already mentioned as well as those villages for which affinal ties are claimed: Tunana and Sui. As soon as news of a death reaches them, those who go to weep over the body pack food and give it to those very closely related to the dead person. All the villages involved in the mourning ceremonies are within walking distance from Koropata. If one of the villages has a truck, however, a contingent of mourners may travel by this means.
Figure 3.7 Sketch map of road from Popondetta to Koropata and surrounding villages
Mourners generally come from villages clustered along the Popondetta road (see Fig. 3.7). It is conceivable that this indicates to some extent the contribution that aspects of colonial infrastructure, such as a post-contact road, can make towards easy, peaceful access for villages.

For Koropata, as for Mumuni, Waseta and Boru, the nearby Waseta Anglican mission station (see Fig. 3.7) is the centre for religion, education and sport. A new church for permanent materials has recently been built, and services are held each Sunday by a Papuan Anglican priest assisted by two lay evangelists from Waseta village. The church provides the usual services and hymns in Orokaivan and immediately afterwards school functions are advertised, the school's need for money or co-operative labour announced, and development projects might be discussed. On one occasion there was a special service to bless the tools to be used in the oil palm project. The congregation for the most part consists of people of both sexes aged between 10 and 30, as services tend to provide opportunities to form new friendships. On Wednesdays there is a meeting of the Anglican Mothers' Union at which there are Bible readings in English, and women from the various villages raise funds in competition with each other. The women look forward to a day free from chores, a chance to wear their best clothes, and an opportunity to sit, talk and eat with friends.

The school is an Anglican primary school funded and staffed by the national government. School rooms and teachers' houses are for the most part made from traditional materials and require constant repair and rebuilding by co-operative work groups from the villages served by the Waseta mission. After sixth grade, all children in Papua New Guinea sit a national examination for entrance into high school. There are usually about thirty sixth grade students at the Waseta school and, of these, five or six are able to go on to Popondetta High School or Martyrs Memorial High School for boys at Agenahambo10 (see Fig. 3.7). Despite the fact that schooling is compulsory, absenteeism is frequent. Parents sometimes punish their children for missing school, but more often accept philosophically their unwillingness to attend. The school has a parents' committee, including several respected men from Koropata, which makes decisions about fees, working bees, misbehaviour and absenteeism.

Almost all Koropatans between 15 and 20 have completed primary school, sixteen going on to high school or vocational training. Several of those between 20 and 35 have completed standard 6 education followed by agricultural training and a few over 35 have two to three years of schooling. Joining the

10 In the past some girls attended Holy Name Girls High School at Dogura, but few do so now.
Correctional Services is a popular ambition among the boys, while girls most frequently want to become teachers and nurses.

The church–school complex at Waseta is often the scene for organized rugby or soccer matches between the men, after church on Sundays, or on festive occasions. Generally, the girls play netball. Sporting events create a lot of excitement and enthusiasm, and provide an opportunity to meet other villagers and mix with kinfolk of other villages. Football games sometimes lead to fights. On most occasions when several villages join together for sport, dancing or exchanges, the young men carry weapons such as tomahawks, knives, leather straps or chains, but during my two periods of fieldwork these were not used. Occasionally, however, there was violence with stone throwing between people from different villages.

Medical centres also link Koropata with the outside world. The village has its own Aid Post Orderly, paid by the national government to tend regular disorders such as malaria, cuts and sores. Once a month the nursing sisters from Saiho Hospital (see Fig. 3.7) hold an Infant Welfare Clinic which is very well patronized by younger mothers. All Koropatans may walk to Saiho Hospital, which is between 5 and 6 kilometres from Waseta, in order to have a first baby, obtain dressings unavailable in the village, become an in-patient, or just to mix with young people from other villages. Dangerous pregnancies, bad cuts, road accidents, wild pig bites, and so on, involve hospitalization at the main hospital base at Popondetta.

Visits to Saiho and Popondetta may also be made for economic reasons. Both centres have markets at which vegetables may be sold. To sell at Popondetta market, the villager has to have more goods, or goods which are able to bring a higher price, than those taken to Saiho in order to offset the transport costs involved. It is a 3 km walk from Koropata to the main road, and in 1979 the Public Motor Vehicle (PMV) fare to Popondetta was K1.20. In order to cover transport costs alone, a Koropatan would have to sell 24 coconuts. Coffee sales are also made in Popondetta.

Popondetta is a small town, population 6343 in 1980 (National Statistics Office 1980:14), with a few general stores, a market, hospital, courthouse, various government and semi-government offices and an hotel. It is a sleepy town, livened only recently by oil palm activity, the bustle of wholesale buying for village trade stores, and the 'fortnight', the government pay day, which stimulates a long weekend of drinking, singing and the occasional fight. Children love to visit the 'town', but adult women in

As well as these complaints diarrhoea can be a problem, especially with babies. Influenza affects many villagers but few visit the aid post for its treatment.
particular yearn for the bright lights of Port Moresby spoken of by their menfolk.

Koropata also has links with the national government. The villagers vote for their local member, having supported Stephen Tago formerly of Pangu Party up until now. They listen to national news on their radios and discuss information disseminated by their Councillor or representative of government Departments of Land or Agriculture. The rare assaults and thefts within the village very seldom lead to formal prosecution, but offences outside usually mean a court trial, or a term in Popondetta prison.\(^{12}\)

Koropata today continues to rely very heavily on subsistence horticulture. This is supplemented by sales of coffee and of subsistence products at markets, and by the inputs of wage labour. This cash is needed for fees, taxes and the Western goods which are now essentials rather than luxuries. Relations with neighbouring communities have increased in frequency since colonization and, in many ways, Koropata's links with the outside world are extending further. Radios in the village have led to an awareness of cultural forms of other areas, and have stimulated an appreciation of urban Papua New Guinean music. People also hear of a political leader who has dealings with vague entities such as Britain, Australia and Japan.

To understand essential aspects of the Koropatan economy, the next chapter looks at the production techniques and co-operative relations of all activities involved in the subsistence sector. The patterns that are revealed provide a locus for the search for fundamental change in economic organization.

\(^{12}\)The scheme for Village Magistrates may, in the future, lead to intra-village prosecution.
Chapter 4

Subsistence production

The family as an economic unit

Everyday activities of production and consumption among Orokaiva revolve around the household which is essentially a nuclear family unit. The observation that the important unit for the Orokaiva is a nuclear family is not new. Williams (1930:91) said that the usually monogamous Orokaivan family consists of a father, mother and children living under one roof. The family is basically self-supporting in its internal affairs. 'In the very simple organisation of the Orokaiva, the family group is self-sufficing. There is no economic necessity for cohesion between family groups ...' (1928:156). Waddell and Krinks, forty years later, said that 'the household, comprising a nuclear family is the basic unit of production and consumption' (1968:114). In their surveys, only 9 per cent of all activity time was rendered in the form of labour service to other households.

As delineated by Table 4.1, thirty-six of the seventy-one households in Koropata 2 consist of the ideal type family: husband, wife and children. Another nineteen households consist of a nuclear family plus a resident parent or sibling, the addition coming about either because of the early death of parents or the unmarried or widowed status of the sibling. There is also one polygamous household which is really a dual household, as two houses and gardens are maintained, but this is treated as one in the table (Category F). There are eleven households which have as extra members orphaned clan relatives or illegitimate or motherless offspring of children. These totals support the overwhelming importance of the nuclear family household, a unit only modified to allow for developmental cycle variations and for the rarer cases of individuals requiring welfare.

1At a certain stage of the developmental cycle a young married couple not fully established as an adult partnership stays with the young man's parents; or an elderly parent, usually the father, chooses not to undertake female chores of cooking and cleaning for himself so moves in with a son.
### Table 4.1

**Composition of Koropata 2 households, 1978**

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<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Household with orphaned clan relatives, illegitimate or motherless offspring</td>
<td>11</td>
<td>15.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Polygamous household</td>
<td>77</td>
<td>108.43</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Overlaps</th>
<th>Total number of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>-6</td>
<td>71</td>
</tr>
</tbody>
</table>

In relation to household heads, a = adopted
The household head is usually a mature man. When a woman has been widowed while still active in social affairs and in the process of raising a young family, she may be considered as the head, even after her eldest son has married. Other women living alone, keeping their own garden and initiating their own small exchanges, are considered as household heads. There are, in all, seven of these. If a man is old or unable to participate regularly in production, his middle-aged married son, usually first born, becomes the head of the household.

Single men live with other single clanmates when young, and alone when they reach what is considered a state of permanent bachelorhood in their thirties and forties. They initially eat with and contribute towards their parents' household. As they grow older, they become part of their brother's household then, finally, part of the household of their brother's son. Any adult who is permanently unmarried is almost invariably one with some physical or mental defect.

The place of the nuclear family household in relation to land and other means of production will be discussed in order to explore the household role in economic patterns.

Clan units have rights to discrete blocks of land, but within these, particular householders have rights over specified areas through the household head. Most household heads are enda ta mama (father of the land) of their own section. If the household head has sons or younger brothers resident in the same village, then he is enda ta mama in relation to this larger kin unit. The enda ta mama marks for the use of his brothers or sons areas that had previously been marked by his father or father's brother.

As already mentioned, there is an inherited office related to the control of clan land at the clan level. The enda ta titi jigari embo is the man who 'holds his eye on the land' or looks after it. Williams saw him as a guardian administering the land, subdividing and allocating the territory among the clan branches. Although there is no 'real chieftainship' in large clans, 'hereditary succession [had a] faint appearance' (1928:125).

In Koropata 2 the position is usually passed from father to eldest son. If the early death of a leader leaves an immature son, then a younger brother of the dead man may intervene and take control. If an heir to clan land leadership has been absent for a long time from the village, a distantly related but enterprising claimant may take over the title and authority.

Both Williams (1930:107) and Schwimmer (1973:89-90) assert that, among the Orokaiva, in spite of nominal clan ownership of land, the individual or family is the unit exercising stronger control over use and harvesting. It seems that the national government's policy of dealing with clan land leaders or leading orators has
strengthened the position of these men in Koropata at the expense of the *enda ta mama* household head. Clan land leaders have been able to allocate cash crop blocks on clan land and reallocate individual ownership of land tenure conversion (LTC) blocks.²

In general terms, Koropatans claim there is no shortage of land as they are using only a small portion of the vast area claimed as their own for subsistence gardening. Involvement in cash crop schemes, however, has increased the importance of land close to roads. Some urban workers have complained that their fathers have been unduly generous with such land and are therefore putting their sons' future access to cash crop blocks in jeopardy. The serious consideration given to dividing the village residential area into cash crop blocks also points to a situation where certain land is beginning to be seen as a scarce resource.

In 1975, Koropata 2 and sixteen neighbouring villages sold timber rights to much of their primary forest land to the government (see Fig. 6.1, p. 181). Koropata will receive its K13,555 share of the total K100,000 payment over a period of 6 years. The money is being given to the four main clans on the basis of the amount of primary forest on each clan's land. The first issue was divided by clan representatives under guidance from clan land leaders, and was shared equally among all adults and young men. Clan land leaders have also been representing their fellows in relations with oil palm administrators and have given the use of clan land to non-clan affines or matrilineal kin. Some of the more extreme elements of the schemes proposed by the leaders have been scoffed at or pointedly ignored, and have not eventuated.³ Despite the emphasis on clan units of ownership from colonial and national administration, the rights of the household heads have not been undermined.

Since the Oil Palm Scheme was introduced into Koropata in 1979, there has been a general village concern to smooth the way for the new cash crop. It is in this context that individual household heads have allowed clan land leaders to lay claim to extra authority.⁴ Nevertheless, the effect of the land tenure conversion of 1968 and the tradition of the household holding particular plots of land allows the continuation of a system in which, to a large extent, the nuclear family household is seen as

²The LTC blocks mentioned previously are now in legal limbo. They were surveyed and issued in 1968 but it only became apparent in 1979 that they were never legally ratified by the last official stamp in Port Moresby. Hence they are not legally individual LTC blocks, and there is some current confusion about ownership.

³For example, leaders proposed to cut up village residential land for oil palm blocks, or to sell blocks for K1000.

⁴See Newton (1982), also Epilogue.
making decisions over the use of the most vital means of production: land. At the more general level though, it is the more embracing unit of the clan, represented by the clan land leader, which guarantees the use of some land to future generations of Koropatans, providing kinship or quasi-kinship relations can be established.

Other resources such as hunting land, bush, and the river are held on a village basis rather than by the clan or household. Fishing shelters on the banks of the large Kumusi River are designated by village names and the water close by is considered the fishing area of that village. The primary forest which separates villages or which stretches out to uninhabited areas is generally considered available to the whole village for hunting and gathering. Secondary bush or kunai grass which is closer to the village, on clan land or LTC blocks, cannot be hunted without prior permission of the right holder. On occasion, the individual household head associated with the particular area of land or the clan land leader may organize a communal venture on this land. Breadfruit, okari or puga nuts should only be gathered by the owner of the tree.

The food obtained by hunting, fishing and gathering is greatly prized because of the variety it brings to the diet, and because successful hunting is highly regarded, but the quantities so obtained make only a minute contribution to the diet. The amount of time spent on these activities is large in relation to the rewards, but overall is very small compared to the time spent on gardening or on modern ventures to produce cash.

Most adult men or female household heads own pigs, and decide on which occasions they are to be killed or used in an exchange. Other household members, particularly wives, share responsibility for the feeding and care of the household pigs. If a pig from one household tries to eat the food provided for a pig belonging to another household, members of the latter would drive the intruding pig away with sticks and stones. A chicken that wanders into the house of anyone but its owner may be caught and eaten or may be trapped and passed on secretly to a relative who may raise it away from the eyes of the original owner. Such petty theft of chickens as well as of clothes and cutlery occurs occasionally between households, but is abhorred within the household.

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5This is in line with land as 'patrimony', a good which belongs indivisibly to members of a community, as outlined for the Domestic Community of Meillassoux (1981:36-7).

6Williams (1928:125) said that clans governed the ownership of small waterways and swamps.

7Williams (1930:46) reported that grass tracts were owned by individual clans.
Equipment such as sewing machines, fishing nets and shotguns is usually owned by an individual household head or his household. Use by members of other households should be compensated in some way, as by percentage of the catch, but such compensatory sharing is difficult to implement in the case of a sewing machine. Tools for daily garden work are owned individually but are shared by all members of the household. Males own axes, spears, shotguns and building tools. Females own string bags, sewing machines, and personal fishing nets. Not all households have housebuilding tools, but these are commonly lent to close relatives outside the household. All tools except sago gathering equipment and the hunting nets of the past are for use by an individual. A valuable item such as a sewing machine intended for communal use may be appropriated by a particular individual unless it is stored in a 'neutral' separate place.8

Breadfruit and nut trees are owned by the household heads and are usually used by all members of the household. On occasion, a male household head will bar one of his sons or daughters from access to these trees without permission, but usually wives and children have full access. Brothers and cousins from different households, however, do not have this full access, but may be permitted to take small amounts of the produce so long as they leave the hae or plant emblem which identifies the borrower.

Although clan and village rights exist, particularly at the ideological level, the household is the most relevant group in regard to practical ownership of pigs, other domestic animals, economic trees and property such as tools, utensils, capital equipment and traditional wealth.9

In addition to being the centrally important unit of ownership, the household is also the unit of consumption.

The household as a unit of consumption. The household is in most cases the unit which receives a gift from an exchange within the clan or village. If a household contains individuals who have

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8Shortly before I arrived in the field in 1977, the Koropata 2 Government Women's Club owned a sewing machine which was housed in their club room. Following the death of the man regarded as the building's caretaker, this machine was destroyed. In 1978 I gave a sewing machine to all the village women. This was minded by one woman whose husband began to demand rental fees.

9Speaking generally about traditional economic systems, Sahlins too stresses the primacy of the household group. 'The household in the tribal societies is usually not the exclusive owner of its resources ... But across the ownership of greater groups or higher authorities ... the household remains the primary relation to productive resources' (Sahlins 1972:93).
recently joined, these may be given a separate gift. But it is not only on formal occasions that there are inter-household gifts.

In closeknit clan settlements such as Seva and Tohane, the evening meal usually consists of a main dish prepared by the consumer household, and several small offerings from closely related neighbouring households. Households which have large families (seven to ten children) rarely participate in these neighbourhood exchanges, being primarily concerned with feeding their own members.

Within a household where there is more than one active adult woman, each will cook her own contribution to the meal, but the food is generally offered to all. There is, however, some division in the household. Food given to the wife of the household head is not necessarily shared with co-residents of low status. I have on occasion observed individuals such as an orphan, a cripple, a mother of several illegitimate children, or a new affine from a distant province, sitting slightly apart in the rest shelter waiting for what remained of preferred foods.

Schwimmer's Sivepe material also supports this notion of separation within the household consumer unit. He reports that a gift of food to a household member other than an adopted or natural child was noted; married daughters and sons old enough to live in bachelor quarters were considered as separate gift recipients. As in Koropata, so in Sivepe, people distinguish between co-residence and commensality.

Even taking into account the fact that not every member of a household gets an equal share of the subsistence food as a natural residence right, it is still valid to consider the household as a consumption unit. It is the residents who are in some sense marginal who are seen as the recipients of gifts rather than the recipients of the natural birthright accorded to members of the nuclear family.

The household as a unit of production. The principal sections of this work deal with economic production within Koropata.

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10 Waddell and Krinks (1968:180) and Schwimmer (1973:125) report such inter-household exchanges as occurring every day in the Orokaivan village of Sivepe.

11 'Persons who are co-resident are always at least in part commensal [but] they are not necessarily wholly so' (Schwimmer 1975:125, 126).

12 Schwimmer says that in Sivepe this natural birthright becomes questionable when school children no longer contribute to subsistence gardening and their school lunch is seen as a gift (1973:125).
To introduce this, a short summary of the findings of earlier researchers will be presented. These centre on productive activities and the time spent on them.

Productive activities with which the Orokaiva concerned themselves in the 1920s consisted of gardening, hunting, fishing, sago and plant gathering, pig tending, cooking, pot making, and the manufacture of clothing, decorations, weapons, tools and other utensils. Gardening involved cutting trees, clearing undergrowth, burning, cleaning soil, planting, erecting fences, weeding and harvesting. For the early stages of clearing, the whole family or even clan could be involved. Small co-operating groups also worked on the fencing and new planting, but the bulk of other gardening tasks was performed by the nuclear family or the wife alone. Men cut trees, arranged burnings, made fences, and planted. Women cleared undergrowth, cleaned, weeded, and harvested, and also appeared to participate in the planting (Williams 1930:21-4, 42; 1928:140, 151, 1952).

Hunting and fishing were generally the preserve of men, though occasionally a husband and wife team set out to hunt. Several times a year there were particularly large hunting or fishing expeditions which involved the men of many clans and villages in the burning of kunai grass. Usually, however, hunting, fishing and trapping could be carried out alone or in pairs with equipment requiring only one person. Nut and plant gathering were performed singly by both sexes, mainly women, but the arduous sago making involved two or three men (Williams 1930:53,55, 59, 60).

Pig tending and cooking were the responsibility of women. Most of the manufactures were the provenance of one particular sex, so were carried out individually by a man or his wife, as appropriate (Williams 1930:22). In general the picture presented by Williams is of a predominance of individual work within the household with only occasional co-operation between two or three individuals, between clans, or even between villages. The majority of the tasks were divided between males and females.

The material presented by Waddell and Krinks (1968) on the Orokaivan villages of Sivepe and Inonda in the 1960s reinforces this impression. The quantitative information shows a small average size of group for traditional subsistence activity: only fishing, sago making, building and yam harvest require an average of more than two people. Household members usually work together, but the individuals tend to have separate tasks. Only those activities considered hard work involve reciprocal co-operative work for more than three people.

In the 40-year interval between the two studies, there were also some marked changes. Large-scale fishing and hunting expeditions and inter-clan co-operation in fencing and clearing had decreased. Pottery, mourning vests, neck ornaments, armlets of
Job's tears and shells, and string belts appeared to be no longer made by women. The making of tapa (bark) cloth was very rare. The men's tasks had been reduced even more dramatically. They no longer made cane belts or clubs, and seldom made spears. String bags and pandanus mats and bags were the only noteworthy manufactured goods (Waddell and Krinks 1968:24, 50, 64, 88, 108, 115-16, 136, 158-9).

Other time-consuming activities had been introduced, however. In Sivepe, modern activities which had the potential to disrupt subsistence routine included marketing of taro, sweet potato and yams; the growing, processing and marketing of coffee, cocoa and rubber; council and church work and meetings; and paid work (Waddell and Krinks 1968:108).

From the ethnographies of 1923 and 1964-6 there emerges a reasonably clear picture of a household production unit. This unit is often divided within itself into units of one or two people performing the same task, and occasionally supplemented by other households, clans or even villages, to perform special or difficult tasks. Williams' (1928:30) information on time spent on various productive activities is presented in the main discursively, whereas Waddell and Krinks present a great deal of quantitative information. There are some contradictions in Williams' statements, but it seems that in the 1920s women generally worked in the garden from morning until about 4 p.m. Men also followed this pattern but sometimes stayed home to work on manufactures or fished or hunted to relieve the tedium of daily garden work.

In the 1960s the mid-morning to mid-afternoon time for garden work appeared to be continuing for all adults (Waddell and Krinks 1968:108, 151). Some traditional activities had been replaced by market oriented activities such as building a copra dryer, cultivating and pulping coffee and marketing rubber (pp. 117, 159). These involved more co-operative and communal work than did subsistence activities, but the decrease in large fishing and hunting expeditions and in interclan co-operation for clearing and fencing could be a more pertinent fact to compare with co-operation on new cash ventures. The daily gardening routine had never, as far as we know, extended co-operation beyond the household.

The consideration of activities and time studies is crucial to an appreciation of the ways in which the human members of a society produce and the way in which the society is reproduced. Such studies should reveal high priority activities in the society, the sexual division of labour, and the differences in production input by sex and age. They also reveal differences in household production and in small network production. They can indicate social relations and point to relative exploitation when seen in conjunction with close observation of the distribution of the returns of labour. Hence the quantitative activity and time studies are not presented in isolation. A qualitative study is
incorporated in order to give a more rounded picture of the people involved and their past history. The quantitative data add regularity to the intuitions gained from participant-observation.

The survey work on activities taken in 1977 to 1978 in Koropata 2 (see above, pp. 14-16), shows in clear relief a changed pattern of activities compared with material reported by Williams in the 1920s. Table 4.2 presents the observation of members of three clan/residential groups taken over a period of three separate one-week periods. It sets out the average number of producers at a particular activity at any given time during the week.

Comparison of the Koropata 2 information with that provided by Williams and Waddell and Krinks allows the following generalizations. Garden work continues to be important, but there has been a substantial change in the subsidiary activity patterns. Most noteworthy is the absence of the varied manufacturing activities of the 1920s. Waddell and Krinks may have incorporated some into their category 'preparation of tools', but the Koropata material suggests that the making of string bags and sharpening of knives and axes are the only manufactures of continuing importance. Decorative beadwork and the making of tapa cloth are rare. The lack of activities associated with making traditional utensils and clothing has consequences beyond the mere release of time: utensils and clothing are still necessary, so Western goods have been substituted. The maintenance and replacement of Western goods have implications for new activities. Information from Sivepe and Inonda as well as from Koropata 2 suggests that it is the 'other' category that related directly to the absence of traditionally-crafted utensils. After resting, gardening, visiting and cooking, the various money-oriented activities classified as 'other' appear to be the most important. (It should be remembered that the high figure for 'resting' does not necessarily reveal the under-use of labour resources claimed by Sahlin's for his domestic mode of production. Vital long-term societal functions may be carried out in this time, such as child care and education, discussions aimed at solving social problems and so on.) The new arenas for these 'other' activities are the markets, the Office of Business Development, the Coffee Co-operative, the Local Government Council, the church and the school. They relate directly to the need to replace traditional manufactured utensils and equipment through the medium of cash as well as to the less quantifiable notion of attempts to gain power in the new situation created by colonialism and neocolonialism.

My own surveys and the descriptions by Williams (1928, 1930) and Schwimmer (1969, 1973) all point to the overwhelming importance of gardening. Waddell and Krinks' figures show that in Sivepe 41.13 per cent, and in Inonda 35.56 per cent, of active hours were spent on gardening (1968:85, 132). In Koropata, Tohane had 46.6 per cent, Ambotohane-Seva 65.5 per cent and Seva (Hamberhambo) had 61.4 per cent of total work time spent on gardening, an average
<table>
<thead>
<tr>
<th>Activity</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tohane</td>
<td>Seva-Ambot</td>
<td>Seva Hamberihambo</td>
<td>Tohane</td>
<td>Seva-Ambot</td>
<td>Seva Hamberihambo</td>
<td>Tohane</td>
<td>Seva-Ambot</td>
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<tr>
<td>Garden</td>
<td>18.00</td>
<td>34.87</td>
<td>25.00</td>
<td>26.43</td>
<td>31.85</td>
<td>25.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resting(^a)</td>
<td>38.00</td>
<td>40.80</td>
<td>37.40</td>
<td>25.00</td>
<td>32.76</td>
<td>33.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooking(^b)</td>
<td>-</td>
<td>-</td>
<td>0.40</td>
<td>20.00</td>
<td>11.72</td>
<td>13.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaning(^c)</td>
<td>1.50</td>
<td>0.30</td>
<td>0.40</td>
<td>1.43</td>
<td>1.38</td>
<td>1.63</td>
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<td></td>
</tr>
<tr>
<td>Washing(^d)</td>
<td>-</td>
<td>0.30</td>
<td>0.20</td>
<td>2.86</td>
<td>2.45</td>
<td>2.88</td>
<td></td>
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<tr>
<td>Manufacture(^e)</td>
<td>2.00</td>
<td>0.16</td>
<td>-</td>
<td>2.86</td>
<td>1.14</td>
<td>1.88</td>
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<tr>
<td>Building(^f)</td>
<td>3.00</td>
<td>4.43</td>
<td>5.50</td>
<td>5.00</td>
<td>1.55</td>
<td>0.13</td>
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<tr>
<td>Visiting</td>
<td>11.00</td>
<td>7.50</td>
<td>22.40</td>
<td>11.91</td>
<td>6.00</td>
<td>17.50</td>
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<tr>
<td>Hunting/fishing</td>
<td>0.50</td>
<td>2.80</td>
<td>6.20</td>
<td>0.12</td>
<td>5.66</td>
<td>1.25</td>
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</tr>
<tr>
<td>Other(^f)</td>
<td>26.00</td>
<td>8.78</td>
<td>2.50</td>
<td>3.57</td>
<td>5.66</td>
<td>2.50</td>
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</table>

\(^a\) The incidence of 'resting' is exaggerated because of the 10-hour survey period. If the numbers working from 9 a.m. to 3 p.m. are considered separately they reveal a lower incidence of resting.

\(^b\) 'Cleaning' consists of clearing excrement, sweeping or cutting grass around the house to maintain a neat settlement area.

\(^c\) 'Washing' includes washing babies, clothes and cooking utensils and collecting water.

\(^d\) 'Manufacture' consists of string bag making but includes such diverse activities as sharpening a knife, making a fishing net and fixing a battery record player.

\(^e\) 'Building' includes construction of toilets, chicken pens and rest shelters as well as houses.

\(^f\) 'Others' embraces a number of important activities generally aimed at attaining more money and power in the long term. These are: trade-store work; meetings related to church, school or business activities; voluntary church work; dealings with outside institutions such as social welfare; and wage labour. The assumed 8-hour day of the few labourers boosted the 'other' category but even if this is substrakted the category is significantly high.
of 57.83 per cent. All the figures point to subsistence gardening being the most important of the Orokaivan economic activities, so it is gardening that will be considered first in the following discussion of subsistence activities.

Gardening

The Orokaivan word pure means both 'garden' and 'work'. Gardening is seen as the regular activity providing the source of being. Children start working in the garden from an early age and from the age of 15 onwards their contributions are comparable with those of an adult. The Orokaivans are predominantly horticulturalists practising a swidden form of taro growing. Garden land is left fallow for a period of 5 to 10 years, after which small trees and undergrowth are cut, allowed to dry, then burned. The area is then cleared of all debris, holes are pushed with a digging stick, and taro suckers dropped in. The suckers are planted about a metre apart in gardens around an acre in size. Despite the fact that many secondary crops such as bananas, sugar cane, ina (pitpit), corn, sweet potato, pumpkin, watermelon, beans and cucumber are grown, gardens are essentially taro gardens. Sometimes small patches of land are devoted to a cash crop such as pineapples or spring onions. Cultivation of the garden is continuous throughout the year although there is a recognized shortage of taro in the dry season. Gardens of families with many children or with time-consuming outside interests are increasingly devoted to the quicker-growing sweet potato.

Usually all phases of cultivation are carried out during each visit to a garden: cutting undergrowth, chopping trees, clearing burned patches, planting, weeding and harvesting. The burning, however, must wait for a spell of dry weather. Virtually all garden clearing is done by individuals or by father-son, father-daughter, husband-wife, or brother-brother combinations. Only three incidents of co-operative garden clearing in 1977-78 were brought to my attention and they all occurred in the one family. The holder of the garden land invited a network of relatives to clear his land while he provided special food as a reward. A

13 The garden work figures from Koropata are probably higher than those for Sivepe and Inonda because travelling, rest and meal times at the garden have not been subtracted from the garden work period, and Sivepe and Inonda garden periods were plotted against total activities rather than total productive work.

14 In one instance, a young single man cooked German taro, bananas and yam soup for two brothers, one adopted brother, a MZS and a MMZDS who cleared his garden. This young man's adopting father, who was a village leader, on two other occasions used this same core to clear his garden and the garden of a brother-in-law resident in another village.
similar sized and structured group, according to old men, was used in the past to help cut trees, plant yams and make fences.\textsuperscript{15} A meal of cooked yam and taro was provided. At present daily gardening is an individual or household affair.

Taro is not only the staple necessary for survival, it is also symbolically and socially important as a feast crop. In fact, along with meat, it is an essential ingredient for a feast. The last big traditional Koropatan feast was held in 1964. It is claimed that now there is not enough good taro to repeat such a large feast.

In former times, a leader suggested and encouraged participation in a feast. Sometimes the people did not work together on one feast plot and only co-operated to the extent that they all agreed to enlarge their own gardens. The resulting surplus could then be pooled, but individual contributions were still noted. This method enhanced the status of the household gardener, the leader and the village. Another past method of production for feasts involved all clan members going on an assigned day to one member's garden to help clear or plant it. One by one all the clan members would have their garden enlarged this way. This method was often used in conjunction with another, involving a communal plot. One clansman offered his land for a feast garden. All the clan worked to clear it but sections called \textit{tane} were marked out for each man to plant and maintain. Once the taro was harvested, the land reverted to the original owner.\textsuperscript{16} It seems that taro growing specifically for feasts involved a co-operating work group larger than the household. Yam growing today further supports this suggestion.

Yams have status as a feast crop and as an indicator of plenty or surplus. Large yams are displayed at intervillage or interclan exchanges. Yam soup is a high status food offered at special occasions or at meals after co-operative working. Yam houses are built in the gardens to store and display the extra food the household has grown. Not all Koropatans grow yams, but several have between twenty and fifty mounds to supplement their taro. Although most men plant their yams alone or with some help from their brothers, some, on the days chosen for planting and harvesting,

\textsuperscript{15}Williams (1930:23; 1928:14) said that fencing required one or two men driving the stakes and some women to maintain the supply of materials. A garden fence was supposed to surround the whole group of clan gardens; it was built in sections, each man responsible for the part nearest his own garden.

\textsuperscript{16}Schwimmer (1969:85, 86) describes a similar feast garden in Sivepe.
invite groups of young men and women to help. After harvesting, such a group enjoys a feast meal of yams.17

Feasts or the exchanges of large quantities of food between potentially hostile groups of people were probably politically important in establishing a shaky equilibrium in pre-colonial days. Feasts, the display and exchange of food, can also be seen in terms of a reciprocal contract with the spirits of the dead who control natural wealth, as well as an action creating spiritual bonds between gifts and the people represented by them (see Mauss 1966: 11-14; originally published 1925).

According to Schwimmer, 'Feasting ... is the moral act par excellence. A direct connection is laid between the virtue of settling conflict and of feasting on the one hand and the fertility and yield of the garden on the other, as enemies are thought to ensorcell the gardens' (1979:300).

As Schwimmer outlines for Sivepe, so in Koropata the harvest and modern feast is an occasion when the community acts as a corporate group to meet in this case the danger of group friction and perhaps the magical dangers mentioned by Schwimmer. In the past, leaders or feast-givers made decisions about which parts of the garden would be devoted to feasts and when the crop was of a satisfactory quantity and quality. In this way, as well as in preparation and cooking methods, there was the distinction between subsistence and 'feasting' described by Schwimmer (1973:122, 149, 153; 1979:300-1). It is conceivable that the Orokaivans have always employed co-operative methods when the harmony, survival or future wealth of the larger group is at stake.

In 1979, there appeared to be a fundamental crisis threatening traditional Koropatan society. The taro was being rapidly affected by a virus for which there is no treatment except the eradication of the diseased plants (Michael Bourke, DPI, pers. comm. 1979). As the crops became disease-ridden, daily subsistence became increasingly dependent on sweet potato. In comparison with the regularity observed in 1978, taro was rarely eaten at the ordinary nightly meal. Villagers lamented their inability to provide taro for ceremonies or special occasions, and funeral exchanges and brideprice payments were being delayed as people vainly checked their poisoned gardens. Koropatans believed that a sorcerer was poisoning their crop and that general village friction and unpleasantness had led to punishment by God or ancestors. Nearby Ajeka villagers experiencing similar conditions prayed for taro increase and claimed they were possessed by spirits. The behaviour

17This is comparable with the results presented by Waddell and Krinks (1968) and Schwimmer (1973:27). Yam harvest notably draws more than one worker, averaging 2.5 in Sivepe (Waddell and Krinks 1968:115).
was strikingly similar to that reported during the taro increase cults between 1911 and 1930 (Chinnery and Haddon 1917:457; Williams 1928:48-9). In Ajeka, the behaviour was manifested by villagers who had been converted to a fervently Pentecostalist form of Christianity.

Some leading Koropatan men from the block settlements decided to have a large meeting to seek out the reasons for the disaster. All representatives brought an example of diseased taro and proffered suggestions as to the cause of the calamity. Several intra-clan arguments over land or pig damage were deemed responsible, and disputants were encouraged to shake hands. Then the bad taro was cut up, thrown into the creek and washed away. The same group voted to spend K1000 of their business group funds on store food and cows to celebrate the arrival of a new truck. This modern feast could be seen as a means of settling conflict and ensuring future yield—in both the taro crop and business activities.

Given the continued spread of the viral disease throughout the taro crops of the Koropatans, the area of life affected goes far beyond destruction of the subsistence staple. The symbolic importance of taro as a means of imparting strength to children and as the signifier of social relations in exchange must also be threatened. The shortage or absence of taro creates a lack of self-confidence among Koropatans. It reduces their self-esteem and puts future amicable relations with affines through exchange to some risk.

The sexual division of labour for gardening in Koropata broadly follows the pattern described by Williams (1928, 1930). The men are supposed to chop trees, clear undergrowth, burn and push holes for planting. Women are required to clean the soil, drop in taro suckers, weed, and harvest. Schwimmer sees this division of labour as part of a perpetual exchange relation that develops between a man and his wife. Objects mediating this exchange are land, raw and cooked taro. A man offers his wife a garden plot and the services of clearing and ritual protection, and in return she offers her labour and the management and cooking of the produce. The correct rituals give strength for clearing, ensure sun and good burning, and lessen danger from ancestral ghosts lurking in the bush or deserted gardens. The male is concerned with the killing of enemies and wild animals, the driving out of ghosts, and the felling of bush; while the female is identified with the cultivation of taro (Schwimmer 1973:89, 90, 91, 117, 118).

Koropatan myths and stories support the notion of a sequence of cumulative co-operative action between husband and wife, and norms of such a division of labour are still referred to in the village. The actual situation, however, is more complex. There is little evidence of ritual activity and magical knowledge among any but the very old men. In many of the households, for a variety of reasons, women do the male clearing tasks and in most households
Plate 1  The ideal division of labour in planting taro is for men to push the holes and women to drop in the shoots.
women regularly carry out the full process of planting. Single men occasionally weed their gardens, but normally supervise the harvesting. The general rule is that women cook the produce but men organize steam cooking for feasts and occasionally cook the evening meal when the wife is attending the Church Mothers' Union.

In general terms, then, there is congruence between the model put forward by Schwimmer and the normative behaviour models in Koropata 2. From the evidence presented by Williams (1928, 1930) and Schwimmer (1969, 1973), however, it seems that the discrepancy between norms and actual behaviour may have increased in recent times. Activities which in the past were explicitly designated to one sex, so that male and female activities could complement each other, are now overlapping — the distinct complementarity breaking down somewhat. Related to this, and probably an example of the continuing and increasing discrepancy between normative and actual behaviour, is the lack of balance in the exchange of services between males and females. It seems that the division of tasks favours the male in terms of lower input and greater return. It is possible that technological change has influenced both the task content of the division of labour as well as the occasion for co-operative productive relations.

In their garden work, women mainly use their hands and digging sticks and place the produce into string bags in a process unaltered since European contact. Women do use steel bushknives but it is men who have benefited more from the introduction of steel. The steel axe is a man's tool, and the bushknife is also used widely by men. It would, however, be unwise to credit the steel axe with creating great amounts of labour time for the male, since tree cutting is only a very small part of the total time involved in garden clearing. The clearing of vines and shrubs with bush-knives takes much more time and women and children help with this. Burning, raking and fastidious cleaning also take much time before the soil is considered ready for taro. It is possible that the steel axe did make it easier to work alone, and hence inadvertently enable decrease in co-operative clearing, but other observations of social relations suggest that co-operation beyond the household for subsistence gardening has never been common. Garden work for feasts, an attempt to promote harmony and abundance, does however demonstrate such network and lineage co-operation.

Gathering

The observant Orokaivan rarely misses an opportunity to gather small edible animals or plants. This usually occurs on the way to or from the garden, or as part of the day's entertainment for children and so, often, remains unrecorded in economic activity.

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18 About half of the households have a bushknife for the use of the wife of the household head or one or two of the children.
surveys. The most important items gathered in Koropata are green plants, nuts and snails.

The frequency of snail gathering and the amounts collected are much greater than those described by Williams (1930:60). Groups of young children, particularly girls under 13 years, go out collecting, and find up to sixty snails each, enough for a sizeable meat contribution to complement the main taro meal. Snails are prized as a delicacy and served to important guests so, in terms of quantity and quality, snails can be considered a significant part of the diet. This is reinforced by a story concerning the culture heroine, Turunsi, which describes a group of girls collecting snails.

An interesting point is that the snails which the girls collect are, in the main, taboo to women. Large snails (mango) are the type commonly found but are denied to women as they are believed to make them smell bad. Smaller snails (ahoma) are less bitter, and harder to find. Both men and women may eat these.

Plant collection is largely carried out by women and young girls. Sharp eyes pick out edible ferns and plants along garden paths, and bunches are collected without a slackening of the brisk pace set by all Koropatans walking from garden to village. Green plants are very important as a dietary additive, and as the base for a salty soup in which the taro is cooked. It is shameful if taro or sweet potato is served dry, without either such a soup or, with luck, some meat.

Woodgrubs and stick insects are gathered very much as an individual catch. They are usually baked on the spot and consumed quickly by the finder, often a young boy. Snails and green plants are collected, mainly by women, to be eaten by the household. Girls collect in a group for company and always keep what they find for their household. Gathering in a group is not a technical advantage, in contrast to some other subsistence activities.

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19 I tabulated an average figure of 0.21 hours per person per week for gathering. Waddell and Krinks (1968:100, 134) recorded no gathering time for Sivepe and 0.5 hours per man per week for Inonda. They acknowledged that the figures were understated because of the gathering on the way to other activities and the role of the children.

20 D. Hyndman's work on the Wopkaimin of the Highland fringe shows how food taboos channel 60 per cent of animal protein from members of the population who have special nutritional needs. Men have a superior diet (1979:7-8).

21 There was no evidence in Koropata of the gathering of ants, honey or frogs as described by Williams (1928:115; 1930:60).
Nut collection was once a feast-oriented activity, although now it is carried out for individual or household consumption and sale. An early preliminary activity for traditional feasts was the collection of okari and puga nuts. They were dried close to each household fire for preservation, then strung on lines until the feast-giver was satisfied that taro and pigs were ready. Finally, when the invited guests arrived, stakes were arranged in line and the taro and nuts were shared out to each representative of a household or clan.

Nuts do not seem to be used at feasts now. They provide a seasonal addition of protein to the diet and a source of cash income. Children figure prominently in the gathering of okari nuts too. Young boys in particular gather okari nuts alone, crack them open with a knife, satisfy their hunger, then bring home a small bag for the household. Trees are owned individually but, if situated close to garden pathways, are continually pilfered by children. Those with large or fruitful okari nut trees make a special effort to protect them by making a 'fence' of a single strand of bush string on which magic has been performed. Adults control harvesting from these trees and work in husband-wife or mother-daughter teams; or, occasionally, an old man may work alone. Special smooth rocks are used to crack the outer case of the nuts carefully. Two people working for about three hours can harvest enough nuts for the household meal, with a 25 kilogram rice bag full extra to sell at the market for about K10.

On the whole, gathering is now an occupation for individual women and groups of young children. Husband and wife teams for snail gathering or okari nut collecting were common in the past, but are now rare. In fact, adult men have little to do with the gathering, but receive disproportionate returns from it. The methods of gathering have remained unchanged save for the small boys' use of a knife to open the nuts. Although, in measurable time, gathering seems unimportant, greens, snails and nuts provide a valuable contribution to the diet. Snails seem to be less significant now than they appear to have been in the past, and the significance of nuts has moved from the realm of traditional feast to the realm of the market.

Hunting and gathering

Since pacification, hunting has been the most exciting activity for Orokaivan men. It not only involves danger but promises a prize of meat, a highly desired food. Williams said the

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22 Puga nuts need purifying in water, so adults usually deal with these.
Orokaivans were keen to eat meat and Schwimmer says that consumption of meat has an especially invigorating and exhilarating effect. A creature that has been a dangerous enemy has been converted into food (Schwimmer 1973:138, 141).

Hunting figures prominently in a widely-known Orokaivan myth concerning the origin of marriage. To become fully married the single men had to become the meat-givers to the single girls who swept, harvested and cooked for them. Brothers showed lineage solidarity and co-operation, and husbands and wives ideally established a balanced exchange of services. Themes such as these reassert themselves in the fishing and hunting activities of the Koropatans today.

Before World War II, Koropatans participated in large-scale net hunting. Each man owned a net made from pandanus fibre, 1.2 metres high and about 20 metres long. On a set day arranged by one or more leading men, the men of a village or group of villages would assemble, then set off for the thick bush. The nets were tied and staked together in a long line under the informally shouted instructions of experienced men. Some men were given the job of looking after the nets (monga embo) and others of going into the bush to shout and frighten the animals. The owner of the net claimed the animal which ran into it, so these men worked in partnership with kinsmen: one guarding the net and the other shouting. Such kinship combinations were usually father and son, two brothers or two patrilateral parallel cousins. Young and old men alternated along the line of nets so that age and experience could counter the more foolish, daring exploits of the young. Once a man had speared a pig or wallaby, he called out the name of an ancestor or clan group: 'I am Handaupa's grandson!', or 'Grandson of Ambotohane clan'. When enough animals had been killed, the men walked triumphantly home with their catch, singing their clan song so that those at home knew that the hunt had been successful. In the village the pigs were cut up and the owners shared them with those who had not been successful.

The strategy and division of labour for net hunting described above were also demonstrated in the spear hunt of 1978. Such an event, now rare, was carried out without the aid of nets or fire. A man from a village close to Koropata organized a large pig hunt on the land of his deceased father, after a five-year taboo on use of the land had been lifted. The residents of Koropata 2 and five

23Williams (1930:44). That this keenness persists was shown in a Koropatan incident when a young hunter was badly bitten by a pig and his serious injuries took second place to the excitement of catching the pig and preparing it for cooking.

24Williams (1930:46f.) has a detailed description of such a hunt.

25Williams' beaters or dogo (1930:46).
other villages participated. On the chosen day about a hundred men gathered, walked for two hours, then arranged themselves in seven main lines after much informal organizing and shouting. The first line beat down the grass with sticks; they were followed by groups of about ten men walking abreast of each other and carrying two or three spears each. The ten or fifteen men with shotguns walked along the edges of the kunai grass, enclosing the lines of spear hunters. Beyond the kunai, the bush became so thick that smaller groups of between two and six hived off. Young boys on their first spear hunt were instructed to stay close to an older experienced man in the line.

On this occasion a youth was badly mauled by a pig after he had speared it. The rescuers were all Koropata 2 men in kin-based pairs. They were related matrilaterally and through distant kin rather than in the close patrilineal combinations stated as their model. Each village hunted in a different section of bush. As the hunt gathered momentum and the bush became thicker and more difficult to penetrate, the large functioning groups tended to break up. Splinter groups may have had no overall conception of what was happening and the smaller groups were in possible danger. The hiving off was not random, however, as pairs of hunters were cross-generational and kin-related.

The annual dry season hunt with fire noted by Williams (1930: 46-7) is not a regular event now. The division of labour involved is similar to that described for the hunt above: firing parties and pairs of spearmen followed by women bagging small game. On one occasion in 1979, Koropata men attempted such a hunt but the kunai was not dry enough and they were completely unsuccessful. The most common method of catching wild animals is by individual hunting and trapping techniques.

The individual hunter usually hunts in daylight. Company is preferred for night hunting, father and son being a common combination. Birds, bandicoots and cuscus are the animals most frequently caught, but occasionally a hunter is lucky and a wild pig is the victim. Hunters now make use of shotguns and, at night, torches. There are only three operative shotguns in Koropata 2, so three men have a monopoly of one means of production. On the rare occasions when the guns are borrowed, there is no money charge and the borrower is not under any obligation to render part of the catch to the owner. The owners' wives were trying to persuade their husbands to make a 50t rental charge, but up until the time I left the field, husbands had not acquiesced. On occasion, men may buy cartridges for the hunter and in this case the gun-owning hunter offers all of his catch to the bullet owner, and if he has wasted the bullets by missing his quarry, he is under some obligation to repay these later on. If a pig or wallaby is shot, the hunter

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26Lending of guns is illegal.
will be rewarded with less than half of the animal. If a bird is shot; he may receive a small portion when it is cooked.

The catch from night hunting which involves a gun hunter and a spear hunter is generally shared equally unless both are from the same household. Dogs are used to aid the lone hunter by day, but have to be stopped before completely devouring the catch. Although not noted during the fieldwork period, it was said that in the past women sometimes hunted at night for frogs, snakes, lizards and cuscus, using a bush torch and killing with sticks. The husband and wife hunting combination featuring in myths and noted by Williams (1930:45) does not appear to operate now.

Trapping methods are known widely but used only occasionally. Of the complex and large variety of traps described by Williams (1930:47-53) the Koropatans describe for pig trapping only large concealed holes containing spikes of black palm; angled spears in low or broken garden fences, and a noose set off when a tree bent under tension is released. Although one man can make a trap by himself, it may take several men to complete the killing of the wounded animal. Such an event occurred in 1978 and the following description demonstrates the ego-centred network involved in trapping and consuming the animal.

A mature man made a trap with a bent tree, wire noose and forked sticks holding the tree under tension. He found a pig when checking the trap. The pig ran off, dragging the broken trap, and was chased by the man's dogs, then by four young men (FBDH and two sons of an age-mate friend). Another five relatives (FBDH, BS, BS, BS and B) helped to prevent the pig's escape. The pig was eventually speared by the age-mate's two sons. The middle of the older brother's sons cut up and shared the pig. The spearers were given a back leg each; the eldest of the older brother's sons, a front leg, and the FBDH, the head. The remaining meat was shared amongst the two FBDHs and the BS. The spearers received more than the trapmaker and the distribution took no account of family size.

Large group fishing, like group hunting, has become a rare occurrence. Being close to the Kumusi River and Hembe Creek, Koropata 2 does have a regular if small protein source in fish. In the past, large nets were used. Up to forty village men would go to the Kumusi River on a chosen night, removing their tapa cloths, avoiding women and speaking in whispers. At the river they stood in a line up to their waists in water holding large cane-bound nets. If they were successful in catching fish, they remained until daybreak, baked some for breakfast, then returned to their individual households with their personal catch. Wives presented with many fish might share them with their own kin or with the wives of their husband's clansmen.
The large nets have now fallen into disrepair and group fishing in the night seldom involves more than six men. Three to six young men use lines and stand a few metres apart. During my period in the field, one large Western manufactured net was used occasionally with notable lack of success, eight fish being the largest catch. Fish may also be stunned in smaller creeks during the day by the use of derris root. Once dazed, the fish float to the surface and are picked off easily with spears. On one occasion, a man supervised this while his two sons and wife's sisters helped, but it can be practised alone. During the day, too, small groups of young boys and girls fish quite successfully for small fish and fresh-water prawns with goggles and rubber-propelled triple-pronged spears. The boys almost always consume their catch communally by the river bank, whereas the girls are just as likely to sell it at the market or present it to the household for family consumption.

On occasion, mature married men may go fishing alone using the goggles and rubber-propelled spear, while married women may use their small nets to collect crustaceans and fish from the rocky edges of the river. Fishing at night with a spear and strong light is popular, but rare, as few own the necessary pressure lanterns. Another individual method is spear fishing by day. Old men stand for hours on a rock or in a rest shelter waiting to spear a large fish going by. Koropatan men may spear one or two in three hours if they are lucky. Shelters for these tedious waits are built along the banks of the Kumusi River by Ombesusu and Hamara villages as well as by Koropata.

Most fishing groups recorded consisted of clan age-mates, cousins (both FBS and FZS),27 brothers and sisters, and neighbouring households. When single men go fishing they usually do so in the company of particular friends from their oro (single men's house). The catches of single men, as mentioned before, rarely contribute to household food. They are usually baked on the river bank or side of the road after green edible leaves and bananas have been added to complement the meal. Fishing by married men, alone or in pairs, does contribute to the household food but is not a major part of the diet. The keenest fishers would bring fish to their family once a week. Efforts are made to catch crayfish and small fish for special occasions and for guests.

The enthusiasm and camaraderie of single men's fishing parties are also features of large hunting parties. The product of both occasions may be destined for a special celebration, such as a feast or a meal for a special guest. Perhaps these two characteristics could be interpreted as aspects of production for feasting: a co-operating group fishing or hunting with a communal partaking of meat in mind. Evidence from Koropata and Sivepe supports the idea

27Although matrilateral cousins were not recorded in fishing groups there is nothing in principle to prevent such an association.
that hunting and fishing activities are akin to production for feasting. In Koropata a special effort was made to obtain fish or game for Christmas and another big feast. Waddell's information on Sivepe points even more strongly to such an interpretation. During one survey intra- and inter-village group hunting drives were organized almost daily for two weeks, and activities being initiated by the blessing of the hunting dogs by the Anglican priest. During both weeks more than 11 hours per man/week were spent on hunting, more than on taro gardening. Wallabies were the main catch and the people's explicit aim was to 'stockpile' smoked meat for the annual Christmas feast held at Sasembata Mission Station (Waddell and Krinks 1968:86).

To a certain extent, then, hunting and fishing can be compared with gardening. Daily subsistence activities are carried on by individuals or household units, but for a feast or special occasion, wider co-operation is sought and kinship and neighbourhood ties are activated. Meat is necessary for feasts or can be sold at market, and the cash used to buy feast food, so hunting and fishing can be seen to be concerned with feasting. The notion of hunting and fishing being extra-subsistence, pleasant activities also shows up in time studies and attitude statements.

Time figures for hunting and fishing are necessarily inaccurate as these are often carried out during the night, and men never express their intention of going on such expeditions as to do so would bring bad luck. Compared with many other activities the time input to hunting and fishing is very small (see Table 4.3).

Some men have a particular liking for fishing but, overall, the time spent is minimal compared with gardening and resting. The food provided is small in quantity but much valued. Fish or wild meat fill most household pots no more than two or three times a month.28

Many Koropatans in fact do not regard hunting and fishing as work. For the young boys it is fun and camaraderie, with the added prize of the meal of high protein. For the older men it is a time of peaceful solitude, a chance to put one's skill to a test, and perhaps an opportunity to add to the household's food supply. For young girls it is an occasion of fun, and a chance to make a little money for small luxuries: soap, underwear and so on.

The reduced frequency of large group hunting and fishing, the fewer methods of trapping in use, and the claimed reduction in

28 This may have decreased since past times but the Orokaivans have always been basically vegetarian (Williams 1930:52).
time spent on these activities in contrast to former times, may all have been influenced by technological change. Koropata villagers say: 'Since the shotgun and the torch, men go to the bush at night and shoot cuscus, bandicoot, wallaby and pig. So now there are not enough animals for a big hunt'. The government issues only one shotgun licence per 50 to 100 head of population, but owners, as we have seen, do shoot on behalf of other people and lend their guns occasionally, so there is a possibility that the bush is being shot out. In fishing too the new equipment has enabled the individual to become more skilful and successful. Pressure lanterns greatly increased the success of night spear-fishing, but on the whole, according to the reports of old men, the catching of large fish in the Kumusi River seems to have decreased.

Table 4.3

<table>
<thead>
<tr>
<th>Date</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>December 1977</td>
<td>0.33</td>
<td>hunting</td>
</tr>
<tr>
<td>January 1978</td>
<td>2.06</td>
<td>fishing</td>
</tr>
<tr>
<td>March 1978</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>April 1978</td>
<td>1.9</td>
<td>fishing</td>
</tr>
<tr>
<td>May 1979</td>
<td>1.1</td>
<td>fishing</td>
</tr>
<tr>
<td>June-July 1979</td>
<td>0.5</td>
<td>fishing</td>
</tr>
</tbody>
</table>

Notes

1. Information was collected during six week-long surveys, checking the whereabouts of producers every two hours from 7.00 a.m. till 5.00 p.m.

2. cf. Waddell and Krinks' figures showing for Sivepe 1.8 hours of hunting, 0.2 of fishing and for Inonda 2.0 hours spent on hunting and 3.8 on fishing, which are roughly comparable with the Koropata data (Waddell and Krinks 1968:85, 132).

3. All adults who worked at all and children over 15 were considered as producers.

It has become obvious that for the most part hunting and fishing are exciting, dangerous, male activities. Men use the larger, more effective, weapons and have for the most part benefited

See Note 2 to Table 4.3. Care must be taken not to attribute too much to technological change and its resulting role in the reduction of game and fish. The environments of Inonda and Sivepe differ in several respects from that of Koropata, and Waddell and Krinks were able to get more accurate figures on night-time activity.
in the short term from technological changes. Women's equipment, once again, has not changed. Young girls, however, have access to goggles to catch small fish and prawns, so they have encroached to some extent on the domain of men.

When a male is single, hunting and fishing are carried out ideally in a unit of clan brothers, but often in fact as an ego-centred network of kin in a spirit of festive solidarity. When a male marries, the contractual relationship into which he enters requires that he share the fruits of hunting and fishing with his wife who, in turn, has certain obligations to him. The norms of hunting and fishing fit well with an overall concept of a sexual division of labour, with tasks carefully allocated between men and women.

Meat is extremely desirable for its taste and for its believed strengthening qualities and, when it is acquired through skill and daring, it is even more desirable. Technological changes, although aiding the hunter in the short term, may have reduced game in the long term by contributing to the shooting out of the environment. The large-scale hunts and fishing may no longer be rewarding on the one hand, or even necessary on the other, as a result of use of the new equipment. The village-wide units and small network sub-units for hunting and trapping may be features of the past, but the solidarity of groups of single men seems to have remained. Individual hunting and fishing are normally more important in terms of production towards household food, but this food may be converted to other objects through the cash medium. Even so, the 'valuable' nature of meat classifies it in many ways as a product associated with extra time, with feasts. This is further demonstrated in the following discussion of domestic meat — household pigs.

**Pig raising**

As in many parts of Melanesia, pigs in Koropata are extremely important for feasts and in some senses they represent or symbolize human beings. Speaking of the Orokaivan Sivepe people, Schwimmer has noted that a gift of pig meat restores relations after a quarrel, and establishes new social relations. He suggests that pig sacrifice can be seen as communion with primeval ancestral beings (Schwimmer 1973:138-9, 145, 148, 153). In Koropata too the gift of pig meat can be used to emphasize the strength and importance of a particular social relationship. The creation myth told by Koropatans is centred on Totoima, a pig-man figure with long teeth (cf. Schwimmer 1973:55). His death and subsequent division into pieces represents the origin of the different language groups around the Orokaiva area. There are examples of pig-man association in myth, ritual and exchange throughout Melanesia. Societies project humanity on to pigs in contexts as varied as myths and compensation payments (see Modjeska 1977; Meggitt 1974) and in the household situation of raising pigs.
Domestic pigs are essentially part of the Koropatan family. They are given personal names, fondly reared and mourned when finally killed. Members of the household and closely-related kin may not eat the pig they have reared. Pigs in Orokaivan villages are not prolific, and probably never have been kept in numbers as large as those in the Highlands. The largest number of pigs shared at a feast that I obtained records for in Koropata was fifteen. Brideprice payments now include one to three pigs.

Most households had between no pigs and three pigs (Table 4.4). Two households had respectively thirteen and sixteen pigs, but this state of affairs was very temporary as young litters of pigs could not be maintained for long. Feasts and obligations reduced the size of both these pig holdings to between one and three pigs by 1979.

Table 4.4
Ownership of pigs per household, Koropata 2, 1978

<table>
<thead>
<tr>
<th>Number of pigs</th>
<th>Number of households</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>1-3</td>
<td>19</td>
</tr>
<tr>
<td>4-6</td>
<td>7</td>
</tr>
<tr>
<td>7+</td>
<td>3</td>
</tr>
</tbody>
</table>

Average 2.8 pigs per household: range 0-16.

Pigs are fed peelings, small taro, sweet potato, pawpaw, coconut, watermelon, old bananas, German taro, and small yams. Both adults and children share responsibility for feeding the pigs, which are given as much as or slightly more than a fully grown man.

30 Meggitt writing of the Mae Enga Highlands people said that the mean number of pigs per married man in 1956 was 5.4 (1974:168).
31 cf. a feast in which 30 pigs were reputed to have been used during my absence in 1979. This occasion was probably exceptional in that those giving the feast had very high cash incomes and were able to buy pigs.
32 Williams (1930:137) said brideprice was usually one or more pigs but continued gifts to the bride's family could raise the figure to six over the years. Schwimmer (1973:142) says seven pigs was the usual number for slaughter at feasts.
33 Waddell and Krinks report that in 1964 the average number of pigs per household in Sivepe was 2, and in Inonda 0.25, and the range respectively 0-4 and 0-1 (1968:44, 88).
The food may be cooked, but is often offered raw. A typical nightly meal for four pigs (1 large, 1 medium and 2 small) is 3 kg of root crop. Such a meal gives only half the pig's daily requirements. The rest is obtained through scavenging scraps, leaves, worms, excreta, or in fact anything edible.34 The pigs intermittently sleep under the house at night.

Although all members of the family rear the pigs, the married women play the major part. A married woman will be referred to as the pig's mother. She will have the primary responsibility for domesticating the pig, usually harming its eyes and feet35 to prevent it from wandering too far. She will carry it and fondle it when it is young, and cry over it when it dies. As a woman performs daily harvesting for the household meal, it is usually she who calls the pig for the nightly meal and decides which of the taro or sweet potato in her string bag should be allocated to the pig. If the husband is a regular gardener, his labour as well as his wife's produces the foodstuff. Whether or not he is a regular gardener, he ultimately owns the pig and decides to whom it should be given, although matters such as these are open to household discussion.

It is difficult to estimate time spent on pig rearing. The animals are usually fed in the course of a woman's preparation of the nightly meal. The treatment of eyes and feet takes little time, and is only noticeable because of the squeals of the pigs. The actual growing of the food is part of gardening time and in the case of owners of large numbers of pigs, can be seen to influence their garden size and work input. Otherwise, the raising of pigs makes the same impact on the labour of a household as the feeding of an extra adult member.

So far, the raising of pigs has seemed very much a household or family affair. No co-operative work is required, except perhaps for the fencing of gardens to keep them out. Very few fences are made now and interest in fence making only appears after a pig has damaged a garden. The household bias in pig production might seem to contradict the importance of pig meat in feasting, as work on activities geared to feasting seem to entail a co-operative group beyond the household. There is some evidence, though, to suggest that a kinship network wider than the household is required to supply pigs for a particular feast at an assigned family life-crisis time.

34 Williams said that much credit for the cleanliness of the village was due to the tireless scavenging of the pigs (1930:68).
35 Lime is put in the pig's eyes to partially blind it, and the pig's feet are cut so that it will have difficulty in walking long distances.
As stated, the feeding of a pig is as much an economic burden as feeding an extra adult family member. Some households find themselves incapable of coping with a new batch of piglets. Several may be farmed out to relatives who are expected to return a piglet from their next litter. Alternatively, the foster 'mother' and 'father' may be required to donate the grown pig to the feast named by the original owners. Another method of ensuring supply at the time required for a life-crisis ceremony is to call on a relative who has a sufficiently grown pig to use on behalf of the person needing the pig. This is done with the understanding that he will in turn call on them on a similar occasion. There is another modern alternative: buying a pig at the required time. It entails involvement with a larger number of people in the collection of money by kin. Thus, in pig raising too, the extended kinship network may be called upon to ensure the success of a feast and the planned production of pigs.

There have been no changes in the technology required for pig raising, but new protective Council rules have been introduced radically challenging the Orokaivan methods of pig production. The rules enjoin the building of pens for the pigs, to reduce the chance of villagers' contracting hookworm. In 1956, legislation to enforce hygienic control of pigs resulted in the slaughter of all pigs in some Orokaivan areas. In 1958 this Council rule was revoked but in 1960 another one was passed ordering the locking up of pigs at night. Waddell and Krinks report that in 1962 villagers from Inonda were still discussing the compulsory penning of pigs so there must have been some confusion over changed Council rules. Inonda avoided the problem by slaughtering all its pigs at a large funeral feast (Waddell and Krinks 1968:44, 58).

The only Council rule that remains on the books now is aimed at preventing the straying of pigs into cash crop areas, gardens or villages. If a pig does trespass, the offended party can kill the animal, then advise the owner to collect it. He can also take separate action to claim damages. Virtually no pigs are penned in Koropata, so gardens are ravaged occasionally. The garden owner may kill the offending pig, as outlined by the Council Rule Book, but rather than suing, he reminds the pig owner of his obligation to help build a protective garden fence.

Although at first sight it may seem unusual that the Koropatans continually risk the ravaging of their gardens by pigs, this can be better understood if it is remembered that scavenging accounts for about half of the pigs' daily food. From the point

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36 This was observed twice in Koropata. Once an ordinary villager used coffee money and donations to buy a pig at K78 for the post-puberty seclusion feast for a young girl. The Aid Post Orderly organized the buying of pigs on a much larger scale, paying about K60 each for five pigs.
of view of the villagers, the problem is not in the initial building of the pen, but in the heavier demands for garden production for the hand feeding of pigs, and, furthermore, the labour involved in fencing gardens securely is regarded as being too high a cost to outlay for security from pigs in the gardens. Koropatans in 1979 anticipated they would kill their pigs when they took on the responsibility of maintaining full-sized small-holder blocks of 480 oil palms (see Epilogue).

Domestic or wild pigs can be sold at Popondetta market for high prices but both live pig and portions of pork are also sold within the village. Although not eating their own pig, men selling their pigs 'eat' what it is converted into: cash. It seems that the money is not intended as a gift substitute for a pig to be presented to a social group on a ceremonial occasion. Observed instances show that it is intended for individual use.

Pigs may be symbolic, meaningful members of the Orokaivan family, but they have undergone a change of role and seem to be losing their significance in some contexts. First, the ceremonies for which they are required have been greatly reduced in number. In the 1920s and presumably prior to colonial contact, compensation or bloodprice for individual deaths perpetrated in traditional fighting required the giving of pigs and ornaments. Peacemaking between two tribes involved an exchange of the same items. In minor disagreements, some men flamboyantly killed a dog or pig in front of the offended party. Male initiation required fumigation by a special stew called *suna* which included pig, taro, *okari* and *puga* nuts, *ina* (pitpit), leaves, crotons, coconut oil and pig's blood. In a mourning feast the widow's jacket was placed on a dead pig before being buried or left to rot (Williams 1930: 166, 170, 225, 331, 332).

Present-day mourning ceremonies still require the killing and distribution of from one to three pigs, but there seem to be fewer ritual practices involving pig meat. A bride's parents will still demand a few pigs for brideprice and the feast given to a girl when she leaves the house in which she has been secluded since first menstruation (see Chapter 5) can still involve the killing of several pigs. This post-puberty feast is becoming very

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37On one occasion a shotgun owner killed a wild pig and cut it in preparation for selling at the market the next day. He sold almost all in K1 to K8 lots to the villagers before leaving for the market. The wife of the Aid Post Orderly bought K16 worth. The pig grossed far more than the intended K20 or so needed for school fees. On another occasion, a young man sold a large pig (almost certainly intended for an eventual brideprice) for K78 so another village man could present a pig at a post-puberty seclusion feast. He flew to Port Moresby to look around for several months on the proceeds.
rare now. Parents might allow their daughters a longer school education and, in so doing, release themselves from the obligation to work hard for a feast.\textsuperscript{38} Very occasionally, a pig may be killed and given to attempt a reconciliation between quarrelling clansmen\textsuperscript{39} but, on the whole, marriage and death are the chief remaining occasions at which it is expected that the main parties will provide one or more pigs.

A second pointer to a decreasing symbolic significance of the pig is the fact that for many functions a cow is substituted for pigs. In some areas cows are substituted for pigs in the brideprice. The people maintain that they prefer to eat pig, but for big end-of-mourning feasts, inaugural cash crop feasts, celebration of a new truck, and some other modern functions, cows are used. Cows are sometimes given personal names, cried over when killed, and subject to household taboos for consumption, but the extent to which the ideological importance of pigs has been transferred to cows is limited. Cows are quite readily attainable by cash from villagers and the Department of Primary Industry (DPI) in Popondetta. Purchase by cash enables the group as a whole to contribute to a shared investment.

The actual and unique symbolic role of pigs, then, may have been diminishing for a while. In the 1960s, many villagers had no compunction about the wholesale slaughter of their pigs as an alternative to the onerous labour required by Council rules. It was observed during the fieldwork period that the extra work involved in rearing pigs for feasts is sometimes neglected in favour of alternative feast-like activities. In spite of these changes, pigs are still highly desired and affectionately reared.

Housebuilding

Shelter, as well as food, is essential for survival, but in horticultural societies the provision of shelter is not a daily work task. As it is not a task requiring daily, weekly, or even yearly effort, it is not part of the regular work pattern and it is in this sense that it can be compared to an irregular event

\textsuperscript{38}The length of seclusion depends on pig and garden produce of the diligent parents. See Williams (1930:207).

\textsuperscript{39}A man from Gulf Province who had married a Koropatan woman visited his wife in the village while on leave from his job in Port Moresby. The wife's family had their house stoned by members of the girl's father's clan. This was in retaliation for threats which had been made against one young clansman by the Gulf man and his clansmen, while the Koropatan was in Port Moresby. The woman's father demanded compensation for the attack and damage and received a pig from the young clansman.
like a life-crisis activity. It is an extraordinary economic activity in the sense that it is an event not in the everyday order of things. It requires the formation of extraordinary work groups, that is a production group drawing on producers beyond the household. The subsistence pattern of activities is centred around the household, but irregular economic activity takes place in an unstable or unusual period in which a larger network of producers is required for effective economic reproduction.

There are two types of house in Koropata: the family house (*bande*) and the single men's house (*oro*), for bachelors over the age of about 12 or 13. The framework of the family house is made by jamming strong saplings into the required positions and lashing the main roof beams. On to that framework, shingle walls of split timber are nailed and the sago thatch roofing lashed. The floors are made of blackpalm strips lashed to the floor framework, the whole standing about one metre from the ground on strong supports. Doors can usually be snibbed or padlocked and most houses have an open square for a window. A few have shutters for these. Pigs usually rest under the house, and sometimes a railing may be built to constrain young piglets. Cooking is usually done outside, but there is a tin or earth-lined section in a central position inside the house for wet weather conditions. The modern *bande* shows a substantial change from the low oblong house raised only on piles with horizontal logs for walls and a raised sleeping platform for men, described by Williams in the early 1920s (1930:69, 70). Schwimmer notes that in the early 1970s in Sivepe there were lavatories, chicken pens and rubbish holes, but these were the exception rather than the rule in Koropata in 1977-79.\(^4\)

Single men like to try out new styles and fashions when they build their *oro*, so in Koropata these houses are quite distinct from the *bande* in appearance.\(^4\) They build porches, verandahs, shuttered windows, rooms for each intended inhabitant, and sometimes raised sections for beds. Their houses are built as high as possible off the ground and, consequently, tend to lack stability. They are often built close to village thoroughfares so that the

\(^4\)The government officers advised that the houses be raised well above the ground level. In the 1920s it became the fashion to use vertically placed midribs of sago palm for walls (Williams 1930: 69, 70). In the early 1970s, vertically laid shingles became popular and larger houses, windows, chicken pens, lavatories and so on were common constructions under government influence (Schwimmer 1973:23).

\(^4\)Schwimmer reports that for Sivepe the *oro* are built the same size and construction as the *bande* (1973:23). Williams also reported that *oro* were usually without distinctive features, but the large decorated male clubhouse called *arijo* to which he refers no longer exists (1930:69-70).
inhabitants can keep an eye on strangers and girls passing by. To discourage entry by small boys, the houses have bars on the windows and removable or steep entry steps.

Another building of great social importance is the rest shelter or arara. Few Koropatans entertain inside their houses. Meals are served and visitors are invited to sit on the roofed platform outside. Important men build impressive rest shelters showing that they can entertain lots of company.

During 1978 there was a flurry of building activity in Koropata. Eleven houses and five rest shelters were built in the settled village, and at least ten houses were built in the newer block settlements. As beetles eat sago thatch and carpenter bees chew through supports, houses are normally built about every three years,\(^4^2\) undamaged material being recycled. Table 4.5 shows the number of people involved and the average time spent per producer each week on building. Waddell and Krinks produce similar averages from their data on Inonda and Sivepe.\(^4^3\) Further ethnographic information, however, must be added to appreciate fully the character and organization of the work.

Table 4.5 sets out precisely what was deduced from observation: namely that housebuilding is essentially a male activity. Men are in charge of construction and although women may help by sewing roof thatch and fetching and carrying for the builder, a woman cannot organize the building of her own house. Sometimes households with an absent or deceased male have difficulty maintaining a weather-proof dwelling, and it literally rots around them until it collapses and the household members have to seek temporary shelter with a kinsman. A newly married woman expects her husband to build her a house as part of the contractual arrangement of rights and duties between spouses.

The time averages for building work of a clan conceal the actual pattern of work for an individual householder. Consideration of the table column 'Range of men's hours' reveals the fact that one or two men are devoting a large proportion of their weekly labour to construction. Every three or so years a householder finds that he must put a lot of time into such building work. Flooring and roofing are the arduous tasks which call for co-operative labour. Invitations or messages are sent informing clan members, other relatives and friends, of the day chosen for the

\(^{4^2}\)Waddell and Krinks said 3.25 years for Sivepe and approximately 5 years for Inonda (1968:89, 136).

\(^{4^3}\)The three surveys for Inonda showed 1.7, 4.8 and 0.5 man-hours per week, an average of 2.0. For Sivepe the figures were 2.2, 1.6, 0.6, average 1.6. (Some building was for cash-oriented activity: Waddell and Krinks 1968:89, 139.)
### Table 4.5

Hours worked on construction, Koropata 2, 1977-79

<table>
<thead>
<tr>
<th>Time of survey</th>
<th>Number of producers surveyed</th>
<th>Average hours per producer per week</th>
<th>Number of men&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Range of men's hours&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Number of women</th>
<th>Range of women's hours</th>
<th>Percentage of group involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 1977</td>
<td>24</td>
<td>1.16</td>
<td>3</td>
<td>6-11</td>
<td>1</td>
<td>5</td>
<td>17.0</td>
</tr>
<tr>
<td>January 1978</td>
<td>47</td>
<td>2.00</td>
<td>8</td>
<td>1-25</td>
<td>4</td>
<td>2-10</td>
<td>25.5</td>
</tr>
<tr>
<td>March 1978</td>
<td>24</td>
<td>1.40</td>
<td>5</td>
<td>1-18</td>
<td>1</td>
<td>1</td>
<td>24.0</td>
</tr>
<tr>
<td>April 1978</td>
<td>25</td>
<td>1.04</td>
<td>7</td>
<td>1-8</td>
<td>-</td>
<td>-</td>
<td>28.0</td>
</tr>
<tr>
<td>May 1979</td>
<td>39</td>
<td>1.04</td>
<td>5</td>
<td>2-18</td>
<td>3</td>
<td>1-2</td>
<td>21.0</td>
</tr>
<tr>
<td>June-July 1979</td>
<td>41</td>
<td>0.08</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>2.5</td>
</tr>
</tbody>
</table>

<sup>a</sup>Refers to producing men and women; see pp. 14-16.

### Table 4.6

Composition of construction work parties

<table>
<thead>
<tr>
<th>Male builder</th>
<th>Relation to male builder</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S S D neighbour and neighbour's son</td>
</tr>
<tr>
<td>B</td>
<td>WB ZS</td>
</tr>
<tr>
<td>C</td>
<td>B B FZS FFBSS FFBSS WMBS WB</td>
</tr>
<tr>
<td>D</td>
<td>BS BS DS ZS DH S</td>
</tr>
<tr>
<td>E</td>
<td>F B Z MZ MBW Unrelated unmarried men</td>
</tr>
</tbody>
</table>
task. Single men are also looked upon as a floating pool of potential workers. Although there is no obligation for either relatives or unmarried men to attend, most of the latter will come when invited, glad of the special meal of feasting food and the good-natured conviviality while working together. The wife or mother of the man responsible for building spends most of the morning cooking a large special meal of, for example, yam soup, taro with pig meat or with coconut-green vegetable soup. Foods cooked with squeezed coconut milk, any meat, yams and good whole taro are the high status foods from the garden or bush. They are served at feasts and to special guests. Those with more access to cash and less access to these required high status garden foods may buy rice and tinned fish for the occasion, spending up to K5 for four to five hours' work from five or more people.

Between one and three of these co-operative work parties will participate in the construction of most houses. The clusters of people working together on house construction are, once again, ego-centred networks of kin rather than strictly lineage or clan affairs. Examples of the personnel in such work parties are set out in Table 4.6.

The preparation and carrying of the framework poles is usually carried out by an individual man though he may call on one brother or cousin to help. House walls as well are usually put up by one person. Wood is cut and split in the primary forest some distance away, carried to the village, then painstakingly nailed to the framework. A few men actually try to build the whole house alone, admitting that it is hard work, but proud that only strong, hardworking men would attempt it. A motive for such attempts can be understood more readily by reference to heavy commitment elsewhere by closely related kin and perhaps the difficulty in supplying the high status food for helpers. The flooring and roofing are both operations using traditional techniques and materials. Walls, as stated already, require hammer and nails in their construction. As several anthropologists have claimed that technological change has been the stimulus for fundamental change in economic organization (Salisbury 1962; Murphy 1978) it is worthwhile to consider such change in housebuilding.

Ownership of the essential hammer and nails for wall building reveals a certain dependence on help beyond the household.

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44One man used only three neighbouring boys for a few hours to help assemble his roof. His wife helped to make a few sago thatch panels. He was married into the village and had little access to high status food. Another man almost had a serious accident when trying to assemble a heavy framework by himself. His younger brothers were building their own single men's house, and his clanmate and cousin (FFBDS) preferred to carry out church work at the mission station. This builder, too, would have difficulty providing high status foods to reward workers.
Thirty-eight hammers are owned in the village, only two male-headed households lacking one. Nails are more difficult to come by and are carefully retrieved from old houses by owners or single men with no other source of materials. Relatives of villagers who work for building companies may obtain nails from work or give them to their kin or, occasionally, a villager who builds a house will buy nails. To build, then, some households have to enter relationships with other households. The actual act of using hammer and nails for walls rather than tying sago ribs, however, reduces the need for cooperative activity.

There are now four buildings in Koropata with iron roofs. These are status symbols and, not being subject to the depredation of the sago beetles, do not have to be replaced about every three years. If more households were to obtain the means to add iron roofs, another major co-operative task in housebuilding would be eliminated. Indeed, most of the activity associated with house-building has been threatened by the inclusion of a permanent materials home in the new Oil Palm scheme. The scheme allows for a two-roomed, iron-roofed house with a tank, in the loan scheme of which many Koropatans anticipate taking advantage. They hold that 'one sleeps well under an iron roof' (see Epilogue).

Building has, up until now, been the prerogative of the male household head who uses at least two or three work parties consisting of patrilateral, matrilateral and affinal relatives and friends for tasks such as flooring and roofing. The occasions for such difficult tasks have already been reduced, as for example in wall building where hammer and nails enable individual work. Further technical innovation in flooring and roofing could reduce this even further. The Koropata material on housebuilding then does not negate the contention that technological change can lead to fundamental change in economic organization. The male role in house-building is an important aspect of the sexual division of labour, implying a balance of role between husband and wife. The recurring 'irregular' activity of housebuilding is a part of the Orokaivan economy which utilizes the male householder as its main work unit, but which up to now has required affiliation with a kinship network to complete the roof and the floor satisfactorily.

Before dealing with the other 'irregular' activities essential to effective social reproduction, I will draw together some of the hypotheses of this chapter on subsistence production, and examine certain aspects statistically. This should permit a limited comparison with Sahlin's model of the domestic mode of production and allow an assessment of the autonomy of the household unit.

Household economy?

The foregoing discussion has established that the nuclear family household is the most relevant unit for the organization of
daily economic activities. It is the production and consumption unit, and the most important unit for the ownership of the means of production for gardening. Production is characterized by a reasonably clearcut sexual division of labour; male tasks have been more influenced by technological innovations than female tasks. For activities associated with the consumption of meat or the giving of a feast a network beyond the household is required for co-operation labour.\footnote{For this reason I cannot accept Gregory's (1982:99) claims that the self-sustaining nature of the food producing unit (the household) is the reason that production should be considered subordinate to consumption in the 'gift' economy. Although he is correct to stress the importance of reproduction of labour and the establishment of security of tenure over land, he is unwise to accept the notion that the household by itself is completely self-sustaining. For long-term production as well as reproduction, a larger unit is required.} Hence yam gardens, gardens earmarked for feasts, large hunting and fishing expeditions and, to a certain extent, pig raising, are activities which call on the aid of village, of clan or more often of the ego-centred network of kin. There is a possibility that there are now fewer occasions requiring co-operation as a result of the use of changed technology.

Sahlins, in his discussion of the domestic mode of production (1972), makes use of formal graphs to support the existence of certain features in the social and economic organization of a society. In this section I make an attempt to verify aspects of the organization of subsistence economy using a modified version of his graph.

In his quest to explain the historical evolution of societies, Sahlins looks at the relation between domestic productivity and certain leadership structures (1972:132). A measure of domestic productivity or economic intensification can be made by plotting household production against a normal consumption quota, or what is required to sustain an average man or household. The difference between the average actual production and the production deemed necessary to sustain individuals gives an indication of the amount of surplus produced and the economic intensification of the society. The difference between individual households in relation to the estimated production required gives an indication of the political organization or type of leadership system. The cluster of high producers opposed to cluster of low producers among the Kapauku of West New Guinea indicates a Melanesian big man system (1972:117). The low surplus production and more even spread of households among the Valley Tonga of Northern Zimbabwe suggests the 'largely egalitarian' political organization (ibid.:123).

There is a sense in which Sahlins is working backwards in this analysis, as he is already aware of the political and social organization of both societies and is searching for a pattern of
production which might typify one type or another. He is constrained by the type of information offered by the ethnographers. For the Valley Tonga, he uses acres of gardenland as the indicator of production and the measure estimating an individual's consumption requirements.

Scudder's (1962) estimate of one acre per caput for satisfactory subsistence is based on his observation of the 'frequency with which this one acre per family member recurs' (Scudder 1962: 218), and his assumption that the calculations of Allan, Gluckman, Peters and Trapnell\(^{46}\) for the Plateau Tonga are applicable to the Valley Tonga. They claim that 400 pounds of grain per annum is an ample per capita subsistence ratio for the Plateau Tonga. 'Since the three Valley cereal crops are all capable of yielding 400 pounds per acre in existing garden types, the Valley Tonga tendency towards one acre cultivated per family member seemingly reflects an accurate estimate of their land needs, providing the crop can be harvested' (Scudder 1962:219). This estimate is not accurate to the degree required for Sahlins' calculations. He converts the one acre to 1.43 acres per gardener on the basis that women, children and the aged consume less than adult men (Sahlins 1972:110).

Another problem with the Valley Tonga material is that the heads of three of the twenty households were employed in wage labour (Scudder 1962:258-62). Although Sahlins acknowledges this, he does not modify the production figures in response to the probable cash or food inflow from the wage labourers (1972:104, 105). Sahlins claims that his statistical evidence shows feasibility rather than proof (p.106), but his sample is so small and the margin for error so large that it would seem unwise to present the conclusions as a likely hypothesis.

For his analysis of the Kapauku, Sahlins uses Pospisil's calculations of kilograms of sweet potato grown and his estimates of satisfactory subsistence. Sahlins constructs a slope of normal intensity on the basis of Pospisil's six-day study of consumption patterns (Sahlins 1972:117). But while Pospisil states that 4 kilograms of inferior sweet potato are fed to a pig each day, and that 'a substantial portion of the sweet potato is fed to the pigs ...', indirectly providing people with extra protein (Pospisil 1963:195), Sahlins in his calculations excludes the consumption of sweet potato by pigs, saying, 'the published data do not readily lend themselves to this calculation' and that there may be theoretical arguments justifying the exclusion of pork from the subsistence diet (Sahlins 1972:120). Pospisil, to some extent, has given evidence to encourage Sahlins' interpretation by saying

that at the time of the survey the pigs were only small and did not eat much, but two years earlier, in 1954, the community had given a large pig feast, slaughtering most of its animals (Pospisil 1963:196). In another table, Pospisil claims that 26 per cent of the total harvest is fed to pigs,

\[47\] and that thirty-eight adult males owned a total of thirty-one pigs (Pospisil 1963:216, 396).

Finally, in the interests of uniformity with other (unnamed) Melanesian societies, Sahlins adjusts Pospisil's estimates of consumption intake\[48\] so that Kapauku women are calculated to eat at 0.8 rather than 0.6 of the adult male requirements (1972:115). Given the thorough, detailed data collection of Pospisil, and Sahlins' reliance on his other measurements, it seems inconsistent of the latter to question the former on this calculation.

In spite of these criticisms of the more detailed aspects of Sahlins' calculations, there is no doubt that the general picture is of the Kapauku producing more per producer and having a greater range of household production than the Valley Tonga. Beyond this, the small size of the sample and the reasonably random scatter of the points made prediction and explanation in terms of surplus and normal intensity of production problematic. What is more feasible however is Sahlins' testing of the argument made by Chayanov in relation to present family farms in Russia. This enables an assessment of the independence and interdependence of households in a society. In this section I attempt to follow this line of analysis. Acknowledging the difficulties in making accurate calculations, it seems that some general characteristics can still be deduced.

The second part of this section uses a survey on property ownership to reinforce these general conclusions.

In order to assess household independence, the number of producers per household and the consumer-producer ratios of each household are viewed in relation to size of household garden, and to the weekly hours worked by the household, on four separate graphs (Figs. 4.1, 4.2, 4.3, 4.4). Variations in the ownership of property between households are also considered.

\[47\] Sahlins makes reference to these calculations (1972:121) but justifies his stand by the fact that 'village production still surpassed the collective subsistence norm' (Gregory (1982:98) totally discounts Sahlins' hypothesis regarding the fish tail distribution on the basis of the importance of food production for pigs).

\[48\] Adult males consume 2.89 kg of sweet potato a day, adult females consume 1.72 kg, and children 1.42 kg (Pospisil 1963:196).
First the estimates of garden sizes\textsuperscript{49} are seen in relation to number of producers, working from the assumption that the greater the number of producers, the greater the area of land which can be cleared and worked. Figure 4.1 shows a slight rise in acreage as households move from two to five producers, but a significant cluster are well above what may be constructed as the average\textsuperscript{50} line of increase. Three households in particular (5, 13 and 32) are acknowledged to work hard and have an abundance of food. The other two, 6 and 8, could have unrealistically high measurements of garden areas. The very steep areas where German taro and bananas are planted were included when, in fact, plantings are sparse in this type of garden.

Figure 4.2 shows the influence of the consumer-producer ratio on garden acreage. By dividing the number of consumer's (counting children under 14 as half and babies up to 3 years as one-quarter) by the number of producers, an index of labour intensity is reached: a household's need to work (cf. Sahlins 1972:115). The garden area is given as an average amount of land in square metres held by each producer in a household so that actual differences between a household's need to work and a household's amount of garden land worked can be assessed.

Once again, in Figure 4.2, the graph appears to show an initial rise in the area of garden land consonant with the rise in the need to work. However, in at least four households where one would expect the producers to intensify their work, namely, 1, 4, 10 and 17, the opposite appears to apply. The heads of both 4 and 10 were engaged in other activities, one (10) working as a building contractor, and the other (4) spending a lot of time with Development Bank officials in an attempt to settle business with his cattle project, and this could account for the low acreage. Household 4 relied to some extent on food contributions from households 12 and 5, the households of WM and HM respectively. The poor showing of households 1 and 17 is difficult to explain, as both were hardworking and had few other sources of food. On the other hand, neither 8 nor 6 had a regularly producing male head. The head of 8 worked hard on weekends, and the adolescent sons of 6 made up for their father's inability to work and, as already stated above, both their areas could have been exaggerated.

\textsuperscript{49}Garden area figures are quite rough as terrain is often steep, borders hard to define and areas multi-sided. I measured at least one of the irregularly-shaped gardens of every household in Tohane and for a few households chosen at random from the other clans. I received estimates for garden plots not measured. As work on gardens is year-long, areas are continually altering.

\textsuperscript{50}This is not the same as Sahlins' 'normal slope of intensity' (1972:109). It is an estimate of how much production is possible based on an average of what people do produce. There are no estimates of how much land a Koropatan needs to cultivate in order to have an adequate subsistence.
As noted already, to some extent these graphs are able to test hypotheses of the Russian economist Chayanov whose work aimed to establish the peculiarities of the peasant mode of production. Chayanov's theories on the economic activity of peasant family labour were based on Russian national statistics as well as on a study of twenty-five Volokolamsk farm families (1966:75-81). He found that the labour intensity of the peasant household was lower than if labour were fully utilized. It was dependent on the number of consumers and the need to work rather than on the number of producers or the ability to work. A balance was made between consumer demands and the burden of labour. When the former were met and the latter became a problem, work eased off. Such ideas have in recent years been much used in the understanding of relative working capacity in peasant and 'primitive' household economies (see Kerblay 1971; Sahlins 1972; Harrison 1975; Durrenberger 1980).
The line of extended average acreage per producer in Figure 4.1 shows merely the average acreage per person increasing as the number of producers increases. In any average, some points are above and some below, but the interesting fact is the extent of this variation. In this graph the general trend seems to be that households containing more producers cultivate larger gardens. Without an estimate of what is possible or necessary for this society, it is difficult to assess whether those with five producers have in fact fallen below what they are able to do. It is relevant, however, to note that all the five producer households fall a considerable distance from the average.

Figure 4.2, providing a consumer-producer index, is more readily comparable with Chayanov. In general terms it seems that

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51 It may have been possible to obtain an average for households with one or two producers but in this case the two households with fewest producers (4 and 10) were atypically unproductive. Their average when extended as a straight line kept level with the lower producing households of each number bracket.
there is increased work with increasing consumer demand, but those households falling above and below the straight line of increase (as for those in Fig. 4.1) need further explanation, which is provided in part by Sahlins.

Sahlins says that although there does seem to be a downward curve after family needs are met, as predicted by Chayanov, there are characteristic deviations as some households fail and others function beyond their need. These latter work at an intensity unnecessary for their needs because, as Sahlins says, they are in a social system of production, not simply a family, household system. The social and political system of Melanesia, according to Sahlins, influences people's relation to the productive process. Big men and followers work more than they need, and others are content 'to praise and live off the ambition of [the former]' (Sahlins 1972:117; also 88-90, 103, 109, 111). To explore Sahlins' hypothesis further, graphs showing actual time worked\(^{52}\) rather than garden acreage will be calculated alongside, first, numbers of producers, and second, producer-consumer ratio.

Figure 4.3 supports the thesis of Chayanov as modified by Sahlins. Almost all households fall below the estimate of potential work calculated by averaging the work of single producer households,\(^{53}\) in a regressive curve. Of the three households well above the line, two, 17 and 14, have very large families and the third, 26, should perhaps be excluded because only estimates of time worked were possible as they were absent in the garden house. Households well below the curve are, first, household 4 headed by the politically ambitious leader already mentioned, and second, 27, the household of the Aid Post Orderly whose income provided most of the household's subsistence requirements. Both were high status households. The clusters do not then readily fit the categories of big men and followers used by Sahlins.\(^{54}\) This could have been anticipated to some extent by recalling the brief discussion in Chapter 3 (see p.72) and will be more fully explicable in terms of the discussion in Chapter 7 (see p.201 ff.). Suffice it to say that functions of leadership are diffuse and that there are no lowly retainers as followers. Even admitting this, it is still

\(^{52}\)Time surveys were made on three clan/residential groups on four separate weekly occasions. Thirty-three households are included. The production unit in all but the first survey (which counted only adults) consists of children over 15 and adults who contribute to production even minimally. Older permanently incapacitated adults are not included.

\(^{53}\)Once again, this is not Sahlins' slope of normal intensity (1972: 109), which is based on an ethnographer's estimate of what is adequate subsistence.

\(^{54}\)This concept is discussed in Chapter 7, under the heading Inequality between Households.
Figure 4.3 Number of producers and times worked by households

noteworthy that no leader distinctly appears above the curve in positions, suggesting that the household works more than it needs to, and some important men appear below the curve in positions suggesting that they may fail to meet their own household needs.

Figure 4.4 uses the consumer-producer index to establish each household's need to work. The hours each producer puts in
**Figure 4.4** Average garden work per household producer according to need

*Household 26 is not included in trends or averages due to unreliability of the figure*
should, according to Chayanov, reflect the household consumption needs, following the formula $h = \frac{kC}{p}$ or, hours worked ($h$) increases constantly ($k$) with the number of consumers ($C$) divided by the number of producers ($p$) (John Perkins, Dept. of Economics, Monash University, pers. comm. 1982). The average extension line on the graph shows that households do not put in the anticipated extra amount of work when more consumers are in the household but the approximate trend shows that most do increase their effort. Up to a point, extra hours are put in, but it seems that households with large consumer needs cannot or will not work any more. Some, such as 19, 6, and 5, may struggle to support their families, or as 8, 10, 18 and 27 do, receive support from wage labourers or the proceeds from gambling. Some, 4, 31, and 25, just do not appear to meet their consumer needs. The households performing above the curve in graphs concerning garden acreage do not match those above the curve in graphs showing time worked. All in all, the complexity of the scatter points in the graph, the lack of comparability between graphs Figures 4.1 and 4.2, and the lack of fit between sociological and economic data, make the construction of explanatory hypotheses difficult. There is reasonable support for Sahlins' statement that in spite of their tendency to produce only what they need, households are linked in a social system of production, low producers relying on high producers to tide them through difficult times. At least some households do not maintain themselves for daily subsistence. Sahlins' hypothesis on the typical Melanesian big man organization of production cannot be supported by the Koropata economic and sociological data. The deviation is not as a result of the absence of data to give a 'normal line of increase' but is in part a condition of historical change.

Some of the patterns hypothesized by Chayanov and Sahlins are discernible in the Koropata material, but the contemporary economy involves extra variables. As the number of producers in a household increases, the area of garden and hours of garden work tend to increase, but in a curve regressing from the estimated potential. The exceptions to this may or may not be generous, leading households and struggling households. The consumer-producer index, expected to be more accurate because it is a measure of household need to work, produced even more ambiguous results: the small cluster with low acreage can only be explained with information from outside the subsistence sector. Many households have directed their time to the external sector where they may be more or less successful in providing an alternative source of subsistence, and this is a factor which is avoided by Sahlins (Scudder in Sahlins 1972:105 fn.), and which is irrelevant in Chayanov's work. Figure 4.4 shows a similarity of average hours worked by most household producers, but within this similarity there are variations beyond what may be anticipated from the stage in the domestic developmental

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55 It is possible that there were unusual work performances during the survey week (see Introduction).
cycle. Some households are working enough land and hours to have the potential to be quite generous, whereas others appear to be working at or below the bare minimum. Some get regular subsistence help from close relatives; others may resort to theft or behaviour that is barely acceptable, such as loitering around other households at mealtimes, waiting for the offer of a meal. Still others are able to supplement bare subsistence living with cash-bought food.

As Sahlins has pointed out, the household is part of a society, but while he sees it as the most important economic unit, the essential structural base of the economy, I make a modification. The household is the most important unit in daily economic activity. Quantitative data show more deviations from the Chayanov-Sahlins' hypothesis than are explicable in terms of political relations between generous and struggling households. As part of my concern is with historical transformation after the impact of colonialism rather than the 'natural' evolution of societies, it is essential to consider the links and relations with the outside capitalist economy. While the bulk of this discussion is reserved for Chapter 6 and the Conclusion, a start can be made here with a look at the differential absorption of new technology and wealth into the village economic system.

Property ownership. A statistical analysis of property ownership in Koropata allows a further assessment of the independence and interdependence of households in the village economy. It also opens the debate as to difference and inequality between households (see Chapter 7). Such difference and the ownership of special items add evidence which confirms the importance of socio-economic organization beyond the household, no matter what the degree of household autonomy.

All Koropatan households do own the essential equipment for daily work. Information on types of property also reveals the extent of the substitution of Western technology for traditional manufactures. Property lists are almost identical with those prepared by Waddell and Krinks (1968). The Tables 4.7 to 4.10 are short summaries of the household ownership of specific representative goods which can reveal the extent of the differences among households. The numbers of items are clustered in such a way that variation between households is meaningful.

There is quite a wide variation in ownership of traditional wealth. Most own one to five tapa cloths and one to three pigs, but in each case there are those with none, and those with several more. The difference in the ownership of traditional decorations is even more marked; several households have up to 200 items, and many have fewer than ten.

Differentiation in ownership of modern property is just as marked. Goods in which the wealthier households seem to invest are clothes, towels, cutlery and plates.
Table 4.7
Households owning subsistence goods

<table>
<thead>
<tr>
<th>Item</th>
<th>0</th>
<th>1-5</th>
<th>6-10</th>
<th>11+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tapa cloth</td>
<td>20,21,27,28,30,31,34</td>
<td>3,4,6,8,12,14,15,17,18,19,22,23,26,29,33,2b</td>
<td>5,7,9,11,16,25,</td>
<td>1,2,10,24,32</td>
</tr>
<tr>
<td>Pigs</td>
<td>2b,15,18,26,28,30</td>
<td>2,3,4,5,6,7,8,9,10,11,12,13,14,16,17,19,20,21,22,23,24,25,27,31,33,34</td>
<td>29</td>
<td>1,32</td>
</tr>
</tbody>
</table>

Table 4.8
Households owning traditional valuables

<table>
<thead>
<tr>
<th>Item</th>
<th>0</th>
<th>1-20</th>
<th>21-40</th>
<th>41-200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feather and necklace</td>
<td>3,6,12,20,21,30,31,2b</td>
<td>11,19,33,34,1,8,28,2,14,16,17,29</td>
<td>17,25,26</td>
<td>4,5,7,9,10,24,32</td>
</tr>
<tr>
<td>decorations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(dr and hambo)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.9
Households owning Western items

<table>
<thead>
<tr>
<th>Item</th>
<th>0-10</th>
<th>11-20</th>
<th>21-40</th>
<th>41+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shirt, dress,</td>
<td>21,22,33,34,18,36,30</td>
<td>7,9,11,12,14,15,20,28,29,31</td>
<td>1,2a,2b,3,4,6,8,10,19,23,32</td>
<td>13,16,24,25,27</td>
</tr>
<tr>
<td>blouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cutlery</td>
<td>22,34,9,12,17,21,30,31,33</td>
<td>13,14,15,1,3,5,7,18,19,23,25,26,28,32</td>
<td>2a,6,8,10,11,16,20,27,29</td>
<td>26,4,24</td>
</tr>
<tr>
<td>Plates</td>
<td>21,22,6,9,14,16,17,28,33,34</td>
<td>1,2,3,5,11,12,15,18,19,20,25,26,23,29,31,32</td>
<td>4,7,8,10,13,24,27</td>
<td>2b</td>
</tr>
</tbody>
</table>

Table 4.10
Households owning towels

<table>
<thead>
<tr>
<th>Towels</th>
<th>0</th>
<th>1-3</th>
<th>4-6</th>
<th>7-9</th>
<th>10+</th>
</tr>
</thead>
<tbody>
<tr>
<td>22,30</td>
<td>5,8,9,11,12,14,15,18,20,21,23,26,27,29,31,32,34</td>
<td>1,2,4,7,16,17,19,29</td>
<td>3,6,10,13,25,32</td>
<td>24,2b</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.11 sets out categories of property rather than making a complete list of property within each category, and I have limited the items to those which, from observation and from informants' own statements, are deemed to be indicators of relative wealth and poverty. Households consistently appearing in the wealthy or above average category are 1, 13, 24 and 32. Two (24 and 13) are large coffee growers, and all four receive monetary help from family wage-earners. All are regular sellers of surplus subsistence crops at the market. The poorest households seem to be 21, 22 and 30. The heads of 21 and 22 are widows and the head of 30 is a man recently married after serving a gaol term. Despite the differences set out above, all households have the necessary equipment to grow, cook and eat food and to dress themselves.

All households have an axe, bushknife, string bag, metal cooking pot, and clothing. Only four households (22, 23, 26, 30) do not possess a grass knife, and eight households (5, 12, 21, 22, 26, 27, 30, 34) do not possess a hammer.
<table>
<thead>
<tr>
<th>Category</th>
<th>Indicators</th>
<th>Wealthy households</th>
<th>Poor households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subsistence trees and animals</td>
<td>coconuts, betel nut, pigs, chickens</td>
<td>13, 32, 24</td>
<td>21, 22, 34, 8</td>
</tr>
<tr>
<td>Traditional property</td>
<td>tapa cloth, <em>di</em> and <em>hambo</em>, drums</td>
<td>1, 5, 10, 24, 25, 32</td>
<td>6, 12, 21, 22, 26, 27, 28, 29, 30, 31, 34</td>
</tr>
<tr>
<td>Personal property</td>
<td>quantity of clothes and manchester, ownership of a few high status items</td>
<td>3, 6, 13, 24, 25, 27, 32</td>
<td>30, 31</td>
</tr>
<tr>
<td>Household property</td>
<td>quantity of cooking utensils and ownership of pressure lantern</td>
<td>4, 6, 8, 10, 13, 24, 26, 27, 32</td>
<td>9, 14, 21, 22, 23, 28, 33, 34</td>
</tr>
<tr>
<td>Tools and equipment</td>
<td>quantity of essential tools, ownership of coffee pulper, fishing net</td>
<td>2, 3, 29</td>
<td>4, 5, 21, 22, 26, 30, 34</td>
</tr>
</tbody>
</table>
Households with a male head, and containing five or six children, exhibit marked similarity in ownership of all categories of Western goods. Certain essential items are owned by all, while a few have more of such items than they need as, for example, a bushknife for every family member, or three plates for every member.\textsuperscript{56} The households notably poor in such goods are usually in specific phases of a domestic developmental cycle. Thus households headed by widows or other females, and some households headed by males who are young or who have suffered misfortune, do need to enter into borrowing relationships with other households. Ownership of traditional wealth items is of vital importance in some brideprice payments and certain households would not be able to honour obligations without help from clansmen or other kinsmen. Ownership of pressure lamps, coffee pulpers, large fishing nets and sewing machines by some households implies but does not show conclusively that there are relations of borrowing and sharing between these households and others in the village.

Western items have been introduced into every household or have replaced their traditional counterparts. Almost everyone now owns clothes, sheets, mats, pillows, blankets, towels, suitcases, mirrors, scissors, spoons, forks, cooking pots, bowls, plates, mugs, grass knives, file, hammer, goggles and spade. About half own such luxuries as pullovers, handkerchief, radio, umbrella, teapot and saw.\textsuperscript{57}

This information on property ownership thus reinforces the concept of a society of households self-sufficient in daily life but relating to other households for certain irregular economic tasks. The selectivity in the influence of Western technology is also apparent in that people have chosen to acquire mirrors, handkerchiefs and cutlery instead of tables, chairs, beds, cupboards, and so on. The general influence of technology has grown since Orokaivans in the past experienced the benefits of steel and now makes relations beyond the village essential for household maintenance. While acknowledging this, this study concentrates on

\textsuperscript{56}Only one plate is used by a person during a meal and the number of guests would rarely, if ever, triple the size of a household. Similar patterns can be discerned in the material collected by Waddell and Krinks (1968:48, 62). In Inonda, all owned an axe, bush and grass knives and cutlery. Some households seemed to have more cutlery (between 2 and 15 items) and more dishes/plates (ranging between 0 and 21) than were needed. In Sivepe, all owned axe, bushknife, pocket knife, cutlery and upper clothing. Ownership of cutlery ranged from 2 to 24, cooking pots 0 to 5, dishes/plates 0 to 20, and shorts and skirts 0 to 13.

\textsuperscript{57}In the 1960s, the list was smaller for Inonda and Sivepe: axe, clothes, blankets, spades, goggles, hurricane lamps, plates, grass knife, hammer, cutlery and cooking pots (Waddell and Krinks 1968: 48, 62).
household and social relations in the reproduction of the economic unit. The establishment of economic ties outside the village has been outlined in the history chapter, and the main structural links are brought out in the Conclusion. An attempt is made there to relate these links to the theoretical work of Amin, but the general thrust of this work is, as stated in the introduction, to draw out the essential features of the economic system of Koropata village today: a wider-reaching macro study is reserved for the political economist.
Chapter 5

Life crises

Van Gennep's 1908 work on rites of passage has enhanced our understanding of the meaning of life crisis ceremonies in relation to the changing role of an individual. The ceremonies marking these changes symbolize separation, transition and incorporation of an individual into a social group (Van Gennep 1969). In this section I will follow the form of anthropological analysis which looks at the contribution of an institution towards the functioning and future functioning of the society. The ceremonies of birth, puberty, marriage and death will be discussed in the context of necessary institutions enabling the reproduction of society. To restate the obvious, birth is necessary to restock the community with living people; the institutionalization of puberty is desirable to channel sexuality and prepare for marriage; and marriage itself is vital for the creation of the smallest functioning economic unit and the effective organization of the conception and rearing of children. Hence these life-crisis ceremonies are essential for effective production and reproduction in economic units. To be successfully carried out they call for the co-operation of the same networks or groups required for irregular subsistence activities. However, as a result of continual modification following European contact, cash is now an essential component of life-crisis ceremonies. As the ceremonies are of such obvious importance in role definition and social reproduction, their significance has been elevated into the realm of ideology in the form of symbolism and ritual.

Birth

At birth the newborn Koropatan baby hovers between the living and the non-living. It is often not named until several weeks

1Both Meillassoux (1981) and Gregory (1982) stress human labour reproduction, through elder-arranged marriage (Meillassoux 1981: 43-4) and kinship-prescribed marriage (Gregory 1982:63-7), as of primary importance in gift/domestic economies. I find no ethnographic justification for treating reproduction of humans as more important than the production of subsistence for humans but nevertheless acknowledge the importance of the former.
have passed and its tenuous entrance into life has become more certain. The pregnant woman often works right up to the day of the birth, but must observe food taboos, particularly of relatively rare items which have physical characteristics suggestive of some physical deformity in children. A baby is usually born in the parents' house with the help of an old woman and of one or two younger married women. Sometimes an unmarried girl may watch and learn for her own later experience. Labour is considered to be painful, but if it seems unusually painful the Aid Post Orderly or a trained nurse living in the village may be called.

After the birth, the mother stays in the house until the bleeding discharge finishes and she feels well enough to garden again, usually in two to three weeks. During this time the father must not do any garden clearing, as cutting a tree would be like severing the baby's neck (see Williams 1930:95). He helps do a little laundry, harvesting and cooking, but the household essentially relies on the food gifts of close kin and neighbours.

Before a baby moves on to solid foods, the father or father's brother may give a small feast. Some educated families now substitute a first birthday party for this, but the only ritual regularly associated with infancy at present is Christian baptism which takes place when the infant is anything between 6 months and 18 months of age. Parents pay K2 to have an Anglican Mass said for their infant. The services are performed for many couples at once, and recently appointed godparents hold the child and make promises which they probably do not comprehend, since the service is in English, and their knowledge of such formal English is limited. There are two female and one male godparents for a female child and two male and one female for a male child. Godparents are usually kin from the father's, father's mother's, or sometimes the mother's side, and the parents choose the three godparents before the occasion. In consultation with the parents, these godparents may ratify or change the baby's name, taking into account family quarrels with namesakes and so on. The giving of a Christian name is seen as very important. Prior to this event an infant may have been known only by a 'custom' or traditional name, and the bestowing of the Christian name is the mark of a future respectable social being. Christianity is an essential component of a new modern way of life for the Koropatans. Those without a Christian name are looked on as being backward and somewhat shameful. The ritual and everyday activities surrounding the

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2 When a child is named he is both individualized and incorporated into society' (Van Gennep 1969:62).

3 This follows the same principle of taboos among the coastal Orokaiva where a pregnant woman should not eat millipedes save she have a multiple birth, or snails save her child is slow and lethargic (Willington Jojoga, Dept of History, UPNG, pers. comm.).
birth of a child, then, show the beginnings of patterns which become more obvious as an individual moves through the life cycle.

The nuclear family and household are most important during a birth, but for the week or two around the birth of a child extra kin and neighbouring friends are required to provide for the family. In baptism, first food and first birthday parties, representatives of kinship groups play some role. Groups or networks of kin are needed to lead a new social member properly but tentatively over the boundary between non-living and living. Small feasts and parties may be an opportunity for wealthier households to enhance status through their generosity. In addition, patterns of exchange and aid given around the birth time are self-perpetuating as, of course, all families face such a time of need and celebration, and help given is reciprocated.

Puberty

At about twelve or thirteen, when a girl begins to menstruate, she must tell her mother or risk permanent blood loss. She is then secluded for a period ranging from one week to three years, the longer term being preferable. The girl usually has a small room or partitioned section of a house where she sits, reclines or sleeps all day. For the first two weeks after the initial bleeding the girl should drink only coconut water, avoiding water, juice and sugar cane. After this, to reduce the blood, a magical substance is used on all watery things for two months. For a schoolgirl who can only stay in the house for one to three weeks, there is a more rigorous application of magical ritual. An old female relative smokes some special leaves and rubs them on the top of the girl's thighs. The girl may be required to walk slowly down the house steps over a smoky fire of special leaves. The smoke pervades her body and helps to 'stop the blood'.

When in the house, the girl does not wash with water or comb her hair; instead she rubs her hair and skin with coconut oil. She may leave the house only at night to relieve herself, making sure she covers her face and body with a cloth. She is fed one large meal a day by her family but neighbouring girls or kinswomen bring portions of whatever food they cook, and the former come in for a chat whenever possible. Men, including male members of her family, may not see her. Aside from sleeping and eating, she may while away the hours by making a string bag. The aim of such seclusion is as Williams stated (1930:200): physical perfection. In Koropata too, a girl who has been secluded for many months comes down from the house like a butterfly emerging from a cocoon; pale, fat, and showing signs of being a young woman.

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4Older women claim it was 15 or 16 in the past.
While secluded in the house it appears that there is some opportunity for socialization of the girl towards womanhood. Such norms of behaviour were verbalized in the old ceremonies described by Williams. On receipt of valuable ornaments 'a woman is told to lend an ear to what her husband says, and never to give him 'strong talk' in return; to accompany him wherever he goes; to be faithful to him; and to keep her hands off other women's property'.

While there is no formal statement of such values in Koropata, the sedentary, passive existence of the girls does seem to make them amenable to advice. Older female relatives impress the importance of diligence in garden work and cooking. Girls are advised to marry a man who works well in the garden or an urban worker who provides food money and does not drink too much. Husbands should allow visits to natal families and should not lose their tempers. Sexual knowledge has already been imparted over a long period by older sisters and cousins. When she leaves the house, the pubescent girl does become more of an adult person in both productive and sexual matters. She is expected to have her own garden and be a responsible childminder, and she may begin to court young men, writing notes and whispering through floorboards at night. Actual sexual relationships do not generally occur until the girl is 16 or 17.

Some girls do not stay for the required seclusion period. They dislike the boredom and lack of social contact in seclusion. Some run away when their family is at the garden and seek temporary refuge with relatives. They are not beaten or punished, and some fathers may in fact be secretly relieved. The feast for girls 'coming down' from the house is a considerable burden for the household producers.

The length of a girl's seclusion is directly related to the adequacy of gardens and pigs for a feast. It is the father's garden that provides the bulk of the feast food, but other relatives are expected to contribute as well. If more than one girl is involved in the feast, the timing becomes even more difficult. When two or three girls from a clan go into seclusion within a few months of one another, their fathers may organize a very large combined feast for the end of seclusion and decorate the girls in the pooled finery of the clan. In this case the adequacy of pigs and gardens in at least three households must be established before the feast can take place.

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5Williams (1930:205). Williams here is actually referring to an initiation seclusion which used to occur after the puberty seclusion. 'A girl enters her puberty seclusion immediately upon her first menstruation, and may pass through it alone. Subsequently she may be one of the batch of youths and girls who are to undergo initiation together and, in that case, she will pass through a second seclusion, viz. the initiatory seclusion' (p.184). See Williams (1930:180-209) for a further discussion.
Plate 2 Clanswomen and wives take up the rare opportunity to prepare food together at the life-crisis ceremony for puberty.

Although it is not acknowledged by Koropatans, the productive labour of the pubescent girl may also be a factor taken into consideration. As indicated in Chapter 4, all young men and women contribute to gardening. Girls also bring home what they gather, or fish, and carry out much of the childminding and cooking. If the household really needs her help, a girl may not be required to stay in the house longer than three weeks. Occasionally a girl who is cheeky may be secluded longer as a form of punishment.

If there is to be a feast after a long seclusion, on the day arranged the girl comes down from the house, in a sense re-enacting the myth of her origin. She is rubbed with coconut oil, her hair combed and sprayed with coconut oil. She is dressed in tapa cloth with necklaces and armbands holding fragrant leaves and usually she is adorned with ceremonial valuables, headbands, necklaces and so on. The girl plays no active role in the events of

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6A widely-known myth describes the origin of women in terms of their coming down from a tree as ripe fruit.
Plate 3 A girl is groomed by her sisters at the end of the seclusion puberty feast
the feast. Only her grooming, the first stage carried out by sisters and older female relatives, and the adorning of valuables supervised by her father or his clansman, put the girl in the centre of the activities. Women of the clan and other female relatives arrive with gifts of taro, yam, sweet potato, and even chicken. Men arrange for the killing and exchange of pigs which will fulfil previous obligations unrelated to the coming down ceremony. The father of the girl donates pigs for the ceremony, but the direction of their distribution establishes debt and credit in relation to other activities and relationships. Women sit together and peel and prepare special feast taro cooked with herbs. Young men catch, kill, carry and singe the pigs, older men cutting them up and deciding where the portions should go.

The daughter sits shyly between her father and mother within a circle of older male kin who pass betel nut and tobacco around, talking and joking. They are then served with a small portion of pig and cooked taro. Most of the cooked taro and raw pig meat is distributed by the donors and carried home by the female guests. The guests are kin of both mother and father, but there is a greater emphasis on the clan of the father. Occasionally age-mates and friends of the father who shared a common oro (single men's house) are also invited.

A description of a puberty or coming down (out of seclusion) feast held in 1977 will indicate the composition of the attendance. The girl, 13-year-old Florence, was the last-born child of ageing parents belonging to the same clan. Florence was withdrawn from school and secluded for six months in a small garden house. Her ailing mother wanted her to stay at home to help as nearly all other children of the family were educated and were living elsewhere.

The feast was essentially a clan gathering, close relatives being equally from mother's and father's side. Gifts noted came from both sides with a slight stress on the father's kin (see Table 5.1). The larger gifts could be seen as a continuation of affinal payments, and there was also a tiny exchange within the distribution. Although the woman numbered 32 was from Ambotohane clan, she was from a different branch from Florence, and it was difficult to trace their actual kinship relationship. The brothers and patrilateral cousins of woman 32 were honoured guests and their wives pooled their gifts with those of 31 and 32. This section thus stood together, ceremonially opposite other sections of the clan.

Age-mates or co-residents of an oro are given gifts, served food and treated the same way as kin. For example, numbers 36, 37 and 38, all from Barahu clan, participated in the feast as kin.

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7They were preferential simbo, or classificatory cross-cousin partners.
because the father of Florence and of 36 and 37 had shared an oro together.

Table 5.1  
Visitors to the puberty feast for Florence, 1977

<table>
<thead>
<tr>
<th>No.</th>
<th>Relation to Florence</th>
<th>Clan</th>
<th>Gifts noted</th>
<th>No.</th>
<th>Relation to Florence</th>
<th>Clan</th>
<th>Gifts noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Z</td>
<td>Ambot</td>
<td></td>
<td>26</td>
<td>FBDD</td>
<td>Tohane+</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Z</td>
<td>Ambot</td>
<td></td>
<td>27</td>
<td>MFBSD</td>
<td>Ambot*</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>FZ</td>
<td>Ambot</td>
<td></td>
<td>28</td>
<td>MFFBSDD</td>
<td>Ambot*</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>FZ</td>
<td>Ambot</td>
<td>rooster, taro, bananas</td>
<td>29</td>
<td>MFFBSDDH</td>
<td>Endi*</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>FB</td>
<td>Ambot</td>
<td></td>
<td>30</td>
<td>MFFBSSW</td>
<td>Ambot</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>FB</td>
<td>Ambot</td>
<td></td>
<td>31</td>
<td>FFBWZS</td>
<td>Ambot</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>FBW</td>
<td>Ambot</td>
<td>taro</td>
<td>32</td>
<td>FFBWZSW</td>
<td>Ambot</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>FBW</td>
<td>Ambot</td>
<td>taro</td>
<td>33</td>
<td>FFBWZS</td>
<td>Ambot</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>FZS/MBS</td>
<td>Ambot</td>
<td></td>
<td>34</td>
<td>MMZDD</td>
<td>Ambot</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>FFBD</td>
<td>Ambot+Kombu*</td>
<td></td>
<td>35</td>
<td>FBWZDS</td>
<td>(F age-mate S)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>FFBD</td>
<td>Ambot</td>
<td></td>
<td>36</td>
<td>F age-mate Baruhu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>FBSW</td>
<td>Ambot</td>
<td>taro</td>
<td>37</td>
<td>F age-mate Baruhu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>MZ</td>
<td>Ambot</td>
<td></td>
<td>38</td>
<td>F age-mate Baruhu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>MZH</td>
<td>*Ambot</td>
<td></td>
<td>39</td>
<td>Clansman Ambot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>MB</td>
<td>Ambot</td>
<td></td>
<td>40</td>
<td>Clansman's Endi+</td>
<td>potato and</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>MBW</td>
<td>Ambot</td>
<td></td>
<td>41</td>
<td>Clanswoman Ambot</td>
<td>taro</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>MZD</td>
<td>Ambot</td>
<td></td>
<td>42</td>
<td>Clansman Ambot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>MMBW</td>
<td>Ambot</td>
<td></td>
<td>43</td>
<td>Clansman Ambot</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*→Married into.

The pattern of work for the feast was, as might be expected, feast-like. Women enjoyed the rare opportunity to sit and prepare a meal together, in this case with many of their clan sisters, because of the frequency of cross-cousin preferential marriages with simbo (cf. pp.71-2, above). Men too reinforced clan solidarity through their preparation for and participation in the feast. The whole affair pointed up the significance of the emergence of Florence as a potentially productive and reproductive member of the society. It also gave status to the organizer, the feast-giving
father. The puberty feast is an occasion on which one can give away subsistence products and receive status in return. In this case it was also a chance for a man (31) to use money from coffee and market sales to buy a pig, and enhance his status by giving that.

Puberty seclusions of more than a week are now decreasing in frequency.\(^8\) Even for the generation of older married women, seclusion was not the general rule. It is only in the generation of grandmothers that all girls were secluded for a minimum of several months. Schooling is usually the reason given for the very short seclusions nowadays, but occasionally a parent admits that it is just too much hard work to prepare a feast.

Williams described the initiations of young boys at Waseta, only two miles from Koropata,\(^9\) and enquiries at Koropata confirm the basic information.\(^10\) A special house was built to seclude both boys and girls. In the house (on the edge of the village in Koropata) the boys led an easy well-fed life, but did plait arm-bands and learn to play flutes, as well as receiving instructions to be honest, obliging and diligent. Thieving and adultery were condemned at the feast given to end seclusion. Ceremonial ornaments and useful objects were presented, the latter ideally made by a skilled craftsman whose honourable and mild character was held as an ideal model. On coming out the boys also ate a purificatory stew and learned the male secrets of the society, thus becoming full adult members (Williams 1930:180-95).

There is some suggestion (Beaver 1918-19, PAR) that earlier initiations into full manhood required the killing of a man, but, according to Williams, homicidal emblems were given to girls and boys at initiation and there was no ceremonial necessity for homicide (Williams 1930:170, 171, 177). The wide array of ornaments signifying homicide were, however, greatly prized and according to Williams had fallen into disuse as they could not be inherited for more than one generation without a further homicide.

At present there are certainly no initiations or seclusions of young men. Their magico-religious beliefs, together with those of young women, consist of a limited knowledge of the spirit world of dead ancestors and an awareness of the effectiveness of sorcery. They try to avoid offending ancestor spirits and have a moderate

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\(^{8}\)Between 1973 and 1978 there were only five or six girls involved in long-term puberty seclusions and feasts. In the past, with rare exceptions, all girls went through long puberty seclusion.

\(^{9}\)Williams (1930:180-95). An Administrator in 1948 described a similar ceremony at Papaki (PAR 1948-49:104-6).

\(^{10}\)Extra enquiries carried out by J. Dammon, Bursar, Martyrs Memorial School, pers. comm., 1981.
fear of the bad luck which may result from, for example, the
defiling of a grave or from the keeping of some personal property
of the dead. Body leavings which aid a sorcerer's work are care-
fully hidden or disguised.

Until recently, a term of wage labour away from the home
district was a means by which a youth could demonstrate his transi-
tion to adulthood. Employment is now difficult to find, so visits
to Port Moresby have to suffice. Youths learn to play the guitar,
to sing and dance in the Pacific stringband style, but although
potential brides take interest, the old ignore these accomplish-
ments. Perhaps the association of homicide with manhood was
stronger than imagined by Williams. Since pacification and the
legal control of homicide, all ceremonies for male initiates have
ceased, whereas girls' seclusions have continued. The more likely
cause of the end of male initiation, however, is the long histori-
cal period of compulsory wage labour, roadwork and so on, which
generally drew on the age group relevant for initiations.

Although all girls are secluded for some time, puberty cere-
monies today pertain to only a small percentage of young women.
The ceremonies require clan solidarity and the usual feast aid
from a network of relatives. They create an occasion for the
demonstration of kinship solidarity, generosity and acquisition of
status and for the marking of the significance of a girl's growth
to productive and reproductive maturity. Although desirable, the
puberty ceremony seems not now essential for social reproduction.
Competing social ideologies from school and church further threaten
the continuation of the custom.

Marriage

In all societies marriage marks the transition of an individual
into important new roles for the economy and the physical reproduc-
tion of the society. Among the Orokaiva it is also a relatively
stable union whose offspring are legitimate and is thus, of course,
an integral part of an ongoing social structure, providing as it
does economic and social security for the future. Marriage brings
Orokaivan youth into the mature world of producing and procreating
adults.

Williams' description of marriage in the 1920s still has some
bearing on the situation found today in spite of the virtual
eradication of polygyny by the Anglican mission. Marriage was
patrilocal, usually monogamous, and wives were often strangers to
the husband's community. Every mature, normal man had a wife who
had to submit to his authority. Marriage could be made by capture,
eloping, purchase or exchange. Sister exchange was preferred,
and abductions and elopements usually resolved themselves into
exchange or purchase. Payments were made by groups, not individuals
(Williams 1930:91, 130, 136, 148).
Post-marital residence is still generally patrilocal and marriages are monogamous, many being made with girls from nearby villages (see pp. 74 ff.). A marriage opens an avenue to a long period of exchange. An outline of the stages involved in marriage is given here to elucidate the modern norms.

Courting. Although there is evidence of some variation, after puberty seclusion or at an age of 15 or 16, an Orokaiyan girl usually initiates courtship with young men of her choice. Notes are sent via 12- or 13-year-old kin of the youth. Arrangements are made, for example, to meet late at night under the rubber trees, or even in the middle of the day in someone's garden. For the young, the meeting may be an exchange of shirts or small luxuries like toothpaste or combs. Older youths may initiate a meeting by themselves, visiting the girl's place at night and whispering to her through the floorboards. Night meetings may eventually lead to sexual intercourse and pregnancy. It is much easier for a girl to form such friendships with youths from her own village than from other villages. Young men from other villages have to undertake long, perhaps frightening, walks in the night and even the risk of a beating by the girl's brothers or clannmates if discovered. Relationships are never openly acknowledged; couples ignore each other in public. Most girls have two to three concurrent relationships before they marry. The courtship with the eventual husband may vary in length from one week to four years. Choice of courting mate is described in physical, romantic terms, but the final partner may be chosen for pragmatic reasons: ability to pay brideprice; wage-labouring potential; long-term relationship between clans or villages; or parents' wishes.

Within this pattern there is still the occasion for older relatives to encourage the development of a relationship or 'make a road' between a girl and a youth. Visits are made to the family; a girl is constantly reminded who is her simbo, and there is enough contact to decrease a girl's shyness and a boy's risk of physical punishment if caught near her house at night. If a mother does not like her son's or daughter's choice of lover, she will make it as difficult as possible for any further developments in the relationship. Sometimes a girl becomes pregnant before marriage and efforts are made by older clansmen to find the father and force a marriage. The Koropatans share the common Melanesian belief that repeated intercourse is necessary for conception, and this makes for further complications as a man who has had intercourse only once with a

11Williams claimed that many of the meetings in his time did not lead to sexual intercourse (1930:134). Old women say that they were far too frightened to have sexual intercourse before marriage; they risked a spearing from their father.

12The Koropatans describe this as being like a butterfly flitting from flower to flower.
A girl will claim he cannot be the father of a baby, and that the girl must be lying about the number of partners she has had. Attempts to punish the putative father by spearing are now, of course, illegal and it is extremely difficult to obtain evidence which will stand up in modern courts.\textsuperscript{13}

\textbf{Eloping.} The next stage in the process of getting married is generally an elopement. On a pre-arranged night, a youth goes to collect his girlfriend, often after a dance or an inter-village celebration of some kind. The girl packs her few personal belongings in a string bag and walks with her 'husband' to his village. In the morning there is no fuss made of the girl. She is referred to as so-and-so's wife, and a few joking comments may be made, but if her mother-in-law is prepared to accept the union, the two of them will go off to the garden together. On returning, the girl will prepare her first meal for her husband. Little attempt is made to learn the girl's personal name. For months she will be known only as 'so-and-so's wife', The new wife is therefore known by a new depersonalized name to go with her new role and its associated responsibilities. As the other wives of the clansmen gradually get to know her, her personal name will come into use again.

Although it is rare now, there is the occasional case of a marriage being initiated through methods similar to the capture and abduction noted by Williams (1930:130). A very shy urban worker from Koropata was taken in hand by his extrovert cousin during the Christmas holidays. In the Aid Post Orderly's truck they drove to the cousin's wife's village and collected a shy single clanswoman of the wife. There was no courting involved at all, but the girl must have been warned as she appeared willing. Unfortunately, her family arrived within one or two days and forcibly took her home from Koropata. A second elopement convinced her family to follow the normal procedure of demanding a brideprice rather than taking her back.

\textit{'The sitting-down price'.}\textsuperscript{14} It is usual for 10-20 clansmen or matrilateral relatives of the girl to wait for a week or so after an elopement before going to the youth's village. This delay allows time for the girl to return if she finds she has made a dreadful mistake or if her mother-in-law exhibits hostility towards her. The walk to the groom's village, although within the radius of neighbouring villages described above (Chapter 3), can take four or more hours, and as the girl's relatives have to leave at

\textsuperscript{13}Older men of the clan try to dissuade youths from affairs likely to lead to pregnancy before marriage by threatening to withhold future brideprice if a youth refuses to marry a girl whom he has made pregnant.

\textsuperscript{14}Cf. Williams 1930:135-7.
dawn the payment offered is described as repayment for dew on the feet. Along the way there is a great deal of half-jesting talk about the terrible things they will do to the young husband, such as rubbing him with thorny leaves, excrement, and so on, but this seldom occurs in fact. On arrival, the party should stand in the sun. Sometimes the girl's father lies under the step of the house of the potential in-laws who are seated, waiting in anticipation. Forthright speeches are made: justifications for not coming earlier to collect the girl, explanations of the difficulty the girl's absence will cause, with a sick mother, and so on; expostulations about the youth or physical immaturity of the girl. The girl's mother generally asks her daughter two or three times whether she is really married. A typical extract of a speech is as follows: 'My daughter is too young, her breasts are too small. But as she says she is really married I will let her stay. At first I was thinking I would come and collect her but now Ananias' parents must look after her. She must feed them and care for them when they are sick.'

Once it is established that the girl actually wants to stay, advice is given on how the young couple should behave in married life. The girl should work hard and do what her mother-in-law says, as well as heeding her husband. She should grow taro and cook for her own relatives as well as her in-laws. She should be faithful. The young man is asked not to lose his temper and beat his wife. The representatives from the wife's kin now loudly demand a large brideprice ranging from K500 to K12,000, according to the anger of the parents, or the value they place on, for example, a pretty, or youngest, daughter. Between one and three pigs are always required, but other customary valuables are demanded almost as an afterthought, as if the real interest is in the amount of money. The presentation of taro is simply taken for granted. To communicate the amount of brideprice desired, the bride's father may simply shout out the amount. On the other hand, he may give a token amount, indicating the desired size of the brideprice, K1 standing for K100 or even K1000. Likewise, a fern may be given, the number of fronds representing a proportion of the brideprice. In addition, a length of string may be drawn out to show the number of feathers and necklaces which should be hung from it.

15 The girl's relatives will sometimes test this by trying to pull the girl away physically.

16 Schwimmer describes Orokaivan brideprice as payment for anger rather than an equal exchange of goods for a woman. According to him, the goods are symbolically significant: taro and pigs re-enact a sacrifice; clothes and pots are male gifts to women, and ornaments are pledges (1973:210).
Plate 4 A young groom’s kin meet with a deputation from his bride’s village in order to ratify the union and settle on a brideprice.

It is at this juncture\textsuperscript{17} that the groom’s family offers the 'sitting down' or 'dew' price. This is a small amount of money and a pig or chicken given to demonstrate willingness to enter into a relationship and contracting to pay the brideprice. The money ranges from about K20 to about K200. If the bride's family is content with the opening gesture, the members will shake hands, sit down in the shade, and accept the hospitality of coconut water and betelnut from their hosts. If they do not think it adequate, they may angrily insult the hosts and even rudely help themselves to whatever betelnut and coconut they find within easy reach. In such a case, the hosts show no sign of anger but do make an effort to gather more money and perhaps an extra chicken from other households in the village. The second offer should usually be accepted, after which there is much joking and a relaxation of postures. Throughout the duration of the ceremony, the bride sits emotionless.

\textsuperscript{17}Sometimes the brideprice amount will be specified almost immediately after the girl's departure and other times the family may decide on the price only after they have sat down and established friendship with the groom’s family.
Plate 5 Newly-married couple on the day of the sitting-down payment
in traditional dress. The husband should sit next to her, but sometimes merely hovers around the edge of the proceedings with a disinterested air. The bride's family is then served a good feast meal of well-cooked taro, greens and some meat, whether this be game, from domesticated animals, or from tins. The two kin networks thus ratify the union with commensality. More advice on correct married behaviour is given to the young couple. Around dusk the bride's relatives leave, having been given gifts but, in some cases, taking everything they can carry in the way of tablecloths, cutlery, crockery and left-over food. Even if behaviour becomes this aggressive, an air of sociability is maintained and warm promises are made about future visits and friendship.

During the course of the day's discussions, the brideprice may in fact be lowered, and time extensions to pay granted if the girl's mother is 'sorry for them' or if the 'sitting down' price has been very generous. As the months go by and further friendship and small exchanges are contracted, the brideprice is further reduced. Reductions are explained in various ways, e.g.:

1. The sitting down price was K147 for Raphael and Rachel, so the K1000 brideprice was reduced to K800 and the time for payment extended from 8 days to 1 month, to 5 months, to 12 months, and so on.

2. K1000 of Estelle's brideprice was perhaps to be paid in land.

3. Alexander was initially asked to pay K12,000 brideprice for Vineka. This was reduced to K600 when the anger of her parents abated, but a sitting down payment of over K100 and a suitcase of clothes and subsequent gifts reduced it to K400.

4. When Hanna's mother died Leonard said he would now pay a lower brideprice as he had full responsibility for the care of his wife.

Final payments may be made two or three years after the elopement, sometimes hinging on the birth of the first child. Although K1000 is the usual amount demanded, K400 to K500 seems to be the more usual amount presented in fact.

**Brideprice payment.** The eventual payment of the brideprice is an important occasion which confers status on a clan as a whole and particularly the main donors within it. When the arrangements have been made, the donors build shelters decorated with flowers, ready for the recipient guests. Girls of the clan and in-marrying young wives dress in traditional tapa cloth and necklace valuables, and a special structure is built to display the food to be presented. Throughout the morning, relatives of the newly married man bring gifts of raw taro to be given away. The wives of the young man's clansmen prepare cooked food to be eaten. When the party of representatives from the young wife's village appear, the clan
girls and wives may give the traditional fierce Orokaivan welcome —
an escorting run with decorated spears poised (see Williams 1930:
31). The guests sit down and are offered coconut water and betel
nut, and are fed. The brideprice pigs are killed and traditional
valuables and money are displayed. With either no ceremony at
all, or with one or two small speeches, the money is passed over.
When the guests' appetites are satisfied, conversation continues
amicably until it is time to leave. The young wife may cry to see
her family and kin leave on this occasion, which is not marked by
the formality and hostility as is the initial 'sitting down'. The
payment of the brideprice marks a permanent transition in the
girl's life.

The women of the recipient group fill their string bags, the
men prepare the pigs on poles, and they begin the journey back to
their own village. Here the foodstuffs are shared out to those
related to the girl's family. Money may be kept by the girl's
parents for a while before it is shared with kin, or it may be
used by the parents for an investment (see p.151).

The description of the activities associated with Orokaivan
marriage strengthens the well-established notion of kinship
involvement in marriage. If a marriage is to be successfully
completed, a network beyond the couple must be activated. During
courtship, young kin are used as go-betweens or older kin 'make a
road'; but the 'sitting down' ceremony and brideprice payment
demonstrate even more clearly the role of clan and matrilateral
relatives. The group's attendance and commensality make the event
socially significant. Several group members actually state this
and thus reinforce the society's expectations concerning married
behaviour; and most contribute economically to exchange which
ratifies the marriage and opens or reinforces friendly and economic
relations with another social group.

Tables 5.2 and 5.3 show the composition of a 'sitting down' and
a brideprice payment for a marriage. Two things become apparent from
these tables. First, the money is collected widely from among the
groom's relatives. These relatives still like to stand together as a
clan, or as a group of patrilateral and matrilateral relatives.
Second, the varying contributions have some relation to the means of
the donor. Close relatives tend to give more than more distant
relatives, but within this pattern those with access to wages and
good profits from coffee tend to give more. The mother's brother,
who gave K40, was expected to supply the K800 brideprice. He is a well-
paid skilled carpenter. Pigs and chickens are usually given by the
groom, his father or his father's brother.

18Schwimmer says that in Sivepe the size of these exchanges is
limited by what can be carried away (1973:27). Insofar as this has
been generally true, the introduction of money which is readily
portable and the use of trucks which can carry very large loads
appear to be breaking this practical limit.
Table 5.2
First contribution made for Rachel's sitting down price, presented by groom's FFZS

<table>
<thead>
<tr>
<th>Donor's relationship to groom</th>
<th>Donor's clan</th>
<th>Amount</th>
<th>Donor's relationship to groom</th>
<th>Donor's clan</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFZS&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Birengi</td>
<td>K12</td>
<td>FBWB</td>
<td>Ambotohane</td>
<td>K2</td>
</tr>
<tr>
<td>FFZS</td>
<td>Birengi</td>
<td>K2</td>
<td>FFZSWB&lt;sup&gt;e&lt;/sup&gt;</td>
<td>Ambotohane</td>
<td>K2</td>
</tr>
<tr>
<td>M</td>
<td>Tohane+</td>
<td>K20</td>
<td>Clansman</td>
<td>Endi</td>
<td>K1</td>
</tr>
<tr>
<td>M's clansman</td>
<td>Tohane</td>
<td>K10</td>
<td>FZSS</td>
<td>Birengi&lt;sup&gt;(Endi)&lt;/sup&gt;</td>
<td>K1</td>
</tr>
<tr>
<td>Clansman</td>
<td>Endi</td>
<td>K2</td>
<td>Clansman's wife&lt;sup&gt;f&lt;/sup&gt;</td>
<td>→Endi</td>
<td>K2</td>
</tr>
<tr>
<td>Closest neighbour&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Hojane</td>
<td>K2</td>
<td>MMFPBSSS&lt;sup&gt;g&lt;/sup&gt;</td>
<td>Ambotohane</td>
<td>K4</td>
</tr>
<tr>
<td>FFZD&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Endi</td>
<td>K2</td>
<td>Clanswoman&lt;sup&gt;h&lt;/sup&gt;</td>
<td>Endi</td>
<td>K4</td>
</tr>
<tr>
<td>Clansman's wife&lt;sup&gt;d&lt;/sup&gt;</td>
<td>→Endi</td>
<td>K2</td>
<td>FMZS</td>
<td>Endi</td>
<td>K5</td>
</tr>
<tr>
<td>Clansman</td>
<td>Endi</td>
<td>K2</td>
<td>FFZSS</td>
<td>Endi</td>
<td>K2</td>
</tr>
<tr>
<td>FMZDH</td>
<td>Endi</td>
<td>K2</td>
<td>Total</td>
<td>K79</td>
<td></td>
</tr>
</tbody>
</table>

→ = married into.

<sup>a</sup>Receives most valuable remittances of all village from wage-labouring family.

<sup>b</sup>Receives highest income in village from coffee.

<sup>c</sup>Daughter is wage labourer.

<sup>d</sup>Son is wage labourer.

<sup>e</sup>Receives high coffee profits and remittances from wage labourer.

<sup>f</sup>Husband is wage labourer.

<sup>g</sup>Manages trade store for wage.

<sup>h</sup>Husband owns trade store in village.
Table 5.3

Second contribution made for Rachel's sitting-down price, presented by groom's mother's clansman

<table>
<thead>
<tr>
<th>Donor's relationship to groom</th>
<th>Donor's clan</th>
<th>Amount</th>
<th>Donor's relationship to groom</th>
<th>Donor's clan</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>MB&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Tohane</td>
<td>K40</td>
<td>M Clansman&lt;sup&gt;f&lt;/sup&gt;</td>
<td>Tohane</td>
<td>K2</td>
</tr>
<tr>
<td>M Clansman&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Tohane</td>
<td>K10</td>
<td>M Clansman</td>
<td>Tohane</td>
<td>K2</td>
</tr>
<tr>
<td>M Clansman&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Tohane</td>
<td>K10</td>
<td>?</td>
<td>K2</td>
<td></td>
</tr>
<tr>
<td>M Clanswoman's husband&lt;sup&gt;d&lt;/sup&gt;</td>
<td>Tohane</td>
<td>K2</td>
<td>Total</td>
<td>K70</td>
<td></td>
</tr>
<tr>
<td>M Clansman&lt;sup&gt;e&lt;/sup&gt;</td>
<td>Tohane</td>
<td>K2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Wage labourer receiving highest income.
<sup>b</sup> Receives high remittances from wage labourer.
<sup>c</sup> Truck driver receiving income.
<sup>d</sup> Owner of trade store.
<sup>e</sup> Trade store manager.
<sup>f</sup> Receives high remittances.

Table 5.4 sets out the payment for a brideprice. The circumstances were unusual in that at the sitting down ceremony the bride's family made no forceful demands. The father and mother were quite old and sick and said they would be happy with whatever Stephen's clan Tohane could collect. Hence the brideprice money was collected and presented on the spot. The brideprice shows the same spread of contributions with a stress on the closest relatives and a slight stress on some who have more money. Some of the payments can be seen as a continuation of affinal obligations. Fifty per cent of the K414 brideprice was given by the groom. Half of the K212 came from Stephen's savings from wage labour. The other half came from Stephen's father's savings, which were made up of profits from coffee and gifts from his other children. Another K100 came from Stephen's sister's husband, the biggest coffee grower in the village.

Although the generally accepted pattern of brideprice accumulation is this spread of minor contributions and close kin network donation of major contributions, there are several cases which suggest that Koropatans may be redefining the norms. In some cases it is expected that a single wage-earner should provide the whole amount. For example, one man asked that there be no contributions for his son's brideprice as his eldest son, working in Port Moresby, would pay it all.
### Table 5.4
Contributions to Jacqueline's brideprice

<table>
<thead>
<tr>
<th>Relationship to groom</th>
<th>Clan/Village</th>
<th>Amount (K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groom + F^a</td>
<td>Sarahu (Tohane)</td>
<td>212</td>
</tr>
<tr>
<td>ZH^b</td>
<td>Hojane</td>
<td>100</td>
</tr>
<tr>
<td>MFBS</td>
<td>Waseta</td>
<td>20</td>
</tr>
<tr>
<td>F's age male</td>
<td>Waseta</td>
<td>10</td>
</tr>
<tr>
<td>Clanswoman's H^c</td>
<td>Kiorota</td>
<td>10</td>
</tr>
<tr>
<td>FW3 (i.e. father's 3rd wife)</td>
<td>Waseta → Tohane</td>
<td>4</td>
</tr>
<tr>
<td>FBD</td>
<td>Tohane</td>
<td>5</td>
</tr>
<tr>
<td>FB^d</td>
<td>Sarahu (Tohane)</td>
<td>5</td>
</tr>
<tr>
<td>Clansman</td>
<td>Tohane</td>
<td>5</td>
</tr>
<tr>
<td>MBS</td>
<td>Waseta</td>
<td>5</td>
</tr>
<tr>
<td>MBS</td>
<td>Waseta</td>
<td>2</td>
</tr>
<tr>
<td>Clansman's WM</td>
<td>Seva</td>
<td>5</td>
</tr>
<tr>
<td>FW DH^e</td>
<td>Ambotohane</td>
<td>4</td>
</tr>
<tr>
<td>Clansman</td>
<td>Tohane</td>
<td>5</td>
</tr>
<tr>
<td>M's clansman</td>
<td>Waseta</td>
<td>2</td>
</tr>
<tr>
<td>FBWHZ (i.e. 2nd husband)</td>
<td>Tohane</td>
<td>4</td>
</tr>
<tr>
<td>Clansman</td>
<td>Tohane</td>
<td>2</td>
</tr>
<tr>
<td>M's clansman</td>
<td>Waseta</td>
<td>2</td>
</tr>
<tr>
<td>FBDH^f</td>
<td>Ambotohane</td>
<td>5</td>
</tr>
<tr>
<td>FBW</td>
<td>Tohane</td>
<td>5</td>
</tr>
<tr>
<td>Clanswoman</td>
<td>Tohane</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total** 414

^a Groom is ex-wage labourer.

^b Receives highest village income from coffee.

^c Truck owner.

^d Receives good coffee profit and remittance.

^e Receives high coffee profit and remittance.

^f Store manager.

In another case, a young clerk wanted to pay his own brideprice because he would then have total responsibility for his wife without interference and demands from other relatives. It appears that if the groom, his brother, or even his mother's brother, are wage labourers, they may be asked to pay the total brideprice. I have no evidence that this has ever actually occurred. It does seem unlikely that, in the actual event, relatives wanting to mark their interest and concern in the marriage or to feel part of high status presentations by contributing K1 or K5, would be refused. The fact that individual payment by a wage labourer is being mooted does, however, suggest some impetus for change in the future.
The brideprices, so far, have come from clan and network presentations, supplementing a larger amount from principal kin. It is difficult to establish where a payment actually goes as Koropatans subscribe to differing norms on this point. Older people feel that a payment should be shared equally among the clan and with those who have previously contributed. However, a few men and women feel that the lump sum received should be used by the bride's father or brother to establish a business. Two trade stores in Koropata were in fact set up in this way. One man hoped to do the same, but his son dissuaded him and proceeded to eat and drink the payment over the Christmas holiday period.

An increase in the individual provision of brideprice could conceivably lead to an increase in individual use of it. A man who pays his own brideprice creates fewer obligations to repay kin and may well expect to receive the total bride payment for his sister. Conversely, though, the custom of contributing to a prestation should be self-perpetuating, as obligations are remembered and carried on over the generations. While group members like to be part of the life crisis ceremony of one of their members, group contributions should continue.

There is of course a social concern with the success of a marriage. Old men advise young men how to behave: 'A married man should sit with his wife, talk to her, walk and work with her. He should not behave as if he is still single and leave his wife with his parents. He should build his own house and live there with his wife.' When young married men do not follow this pattern—fishing, hunting or gardening alone, or playing cards and going to social evenings—some old men call out in the evenings, shouting that the behaviour is inappropriate for a married man, though not naming the person in question. Out of ten marriages contracted in 1977-78, two have since failed and the wives in at least another two have suffered beatings, and on occasions their husbands have been absent overnight at social evenings.

Although courtship is a time for enjoyment and few responsibilities, as is almost universally the case, a girl must eventually marry. If she remains single to enjoy her freedom for any length of time, she risks pregnancy and consequent low status. If she mistakenly takes an overdose of traditional contraceptive herbs and becomes sterile, she is assured of even lower status. Like a young man, she does not become fully adult until she marries and has a child in wedlock. When she can plan her own garden and budget the household's crop for domestic and feast needs, she is a mature woman. Some men do cling to bachelorhood, risking low status in order to have a longer period of freedom. They can go

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19A social evening is an organized dance at which several local village bands play and young men from surrounding villages visit to dance and meet the local village girls.
hunting and fishing, and enjoy a meal from the catch with their friends, and can devote more time than married men to intrigues with women. Almost every physically and mentally normal person eventually opts for marriage and children. As is generally the case in Melanesia and the rest of the world, children are desired emotionally as well as for economic security in old age and for the continued existence of the social group.

Marriage as a life crisis shows even more clearly than birth or puberty the relevance of the clan or network of relatives at certain important times. The group ratifies a sexual union by taking a constant interest, eating with the new affines, and by contributing to the payments that begin or reinforce a relationship with another social group. Such payments are an occasion to exhibit generosity and, insofar as those with greater assets tend to make larger contributions, to encourage or lead to a spreading of resources throughout the group. By their very structure they encourage a perpetuation of exchanges and a reproduction of both the physical society and the socio-economic relations within it.

Death

The Koropatan believes that at death the individual passes to a realm unknown to the living: the world of the supernatural. The correct burial ritual performed for a mature man activates the widest social network in which he was involved in life. The deaths of small children and aged women involve much less ritual and a smaller exchange. The ritual surrounding the death of a mature woman varies in scope according to the status of the husband and/or the extent of his grief.

Initial mourning. Immediately on hearing of a death, close kinsmen cease what they are doing and come to wail over the body. Other villagers collect rice and tinned meat and fish from trade-stores and quickly harvest some taro, bananas and coconuts. Bearing these gifts, groups set off for the hamlet or village section of the deceased.

For up to three days after the death, the body, usually enclosed in a coffin, lies on a platform sloping at an angle of $20^\circ$ from the ground, and gift-bearing parties from neighbouring affinally-related villages arrive one after the other. The inhabitants of the host hamlet may decorate their faces and bodies with white mud; visitors usually paint themselves with orange or black designs (cf. Williams 1930:210). The visiting mourners are calm or even jolly during the journey, but at the entrance to the

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20Williams (1930:211) said this bakari was for a man of importance and was convenient for those wishing to embrace the corpse.
deceased's hamlet they draw themselves together and march solemnly towards the body, women depositing their string bags before erupting in hysterical grief, sometimes throwing themselves on the ground. Men join a male group seated on a rest shelter, chewing betelnut, smoking and singing a moving funeral dirge. The chorus, with improvised verses sung by close friends or relatives, goes on almost continuously for up to three days, breaking into counterpoint or beautiful harmonies in the night when several groups sing at once. The nuclear family of the deceased may break down weeping occasionally or may sing emotional verses such as 'My younger brother, my younger brother; he has gone'.

The closest female relatives and some male family members periodically throw themselves on the ground or at the body, or try to hurt themselves by hitting themselves with fists and scratching themselves with fingernails. Cousins and friends stay by these grievers, holding them constantly to prevent suicide or serious injury. Groups of women or men from a particular clan may return to their nearby homes to gather more food and to prepare for a funeral dance. The Anglican Mothers' Union may organize and compose a song and dance for the deceased. The clanswomen's dances generally involve self-mutilation as the women beat their own arms, legs and breasts and sometimes cut their foreheads, (see Williams 1930:212) to the chagrin of the representatives of the Anglican Church who oppose the self-infliction of pain on the grounds that funeral participants should rejoice in a soul's release to heaven.

The burial. When the hysteria has died down and it is apparent that the tropical climate makes removal of the body desirable, the burial will begin. The next of kin of the deceased may have been waiting for another relative to arrive from a distant work place, but as time passes he will waive his demands. A grave is dug and if a qualified person is present a short Christian service may be read. As the coffin is lowered and covered up, a dense, jostling but quiet crowd watches and the family of the deceased put personal property such as clothes, tools, money, bankbooks, radios and even record players into the grave.

Post-burial exchange. During the time leading up to the burial the close kin are unable to work, so rely on gifts of tinned foods, rice, cooked taro, etc. for sustenance. Clansmen and the close network of relatives contribute raw taro, yams, bananas, sugar cane and sweet potato which are piled up on a platform. After the burial a clansman of the bereaved family organizes a distribution of this food together with portions of two or three pigs donated for the presentation. Food is shared equally among all visiting villages, irrespective of the number of mourners from each, and not taking account of latecomers following. Recipients quietly gather their gifts and leave as do the villagers from different sections of Koropata.
Plate 6 Women from the Anglican Mothers' Union compose a song and dance for the arrival of the body

Post-burial restrictions. The strict and elaborate widow seclusion described by Williams (1930:215-21) does not appear to be practised now, but a very close relative who is grieving may retire to the house for several months of silent mourning, surviving on food gifts from kin. Widows now sometimes follow the European custom of wearing a black dress. A common custom following a death is the destruction of utensils, tools or coconut trees belonging to the deceased or having been used by him frequently.21 Friends and close relatives often choose to deprive themselves of a particular item or category of food,22 or an activity loved by the deceased — for example, spear and goggle fishing. These abstentions should end with the end-of-mourning feast. The nuclear family of

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21Williams (1930:223) describes the cutting down of coconut trees and breaking of pots and wooden plates: 'He ate from this dish ... therefore we break it.' An associated Orokaiva custom is cited in PAR 1914-15, p.51: 'An heir finds himself in the somewhat unpleasant position of having to give away most of his father's property ...'

22This sometimes presents real difficulties for a household including as it may all tradestore food, or the staple taro. Williams, too, describes this self-inflicted abstinence hajai (1930:223).
Plate 7 Men from the bereaved clan place stakes to represent each village deputation and begin to share out the feast food in repayment for the mourning
the deceased does not work for a period of at least several weeks after the death and the deceased's garden should be left to rot.

The spiritual realm. The cause of the death is almost always attributed to sorcery, particularly if the deceased worked in distant places, surrounded by strangers and people from provinces renowned for their magic. Much of the behaviour after the death can be explained in terms of a public affirmation of guiltlessness, but there is a further consideration. The spirit of the dead person continues to be relevant to the living. Spirits are believed to have some control over future productivity and harmonious relations in the village, and it is often respect for the feelings of such spirits as well as psychological attempts to lessen the grief of the mourners that structures the destruction, unrestrained grief, the seclusions and abstentions. Most Koropatans claim that burial of property is just an extension of burial of the man, as it is property made up of personal belongings; or that it is to avoid a constant material reminder of a loved one. However, sometimes it is stated that the spirit of a dead person may be angry if the living make use of his personal property.

End-of-mourning feasts. After several months, or even one or two years, there should be a large end-of-mourning feast. As neighbouring villages have already been repaid, this feast tends to take the form of a clan exchange. Other relatives may 'stand with' the donor or recipient clans. The atmosphere is relaxed and cheerful and large amounts of taro, yams, bananas and so on, together with as many as thirty pigs and several cows, are presented to sections of the clans which helped during the funeral period and which have long-standing affinal ties with the donor clan. Speeches are made and often the broken spears or other property of the deceased are ritually burned. More than one feast may be made to repay all clan sections in full.

Tables 5.5, 5.6, 5.7 and 5.8 and Figure 5.1 describe the post-burial and the post-mourning feast exchanges after the death of Cecil, a 20-year-old man, in 1977. They give some indication of the complexity of any exchange and the extent of the social network involved in a death. Besides those who publicly donate on the day of the exchange, there are donors' relatives who fulfil some former obligation by helping on a certain occasion. It may seem that a

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23Compare an observation of the Orokaiva made in 1914. The ghosts of the dead hover around their abodes in life: when the bodies are placed in the grave, they are addressed by the mourners. They are invoked at a long series of funeral feasts. They guard the crops of the living. In almost every village will be seen a ghost platform, on which are placed offerings of food by relatives of the dead (PAR 1914-15, p.50). In 1930 Williams wrote 'Every gardener and hunter feels that the dead may send him success' but any failure of crops or destruction by pigs 'may also be attributed to them' (Williams 1930:283).
lineage receives gifts solely as repayment for aid during the funeral, but on closer examination the exchange takes on the character of an affinal exchange. Some affinal exchanges, once further distributed, might serve to placate a clan not already repaid for dancing or giving gifts of food at a funeral. Generally the largest gifts are provided by the closest relatives and affines, and there is some evidence that those with access to a wage-labourer's money give a little more than others. Although not tabulated, the bulk of the vegetable food is provided by a large network of clansmen and kin; the feasts following death demonstrating more than any other life crisis the solidarity of lineage, clan and village. Ritual mourning and gift giving take priority over all other activities as these units stand together to support the bereaved and express their concern at the death as active clan or village members. The immediate distribution after burial concerns only outside villages. The distribution three months later was virtually one between Endi clan and three lineages of Ambotohane clan within Koropata. The end of mourning feast 15 months later involved about thirty pigs and three cows, but from my limited information24 seemed to draw in individual affinal payments and, in doing so, reward Tohane clan and other Ambotohane lineages who had not figured in the earlier repayment exchanges, although they helped during the burial period.

Table 5.5

<table>
<thead>
<tr>
<th>Relationship to Cecil</th>
<th>Lineage/Clan</th>
</tr>
</thead>
<tbody>
<tr>
<td>FZa</td>
<td>Birengi (Endi)</td>
</tr>
<tr>
<td>FB</td>
<td>Birengi (Endi)</td>
</tr>
<tr>
<td>FMBWZHB</td>
<td>Dipuni/Endi</td>
</tr>
</tbody>
</table>

a Married to Ambotohane man who receives highest remittances.

Some interesting points concerning female roles emerge from the foregoing discussion. In many presentations a woman received gifts according to her status as a member of the clan of her birth or of the clan of her marriage. Thus Cecil's father's sister played a dominant role in the giving of pigs and cows (see Tables 5.5 and 5.8). Women played the most emotional roles in the ritual immediately following death, releasing tension and grief by unrestrained wailing and physical collapse. Their grief was also expressed in the more organized dance of the Mothers' Union. They had a rare opportunity to create their own song and movements. Throughout the funeral, as on other social occasions, women's activities are

24 I was not present for this feast, so had to rely on informants' information.
for the most part separate from, though complementary to, those of the men. In this most important life crisis, however, women, in particular older women, appear to have more autonomy in their actions. They take the initiative in both decision-making and in creativity relating to the exchanges and the mourning surrounding the death.25

Table 5.6

<table>
<thead>
<tr>
<th>Gifts received by each village</th>
<th>Villages</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 sugarcane, 20 bananas</td>
<td>Togahou, Waseta, Koipa</td>
</tr>
<tr>
<td>2-3 coconuts, 4-5 yams</td>
<td>Kiorota, Uhita, Awala, Sui</td>
</tr>
<tr>
<td>10 large, 4 small taro</td>
<td>Tunana, Boru, Isoge, Mejuta</td>
</tr>
<tr>
<td>5-8 kg of pig meat</td>
<td>Sairope, Mumuni, Sasembata, Ambogo and Ombesusu</td>
</tr>
</tbody>
</table>

Patterns discerned in life crises previously discussed are perhaps more obvious in death. Burial of personal property, money and bankbooks with the corpse is widespread in Koropata. Destruction of coconuts and killing of the deceased's pigs is common too, but, as Williams noted (1930:223), care is taken that dependants do have the essentials for survival: an axe, a spear, a string bag, and perhaps a pig. In the future, this may also come to mean that some money will be kept back for dependants' school fees and so on, when such expenses are seen as part of the minimal ingredients for survival. As the custom now exists, though, the burial of money and expensive luxury items contributes to a situation where all children should start life with only the bare essentials for their future: land, a few basic tools, and kin. The large gifts of wage-earners to death-related exchanges also contribute to an equalizing of resources.

If a funeral is to be satisfactorily carried out, members of the deceased's family cannot work, so it is necessary for the clan and for a kinship network to be mobilized to help. To satisfy the spirit of the dead, too, all close kinsmen and affines must make some gesture of concern, sometimes even leaving a job and flying from Port Moresby. This exchange with the dead has been discussed with reference to Melanesian and Australian Aboriginal society by

25Meillassoux (1981:76) claims that when women lose their capacity to reproduce children they gain a social capacity to 'reproduce'. That is they gain importance in social ceremonies.
Table 5.7

Major gifts at end of mourning, December 1977

<table>
<thead>
<tr>
<th>Donor's relationship to Cecil</th>
<th>Gifts</th>
</tr>
</thead>
<tbody>
<tr>
<td>FB(^a)</td>
<td>truck hire</td>
</tr>
<tr>
<td>Zh(^b)</td>
<td>cow</td>
</tr>
<tr>
<td>FB and FZS</td>
<td>cow</td>
</tr>
<tr>
<td>FBS(^c)</td>
<td>pig</td>
</tr>
</tbody>
</table>

\(^a\) Receives large remittances.
\(^b\) Wage labourer, bought cow.
\(^c\) Wage labourer, bought pig.

Table 5.8

Donors and recipients for some major gifts at second end of mourning, December 1978

<table>
<thead>
<tr>
<th>Ceremonial donors</th>
<th>Gift</th>
<th>Recipients' relationship to donor</th>
<th>Lineage/Clan</th>
</tr>
</thead>
<tbody>
<tr>
<td>F(^a)</td>
<td>pig</td>
<td>BWB (ZHFFBSS)</td>
<td>Ambotohane</td>
</tr>
<tr>
<td>FZ(^b)</td>
<td>cow and pig</td>
<td>HFFBSS</td>
<td>Paumbari/ Ambotohane</td>
</tr>
<tr>
<td>FBS</td>
<td>cow</td>
<td>WB</td>
<td>Puhoropa/ Ambotohane</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WZH</td>
<td>Tohane</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FBD</td>
<td>Birengi+ Tohane</td>
</tr>
<tr>
<td>FMBS</td>
<td>cow</td>
<td></td>
<td>Paumbari/ Ambotohane</td>
</tr>
</tbody>
</table>

\(^a\) Cecil's father was aided by his MFBSWB in obtaining the pig.
\(^b\) Cecil's father's sister was aided by her MBW in obtaining the cow and pig.

Production for death feasts or sacrifices to spirits may seem unproductive for the society's economy, but it is really a gift in exchange for ritual harmony with earth spirits, animals or ancestors. Thus man-nature or man-ancestor relations are important for the continued reproduction of the society in that, through the feasts and gift-giving they require, they give the people confidence in the continued clemency of the weather and fruitfulness of the land, reciprocal gifts from the ancestors. The shame that a small
Figure 5.1 Recipients of gifts at Cecil's end of mourning, December 1977, distributed to representatives of three lineages from Ambotohane clan and one from Endi
or improper funeral would bring to the deceased's family also ensures a perpetuation of most customary procedures. Death, which occasions the ultimate and largest of the life-crisis ceremonies, enhances the awareness of the supernatural for those living. In order for the social group to continue harmoniously in the face of these unknown dangers, in the performance of rituals, the group gives its most dramatic display of solidarity.

This section has brought out more clearly the role of kinship in social reproduction. Ideas of correct economic and social behaviour are inculcated by kin at ceremonies and gifts from them are essential for the satisfactory completion of life-crisis exchanges. Hence kin, and indeed the society in general, strengthen certain norms concerning the division of labour and the distribution of the product. A network or group of kin is essential to offer productive and material assistance on intermittent but vital occasions. The importance of the unity of the group is symbolized by the fact that they eat cooked food, particularly taro, together on most of these ceremonial occasions. Here we may recall Sahlins' contention that eating together is a 'ritual of commensality that consecrates the group as a group' (1972:94). Although Sahlins is referring to the daily household eating, the same applies to the more irregular commensality of the kinship group or network. Hence this aspect of organization is of equal importance with the household which is predominant in daily activities.

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26 Schwimmer (1973:112, 124, 126) says that taro (cooked) 'symbolizes commensality' and is an 'infallible index of intimacy' (p.112).
'No bucks' is a common saying in Koropata village amongst youngsters who have left school after sixth grade. The words 'no bucks' or 'poor' are carved on trees under the names of friends as an insult. In arguments between clans, 'poor' and 'no money' are the insults flung from one side to another. A youth will leave his lover when warned that the size of the brideprice represents an unattainable amount of cash.

The year 1979 offered new promise, however. Koropata was invited by the Department of Primary Industry (DPI) to become part of the Village Oil Palm Scheme. There was much anticipation and excitement at the prospect of mani pajire (big money) from this scheme. Although Koropatans claimed that they did not know what would be the outcome of the scheme, they were clearly hoping for rich rewards.

The Koropatans' attitude to money and their economic need for it lead them to shape a number of alternative strategies. These plans are aimed at increasing access to money as a prerequisite to raising status and making life physically easier. In 1977-78 the strategies included the growing and selling of cash crops such as coffee, market crops and timber; the raising of cattle; and business activities associated with tradestores and trucks. These last two are service industries providing transport and marketing facilities which enable products of both the village and capitalist economies to reach the consumer. It is in this sense that they constitute production, a non-material production that is part of the process in which material products realize their value through distribution and eventual sale. Also, from the villagers' point of view such businesses are considered as productive ventures, undertaken to make money. As shown already, some money must be

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1 In 1976 a multi-million kina agreement was signed between the government and the Commonwealth Development Corporation to set up in Northern Province an Oil Palm Scheme consisting of company plantation and factory, smallholder settler plantations and village plantations. See Epilogue.
produced in order for the Koropatan people to continue to meet their material needs.

There is another aspect to their conception that all money-making activities are production. In 1959 an orator from the New Guinea highlands said in reference to coffee, 'Money grows on those trees' (cited in Brookfield 1969:97). A Koropatan would agree but would incorporate further analogies explaining the natural growth of money from the sale of timber and the ownership of cattle, truck or tradestore. Like the staple crop taro, money is seen to grow after its initial investment. Cash activities are related to each other. Truck and tradestore businesses are often inaugurated and supported through the profits of cash crops and these businesses feed back into material production and feast consumption by providing cheap transport to markets and converting subsistence food to high status food through the medium of money. If all cash marketing activities are included in this analysis each can be viewed in terms of its role in production, distribution and consumption, aspects of which have already been referred to in the last chapter. This should contribute to an understanding of patterns of distribution between particular people and groups in relation to their productive input.

The production of market crops will be dealt with first as it relates most closely to subsistence production, differing in aim and organization from the other cash-making activities.

**Market crops**

Surplus subsistence or crops grown specifically for market sale are almost invariably produced and marketed by the nuclear family. Pineapples, watermelon, spring onions and cucumber may be planted especially for sale but most sellers use surplus subsistence crops such as coconuts, sweet potatoes, corn, betelnut, hingi (piper betel leaf) and ina (pit pit) for their marketing. They are part of the household garden and are cared for mainly by the women. Young men may gather coconuts, betelnut and leaves but they are loath to sell such goods at the market because they see this as women's work.

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2Gambling has not been included although for some lucky card players the gambling table is their central place for making money. For others of course it is a centre for the distribution of cash earnings from other sources. No systematic enquiry was made into this activity.

3There are a few surplus village crops which are not sold at the markets. Two or three old men sell betelnut or tobacco to people within the village.
There are two local markets. One is at Saiho hospital, 9.5 kilometres from Koropata. Prices at this market are low so women do not use PMV truck transport because the fare would cut into profits too much. They walk to Saiho market and the amount they can sell is limited by what they can carry. People commonly bring back K1.00 or K1.50 but they do not always sell all or indeed any of their produce. Visits to Saiho market, as with markets all over the world, are often associated more with social pleasure than with economic motives. Out of nineteen trips recorded, ten were by small groups of young girls. Their fish and sweet potatoes usually brought less than K1.00 but they went on the busiest market day when village youths gathered too, ostensibly for minor treatment at the hospital.

The main market is at Popondetta where a ticket entitling a person to sell costs 20t. The return fare between Koropata and Popondetta in a PMV is K2.20, so produce must be high in value or large in quantity to warrant the trip. Betelnut, mustard leaf, okari nut and pig meat bring the highest profits. Since the Pavo tekari Endi-Ambotohane business group has bought a truck, members are able to travel at half price so market visits have become more profitable. In 1977-78 the average market profits recorded for Popondetta were K5.46. Of eighty-three cases for Saiho and Popondetta the average was K4.41 (Table 6.1). To cross check the limited observations made, Koropatans were asked to estimate the frequency and profits of market visits. The results corroborate the observations noted above (Table 6.2). Work surveys add a little to the appreciation of time spent marketing surplus subsistence goods (Table 6.3).

Table 6.1
Profits from market trips recorded, 1977-78

<table>
<thead>
<tr>
<th>Market</th>
<th>Cases recorded</th>
<th>Total</th>
<th>Average profit(^a)</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saiho</td>
<td>19</td>
<td>K16.40</td>
<td>K0.86</td>
<td>0-K 3.00</td>
</tr>
<tr>
<td>Popondetta</td>
<td>64</td>
<td>K349.49</td>
<td>K5.46</td>
<td>0-K13.30</td>
</tr>
<tr>
<td>Saiho and Popondetta</td>
<td>83</td>
<td>K365.89</td>
<td>K4.41</td>
<td>0-K13.30</td>
</tr>
</tbody>
</table>

\(^a\)In the case of the Saiho market there were no expenditures so income and profit are the same figure.

The production of crops for the market is the province of the nuclear family. Women determine whether there is a surplus in food crops such as sweet potato, corn or German taro. Men plant and/or inherit coconuts, betelnut, okari nut and pineapples so they make decisions about the marketing of these items. Older unmarried
Table 6.2
Estimates of market visits and profits made

<table>
<thead>
<tr>
<th>Location</th>
<th>Average profit from market visit</th>
<th>Range of profit</th>
<th>Visit frequency&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Average annual market profit per household</th>
<th>Range of annual income per participating household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Koropata 2 village (30 households)</td>
<td>K5.20</td>
<td>K2.00-K10.00</td>
<td>each 3.8 weeks</td>
<td>K81.60</td>
<td>K2-K192</td>
</tr>
<tr>
<td>Koropata 2 block settlement (24 households)</td>
<td>K4.00</td>
<td>K1.50-K8.50</td>
<td>each 2.5 weeks</td>
<td>K86.72</td>
<td>K42-K190</td>
</tr>
</tbody>
</table>

<sup>a</sup>The concept of frequency of market trips was difficult to convey so annual figures are possibly inflated. From observations made in 1977-78 one trip to the market per 5 to 6 weeks seemed usual. In 1979 market trips were rarer.

Table 6.3
People and time involved in market crops, Koropata 2 village

<table>
<thead>
<tr>
<th>Survey time</th>
<th>Clan/Group</th>
<th>Total in group</th>
<th>Men marketing</th>
<th>Women marketing</th>
<th>Hours per week spent by clan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 1977</td>
<td>Tohane</td>
<td>24</td>
<td>–</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Jan. 1978</td>
<td>Seve-Ambot</td>
<td>47</td>
<td>6</td>
<td>13</td>
<td>93</td>
</tr>
<tr>
<td>Mar. 1978</td>
<td>Seva-Hamberihambo</td>
<td>25</td>
<td>1</td>
<td>2</td>
<td>32</td>
</tr>
<tr>
<td>Apr. 1978</td>
<td>Tohane</td>
<td>25</td>
<td>1</td>
<td>6</td>
<td>67</td>
</tr>
<tr>
<td>May 1979</td>
<td>Tohane</td>
<td>39</td>
<td>–</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>June-July 1979</td>
<td>Seve-Ambot</td>
<td>40</td>
<td>1</td>
<td>1</td>
<td>15</td>
</tr>
</tbody>
</table>
daughters and mature women in their forties and fifties are those who do most of the market selling. However, there are at least four married couples and one or two single or widowed men who also sell regularly at the market.

Market trips are normally made in response to a direct need. Many villagers claim they go to the market only when they are 'worrying for' or short of tobacco, kerosene and salt. Trips to the market increase dramatically when a clan begins preparation for a feast. The entire profits may be spent on white rice, tinned fish and meat. Table 6.4 demonstrates the fluctuating pattern of market visits, wherein it is seen that visits occurred most frequently during December and January, when there were welcome and goodbye parties for secondary school students and wage labourers, brideprice payments and Christmas and New Year celebrations. The slump in February and March may have been related to what was claimed to be a taro shortage. The sweet potato, German taro and bananas usually available for sale may have been eaten as a replacement for the taro.

Table 6.4

| Number of market trips recorded, 1977-78, Koropata 2 village |
|-------------------------|----------------|
| October 1977            | 0 |
| November 1977           | 5 |
| December 1977           | 25|
| January 1978            | 21|
| February 1978           | 14|
| March 1978              | 15|
| April 1978              | 17|

When no truck is running from the village to the main Kokoda-Popondetta road extra labour costs are incurred. Carriers are needed to get the produce 2.4 km to the road, and if a woman plans to sell coconut or betel nut she has to pay climbers, usually young male relatives. Most market sellers manage to use a member of the nuclear family and reward him with a payment of between 20t and K1, depending partly on his age and partly on the success of the trip. If a clan member outside the nuclear family is used and a valuable crop such as pineapples is sold the payment could be K1.00. Youths are expected to do these small tasks without payment but if no present or monetary reward is offered they will become angry and threaten not to help in the future.

The actual process of selling involves the owner in arranging his or her produce in 10t to 20t lots and quietly waiting for a customer to choose and pay. Sometimes a husband's and a wife's goods are both sold at the market and proceeds are kept separate,
but usually the produce is seen as belonging to the woman. The
dates are fairly standard but sellers are flexible enough to alter
them according to supply and demand on a particular day. As the
villagers remark, 'the ladies know how to pull in more money'.
If sweet potato is scarce on one day they will reduce the number
for sale at 10t. If they are hot and tired they may lower the
price by giving more produce for 10t but they are just as likely
to pack up their remaining produce and take it to a wage-earning
relative. There they offer the unsold food and in return get rice,
fish and a night's accommodation in town. There is no desperation
to sell. If a watermelon brings K3 there is cause for celebration
but, if not, the relatives will enjoy eating it.

The distribution on profits has already been alluded to.
It is of course spent at the village tradestore where people buy
Western food for a visitor, for themselves when for some reason
they have not gone to the garden, or for a work party or clan
feast. Carriers and climbers receive a small monetary gift and
children in the nuclear family may receive a treat such as a packet
of cheese snacks. A single man may beg his sister for 20t or 30t
for soap or gambling money. A husband may expect a gift of tobacco.
A widow may be given a present of 20t. If there is any money left
the young woman or wife will keep it until a visit from a kinsman
or a bout of sickness makes it expedient for her to buy such things
as rice and tinned fish from the village tradestore. Men usually
buy food in Popondetta where it is cheaper but many women are ill
at ease in the town stores and will buy at the village trade
stores. The foodstuffs preferred and most often bought are rice,
tinned fish, tinned meat, coffee, tinned milk, sugar and dry
biscuits. Kerosene and tobacco are bought fairly regularly as no
household likes to be without them.

Both women and men receive proceeds from market sales.
Young single men often receive a reward beyond what is called for
by their labour contribution. Profits are often used to enhance
the status of the male-headed household in entertainment and feast
presentation. Female-headed households, being generally poorer,
seldom participate in these feasts. A man has the power to ask
for and receive whatever money remains in his wife's care. Beyond
that it seems that the market-selling of subsistence surplus is
primarily an activity of the woman, involving little co-operation
beyond the household.

To a large degree the income from marketing is used to main­
tain the basic standard of living. This now incorporates several
needs acquired since colonial contact and includes the substitution
of Western food for surplus subsistence at exchanges. The follow­
ing section on coffee reveals the more complex organizational forms
developed for an activity offering more cash than market selling.
Coffee

Coffee planting was established in the Northern Province (then Division) as early as 1924 and these communal plantations yielded 84 tons of hulled coffee in 1938-39. However, with World War II, dissatisfaction with the returns from communal holdings and the devastation resulting from the eruption of Mt Lamington, these plantations fell into disuse. Then in 1956 a Local Government Council was established in Northern Province (then District). On hearing of the success of coffee growing in the Highlands4 this Council tried to develop similar schemes for the Orokaivans. District agricultural officers encouraged large-scale planting of coffee, some villages opting for large 'company gardens' and others for individual holdings. 'Company gardens' were modelled on the compulsory village plantations of the early days of colonial contact. In those times whole clans or villages worked to clear and plant a plot, sometimes under the direction of the Village Constable. In the 1950s agricultural extension officers advocated that plots belong to individual men to facilitate distribution of profits.5

In the Northern District, then, coffee was promoted by the authorities as the most desirable cash crop in the late 1950s. In 1960 attention switched to cocoa and then, in the late 1960s, to rubber. Koropatans planted some of each of these crops but, in general, financial returns have been limited to what has come from coffee. In the 1970s, when coffee prices boomed, the villagers' incomes increased and they planted more coffee which has not yet come into full production.

Almost every Koropata household has a small coffee plantation ranging in size from a half to three acres. The crop from the main Koropata village in 1977 returned approximately K5500. Most people received an initial price when delivering the coffee, then received a smaller rebate from the Orokaiva Coffee Growers' Cooperative in 1978.6 Each household received an average of about

4During the 1950s the Gorokans from Highlands New Guinea enthusiastically took up coffee growing, aided initially by a few European planters and then by government officers. By 1964 the World Bank claimed that the growth of the coffee industry was one of the success stories of the then Territory of Papua New Guinea.


6Prices January 1977: 77t per kg and July 1977: K1.21t per kg. February 1978 rebate 18.5t per kg. Sets of prices are derived from PNG Coffee Industry Board, Goroka, pers. comm. July 1978. These prices represent the price boom in coffee following the Brazilian crop failure. Prices were much lower for the 15 years prior to this (Gregory 1982:187).
The households in the block settlements received a total of about K4950, an average of K140 per household.

Coffee is not 'picked out': that is, not all the cherries are picked. There is a shortage of coffee pulpers in the village and this restricts the amount of coffee a man can process when his crop is ready. Men have individual holdings of coffee and rarely call on co-operative labour beyond the nuclear family to pick it. Pruning and clearing around trees during the year are carried out only by one or two of the most diligent growers. A youth group formed in 1978 undertook this work for several growers, but the group broke up after a few months because of accusations of misbehaviour, as young people of both sexes were working together. There were also claims that the leader had mismanaged group funds.

Work involved in coffee growing is seasonal. From October 1977 to May 1978 virtually no coffee work was registered in my time surveys. In late March 1978 the largest coffee producer and his three children spent about 10 hours picking a sack of coffee cherries. The cherries have to be soaked, pulped, dried and transported before they can be sold, realizing a price of from K45 to K60 per bag in 1978. During my second field trip, between May and August 1979, the coffee season was in full swing so more information on the organization of labour and distribution of returns was available.

Table 6.5 shows that there are few questions (2a, 3, 13, 14, 24, B3) which put considerable effort into the production of coffee and have an overall average production return of more than K100 per household. Households without coffee are generally those of widows and recently returned wage labourers. Time figures for coffee production have limited value for several reasons. The first period of fieldwork did not coincide with the coffee season save for four weeks at the end. The second period of fieldwork coincided with an abnormal coffee season in that excitement about oil palm and demands on labour by the oil palm project severely limited the harvesting of coffee. Furthermore, much of the coffee picking and processing was done by children under 15, not considered producers for the purposes of the survey. The figures do, however, bring out the absence of work during the off-season and show the work patterns of those few households still treating coffee as a worthwhile cash crop, as opposed to the majority of households who had transferred their commitment to oil palm (Table 6.6).

The figures for the households not participating in oil palm clearing for June-July 1979 give the most reliable indication of individual effort put into coffee-picking and processing. However, the absence of children's input and the general lack of enthusiasm for coffee among the villagers have almost certainly deflated the 1979 figures to some extent. Viewed over the whole
Table 6.5

Koropata 2 sales of coffee sacks, 1977, 1978

<table>
<thead>
<tr>
<th>Village household number&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Coffee parchment sacks 1977</th>
<th>Coffee parchment sacks 1978</th>
<th>Block settlements of household numbers&lt;sup&gt;b&lt;/sup&gt;</th>
<th>1977 numbers</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2.6</td>
<td>2.0</td>
<td>B1</td>
<td>3.5</td>
</tr>
<tr>
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<td>3.0</td>
<td>B2</td>
<td>3.5</td>
</tr>
<tr>
<td>2b</td>
<td>-</td>
<td>3.0</td>
<td>B3</td>
<td>5.5</td>
</tr>
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<td>7.0</td>
<td>4.0</td>
<td>B4</td>
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</tr>
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<td>-</td>
<td>B5</td>
<td>?</td>
</tr>
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<td>B8</td>
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<td>1.0</td>
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<td>1.0</td>
<td>B13</td>
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<td>34</td>
<td>1.0</td>
<td>2.2</td>
<td>B35</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Total 91.7 sacks 46.3

| Total average 2.7 | Total 82.4 |

Average 1.5

| Average 2.5 |

<sup>a</sup>See Figure 3.4.

<sup>b</sup>See Figure 3.2 and Table 3.1
year, however, it is still apparent that, in terms of time, coffee work is an activity of minor importance.

The current patterns of working on coffee fit in with household work in daily subsistence activities. All Koropata 2 villagers and residents on the settlements were questioned about or observed in their organization of labour in coffee work. They were also questioned about patterns of disbursement of the coffee payments. The model that emerges is that of a husband, wife and children picking coffee, the wife and children doing the greater amount of work. Under usual conditions the household head organizes the work and disposes of the cash as he sees fit. The wife minds the money as part of the marriage partnership but if her husband demands that she hand it over she must accede.

<table>
<thead>
<tr>
<th>Period</th>
<th>Men at work</th>
<th>Women at work</th>
<th>Total hours</th>
<th>Average hours per producer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 1977</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Jan. 1978</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mar. 1978</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Apr. 1978</td>
<td>3</td>
<td>4</td>
<td>29.5</td>
<td>1.18</td>
</tr>
<tr>
<td>May 1979a</td>
<td>-</td>
<td>1</td>
<td>3.0</td>
<td>0.07</td>
</tr>
<tr>
<td>June-July 1979</td>
<td>4</td>
<td>12</td>
<td>154.5</td>
<td>3.86</td>
</tr>
<tr>
<td>Oil palm</td>
<td>-</td>
<td>5</td>
<td>38.5</td>
<td>1.25</td>
</tr>
<tr>
<td>No oil palm</td>
<td>4</td>
<td>7</td>
<td>116.0</td>
<td>12.90</td>
</tr>
</tbody>
</table>

a The Tohane group were totally involved in oil palm.
b Ten households were concerned with oil palm and two were not.

After selling coffee in Popondetta a man usually buys a large bag of rice or flour and some tinned meat and fish. If he chooses instead to buy beer and neglects his family, the wife's only recourse is to complain loudly. A woman is socialized throughout life and reminded at life-crisis ceremonies that she should obey her husband. If she forgets these rules she is likely to be physically assaulted. After the payment is received children are rewarded for their help according to their age or size rather than according to actual labour contribution. Young

7This inequality between men and women can be noted in relationships other than between spouses. An unmarried mature woman who lived with her married brother picked and processed most of a sack of coffee, then sold it when a coffee buyer sent a truck to Koropata. Her brother took the whole payment from her.
children generally receive 20t, 50t or K1; older children may receive up to K10.

Actual practice may of course be quite different. Sometimes children are rewarded with food rather than with money. Households including an unmarried adult reward him or her with a large, perhaps equal, share of the coffee income. Small households such as 10, 19, 33, 7 and GM who lack labour, and hardworking households such as 13 and 24 with large coffee holdings call on a larger network of kin for harvesting. Table 6.7 presents a summary of the kin clusters called upon. The inclusion of some of the more distant kin in the network of helpers occurs for a variety of reasons. The aid may be given to reciprocate use of a coffee pulping machine, in anticipation of a large contribution to a future bride-price, or to earn cash for a particular individual project. The head of household 13 also obtained the services of a class of school children through his position on the school committee and in exchange for a donation of K10 to the school funds.

Table 6.7
Co-operative labour for large coffee growers
or small households

<table>
<thead>
<tr>
<th>Household</th>
<th>Network helping</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>S, S, S, D, WZ, WBS</td>
</tr>
<tr>
<td>13a</td>
<td>D, S, S, BS, BS, BD, BD, BS (WB, WB children) Waseta school children</td>
</tr>
<tr>
<td>10</td>
<td>B, Z, Z, W, S, ZS, clan brother</td>
</tr>
<tr>
<td>33</td>
<td>S, SW, SD, SD</td>
</tr>
<tr>
<td>19</td>
<td>W, BS clan B, clan B</td>
</tr>
<tr>
<td>7</td>
<td>W, D, DH</td>
</tr>
<tr>
<td>24</td>
<td>D, D, S, MBWZDS, FZHFFBDS</td>
</tr>
<tr>
<td>GM (Block)</td>
<td>W, classificatory Z children (MFFBSDD children)</td>
</tr>
</tbody>
</table>

aThree separate occasions.

Most deviations from the nuclear household model occurred in 1979 when for many Koropatan households coffee was of decreasing importance, both because of the falling prices and in comparison with the promise of oil palm. At this time many children organized the picking, processing and sale of the family's coffee and spent the proceeds on basic needs or luxury items for themselves: bedding, towels, clothing and so on. Some children picked a certain amount of coffee with the purchase of a bed sheet in mind.
and older youths picked in order to buy a carton of beer or a plane ticket to Port Moresby. Children did not always spend the money on themselves: proceeds from one sack of coffee might spread throughout and beyond the nuclear family, fulfilling social obligations and reinforcing friendships.8

The technology involved in coffee processing may have had some influence on the amount of co-operation in the work process. A coffee pulper makes processing quicker but it is an expensive machine, costing about K180 in 1979, and requires some skill to operate. Within the village there are three individually owned pulpers, two of which were bought with remittances from urban workers and the third paid for with the proceeds of coffee sales. There is also one communal coffee pulper which was installed by the Local Government Council. However, many do their pulping by hand because they lack the skill required to operate the pulper and because they want to avoid queueing or getting involved in arguments when the coffee season peaks. Manual coffee pulping requires patience and much more time than the machine. The equipment needed consists of a couple of large metal cooking pots. Sleeping mats are used to dry the coffee cherries and empty rice or sugar bags are used to take the dried cherries to Popondetta. The three households owning coffee machines (13, 2a, 24) are large coffee growers, having produced in 1977 respectively, 5.5, 5.5 and 11 bags as compared with the village average of 2.7 bags. When the communal coffee pulper was installed its presence may have initially encouraged co-operation in the organization of coffee work. Since the households which own the machines keep them for their own use, with access being given only to some close relatives, and since the far more common manual pulping is carried out by individual households, any group feeling or organization in coffee processing is now minimal. Almost all work associated with coffee growing is thus centred on the nuclear family household.

Only brief mention has been made of the pattern of work during the initial stages of establishing a coffee garden. However, the general accounts of the establishment of coffee, rice, rubber and cocoa plantations in Northern Province give a good indication of Koropata's own experience. Generally speaking, when a cash crop is introduced the organization of work for the clearing and planting contrasts markedly with the organization of work used in the subsequent maintenance and harvesting.

Thus, for example, in the period 1948 to 1950 the Yega people on the coast of Northern Province began growing rice under

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8Diane, a recent Form Two graduate, sold a sack of coffee to the Orokaiva Coffee Growers Society. She bought a dress for herself and bought Western food for use in a family funeral exchange. She gave K10 to her sister to buy baby food and gave the remaining K5 to her mother to mind.
the Christian Co-operative Movement and maintained a highly-structured, organized co-operation for one year. In 1957-58 by contrast, coffee was planted in the same area with only one group working co-operatively. However, in 1960 when the Administration introduced cocoa the Yega people cleared many of their 46 blocks by communal labour. As in the preparation of feast gardens in the subsistence sector a small kin-based group worked together and cleared the land; then sections were allocated, planted and cared for by individual households. The Yega people tried unsuccessfully to initiate co-operative work on cash crops for a few years, then in 1964 there was a successful plan to cut and clear blocks co-operatively every Tuesday (Dakeyne 1966a:30-38; 1966b:58).

Other sources also document the initiation and common subsequent failures of large-scale group co-operation in regard to every new cash crop. The kin-related network as a work unit was more persistent than village-wide units. Mostly people co-operated for clearing and planting. Occasionally the desire to help each other extended beyond the initial clearing to the sharing of produce. For example Inonda village insisted that production of copra in the communally built copra drier 'should be on a communal basis' (Waddell and Krinks 1968:60), proceeds going to the village savings account (Morawetz 1967:25; Rimoldi 1966:26; Crocombe 1964:21, 29, 34).

It was not so much force but the attractiveness of the schemes and their methodological blueprints which influenced the Orokaivans' participation in cash cropping, particularly after World War II. The blueprints set out by the officials were perceived by villagers as part of a whole body of Western knowledge, material wealth and power. Thus guidance and plans set out by the colonial power interacted with and strongly influenced traditional forms of organization because the methods were believed to hold, within themselves, the key to knowledge, wealth and power of the colonizer. While acknowledging that the very early plantings occurred within a milieu that allowed for coercion, it is important to appreciate how widely communal work parties were distributed and how enthusiastic people were for this form of organization as the various cash crops were introduced in the

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9Failure during these years could be related to the influence of the Land Tenure Conversion Act 1963 which promoted individual ownership and production (Crocombe 1964 and 1966).


11On the other hand Crocombe (1964:21, 29, 34) says that the communal model was pushed on the Orokaivans through early compulsory plantings and that very strong sanctions were needed for group co-operation beyond the sub-clan or extended family.
1940s, fifties, sixties and seventies. The highly-structured, organized work timetables of the Christian Co-operatives, for example, were not forced upon the people but were followed enthusiastically at first, although this enthusiasm waned afterwards. Throughout the Orokaiva area people still show a tendency to assign certain days to certain activities, attempting to work from 6.00 a.m. to 6.00 p.m., to structure their life according to the perceived time schedules of the Europeans in an effort to achieve the same success. Apart from attempts to follow European models there is also a strong tendency within the community for wider group co-operation to initiate an activity or program which is expected to have good long-term effects on the social group as a whole, for example a feast.

In the case of coffee the tendency towards co-operation may be seen in the group clearing of coffee plots and in the use of a communal coffee pulper. However, official encouragement of individual plantings of cash crops and the attempted introduction of individual title to land could be seen to be the stronger influences on the organization of production. At the household level the blueprint derived from the European officials is readily comparable with the traditional Orokaivan model. The male household head takes charge of a cash venture or a feast, initiating planting and controlling marketing while using household labour for maintenance and harvesting.

Despite the shortness of the coffee season the harvesting is important because of the cash income it brings: cash needed to replace subsistence equipment and to successfully complete life-crisis ceremonies. Virtually all households have individual plantings and a few have substantial holdings. Women tend to work on coffee more than do the men, who nevertheless generally market it. But in a busy time when the importance of coffee may seem minimal, children may do the bulk of the picking, processing and even marketing.

Co-operation in the inauguration of cash crops was supported by both the early blueprints of the Administration and the traditional Orokaivan organization of production, reserved for the initiation of activities beneficial to the whole community. Communal clearing of feast or cash crop plots is thus related to both European and Orokaivan models. The Administration policies could also be seen as a charter reinforcing the central position of an Orokaivan man as an initiator of large activities and controller of surplus.

Cattle

Part of the Australian development program in the 1960s was an interest in the establishment of cattle projects in the New Guinea Highlands. The success of the coffee projects meant that
Administration officers were inclined to see this area as being one in which development projects would have a high chance of success. In this context it is not surprising that the Highlands were chosen for pilot projects in cattle raising. The timing of the introduction of these was probably related to uncertainties in the international coffee market. The initial projects were village funded and enjoyed some success so that the PNG Development Bank, which had been established in 1967, began to offer credit for them. Loans were to be to individuals and would be made only to men for whom a field officer could vouch. Thus large coffee growers, local politicians and government workers were favoured, and as the Bank decided that loans of less than K500 were too costly to administer, the system worked towards producing a rural elite of large cattle owners. At this time too there was a rapid growth in the government bureaucracy. Decisions on the care and sale of cattle which were formerly made by the small cattle project owners came to be made instead by an increasing army of agricultural and business advisers working for efficiency, profit and centralized control (McKillop 1976).

Subsequently cattle projects were introduced into the lowlands, including the Northern Province. In this area, however, though a few owners of large herds are still succeeding, very many of the cattle are roaming wild in the secondary forests between Kokoda and the coast.

Koropata became involved in a cattle project in 1970 when an individual known and respected by Administration personnel obtained a loan. From the point of view of both the Development Bank and the Administration it was an individual who received loans and who accepted responsibility for running the project and for repaying the loan. For the Koropatan community, however, the individual was merely the focus for an activity requiring collaboration and co-operation on a wide scale.

William, the man who obtained the loan, had trained at an advanced vocational school and had won the confidence of the European headmaster there. The cattle project, requiring 25 acres of land, effectively prevented a Koropatan individual from using what may be considered his own household land, so William made an arrangement with his clan land leader and two other members of his clan who held rights to the particular area chosen. Again, an individual could not hope to clear and plant grass seed on 25 acres. This work for the cattle project was carried out by Popondetta Agricultural Training Institute (PATTI) trainees as well as by members of all four clans from Koropata. Between 50 and 100 people took two weeks to clear 15 acres, between twelve and fifteen of William's relatives doing the most work. In return William promised calves and money to people to go towards new
cattle projects in the village.¹²

William used as loan guarantors two of the main owners of the clan land marked for the project. The loan of K1960 from the Development Bank was supplemented by K200 of personal savings and a little money from a cousin (MZS) who was working in Bougainville. The money was used to purchase ten heifers, two steers, good grass seed and fencing materials. The Koropata project had access to a bull from a similar project a few miles down the main road.

Within two years William sold the two steers in order to pay part of the loan and also sold two heifers because they were hard to control. Most of the money from these sales went to pay off the loan but some was used to buy personal luxuries for William. Up to this point the Koropata cattle project seemed to have had a modest success but serious problems soon became apparent; the bull proved too temperamental to transport; fences broke; and the cows were too fat to conceive through chance encounters in the bush with bulls from other projects.

Problems within the social group also became apparent. Thus as soon as the first cows were sold, villagers who had co-operated in the early clearing work demanded a share and some clansmen from a different clan section took William to court over the use of the land. The clan land leader reaffirmed clan consent for the project but William moved his house away from the cattle land, back to the village, fearing sorcery against his family, and, in so doing, neglected his cattle work.

The government and bank bureaucracy, lacking detailed knowledge of what was happening to the project in the village, went on having discussions with William to encourage continuation of the project so that the loan could be repaid, in spite of his wish that the whole thing be finished. In 1978-79 William sold a cow to me for a going-away feast and donated another cow to an end-of-mourning feast.¹³ These transactions added to his status in the village and helped to placate the original workers on the project.

Approximately K1000 of the loan has not been repaid and the fencing has deteriorated. This means that the cattle are free to wander and are difficult to catch and sell. The project involves far more work than had been envisaged by the villagers and, since so much of the money obtained goes towards loan repayment, it brings paltry returns in comparison with what had been anticipated.

¹²As late as 1975, when it should have been obvious that the project had failed, a leader from another clan organized large-scale clearing in preparation for the donation of cattle.

¹³Although he still had most of the loan to repay he gave this cow saying that he would receive money later for it from his clan brothers when they collected their money from coffee sales.
A problem within the scheme is that it requires large-scale initial co-operation, but early returns appear to benefit only the cattle owner. Any unshared wealth that separates a man from his fellow villagers leads to jealousy and fears of sorcery. Unrealistic expectations of great profits are also a recurring theme in the following discussions of timber sales and trade stores. As stated already, money is believed to grow in much the same way as taro does. The use of money in the establishment of a venture implies that much more money will build up over time. Such beliefs are closely related to the simplified information received by the villagers from enthusiastic Administration officials.

Timber

Koropata 2 is part of the Saiho Extension Timber Scheme in which the national government has bought the timber rights of vast tracts of primary forest, selling them in 1981 to a New Zealand company, Kumusui Timber, which has since operated in the area. The seventeen villages involved are to receive K100,000 for the use of their timber\(^{14}\) in the next 20 years. Payments are made on the basis of percentage of rainforest, and to a lesser extent other vegetation, on a particular clan's land. Thus not all of the four main clans in Koropata receive equal amounts. For example Seva clan received K1805 in the initial payment and Tohane K900. The total payments to the clans in Koropata 2 is to be K13,555. The first portion was received in 1976 and the rest is to come in three more instalments.

Younger leading men with experience of the English language and Western institutions took a major part in the distribution of the money, together with advice from clan land leaders and from the European Lands Officer. The distribution within the clans points up just how quickly a sum of K100,000 for the whole of the Saiho extension area and K13,555 for Koropata 2 can be broken up into meaningless and virtually useless sums. Payments were divided by the Lands Office into village lots, and then into clan lots according to the amount of good timber on clan land. Then, with the aid of the Lands Officer, the young clan representatives divided the money on a household, or even individual basis. Household heads, their wives and their children, both male and female, over the age of 15 received equal shares. Widows, widowers and some absentee young men received a share. Absentees' shares were held by the fathers. Many young women married to other villages were counted in the clan of their birth but older women were always counted in the clan they had married into. Some long-term absentees were included, others not.

\(^{14}\)Koropata still has some land outside this scheme. The land that is affected still belongs to the villagers and all rights revert to them after 20 years.
In the distribution of Seva timber money a total of twenty-two men, sixteen resident and six absent, received timber money. Nine women born into the Seva clan, six resident and three absent, received shares and all thirteen who had married into Seva received shares. The money was distributed on an individual basis so that each person in Tohane clan received only K20, each person of Seva clan K28, each Ambotohane person K22 and each person in Endi K5. Thus a potentially useful lump sum of village or clan money was dissipated (Fig. 6.1). There was however an attempt to pool the individual sums for group purposes. Seva planned to put their money together to start a tradestore but were persuaded by the better organized Tohane clan to form a united clan business group to start a store and buy a truck. Thus the Seva-Tohane business group was formed as a result of the first distribution of timber money.

In 1979 government plans for a timber industry began to founder: several overseas companies rejected its overtures, so the national government proposed to join with the provincial government and the participating villages in a company which would mill the timber and sell the logs directly overseas. This revised scheme would have eliminated the possibility of developing a large local timber industry. Profits from the revised scheme would have been substantially less than those projected in the original plan. Before Kumusi Timber took over the central government tried to obtain agreement from the participating villages that would make it possible to engage in follow-up development on the cleared land. The Koropatans, however, were fully taken up with the development of the oil palm project and they refused to entertain any idea of more land tenure conversion or additional cash crops. They wanted regrowth of the forest.

It appears that the people will get little apart from the initial payment from the sale of their timber rights, although they are expecting more. The following extract from a composition by a Standard Six student exemplifies the grand hopes and questioning doubts of Koropatans and the sense of powerlessness they have in the face of large-scale development:

When the timber rights arrive some people are going to be very happy with that. Are they going to get more money from timber rights? ... The road will go down to the Kumusi ... Some people say that we are not going to eat fish from that river. We are going to eat only fish that we buy in the store — they are saying it — is it true? ... A bulldozer is going to clear the bush right down to the Kususi. All the trucks are going down to get timber rights. They are going to get more timber from our land. The timber rights are

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15Profits were to be in the ratio: provincial government 50 per cent, central government 25 per cent, villages 25 per cent.
Figure 6.1 Clan land of which timber rights have been sold to the government
ready to come ... Some people are getting ready to get jobs but the timber rights have not yet arrived so they are waiting. When it comes all the people are going to join it — but we haven't heard yet so we are still waiting.

Up until 1979 there had been only two or three general meetings to discuss activities concerned with timber. The payment already received and the money yet to come can be seen as a gift to the current set of owners of timber and other natural resources; longer-term benefits to the area would come through the creation of jobs or the creation of other allied industries. The original plan which included full-scale milling promised quite a large number of job opportunities but under the 1981 agreement with Kumusi Timber there are fewer of these in the logging operation.

In 1982 only two Koropatans had achieved permanent jobs with Kumusi Timber. One had taught the other how to operate heavy equipment and they received up to K120 a fortnight and lived in company accommodation for K4 a fortnight. The initial felling in the Koropata area had been completed and bananas had been planted in the cleared areas. Further payments for the sale of timber rights had been made, individuals receiving between K6 and K13.

An interesting and unusual feature of the 1975 money distribution was the acknowledgment of female ownership of natural resources. Women are not usually considered land owners but use land which belongs to their fathers or husbands. The pattern of distribution could have been influenced by the European Land Officer's suggestion that all adults, male and female, were to receive a share. It is also likely, as mentioned, that the inclusion of females in the distribution was part of a strategy by which households were able to increase the size of their shares. The widespread distribution could have meant the loss of timber for 20 years in exchange for a few meals of rice and corned beef for individuals but the value of combining together was not completely forgotten and pooling of the money allowed the formation of a business group and the setting up of a tradestore.

**Tradestores**

Throughout the last 10 to 20 years individual ownership of tradestores in Koropata has fluctuated but the institution has survived. The question of why they survive is just as important as why they fail. In an effort to answer both questions this section looks at the organization of labour used in setting up the store, the sources of financial backing and the distribution of profit and loss. The way the stores are organized seems to be affected by a number of factors. The Chinese-owned general stores in Popondetta are used to some extent as models and the Government Office of Business Development in Popondetta offers advice.
Further guidelines for the establishment of tradestores are inculcated through the set social studies texts of primary and secondary schools.

In 1977-78 there were six stores operating in Koropata village and block settlements. By 1979 four of these stores remained and a new one had been set up. Physically, all village tradestores are small wooden buildings built primarily of traditional materials and always stocked with white rice, tinned fish, tinned meat, tobacco, cigarettes, biscuits, soap, salt and sugar. Some go beyond the basics and stock chewing gum, dripping, tea, coffee, matches, torch batteries, torch bulbs and razor blades. Still others stock such luxuries as Vegemite, Milo, powdered and tinned milk, tinned cake, toothpaste, toothbrushes, cartridges, stationery, cups and plates and a very wide variety of tinned meats. Tables 6.8 and 6.9 set out the wholesale costs and daily takings calculated on the basis of the stores' written documents. Table 6.10 on the selling price of stock is made from my own calculations.

Table 6.8
Average monthly spending at Popondetta wholesalers

<table>
<thead>
<tr>
<th>Tradestore</th>
<th>Amount per month</th>
<th>Period examined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seva-Tohane</td>
<td>K301.75</td>
<td>June-Oct. 1977</td>
</tr>
<tr>
<td>Endi-Ambotohane</td>
<td>K553.37</td>
<td>May-Aug. 1979</td>
</tr>
<tr>
<td>Didimus</td>
<td>K154</td>
<td>June 1979</td>
</tr>
<tr>
<td>Barnabas</td>
<td>K245.55</td>
<td>Jan.-Mar. 1978</td>
</tr>
<tr>
<td>Philomon</td>
<td>K96</td>
<td>1975-77</td>
</tr>
<tr>
<td></td>
<td>K64</td>
<td>1978</td>
</tr>
<tr>
<td></td>
<td>K85</td>
<td>1979</td>
</tr>
<tr>
<td>Adrien</td>
<td>K429</td>
<td>June 1979</td>
</tr>
<tr>
<td>Donald Gill</td>
<td>K85.02</td>
<td>Aug.-Nov. 1977</td>
</tr>
</tbody>
</table>

As some documents were missing, estimates were made.

As shown, expenditure varies from K60 to K550 per month, daily takings from nothing to K55 and value of stock from K9 to K409. The figures take on a new meaning when it is added that only three stores have had any long-term success and that these three cover the full spectrum of size and daily income. There is no optimum size for success.

Tradestore owners buy from wholesale Chinese and European-owned stores in Popondetta, and usually travel with their goods on PMV, then carry the goods the last one and a half miles with the help of young school boys or relatives. When a clan business group is flourishing it may have its own PMV for transport. Table 6.11 indicates the transport costs, and profit banked, for
each store. Transport is a heavy cost for every store owner. This may be relieved temporarily by the purchase of a vehicle, but in the case of Seva-Tohane business group their second-hand truck added an extra burden, hastening the demise of the store. However, for Endi-Ambotohane the purchase of a new reliable truck enabled the store to go from success to success. Only two stores make a regularly recordable banked profit but further analysis of individual stores brings to light hidden profits.

Table 6.9

<table>
<thead>
<tr>
<th>Tradestore</th>
<th>Average amount per day</th>
<th>Range</th>
<th>Period examined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seva-Tohane</td>
<td>K10.80(^a)</td>
<td>80t-K22</td>
<td>Oct. 1977</td>
</tr>
<tr>
<td>Endi-Ambotohane</td>
<td>K16</td>
<td>K5.65-K29.75</td>
<td>1977</td>
</tr>
<tr>
<td></td>
<td>K28.66</td>
<td>K10.76-K52.34</td>
<td>1979</td>
</tr>
<tr>
<td>Didimus</td>
<td>K8.00(^b)</td>
<td>0-K15</td>
<td>1979</td>
</tr>
<tr>
<td>Barnabus</td>
<td>K12.04</td>
<td>K5-K25</td>
<td>Jan.-Apr. 1978</td>
</tr>
<tr>
<td>Philomon</td>
<td>K2.00(^b)</td>
<td>0-K10</td>
<td>1978-79</td>
</tr>
<tr>
<td>Adrien</td>
<td>K13.55</td>
<td>K4-K22</td>
<td>June 1979</td>
</tr>
<tr>
<td>Donald Gill</td>
<td>K2.70</td>
<td>50t-K11</td>
<td>July-Oct. 1979</td>
</tr>
</tbody>
</table>

\(^a\)This store in fact failed very shortly after this period.

\(^b\)As receipts were not kept, estimates were made.

Table 6.10

<table>
<thead>
<tr>
<th>Tradestore</th>
<th>Selling price of stock</th>
<th>Time surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seva-Tohane</td>
<td>K 50.00(^a)</td>
<td>Oct. 1977</td>
</tr>
<tr>
<td>Endi-Ambotohane</td>
<td>K409.72</td>
<td>Nov. 1977</td>
</tr>
<tr>
<td></td>
<td>K379.93</td>
<td>July 1979</td>
</tr>
<tr>
<td>Didimus</td>
<td>K220.75</td>
<td>June 1979</td>
</tr>
<tr>
<td></td>
<td>K 50.00(^a)</td>
<td>Aug. 1979</td>
</tr>
<tr>
<td>Barnabus</td>
<td>K239.39</td>
<td>May 1979</td>
</tr>
<tr>
<td>Philomon</td>
<td>K 9.00</td>
<td>Dec. 1977</td>
</tr>
<tr>
<td></td>
<td>K 63.49</td>
<td>Jan. 1979</td>
</tr>
<tr>
<td>Adrien</td>
<td>K265.00</td>
<td>June 1979</td>
</tr>
<tr>
<td>Donald Gill</td>
<td>K 30.00(^a)</td>
<td>Nov. 1977</td>
</tr>
</tbody>
</table>

\(^a\)Estimates made because access to exact information was made difficult by removal of store to an outlying area, loss of store key at the end of field period or difficulties in approachability at beginning of field period.
Table 6.11

Transport costs and profit banked per month

<table>
<thead>
<tr>
<th>Tradestore</th>
<th>Transport costs per month</th>
<th>Profit banked</th>
<th>Period examined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seva-Tohane</td>
<td>K115.00^a</td>
<td>—</td>
<td>Jun.-Oct. 1977</td>
</tr>
<tr>
<td>Endi-Ambotohane</td>
<td>K 52.00</td>
<td>K100.00^b</td>
<td>1977</td>
</tr>
<tr>
<td></td>
<td>K 0</td>
<td>K200.00^b</td>
<td>1979</td>
</tr>
<tr>
<td>Didimus</td>
<td>K 10.00</td>
<td>—</td>
<td>Jun. 1979</td>
</tr>
<tr>
<td>Barnabus</td>
<td>K 15.00</td>
<td>K 56.00</td>
<td>Jan.-Mar. 1978</td>
</tr>
<tr>
<td>Philomon</td>
<td>K 8.00</td>
<td>—</td>
<td>1979</td>
</tr>
<tr>
<td>Adrien</td>
<td>K 18.00</td>
<td>—</td>
<td>Jun. 1979</td>
</tr>
<tr>
<td>Donald Gill</td>
<td>K 19.50</td>
<td>K 26.00^c</td>
<td>Aug.-Nov. 1977</td>
</tr>
</tbody>
</table>

^a Costs incurred by store's own vehicle.
^b After purchase of own truck.
^c Store owner banked income until there was not enough capital to replace goods.

Time surveys do not give a totally fair representation of time spent on tradestores as owners often just open the store when someone seeks them out to buy goods and selling could go on till 10 or 11 at night. With this reservation Table 6.12 shows the number of people concerned and hours of tradestore work performed by men and women. Store work is performed on the whole by men although the wife of one tradestore owner helps regularly.

Table 6.12

Work in tradestores

<table>
<thead>
<tr>
<th>Time surveyed</th>
<th>Total number in clan/group</th>
<th>Tradestore workers</th>
<th>Hours per week</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>men</td>
<td>women</td>
</tr>
<tr>
<td>Dec. 1977</td>
<td>24</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Jan. 1978</td>
<td>47</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>Mar. 1978</td>
<td>25</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Apr. 1978</td>
<td>25</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>May 1979</td>
<td>39</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Jun.-Jul. 1979</td>
<td>43</td>
<td>1</td>
<td>—</td>
</tr>
</tbody>
</table>

^a Hours are inflated owing to a large meeting concerning Seva-Tohane business group.

The storekeepers have problems working out the selling prices of goods which they have bought in bulk. On the average all stores have steep mark-ups on their goods: rice and tinned fish are usually marked up 31 per cent, tobacco 78 per cent and
soap 100 per cent. However, errors are made in the other direction too. Several stores sell between one and four products at cost price or less: an example is rice bought in bulk and individually packaged by the storekeeper.

Five of the seven tradestores are run by individual villagers trying to make individual profits and were set up after the acquisition of a lump sum of money from a brideprice payment or from the proceeds of wage labour (see Table 6.13). Three of these individual store owners already have claim to status because of their position as clan leaders or potential leaders. They want to enhance this traditional status by showing an expertise in modern institutions. Of the other two, one is living uxorilocal after a long period of wage labour and the other prefers a storeman's life to that of a subsistence gardener. He expects independence to bring affluence to PNG, of which he would like a share.

Table 6.13

Financial basis of individual stores

<table>
<thead>
<tr>
<th>Store</th>
<th>Amount used to establish</th>
<th>Source of money</th>
</tr>
</thead>
<tbody>
<tr>
<td>Didimus</td>
<td>K250</td>
<td>Son's wage labour</td>
</tr>
<tr>
<td>Barnabus</td>
<td>K300</td>
<td>Wage labour</td>
</tr>
<tr>
<td>Philomon</td>
<td>K65</td>
<td>Gift from wife, brother and three others</td>
</tr>
<tr>
<td>Adrien</td>
<td>K470</td>
<td>Brideprice for sister</td>
</tr>
<tr>
<td>Donald Gill</td>
<td>K600</td>
<td>Brideprice for daughter</td>
</tr>
</tbody>
</table>

Most individual store owners receive a benefit which is not strictly an economic advantage in that they can eat a Western style meal about once a week. They also have access to things like tobacco and soap and do not have to go through the process of borrowing them from neighbours. The continued existence of particular stores has been threatened in various ways. Tables 6.8 and 6.9 show that some of the stores are very small so that the theft of a few cans of meat can undermine the whole enterprise. The use of store takings for purposes such as gambling or providing truck fares for oil palm workers made it more difficult for owners to restock. Finally, an unrealistic expectation about the size of profits has led store owners to do such things as hire a manager and hire transport vehicles, and has encouraged
original contributors to the store to make very heavy demands.\textsuperscript{16} Few stores survive a combination of these problems without either a second lump sum to re-establish the stock in the case of the larger stores or a continual supplement from market profits in the case of the smaller stores.

All store owners initially claim that they give no credit, but a check reveals that in fact they all have a slip of paper somewhere with a list of money owing. Signs such as \textit{Eto Teho umbari avo irera. O donda umbuto ambota money ikari avo ire} [You cannot get anything without paying something. You can only get meat and things after giving money] abound but all the stores have a special policy which aims to restrict the range of people to whom credit is in fact given. Restrictive rules include the giving of credit only to wage earners; giving credit to a maximum of K2; and sending reminder notices after one month. The largest wage earners are constantly and deliberately in debt, using stores as a credit facility. The failure of some stores is blamed on the non-payment of debts but closer investigation shows that the major cause lies elsewhere.

All individual stores are set up and managed by men.\textsuperscript{17} Didimus and Philomon use their own children and schoolboys to carry goods from the main road while Donald Gill, Barnabus and Adrien use expensive hire cars or pay PMVs extra to bring their goods into the village. Didimus and Philomon are only available for limited times in their stores. Barnabus spends a bit more time in the store as he has no children to feed and maintains only a small garden. Adrien spends long hours in his store even though there may be very few customers. Donald Gill was trying to keep up with pig husbandry and gardening so he hired a manager for his store even though there would be only 10 to 20 sales a day. It is not surprising that Donald Gill's store ceased to function and that, in 1979, Adrien's store seemed doomed. Table 6.14 shows how other members of the community benefited from the individual stores.

Whether intended or not, the returns from the trade store usually extended beyond the nuclear family, sometimes only to an affine or manager but sometimes throughout the whole clan or village community. The most potent reason for store failure is the combination of unrealistic expectations of profit levels and a penchant for the grandiose gesture, such as hiring a manager or a car. Similar sorts of problems affect the group store ventures.

\textsuperscript{16}Two of the original contributors of K10 to Philomon's store have demanded respectively K90 for a feast and K30 for a social evening as a return obligation.

\textsuperscript{17}Barnabus' wife serves in the store sometimes. They have no children.
Wages are usually grossly inflated in comparison with the current minimum wage, given that the work is part-time (Table 6.15).

Table 6.14

Distribution of benefits from tradestores

<table>
<thead>
<tr>
<th>Store</th>
<th>Means and direction of distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Didimus</td>
<td>Son and SW gambling money, store food eaten by nuclear family. Credit for SWF.</td>
</tr>
<tr>
<td>Barnabus</td>
<td>Takings banked in personal high interest savings account.</td>
</tr>
<tr>
<td>Philomen</td>
<td>Theft of tradestore food.(^a) Funding for social functions for original contributors. Credit for clansmen's PMV fares. Store food for family.</td>
</tr>
<tr>
<td>Adrien</td>
<td>Cheap goods for all customers.(^b) Cash to Endi-Ambotohane group for transport costs.</td>
</tr>
<tr>
<td>Donald Gill</td>
<td>Frequent trips to town to buy stock.(^c) Wages to WFBSS. Use of food by own family.</td>
</tr>
</tbody>
</table>

\(^a\)Although no verification was offered, villagers asserted that young boys broke into the store to steal food for their 'picnics'.

\(^b\)Poor change giving meant that customers sometimes obtained goods at half the designated price.

\(^c\)Expensive trips to town (hence rest from garden work) were enjoyed and were sometimes made more often than required to refurbish stock.

Table 6.15

Wages paid to store operators

<table>
<thead>
<tr>
<th>Store</th>
<th>Fortnightly wages</th>
<th>Wage earner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seva-Tohane</td>
<td>K10-K20</td>
<td>Manager/storeman</td>
</tr>
<tr>
<td>Endi-Ambotohane</td>
<td>K75(^a)</td>
<td>1 storeman, 2 managers</td>
</tr>
<tr>
<td>Donald Gill</td>
<td>K10</td>
<td>Manager/storeman</td>
</tr>
</tbody>
</table>

\(^a\)Wages paid only in 1979 after store's success enabled purchase of truck.

Both group businesses are two-clan organizations. Seva-Tohane business group was formed with the proceeds of the first timber payment and a large individual donation of K174 from a commuting carpenter. Both groups are officially registered as
businesses in the Popondetta Office of Business Development. Endi-Ambotohane group collected shares from their two clans, money saved from timber, market and coffee profits in 1977. Full shareholders in both cases paid K20 but these are given no special privileges over part shareholders.\textsuperscript{18} The latter are also registered on the clan business records. Table 6.16 demonstrates the numerical and financial involvement of men and women in the two business groups.

Table 6.16

<table>
<thead>
<tr>
<th>Sex ratio of co-operative shareholders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business group</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Seva-Tohane</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

As would be expected, men play a dominant role but women own a sizeable proportion of shares and are well represented as shareholders. They are once again, as in the timber distribution, both natal and affinal members of the clan. There were thirty-one female shareholders in Seva-Tohane business group, six with full shares of whom two were natal and four were affinal members of the clan. Twenty-five held part shares, nine natal members and sixteen affinal members of the clan. Because of the frequency of marriage within Ambotohane and between Ambotohane and Endi virtually all of the female shareholders are both natal and affinal members of the group.

\textsuperscript{18}Both can have their shares refunded if they choose to leave the business group and both in the Endi-Ambotohane group receive free or discounted transport on the group's truck.
There are eighty-five adult shareholders in Seva-Tohane group although there are only eighty members of the clans. Of the 134 adults in Endi and Ambotohane clans 123 (91.8 per cent) are shareholders.

As soon as the share money was collected the Seva-Tohane group opened a store, hired a manager, bought a second-hand truck and hired a driver. Cost of truck repairs soon ate into the store profits but the high wages paid to the manager and driver, two leading young men from the clan, were more damaging. Within eight months of the group's inauguration in June 1977, the truck was permanently in the workshop and the store's shelves irretrievably depleted.

Endi-Ambotohane group were better organized. The store initially served the whole block settlement area and so was assured of regular custom. The group aimed to buy either a new bulldozer or a truck but were advised by the Business Development Office to choose the latter. They decided to work towards the deposit needed to receive a bank loan and a Village Development Fund Grant enabling the purchase of a truck. They worked voluntarily and co-operatively for one year, hiring neither people nor trucks.

Management and storekeeping were controlled by young men with some English literacy skills. All male shareholders were rostered on store assistant duties and all helped to carry store goods one and a half miles from the PMV on the main road. The success of the store and pride in achievement stimulated the donation of more and more share money until in April 1978 share money, together with accumulated profit from the store, amounted to K2000, enough to receive a loan, grant and thus a new PMV.

Immediately this goal was achieved the leading skilled volunteers demanded a wage. By May 1979 the two managers and storeman received K25 each per fortnight. As transport of storegoods was now free and the high wages paid out were going back into the store in purchases the enterprise was able to absorb the cost.

In this case store profits and share money were directed to the purchase of a truck and subsequently to the purchase of a second truck. Three members of the group derive a substantial cash income from the enterprise, most of which is spent on store food for feast presentations and domestic consumption. The store's sale of under-priced, hand-packaged rice gives the community cheaper Western food than it could obtain elsewhere, so in this sense they receive a benefit.

19 Some married women have dual membership in Seva-Tohane and Endi-Ambotohane groups. Some clansmen living in other villages also became shareholders.
The profits on stock of Seva-Tohane group went mainly to the wages and 'perks' of the driver and manager but all the settled village enjoyed the temporary convenience of door-to-door transport and a wide range of Western foods. The proximity of all tradestores and constant availability of storemen to serve customers means that all villagers have easy access to desired goods.

The result of this for women is that they get some respite from harvesting and from the time-consuming food preparation. They are also recognized as financial contributors to the group business, though their contribution is less than that of the men and they have no say in any decision making concerning the group's management.

Business behaviour is in a sense modelled on the examples presented and advice given in Popondetta. The concept of the Chinese-owned general store is important as it is such stores which are mostly frequented by the villagers. These stores are the source of wholesale tradestore goods and are a model for the type of stock kept and the method of serving customers. They have large locally-born staffs who silently and slowly deal with each customer, often giving change after each item purchased so the buyer knows what remains of his money. They also tolerate the large number of visitors to the store who are 'just looking'. Familiarity with this model results in many village tradestores looking and functioning like miniature versions of the Popondetta general stores.

Besides the 'folk model' of tradestores there are also official sources of advice from the Business Development Office. These consist of pamphlets and occasional visits by field officers, both of which stress the small individually-owned store. Pricing charts with percentage mark-up are also issued. A more indirect socialization of business techniques derives from school texts in primary and secondary schools. Texts in primary school set out how a business company works and explain the idea of shares, partnership and so on. The manager is pictured with the caption: 'The manager tells the workers what to do'. A text to follow this one gives positive encouragement for villagers to start small individual businesses. When writing compositions on what could be done with K500, almost all the Standard Five class at Waseta expressed a desire to start a tradestore as the beginning of a money-making career.

Tradestores in Koropata survive because they are wanted and needed for the new standard of living. The returns of a wage

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20 There is less advice for the larger co-operative ventures and indeed the province-wide co-operative in Popondetta, Orokaiva Coffee Growers Society, had to sell its store because of accumulated debts.
labourer or receipt of a brideprice provide recurring opportunities for people to set up a store. There have been many failures but there is no perfect formula for success. The three long-running successful stores operate at different levels of scale and according to different principles of organization. The sources of capital vary from individual wage earnings to two-clan wide contributions and the money from the stores can be used in social functions, banked or invested in a truck. There are some factors however which help determine success. To survive each store must be seen to benefit those who work most to keep it in operation but must not provide excessive wages or transport payments. Running or owning a tradestore improves a man’s status in the village and is an activity formally approved by the government and encouraged in schools. Except in the case of the new full-time Endo-Ambotohane group storeman, the running of a tradestore need not interfere with subsistence gardening. Once a man receives a wage though, he is tempted to neglect his garden and this will possibly have further ramifications for production in the subsistence sector.

Truck businesses

A group-owned store is seen as a service and a source of pride, but this is nothing compared with the thrill and renown achieved in owning a truck. Truck purchase is the major aim of business groups as cost prohibits individual ownership. In 1977 Seva-Tohane group bought a small old truck for K1000. As it could carry only a few passengers and was continually in need of repair, income rarely exceeded outlay (Table 6.17). Tohane clan

<table>
<thead>
<tr>
<th>Period surveyed</th>
<th>Income</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jun.-Jul. 1977</td>
<td>K 74.42</td>
<td>K358.96</td>
</tr>
<tr>
<td>7-14 Oct. 1977</td>
<td>K119.46</td>
<td>K 97.10</td>
</tr>
<tr>
<td>14-21 Oct. 1977</td>
<td>K 25.95</td>
<td>K136.00</td>
</tr>
</tbody>
</table>

The Aid Post Orderly in Koropata ran his own truck PMV in 1977-78 but neglected his medical work. He relied on the regular orderly's salary to feed his family and to pay for truck repairs. He hired a village man to drive and gave a generous end-of-mourning feast but was still reported and indirectly driven out by the clan land leader, who claimed that the orderly had caused the death of the driver's mother by sorcery because he was angered by the driver's fast driving and abuse of the truck.
took most administrative responsibility and their driver initially drew a K10 a week wage, but this did not prove feasible later. When money was needed for repairs a Seva leader paid K60 and then claimed control, hiring his own classificatory son as a driver. Both drivers socialized in the hotel instead of diligently seeking passengers all day, but repair costs were the most crippling problem. The period of cheap fares and transport to and from the village was all too brief for the Koropatans. By April 1978 the truck was permanently in the repair shop with a reputed bill of K1000 owing. The difficulty of paying for petrol and repairs brought to light problems in the concept of ownership. In December 1977 a meeting voted to sell the truck, but in 1979 the immobile truck stood outside the Popondetta house of Seva clan leader's sister's daughter, the repair bill still unpaid.

Time figures on truck work indicate little, as the survey periods did not coincide with mobile vehicles. In December 1977 five men and nine women of Tohane clan spent a total of 25 1/2 hours at a meeting concerning truck business. In January one man of Ambotohane clan spent 16 hours collecting money for the Aid Post Orderly's truck and in April 1978, aside from the man who worked daily as a driver for Etija Company, one man worked 5 hours driving a truck belonging to another village.

One village man anticipated paying the repair bill for a truck owned by an affine. In order to recoup the costs he would 'own' or manage the truck for a while and collect the PMV fares. Although trucks are usually group-owned, if one man has the ability to put a vehicle back on the road he often claims the ownership and receives passive assent or at least lack of resistance from the village shareholders. Failures in group business among the Orokaiva have been so common that there is often no more than a token complaint that a manager or driver has 'eaten' the money before the matter is dropped.

Endi-Ambotohane group waited longer to experience the disappointment of failure for their enterprise. The enthusiastic labour and financial co-operation that enabled the rapid purchase of a 20-seat PMV for K7000 has already been mentioned. In 1979 the group was able to add to this success with the purchase of a second truck, under slightly different circumstances. Figure 6.2 indicates the irregular but profitable nature of the group's truck business, monthly takings usually totalling more than K1000. Monthly totals seemed to decrease overall from the time the truck started operating and this appeared to be a continuing trend as the truck got older. Table 6.18 shows how a few repairs in one month can drastically influence the fluctuating costs. The table also shows the large amount of money devoted to wages. As in the tradestore organization, every male member of the Endi-Ambotohane group was rostered to help on the PMV. An old and a young man worked together, the latter collecting the fares and the older minding the money bag. They worked for one week
Figure 6.2 Daily and monthly takings for PMV owned by Endi-Ambotohane group, 1978-79
(Wednesday excluded) and received K5 each. They provided some security against drunken strangers in town and against possible dishonesty on the part of the driver. The driver received K75 a fortnight, a very handsome salary compared with the salaries of mission and government drivers who earned approximately K25 a fortnight. He also controlled most of the movements of the truck though officially under the guidance of the more senior group directors. Thus for example he could drive to the airport to collect his sister, hire the truck out for a day, use it to help relatives move house or organize co-operative rock collecting and road building. Some of these uses of the truck were obviously intended for the benefit of the whole village, others directly benefited close relatives, but all reduced the monetary income that enabled purchase of expensive petrol and payment of high wages. All group members were entitled to a 60t trip to Popondetta, a valuable saving for market vendors.

Table 6.18
Costs for Endi-Ambotohane PMV, 1979

<table>
<thead>
<tr>
<th></th>
<th>February</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petrol</td>
<td>K173</td>
<td>K99</td>
<td>K138</td>
<td>K233</td>
<td>K217</td>
</tr>
<tr>
<td>Repairs</td>
<td>0(^a)</td>
<td>K30</td>
<td>K174</td>
<td>K190</td>
<td>K180</td>
</tr>
<tr>
<td>Wages</td>
<td>K160</td>
<td>K160</td>
<td>K190</td>
<td>K150</td>
<td>K180</td>
</tr>
<tr>
<td>Total</td>
<td>K333</td>
<td>K259</td>
<td>K707</td>
<td>K557</td>
<td>K427</td>
</tr>
</tbody>
</table>

\(^a\)No documentation found and no repairs remembered.

The Development Bank was very pleased with the rapidity with which the Endi-Ambotohane group repaid their loan and established another one, but on the 1979 occasion the K5000 target was not reached through voluntary labour and share donation. A leading manager of the group left his clerical job in the Public Works Department and contributed K3000 of his K6000 severance pay towards the truck, to be repaid later, perhaps with interest. K3000 from the Endi-Ambotohane group and K4800 from the bank made up the K10,800 needed for the new vehicle. The Endi-Ambotohane group voted to spend K1000 on a party to celebrate the arrival of

\(^{22}\)Most of this had already been borrowed from the driver by the end of the week as helpers had no village food and bought drinks and food in Popondetta.

\(^{23}\)The two business group managers had hoped to be taught to drive by the regular driver but this had not happened in 1979 and an outsider courting the driver's sister had been hired to drive the second truck. This was a result of a violent quarrel between the original driver and one of the two managers.
the new truck. They celebrated on 1 October 1979, using K400 worth of tinned meat, flour, sugar, rice and milk as well as two cows. They distributed this huge amount of food among the members of the group and did not invite Seva-Tohane clansmen as originally mooted.

As mentioned previously the preparation for this feast occurred soon after the public recognition that the staple taro crop was failing. The pride in the quantity and quality of the modern feast may possibly have helped counteract the acknowledged shame of having inadequate supplies of traditional feast fare. In any case the celebration provided a tangible benefit to shareholders and an occasion to remember for a long time.

Schwimmer has said Orokaivan feasting is a form of communion to break a state of permanent warfare (1973:56) and a means to 'magically increase the yield of the gardens' (p.149). It is speculative but plausible that the enlarged modern feast could be seen as a means of adding to group harmony, settling conflict and ensuring future yields in monetary activities.

Truck business in Koropata is a good example of feast organization of production. The longer and more diligent preparation by the Endi-Ambotohane business group allowed a successful feast for the buying of a truck. Once the target had been reached, the main workers, store managers, received a regular reward and the ordinary villager had access to cheap transport. The extravagant expense of the celebration for the second truck was a timely, more tangible repayment to the ordinary shareholder. The driver's large salary was regularly channelled into store purchases for the benefit of the extended family. In fact it was almost totally spent on these purchases before he was paid. The group had regular meetings in which usually only educated or senior males spoke. In 1979 there had been no charges of malpractice made against leading personnel but by 1982 the history of this business constituted a familiar tale.

The Endi-Ambotohane business group had discontinued operations by the end of 1980. The manager who had invested most of his severance pay (K3000) was out of public favour, several villagers claiming that he had 'eaten' the group's money. Before the group's demise the two clans had taken separate responsibility for each truck. First one truck broke down. Money for repairs ate into the tradestore profits, so that failed too. Finally the second truck broke down and there was no money to fix it. Many of the group's supporters left the main settlement to take up oil palm blocks.

Truck business in conjunction with some other cash activities shows unrealistic expectations of profit but in some sense represents the culmination of village or clan achievement. Ownership of a truck gives status and convenience comparable with the lifestyle of the
Europeans. It gives the Koropatan a sense of power and self-respect weakened in former times by contact with the technologically superior West.

Conclusion

Cash activities are almost always initially conceived of in terms of a windfall, or a 'feast to end all feasts'. Coffee, timber, cattle, tradestores and trucks all originally hold great promise as producers of big money for the Koropatans. As these activities concern the realm of the feast and village-wide activity, it is the men who take the prime decision-making roles. Women, however, are acknowledged as shareholders in timber, trade-store and truck business. Men do the major work in the establishment of a cash activity but, in the case of coffee, once the original hard work of establishing the crop is over, women come in to perform the tasks associated with harvesting and processing.

The one activity which does not fit in well in this scheme is marketing. In this women, rather than men, dominate the selling of subsistence surplus and although profits are used in contributions for life-crisis ceremonies, the activity is not conceived of in terms of a feast to be looked forward to. Marketing is seen to bring only enough cash to provide for changed needs such as salt, kerosene and tobacco, and to make small contributions to feasts. Although they do not hesitate to appropriate them, most men see the profits to be made through marketing as trifling and in fact single men view the activity as demeaning.

Following from the anticipation of a feast-like return in all the other cash activities is the feast-like organization of production for their inauguration. Changing blueprints from the government influence rather than determine the historically recurring penchant for co-operation during the initiation of a large venture. Government blueprints have, however, continually altered the frequency, goal and direction of these activities. Returns from the ventures are always overestimated, creating problems such as jealousy, overpaying helpers and overspending on celebration feasts. Wages, feast contributions, large-scale tradestore buying, free use of stock and transport facilities as well as occasional theft mean that the material and immaterial benefits from ventures are often spread beyond the owner, manager or over-salaried employee. The money from coffee sales (and some from market sales) is used to carry out life-crisis ceremonies properly and occasionally to make a purchase of capital equipment. Such purchases, combined with the fact that large coffee growers receive help from distant kin or affines, could indicate a differentiation in wealth and status between households.
In an effort to search for the essence of the productive organization of the Koropatan Orokaivan society, the next chapter discusses the property and power differences between Koropatan households and some outcomes of the sexual division of labour within the household. An overview of cash activities sees women as financial backers and recipients, maintenance workers and household treasurers, but sees their power as ultimately limited at the discretion of the male household head.
Chapter 7

An essential inequality

Inequality between households

So far in this study care has been taken to establish the importance of the individual household to the village economy. Within the context of the whole village it has become apparent that households differ to a greater or lesser degree and it is the aim of this part to ascertain the extent to which these household differences indicate a structural feature of the organization of production. Two areas of study influence such a discussion and will be presented in summary: first the school of development studies which holds that colonialism causes exploitative inequality will be briefly considered; second a consideration of the reciprocity or exploitation involved in the Melanesian 'big man'/follower relationship will be given.

Colonialism: the path to inequality. Some students of Papua New Guinean development (e.g. Connell 1979; Howlett 1973) hold that the relative wealth of rural/urban, village/village and household/household diverges after the impact of colonialism and imperialism. In Papua New Guinea an uneven involvement in the cash economy and a dependence on Western commodities to replace essential tools and utensils can widen the disparities between households and regions. The greater involvement with the colonizing power of an elite of village constables, big men or educated urban dwellers can set them apart from the ordinary villager. These elites can eventually take on some of the characteristics of a class of wealthy peasants or a 'petty bourgeoisie' (Schütte 1975:420) using political and educative structures to further entrench their economic advantage. Although all colonized people are bound to the outside capitalist structures it is only the elite that has any upward mobility. The mass of the population is dependent and severely limited in its ability to raise its socio-economic status.¹

The introduction of Western money may have been an important factor contributing to the economic differentiation described above. Such money is a standard or common measure of value, a means and medium of exchange and a mode of payment. It is not desired for its utility or as an ornament or display (Bohannan 1959; Dalton 1967:123, 253, 255; Armstrong 1967). Within this system of Western money every item of property should be convertible to a common value standard and it is this feature which is often held to subvert traditional customs, particularly ceremonial exchange. Closed systems of exchange characterized by the monopoly of particular goods by a particular social group would seem to be vulnerable to breakdown when, by the sale of labour or cash crops, anyone can use money to obtain desired ceremonial items.

Units of Western money are more durable than the staple tropical root crops of many areas of Papua New Guinea where food preservation and condiments are seldom used. The fact that certain subsistence crops can be converted to durable money at the markets could well inhibit the giving of subsistence food as gifts (before they rot) and might therefore contribute to greater accumulation of wealth by particular households who formerly would have raised their status by generous giving of surplus beyond their subsistence needs.

These hypothetical effects of money are plausible, but ethnographic reports of the results of the use of money are not so clear cut. There are cases of money being treated as a traditional valuable on the one hand (Salisbury 1962; Chowning 1978:306) and of the monetization of a multitude of village exchanges (Counts and Counts 1977; Chowning 1978:306). The widespread use of money has not reinforced economic differentiation evenly across the board in Papua New Guinea and the impact of colonialism has also varied. Some students of development (Epstein 1968; Finney 1968; Connell 1979; Standish 1978) believe part of the explanation for the difference may lie in the institutions and social structure of the pre-contact societies. They hold that some societies have an inherent proclivity for cash cropping or wage labour, that is, their institutions and social structures were already adapted to adjust smoothly to the requirements of colonialism. Others maintain that the preconditions for the evolution of elites were already present in the system of leadership prior to the introduction of colonialism. This discussion brings to the fore the question of the degree of inequality in the traditional political system.

Gregory (1980, 1982) describes how money can operate in different ways in the gift and commodity economies of PNG. He outlines an interesting situation in Poreporena village, Port Moresby, where money is competitively given to the church and effectively destroyed, as in a potlatch. No return is expected.
The 'big man' system: seeds of inequality. Sahlins' (1963) paper drew together some of the Melanesian material on leadership and posited a model of the Melanesian big man: the self-interested calculating manager using wives and a following of young and less important men to organize an exchange or distribution bringing status and power to his group and to himself. In the literature referring in particular to Highlands Papua New Guinea (Salisbury 1964; Strathern 1966), the big man, financer manager, is the opposite of the rubbish man. Among the Mae Enga, Meggitt saw this permanent bachelor as an errand runner who is 'thoroughly exploited', primarily as a result of his lack of access to female labour. 'He gravitates to a position of retainer for the big man' (1974:183). Generally the big man model stressed an egalitarian philosophy, leadership by achievement and an equalizing generosity. However, there are some descriptions of rubbish men that bring this egalitarian model into doubt. The reality of generosity in Melanesia is more likely to be closely comparable with that outlined in the following comment on Eskimo generosity. When accounts of daily exchanges are made, those who are socially acknowledged as generous, high status men are not shown to be generous at all. Recognition of generosity falls on those who manipulate others, control the situations in which they give, and choose carefully the most advantageous time to make large, conspicuous gifts (Pryor 1977:94).

The early recognition of difference in wealth and power has been reinforced increasingly in the recent literature on Melanesian leadership (Chowning 1979; B. Douglas 1979). This is mainly due to a belated recognition of the widespread occurrence of ascribed rather than achieved leadership. Among the Siwai, Chimbu and Melpa, evidence is given to support the existence of exploitative ascription and significant differences in property and need to do garden work (Strathern 1966; Connell 1977:1, 6, 9, 11; Standish 1978:20-34). Modern difference is more obvious as it is represented by material property. Traditional advantage, according to Standish (1978:20ff.), is found more subtly in the ceremonial finery, strong healthy families and fewer hours of garden work performed.

The recent work of Godelier (1982), Modjeska (1982), Strathern (1982) and Golson (1982) incorporates a reconsideration of the big man model's applicability to the New Guinea Highlands. Godelier (1982:18-26) describes the existence among the Baruya of Great Men who are born with their powers and are therefore beyond competition. Modjeska describes the range of areas in which Duna men can achieve eminence and demonstrates that they rarely overlap (1982:86-7). Both Godelier and Modjeska relate the development of social formations where there is inequality between big men and rubbish men to an intensification of horticulture, a substitution of wealth (pigs) for people and an appropriation of greater surplus from the women.
We should recognize then that ascriptive leadership is probably more important than the ethnographic literature of the 1950s and 1960s implied and that there is much more variety in leadership forms than originally thought. Within the achievement model, also, it is important to note that there is scope for significant inequality. The role of the wife is crucial to an understanding of economic differences. Men without wives tend to become retainers for a leading household. Men with more than one wife have the ability to produce more (food and children), and have become leaders through conspicuous generosity.

T.S. Epstein (1968) and B. Finney (1968), building on Sahlin's achievement model of leadership, put forward the notion that the traditional big man retainer unit was ideally suited to several small capitalist businesses or cash cropping (see also Connell 1979). Their influential analyses should be reconsidered, perhaps, in the light of the above discussion and in the light of fundamental processes involved with colonialism.

Contact with the West may have accentuated difference due to the qualities of money and the colonial system of patronage and unequal development. It may have also opened more egalitarian alternatives for a single man, a non-chiefly lineage or a woman. Education and wage labour offer an alternative means of gaining respect and a fulfilling life away from the village context. It is accepted that colonialism causes increased inequality. However, the literature of development concentrates on the wider general economy of metropolitan centres and peripheral colonized states. I want to examine in detail the actual processes of colonialism and neo-colonialism as they affect a village in a peripheral state. To acknowledge the presence of money is not enough. The actual links between economic factors of colonialism and factors of village economy must be sought. In order to do this I will look again at traditional leadership in Koropata so that it is possible to assess its similarity with the general Melanesian big man model.

As Williams noted (1930:104) there is no well-defined chiefship among the Orokaiva. There are terms for important respected men but these are not necessarily leaders. A really important man is he who gives his name to his followers. In Koropata 2 the names of leaders who have survived to be shouted after chopping a tree or killing an animal, or to be printed on T-shirts, are those of fight or war leaders from two or three generations past: 

*Handaupa ta ahije!* (Handaupa's grandson!). There are also feast leaders (*pondo embo*), good spearmen (*ki embo*), orators (*ke embo*), church and school leaders, all achieved positions. The only leadership role that is mainly ascribed is that of *enda ta titti jigari embo* (lit. 'man who holds his eye on the land'; see p.72). It is likely that the increased importance of decisions relating to land has bolstered the position of the clan land leader to the detriment of the other types of leader. However, Koropatans
continue to describe the orator *ke embo* as the man most likely to be called leader and it is this 'office' which often coincides with the elected positions of councillor or village court magistrate. The following of a leader may be based on a lineage core or on exchange relations created by the leader.3

The sort of privileged access to government services spoken of by McKillop (1976) nurtured the formation of a rural elite. The most successful and best-known Highland coffee growers and cattle owners were helped by extension officers and given greater access to bank loans. In contrast to the Highlands there has been minimal formation of an elite in Koropata. The two young orators, the councillor and village court magistrate, have had some opportunities of this kind but have not taken advantage of them. They have not been able to balance their own desires for luxuries with either the need to reciprocate generosity in the village or the need to maintain an adequate subsistence base. Both have been involved with the formation of business groups, both have received loans and have had some say in the disposition of council or government money. The village court magistrate has also been able to act as intermediary between the villagers and social welfare authorities. These activities have enhanced their status and increased their expertise in dealing with new or outside institutions but they have not been able to use them to gain access to larger sums of money. Leadership in Koropata is then situational and dispersed and has not yet thrown up a minority or elite with governmental privilege, able to pass on a favoured position to their children.

The low incidence of polygamy is congruent with a pattern of leadership that does not fit the Sahlin's *big man* model. Although stories that I gathered mention men with two or even ten wives, in the 1920s Williams could claim that the majority of marriages among the Orokaiva were monogamous. As sex groups were fairly even in size and both men and women married young, every mature, normal man had a wife (1930:130). Since the death of an old man in 1978 and the suicide of another man's second wife in 1979 there have been no polygamous households in Koropata. There is a general acceptance of the Christian monogamous ideal. Most young women will not tolerate the idea of sharing a husband. It seems that in the past, as now, there were few bachelors. In Koropata

3Schwimmer (1973:133) develops this further. He explains that both 'cluster' and 'circuit' associations in Sivepe have a characteristic form of leadership. The cluster exchange relationship occurs when there is a network of one degree links with all community members, and in Sivepe this produced 'an aristocratic type of New Guinean "big man" leadership' (ibid.). The circuit or chain associations produced a leader with a wide exchange return but a leader who had to systematically foster new associations.
almost all of the small number of bachelors have a physical
defect (such as a limp, deafness or the appearance of being
mentally retarded). The only bachelor with no physical blemishes
is a poor young orphan, but even he has not attached himself as a
helper to a respectable household. He rarely works for anyone
and if his own garden is inoperative, he relies on relatives for
sustenance. 4

Without multiple wives or a pool of single men retainers,
the scope for a leader in large-scale exchange is limited. The
lack of retainers attaching themselves to leaders' households
could perhaps be due to the end of warfare and to improved com-
munity health so that there are now few orphans or fatherless
sons. Almost every youth has a father or older brother to guaran-
tee the payment of his brideprice. The productive relations
between old men and young men are interesting in that they provide
the possibility for a form of exploitation or unequal return for
equal work, with the old men withholding the young men's access to
a bride.

This ethnographic situation has been noted in Central
Africa (Douglas 1963:35, 50, 58) but has been developed as a
theoretical model by members of the French Marxist school in ref-
erence to parts of West Africa. Rey (1969) and Meillassoux in
1978 (1978b:127-57) and more recently in 1981 (41-2, 79-81), set
out the exploitation between old and young men as a central
feature of the economic 'mode of production'. Meillassoux sees
this as a system of advance and return, particularly applicable
to societies with cereal agriculture. Elders provide short-term
seed and long-term subsistence until juniors are able to reciprocate,
both annually until they are provided with a bride, and
in the long term by providing for their aged fathers. Juniors
do not directly possess the product of their labour. This system
of advances and returns is seen as the essence of the relations
of production, creating lifelong relations between members of the
community and supporting a hierarchical political structure based
on age.

Modjeska has recently addressed this proposition in relation
to Highlands societies New Guinea and has concluded that 'differ-
ences among mature men may overshadow differences between elders
and juniors' (1982:63). Compared with Africa, control of tech-
nical information and bridewealth goods is not as strong or
relevant in New Guinea, where young men produce for themselves,
and on a lineage level the authority of elders over juniors is
muted.

4In 1980 he was, however, able to marry a young woman from
Koropata 1 with a small brideprice of K30, which was donated by two
relatives.
An examination of garden production figures in Koropata reduces the credibility of this proposition in relation to the Orokaiva as well.\(^5\) The following information supports the notion that in hours of work neither the single men nor the man under 30 is performing more work than his elders. In fact, it seems that the older married man does slightly more garden work. Men over 30 average 17.45 hours per week in the garden, men under 30, 16.7 hours. Married men average 16.8 hours and single men 16.6 hours.\(^6\) If old women were included the figures would show even more significantly the practice of old people spending more and more of their working time in the garden (see Schwimmer 1973:92). Also, as described already, the produce of the garden belongs essentially to the grower, although a mother may ask her son for access to his harvest.

Having discounted the existence of a system of leader/retainer production it is pertinent to look now at the differential property of households, to assess the existence or formation of any other sort of elite. Table 7.1 shows the special status of household head, traditional and modern wealth rating, money held in bankbook, number of pigs owned, coffee bags sold and estimated income from migrant workers.

A number of wealth categories are very temporary indicators. Pigs are still necessary for all feasts but the number of pigs owned by a particular person can alter rapidly in a short time. For example, household 32 had sixteen pigs in 1977 but in 1979 had only one small animal because of a funeral exchange, a coming-down puberty feast, a brideprice presentation and the killing of pigs caught marauding in gardens. In 1979 there was also a belief current that pig keeping, being probably detrimental to oil palm success, would eventually cease.

Income from migrants is not a long-term reliable source of cash, either. The migrant may lose his job, marry or return home, so income sent home tends to fluctuate widely. In 1977 several households (1, 2a, 3, 13, 28, 32) received large gifts from children working in towns. By 1979 two daughters had returned home (3 and 13); three sons had married or created other obligations (3, 28, 32); a son returned (32) and a son lost his job (1). Gifts from migrants can be in the form of clothes or cash intended explicitly for a particular item (such as coffee pulper or shot

\(^{5}\)Meillasoux (1981:26-31) would now claim that this was understandable as root crop horticulture does not require the same system of advance and return as cereal economies, production being as it is, continuous, and cuttings and suckers easy to obtain.

\(^{6}\)The figures are probably lower than might be expected as the time survey included a period of rushed oil palm clearing during which very little garden work was carried out.
Table 7.1
Koropata 2 village household wealth

<table>
<thead>
<tr>
<th>Household</th>
<th>Position of household head^a</th>
<th>Estimated income from migrants 1979</th>
<th>Money held 1979b</th>
<th>Number of pigs^c</th>
<th>Bags of coffee sold 1977d (value K60 ea.)</th>
<th>Traditional wealth rating^e</th>
<th>Modern wealth rating^f</th>
<th>Owner of truck, trade-store or cattle project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>K100 (1977 K800)</td>
<td>K2</td>
<td>13</td>
<td>2.6</td>
<td>A</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>2a</td>
<td>Church leader</td>
<td>K130 (1977 K840)</td>
<td>K50-100</td>
<td>3</td>
<td>5.5</td>
<td>B</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>2b</td>
<td></td>
<td>K1000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>K50</td>
<td>K20</td>
<td>3</td>
<td>7.0</td>
<td>B</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Business group leader, village magistrate</td>
<td>&gt;K50</td>
<td></td>
<td></td>
<td></td>
<td>B</td>
<td>B</td>
<td></td>
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<tr>
<td>5</td>
<td></td>
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<td>2</td>
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<td>6</td>
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<td>K260</td>
<td></td>
<td></td>
<td>0.6</td>
<td>C</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>K15</td>
<td></td>
<td></td>
<td>0.2</td>
<td>B</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Ex-Councillor</td>
<td></td>
<td>K200-300</td>
<td>1</td>
<td>1.0</td>
<td>B</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Aspirant to clan land leader</td>
<td></td>
<td>K210</td>
<td>4</td>
<td>2.5</td>
<td>B</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Clan land leader</td>
<td></td>
<td>K2600</td>
<td>1</td>
<td>2.5</td>
<td>A</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td>K15</td>
<td></td>
<td>5</td>
<td>4.5</td>
<td>B</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td>K5</td>
<td>K50-100</td>
<td>4</td>
<td>2.5</td>
<td>C</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>School committee member (1978 K360)</td>
<td></td>
<td></td>
<td>5</td>
<td>5.5</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>K10</td>
<td>&gt;K50</td>
<td>1</td>
<td>6.0</td>
<td>B</td>
<td>B</td>
<td></td>
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<tr>
<td>15</td>
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<td></td>
<td></td>
<td></td>
<td>2.5</td>
<td>B</td>
<td>B</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>K10</td>
<td>&gt;K50</td>
<td>2</td>
<td>4.0</td>
<td>B</td>
<td>B</td>
<td></td>
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<tr>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>1.5</td>
<td>B</td>
<td>B</td>
<td></td>
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<tr>
<td>18</td>
<td></td>
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<td></td>
<td></td>
<td>0.4</td>
<td>B</td>
<td>B</td>
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<tr>
<td>19</td>
<td>Council committeeman</td>
<td>K42</td>
<td>K20-30</td>
<td>3</td>
<td>0.4</td>
<td>B</td>
<td>B</td>
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<tr>
<td></td>
<td>Position</td>
<td>Quantity</td>
<td>Grade</td>
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<td>K20</td>
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<td>0.6</td>
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<td>3.5</td>
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<td>25</td>
<td>K700</td>
<td>5</td>
<td>11.0</td>
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<td>A</td>
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<td></td>
</tr>
<tr>
<td>26</td>
<td>K45</td>
<td>-</td>
<td>4.5</td>
<td>C</td>
<td>C</td>
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<td></td>
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</tr>
<tr>
<td>27</td>
<td>K500-600</td>
<td>2</td>
<td>1.0</td>
<td>C</td>
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<td>28</td>
<td>K190</td>
<td>-</td>
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<td>A</td>
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<td>29</td>
<td>K4</td>
<td>-</td>
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<td>30</td>
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<td>5</td>
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<td>A</td>
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<td>31</td>
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<td>-</td>
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<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Clan land leader</td>
<td>(1978 K480)</td>
<td>16</td>
<td>4.0</td>
<td>A</td>
<td>A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Position of household head refers to ascribed positions and modern political offices.
- Money held in July 1979 consists of passbook savings, often in a savings and loans account. Some figures are recorded accurately (10) and others (e.g., 12) estimated by the householder as below K50 or for example between K50 and K100. All those listed may have K5-K10 in a household purse or tin.
- Number of pigs includes piglets as well as large pigs.
- By 1979 returns from coffee were smaller in quantity and monetary reward as concern with the Oil Palm scheme and lower price of coffee reduced interest.
- Traditional wealth rating is calculated through an analysis of the property lists (see Appendix B of the thesis on which this monograph is based). Quantity and quality of particular objects (tapa cloth, betelnut, coconut trees) are considered and an assessment of A (high on all levels), B (overall average), or C (low on all counts) given.
- Modern wealth rating is calculated on the same basis as traditional wealth rating, with different objects. For example, the quantities of towels, clothing, plates and grassknives are noted and the presence of sewing machines, pressure lamps and so on, taken into account.
- Households 2a and 2b shared the same house for a temporary period.
The most reliable income from wage labour comes when the household head himself works and either commutes or returns every weekend (10, 27).

Households denoted as wealthy are numbers 1, 10, 13, 24, 32. Households 21, 22 and 30 are relatively poor, the heads being widows and a man recently remarried after a gaol term. Of the wealthy five, two hold some traditional office and one a modern political office. Households 2b and 27 are interesting as they are both outsiders, wealthy in modern material goods, savings and business but poor in subsistence items. The households 4, 8 and 9, all important both in new political offices and traditional leadership roles, have only sound median wealth in both subsistence and modern items. Households 2a, 16, 17 and 19 demonstrate the position of respected men rather than leaders. The last three are able to deal with Western political and economic institutions and the first has close links with the Anglican church. Although there are differences it is apparent that there is a general similarity in ownership of property (see also p.126f.) and that major differences are often very temporary.

Information which does not appear on the table but which could be useful is the randomly observed health and consumption patterns of particular households and the reputation and tabulated information on the amount of garden work by a household head, in area and time. There is an air of plenty in households 13, 24 and 32. Food is rarely eaten without tasty soup; taro is served more often than sweet potato and green vegetables and meat appear regularly. The household children are with one exception strong and healthy. The consumption patterns of the households based more on modern wealth (10 and 27 and two or three Pavotekari households) show frequent eating of rice, tinned meat or fish and drinking of coffee with sugar and rare eating of gathered green vegetables or fruit. This eating pattern is probably reflected in the fact that several of the adults are overweight and some children have grile, a skin disease believed to be caused by a deficiency of vitamins contained in green vegetables and some fruits.

The poorer households tend to rely on the quicker growing sweet potato and may often have neither soup nor meat to accompany it. Widows (21 and 22) generally do not eat well and families with small underproductive gardens (4, 7, 8, 18, 28) or many children (17, 19, 25, 5, 6, 16) can have children crying for food.

The wealthier household heads (13, 24, 32) are particularly noted for their hard work in the garden and one (10) is noted for his diligence in his trade of building. To a certain extent this

7The other wealthy household (1) was able to offer excellent meals for a guest but was difficult to observe at other times.
fits in with calculations on average time and area worked in the garden. Only households demonstrating or exemplifying extreme conditions are listed. Table 7.2 shows typical garden and total work hours, rather than averages of recorded working times.

Table 7.2

<table>
<thead>
<tr>
<th>Hours worked in the garden by affluent and poor households</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Affluent households</strong></td>
</tr>
<tr>
<td>Hours worked in garden</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>13</td>
</tr>
<tr>
<td>24</td>
</tr>
<tr>
<td>32</td>
</tr>
<tr>
<td><strong>Poor households</strong></td>
</tr>
<tr>
<td>Hours worked in garden</td>
</tr>
<tr>
<td>------------------------</td>
</tr>
<tr>
<td>2&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>21&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>30&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>4&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>5&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>7&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>17&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>18&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> Not all gardens were measured so general agreement on size is calculated as small, average or large.

<sup>b</sup> Property-poor households.

<sup>c</sup> Those households having difficulty providing food.

The general impression is that affluent households do actually work long hours and have larger gardens. Much of their work may be associated with cash cropping, marketing, wage labour or trading. The property-poor households work only a little less but those observed to be having difficulties in subsistence provisioning on the whole have smaller gardens and spend fewer hours on garden work. Almost all of the widows were absorbed into related households after 1977. It appears that the Koropatan wealthy households do not work less; in fact they generally work more. Wealth is not parallel with political power and the household heads of 4 and 8 demonstrate that, in spite of poor coffee returns, few pigs and no help from migrants, they can achieve powerful modern political positions; councillor, manager of business group and village court magistrate. They may do minimal garden work so
that they have limited subsistence wealth and have difficulty feeding their families properly, but they gain status and wealth because they help fellow villagers in dealing with outside institutions. As mentioned before both men have faced accusations of 'eating' or 'drinking' money from group ventures and have been unable to consolidate any permanent advantage deriving from a combination of their foresight and intelligence, and their favoured access to government loans and services. Neither household (4 and 8) has any retainers. Clansmen will help the wives during their husbands' absences, and acknowledge their leadership, but will demand monetary reward the moment cash returns appear. Neither household has potential wealth and status resulting from children in secondary or tertiary educational institutions, though both leaders have post-primary school training. Both their political positions terminated in 1977 to 1979 and the struggle of feeding an annually increasing family continues.

The traditional importance of land increases somewhat in modern times as population density increases and cash cropping provides a means to wealth. Good land for cash cropping becomes more of a scarce resource, so the actions of the high status wealthy clan leaders (10 and 32) become increasingly important. To recapitulate, in 1965 all village adults and clan leaders agreed to land tenure conversion and allocated a block to every household head and mature single man. This was an opening to difference in wealth as the birth of sons in the following generation would not take place evenly among block holders. Some men would have no sons and others might have six. This could result in one son (without patrilateral cousins) receiving both his father's and his father's brother's blocks while another son may share with five brothers the one block of their father.

However, in 1979 it was revealed that the land tenure conversion was never officially registered. The heads of 10 and 32 began to reallocate the former LTC blocks and form new blocks on clan land for the planting of oil palm. Coffee plantations owned by block settlement people, on clan land not their own, were cut down as no rent was ever paid. Clan land leader 10 allocated blocks of Tohane clan land to his sister's husband and to his FFZSS, a teacher at Waseta, and neither of these men is in Tohane clan. Land leader 32 created a new clan land block for a young fatherless clansman and given his former LTC block to the Anglican priest, who intimated that he was considering retiring from the church and becoming involved with oil palm. This leader has stated that he will charge K1000 if anyone wishes to buy the land which he now claims as exclusively his. Similarly, a Hojane clan leader from Povotekari refused in 1979 to allow oil palm development on or access to land to which he makes exclusive claim. He

8These blocks are termed 'pragmatic' by DPI officials. That is, they are not officially registered as individual blocks.
even demanded compensation for portions of Hojane land that since 1965 have been considered LTC blocks belonging to some Tohane clan members, and were then being 'spoiled' by oil palm clearing. 9

As yet, sale or compensation prices have not been paid for land and present government policy states that there is no legal support for these claims. The local administration is confident that, given the system of political organization within the village, a clan land leader will not overstep the mark of acceptable behaviour, as perceived by the rest of the villagers. The general belief that there is an abundance of land (as opposed to the fears of a few that good cash crop land is disappearing), however, may retard common awareness of dangers inherent in the leaders' generous allocation of blocks.

The foregoing discussion shows that the lifestyle of all households in Koropata is very similar. No children starve and any household is likely to be temporarily without some item such as soap, salt or tobacco. Households notably poor are in a particular phase of the developmental cycle. They may consist of young couples just establishing themselves, old widows, or a household temporarily impoverished by the absence of a male household head. This is by no means as an important structural condition as Sahlin would have us believe (1972:69; see Chapter 1). Only a small percentage of houses consistently fail to reproduce their livelihood. As stated in the formal analysis of the household economy (see pp.125-30), male headed households with five to six children show remarkable similarity in ownership of property in all categories of Western goods. Certain essential items are owned by all and collected in number by few. All households have the equipment to grow, cook and eat food and to clothe their members. Many households have the equipment to build the modified traditional house. Widows live poorly and eventually seem to merge with another household. There is no polygamy. Single men can rely on marrying if they have no physical or mental disability. They do not work harder than older married men. No single man is a retainer for a wealthy man. Modern political power has not entrenched wealth in certain households in Koropata as might have been expected from previous knowledge of colonial patronage. Wealthy clan land leaders have the greatest opportunity to draw allegiance and to add to their own wealth through the provision of land blocks for oil palm. Co-operation in other cash-oriented ventures always implies a return commensurate with that which the organizer is seen to receive. Any project aimed at receiving cash should return cash to the landowner or helpers. As seen in Chapter 5, those with more

9Such a situation has been outlined by Gregory (1982:165). As commodities are grown on clan land, land has an implicit exchange value. This causes quarrels between individuals and clans.
tend to give more for brideprice, end-of-mourning feasts and so on, if they are closely related to the principals.

The general effects of colonialism cannot be assumed to be conducive to greater inequality within villages without an understanding of the actual structural links between the village and the colonial state and of the operation of economic relations within the village. The traditional political organization of the Orokaiva does not present a close approximation to the big man model nor suggest an inherent proclivity towards capitalist inequality. Household difference so far is essentially a structural feature only in that it is an aspect of the developmental cycle. If there is an essential inequality or exploitation in the Koropatan organization of production, it must be sought elsewhere, within the household.

Inequality within the household

The male tends to be concerned with the killing of enemies and wild animals, the driving out of ghosts, the felling of bush before a garden can be made ... The female is identified with the cultivation of taro (Schwimmer 1973:117).

The sexual division of labour is, among the Orokaiva as in most societies, a pervasive aspect of the economy. Schwimmer (1973:90-1) sees the sexual division of labour in marriage in terms of rights as well as duties. A man has a right to his wife's labour and the wife has an 'equally important right of unlimited access to her husband's garden land and its produce' (p.90). A garden plot is a gift from a man to a woman and the product of the land is a gift from a woman to a man. Before land may be cultivated, nurtured and harvested by a woman there are crucial male tasks to be performed: clearing, and protection through ritual control of sun, rain and dangerous spirits. This reciprocal relationship can be seen in terms of an exchange cycle (1973:91).

In addition to his tasks in horticulture the man must build houses and bring home meat (Schwimmer 1974:225). The husband-wife relationship is a symbiotic one in which value is created only by co-operative action. For example, the wife provides taro and the man provides meat and the land on which she grows taro. Myths express this symbiotic relationship (Schwimmer 1973:91, 109, 117, 118, 173).

Normative models presented in Koropatan myths and stories, as well as in everyday statements, show men as hunters who provide meat and who should develop close reciprocal bonds with their wives. A close economic co-operative tie is easier if a man has one wife. The picture is also of a partnership, two separately functioning parts of a unit. But whereas there is in Schwimmer's
model the implication of equality, a closer look at the Koropatan model reveals that in some normative statements one part is seen as less than equal. A woman is dependent upon her husband for the greatly desired meat and for the organization of activities beyond the household, and her junior status is apparent in all legal and political matters, especially in relation to land. An influential woman can rarely compete with an influential man and women generally do not speak at political gatherings. If a woman does not go to the garden to harvest food for her family it is seen as a neglect of duty rather than failure to take up a right.

The inherent inequality of the relationship, discernible in some statements of norms, is much more obvious in the actual life patterns. Men are seen as the ones who clear the land and dig the holes for the taro and the women are seen as the ones who plant, weed and harvest. In Koropata today, however, in almost half the households women are carrying out the whole planting process as well as much of the clearing. Men own axes and are supposed to be the only ones who use them but in households lacking adult men a woman or an adolescent girl will wield an axe. Men alone can make fire through wood friction so theoretically a woman depends upon a man for bush burning, and domestic cooking fires. Actually matches, cigarette lighters and the borrowing of burning sticks give women almost full access to fire. Men own building equipment and they know how to build houses but women help by sewing thatch roof sections, holding uprights, and occasionally by tying floor sections. There is still some division in craft work. Men fashion axe handles, decorative headdresses and necklaces. Women make tapa cloth, sew Western dresses and make rings and necklaces from plastic beads. Women cook unless they are sick. Men know how to cook, weed, harvest, clean up after babies and so on but consider these duties to be unpleasant, and women's tasks. Men hunt large game and fish and women seek smaller game by slower but more reliable techniques.

There is a social stigma on a young woman if she remains single but beyond this a husband is still seen as necessary to clear, to build a house, to work in the garden and to provide some regular protein through skill with the spear or success in a cash project. The belief system strengthens the concept of female dependence. Men control fire, protect the family and garden through magic or sorcery, are skilled at building and hunting, and so are not merely desirable, but essential economic mates. Ideologically and economically a woman seems to depend on a man more than a man depends on a woman. However, some changes challenge this dependence. The profits a woman makes through market selling can be spent on matches or a cigarette lighter and on cans of meat or joints of cooked pork. If a household chooses to take part in

the Oil Palm Scheme a permanent house is constructed for them by the government. With access to fire, steel tools, market profits and government schemes women are able to feel less dependent on men for garden clearing, house building and meat provision. Men know how to perform most female tasks and are not ritually prohibited from doing so among the Orokaiva.

In all societies biological reproduction is essential for the general social reproduction of the unit: children are needed to care for the aged and to replace them as members of society. Men are dependent on women to co-operate in biological reproduction, and to carry out the major role in nurturing. Although both men and women need children to look after them when they are old, there may well be a differential interest in that Koropatan men appear to want more offspring to represent the name of their proud clan, known for its former fighting. Men also say that without a wife they will eat and behave in a less than civilized, uncultured fashion.

It is undoubtedly both practically and ideologically beneficial for men and women to establish partnerships but it is worthwhile examining the equality within that partnership. From roughed compilations made in 1928 among the Aiga, Williams showed that 48 per cent of a man's work and 43 per cent of a woman's work were in the garden. 'The largest share of the routine falls to the women; the hardest of the initial work to the men... The wife's working hours are longer both in the village and out of it' (1928: 150). This generalization is basically supported by Koropata data between 1977 and 1979, though in these surveys there is the added complication of cash cropping. It appears that the state of this cash cropping has a significant influence on the men's allocation of labour to certain activities.

Tables 7.3 and 7.4 show weekly averages of working hours, which are a summary of much of the survey data used throughout this book. 'Work' here has a very wide meaning: it includes garden work and associated travelling time; washing clothes and pots; collecting water; any manufacturing (string bag, axe handle, bead necklace making and so on); any co-operative work for school or church; building and collection of building materials; clearing or cleaning of village environs; any work on cash crops; hunting, fishing and gathering; any business or church meeting; and anything involved with the marketing of cash crops or buying of trade store goods. Cooking is included but childminding is not, being too difficult to consider separately from other activities.

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11 This can be mitigated to a certain extent by adoption.
12 Cf. S. Ortner's argument placing men, as representatives of culture, on a higher plane than women who are seen as closer to nature (Rosaldo and Lamphere 1974:67-86).
Table 7.3
Weekly work averages in hours\(^a\)

<table>
<thead>
<tr>
<th>Clan or group</th>
<th>Unadjusted male producers</th>
<th>Adjusted(^b) male producers</th>
<th>Female producers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 1977</td>
<td>29.5</td>
<td>24.7</td>
<td>35.6</td>
</tr>
<tr>
<td>B 1978</td>
<td>36.0</td>
<td>31.8</td>
<td>39.5</td>
</tr>
<tr>
<td>C 1978</td>
<td>28.4</td>
<td>28.4</td>
<td>29.3</td>
</tr>
<tr>
<td>A 1978</td>
<td>35.4</td>
<td>24.7</td>
<td>40.3</td>
</tr>
<tr>
<td>A 1979</td>
<td>41.9</td>
<td>40.2</td>
<td>40.6</td>
</tr>
<tr>
<td>B 1979</td>
<td>39.8</td>
<td>39.2</td>
<td>43.9</td>
</tr>
</tbody>
</table>

\(^a\)See Introduction, pp. 14-16, for methodology of data collection.

\(^b\)'Adjusted male' is the number of hours' work per week on work other than hunting and fishing (seen as recreation and sometimes accounting for up to 17 hours with no catch resulting); and unproductive business activities (long waiting periods in trade stores with no customers, waiting on main road for transport and in Popondetta waiting to see officials or for return transport).

Table 7.4
Garden work weekly averages in hours\(^a\)

<table>
<thead>
<tr>
<th>Clan or group</th>
<th>Male producers</th>
<th>Female producers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 1977</td>
<td>14.0</td>
<td>17.5</td>
</tr>
<tr>
<td>B 1978</td>
<td>25.6</td>
<td>23.2</td>
</tr>
<tr>
<td>C 1978</td>
<td>14.3</td>
<td>16.0</td>
</tr>
<tr>
<td>A 1978</td>
<td>14.5</td>
<td>24.6</td>
</tr>
<tr>
<td>A 1979</td>
<td>6.8</td>
<td>16.5</td>
</tr>
<tr>
<td>B 1979</td>
<td>12.5</td>
<td>23.0</td>
</tr>
</tbody>
</table>

\(^a\)See note to Table 7.3.

The figures for 1977-78 show, on average, a greater amount of work done by the women than by the men. In 1979 the situation had changed somewhat and both sexes were working longer hours, one residential group showing slightly more work by the men until hunting, fishing and unproductive business were excluded. The changed situation, involving as it did the high priority given to work on oil palm clearing, makes reliance on the garden work of women more obvious. Seva-Ambotohoné group (B) as a whole tend to work longer hours in the garden than the rest of the village. Their men are much less involved in unproductive business activities. Garden work for women stays at a similar level in each clan. As stated, men's garden work suffered a sharp decline in 1979 owing to the male involvement in oil palm clearing and planting.
A comparison of Tables 7.3 and 7.4 indicates that there has been a substantial increase in cash crop work, when it is made clear that the difference between garden work and total work is made up almost totally by oil palm work.

With the introduction of the Oil Palm Scheme in 1979 it was expected that married women would put extra effort into oil palm work, and on the whole they did. However they also had to maintain levels of work in subsistence horticulture sufficient to provide adequate sustenance for their own households and to provide regular feast food for clan work parties. The male involvement with the new cash crop could not have been achieved without a reliance on the women to maintain a steady harvest of subsistence food.

In recent years many Koropata men have ceased to put in the extra time in the garden required for feast production. They have carried out the minimum number of essential garden tasks, leaving their wives and daughters to produce adequate subsistence food. In the freed time they attempt to make money. In 1977-78 these attempts generally failed. Even when cash schemes were operating many of the related activities were non-productive,\(^\text{13}\) Often trucks ran out of petrol and the driver had to walk several miles to ask someone for petrol. During quiet periods in the middle of the day trucks were often driven around the town in a vain search for customers or parked while drivers rested at the hotel. Trips to Popondetta to obtain business registration or advice often involved a three-hour wait on the Popondetta-Kokoda road and several hours' socializing in town. Tradestore owners sometimes spent many unwarranted hours manning their stores when all business could effectively be carried out in one to two hours a day, as villagers tended to require goods only in the early morning and evening.

In 1979, oil palm was presented to the Orokaivans close to Popondetta as a new method of making money (see Epilogue). As in the past with coffee and rubber schemes in the area, many Orokaivans embraced the plan wholeheartedly and redirected their surplus\(^\text{14}\).

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\(^{13}\)Strictly speaking these activities were the result of inefficiency (in Western terms) in the running of a business. There was, however, a general village feeling, particularly among the women, that the 'unproductive' time of these activities constituted a waste of time. This extra time was not conceived of as important for the successful management of the business in contrast to, for example, the holding of a feast to ensure success in subsistence gardening.

\(^{14}\)Surplus here refers to the freed time which men have as a result of their slight reliance on women to carry out the greater burden of daily subsistence activities. It is only surplus in the sense that it is not required for daily household provisioning.
time to the hard work involved in establishing an oil palm plantation. Once the palms are fully planted it is probable that work time figures could return to the pattern of 1977-78, in spite of the fact that villagers have been advised that oil palm smallholders (1.5 adult units) are expected to put in three to four days per week on the cash crop.

The situation for Koropata, then, is that there is a reliance on women to maintain the subsistence economy while men use their surplus time not, as in the past, for wartime and feasting, but for involving themselves in the new Western 'feast', monetary wealth. When schemes are failing and the expected abundance is not forthcoming the investment of surplus time in cash schemes is only desultory. When, however, the propaganda for the scheme is intense and far-ranging, the surplus time is invested energetically, willingly and diligently into preparation for what can be seen as one of the biggest 'feasts' ever: a constant source of enough cash to enable people to ride around in motor vehicles and to free themselves from the daily grind of subsistence labour.

Before investigating the extent to which the reliance on women amounts to a form of exploitation of women by men, it is necessary to recapitulate the access to means of production and the contribution made by men and women to the production of food and the generation of cash, and to set out the distribution of these items in the Koropatan economic system.

O'Laughlin (1974:301-39) holds that the ethnographer should go beyond the kinship rules and ideology which may limit the productive and reproductive activities of women and look at the reasons for the actual division of labour in the control of land, tools and technology of production, by, for example, men. Although an Orokaivan woman has access to the use of land through her status as a daughter, sister or wife she does not have the more permanent use right granted to a man, unless all men in her immediate family have been provided for. As far as household equipment goes she does not have access to an axe or a building tool without permission and I know of no case where she has the right or skill to use a shotgun or non-ceremonial spear.

If we look at the relative contributions to garden work by men and women (see pp.91-6), a woman produces more of the household subsistence diet of taro, sweet potato and green vegetables. Observations of approximately 24015 meals showed that women receive slightly less of the carbohydrate root crop and slightly more of the green vegetables.

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15I dined nightly with different households in the village throughout the fieldwork period so that all households were observed at least twice and some as many as ten times.
As a diet consequence of women's greater contribution to the cultivation of root crops they can also be said to put more work into raising pigs, though in some households diligent men provide surplus watermelon and bananas. Women then contribute as much as, if not more than, the men to pig husbandry. A household does not consume its own pigs but makes presentations at feasts and in return obtains pork from other households. The more frequent and more generous the presentations, the more frequent and generous the returns. When pig meat is given at feasts it is allocated to the household head and collected by his wife or female relative. After cooking, the choicest and largest pieces are offered to the men and older sons (cf. Strathern 1982:149; Modjeska 1982:84).

When the meat consists of the spoils of hunting—birds, fish, lizards, possums and wild pig—a particularly generous portion tends to be given to the person who actually did the killing. Fish is a treat in most households and only those few who have shotguns obtain game more than very occasionally. Snails and small fish collected by young girls are a more regular contribution to the diet and, as stated in the section on gathering, most of the snails collected are specifically for male consumption only. In subsistence food, then, the overall picture is that the women contribute more and receive slightly less.

In business group ventures the older married women are listed as shareholders but for the sake of convenience are recorded with their husbands in their husband's clan. Table 6.16 (p.189) shows the female contribution to Seva-Tohane and Endi-Ambotohane business groups to be substantial, though not as high as the male contribution. The money that villagers contribute to these ventures comes from several sources. Money from urban relatives and the sale of timber rights is not earned. In the latter case it is distributed equally to males and females in the recipient group, regardless of whether the woman married in from another clan or married into Koropata from another village. When money is obtained from marketing and coffee sales it is almost always the case that women have contributed a larger proportion of the labour needed to produce the goods sold. A man usually does the coffee selling in Popondetta and collects the money and he can spend it as he wishes in the town before returning to the village. A woman on the other hand obtains the money from marketing and is likely to spend some of it on rice and tinned meat or fish, either for domestic consumption or to present on behalf of the household at a feast. In either case the man usually benefits slightly more than the woman: he is likely to have a larger share of the store-bought food at a household meal, and as household head he enhances his status if the goods are used in a presentation.

The woman minds money from coffee sales and marketing but her husband has the right to demand it from her when he wants it. As is probably true of many cultures, a husband and wife with a
happy long-standing marriage would almost certainly discuss purchases and agree on the use to which money should be put. But behind the man's right to demand money when he likes there is the implicit threat of socially-approved physical force if the woman refuses.

Apart from men's greater consumption of meat the standard of living of men and women is very similar. Young unmarried girls are indulged slightly more with clothes. Gifts from urban workers and a collection of shared clothing in the *oro* adds variety to the clothing of the young marriageable men.

In work for the cash sector as well as subsistence it seems that the women give slightly more than they receive, and have less control over the means of production. This impression for both sectors is strengthened if the children of the household are considered. The woman once again gives more in the sense that she bears, nurtures and has the major responsibility for feeding the children, but none of this labour gives her rights. Under customary law a woman's rights over her children are subsidiary in that a child can be taken from her by the father's clan. Once a marriage is dissolved a woman theoretically has difficulty keeping her children, even young babies at the breast. An illegitimate baby may be adopted out by a brother or father of the mother without any consultation. In recent times when there has been a dispute over custody of a child women have had recourse to the Social Welfare agency in Popondetta which has the legal power to favour the woman. But from the few cases observed they seem to stand by and let the customary law be followed. Thus for example if brideprice has been paid the representative of Social Welfare may agree to the father's group taking the children. Some examples of actual cases show some divergence from the normative rules but overall tend to support them, e.g.:

(i) When J's husband C died, C's clan demanded that the baby son stay in Koropata rather than go to J's home in Madang. After many consultations with the Department of Social Welfare during which J experienced considerable anxiety she was able to leave the village with her baby because the Social Welfare Department maintained that C had never paid a brideprice.

(ii) S was told by her father that her illegitimate son would be raised by her older brother and his wife. When I was in the field the child was still being breast fed but S was resigned to him being taken by her sister-in-law when he got older.

(Cf. Meillassoux (1981:102, 141-3) on the family in capitalist society. Children, potential wage labourers, are raised by the unpaid labour of their parents, especially the mother, but legally, after the age of consent, their labour can only be exploited by those with the capitalist means of production. The children can be seen as commodities which cannot be sold by those who produced them.)
(iii) Three women had been divorced and remarried. In each case the husband had permitted the woman to keep one child but had claimed the others.

(iv) L, an educated nurse, gave up all three of her children in order to simplify separation from her husband who had previously complained to the Social Welfare people that she was incapable of looking after them.

In the period 1977-79 at least six young women bore illegitimate children. They generally took the advice of their fathers or brothers on the future custody of the child. The male assertion of 'ownership' is not an empty claim, but neither can it always be exercised successfully.

Thus the above discussion of the differential contributions of men and women in regard to food and cash supports the conclusion arrived at from the examination of differing work times. Within the household there is some overall inequality between woman and man in terms of hours of input and return. The man's reliance on a woman for continued daily subsistence releases time for his involvement in the cash or 'feast' sphere. Schwimmer's (1973:90-1) analysis of the ideology of exchange and its implications of equality are indeed part of the story for the Orokaivan sexual division of labour. However, further analysis of the Orokaivan belief system and norms shows that a degree of inequality is also built in and it is this aspect which is most obvious in daily life. The belief system in combination with the subtle threat of physical force from the men supports an actual social situation which is not equal.
Throughout this study two characteristics of the Koropatan economic organization have been repeatedly brought to the fore. In the organization of labour the household unit appears to be most important. In daily life it functions as a unit of production, consumption and distribution. However, for less regular feast, life-crisis or cash activities a larger unit of production is required. The ego-centred network of matrilateral, patrilateral and affinal relatives is necessary for the long-term reproduction of the society. Sometimes it operates as a network and sometimes as a clan or patrilineage. It functions at life-crisis ceremonies of birth, puberty, marriage and death; at certain stages of house-building; at large hunts and fishing expeditions; at feasts; and at the inauguration of large-scale cash crop ventures. Koropatan economic organization then is based on the household for daily activities and requires periodic contributions of a wider kinship network to sustain it in the long term. Contrary to Sahlins (1972:95) there is something in the infrastructure of production obliging several households to enter into compact with each other. Sahlins was indeed correct to bring out the importance of household, of the sexual division of labour and of practical use right of households over land and tools, as this fits well with the ethnographic material from Melanesia, but his total dismissal of co-operation is unjustified. Wider co-operation is seen as an essential basic element in the normal functioning of the economic system, whatever happens at periods of crisis or breakdown. Ownership by the household is extremely important but it is the wider clan ownership that guarantees land to all the men of the group in perpetuity.

In regard to other aspects of Sahlins' model it seems feasible to accept that there is an under-use of subsistence resources given the low population density and the abundance of land in Koropata, even when the land needs of swidden horticulture are considered. The particular political organization of pre-contact Orokaiva, where warfare and buffer zones were vitally important, does relate directly to this under-use of resources but it is unwise to assume that one caused the other. Under-use of labour is a more problematic hypothesis of Sahlins although it may bear some relevance to the changed situation for Orokaiva men after fighting ceased to be
important and feasting was reduced in scale.\(^1\) Even so, such under-use of labour can be held to exist only if certain types of activity are deemed unproductive for the functioning of the economy as a whole. Failure of a household to provide its own subsistence has been shown to occur only under certain temporary phases of the developmental cycle. The great majority of households manage to produce their own daily livelihood.

To work out essential elements of the Koropatan organization of production I have followed through aspects of the sexual division of labour rather than attempting to quantify under-production. The second major characteristic of the Koropatan economy is then that there is a sexual division of labour in which men are released from some of the daily subsistence activities, so that they have time to engage in groups larger than and activities beyond the household. In a certain sense surplus labour\(^2\) is appropriated from the women as they receive less in the way of tangible objects than the men in return for their work.\(^3\) The activities that the men engage in during their freed time are, for the main part, centred around the acquisition of money, although some look for power through media other than cash, that is through church and school committees and so on. Through their co-operative involvement in cash crops and tradestore and truck business men attempt to produce the abundance of feasts to benefit both their own households and the whole society. The relationships between women, whose concern for the household takes priority, and men, who must show concern for the wider social group, is not equal. This inequality is probably maintained to some extent by an ideology of complementary partnership and by the greater access to force which the men have through their ownership of axes and spears and their use of superior physical strength.

There is reason to believe that the feast/subsistence, male/female organization of work has its origins in pre-contact situations. The historical evidence from the early part of this study demonstrates the ubiquity of warfare and the fluidity of residence patterns. It was probably vital for men to put time and effort

\(^1\)Cf. Gregory (1982:6, 166) on efflorescence of traditional gift exchange. This need not be a contradiction if the products of cash cropping are, as Gregory says they are, treated as gifts.

\(^2\)Surplus labour is a Marxist concept concerning labour performed over and above the labour repaid by returns, necessary labour. Usually the owners of the means of production benefit from this extra labour. If this surplus is converted to money it is called surplus value (Mandel 1973:7, 8, 23-4). The concept is difficult to apply where returns may be intangible and there is no class wholly supported by it.

\(^3\)Cf. Godelier (1982:28) on the Baruya: 'Inequality between the sexes is the fundamental basis of the social order'.
into visiting surrounding social groups; into organizing feasts to restore peace; and into going to battle to demonstrate group strength. Failure to do so would risk social reproduction in the long term. Although perhaps crudely functionalist in interpretation it is possible that in horticultural societies there is a reliance on women to continue with daily subsistence work so that crises and the continued security of the social group could be dealt with by the men.

Vayda (1976) uses the Maring of the Bismarck Mountains of New Guinea to investigate his general hypothesis that warfare is a process which is a response to environmental problems, leading as it often does to population dispersion and land redistribution. Sillitoe, on the other hand, in a massive comparative survey of New Guinean societies (1972:31), establishes that few wars are simply the result of ecological pressure. He sees New Guinean societies as systems of big men, building factions and absorbing refugees rather than as systems of descent (ibid.:306). 'The political system operates through war because big men and their factions fight to extend their unstable political influence or to weaken the threat of a rival group' (ibid.:26).

This general theme and that of a division of labour for warfare is reiterated by Donaldson (1980), who has set out the mode of production of the Eastern Highlanders after the introduction of sweet potato and before European contact. His evidence from early ethnographies establishes the constant and time-consuming nature of warfare. 'Male children were reared to be warriors ... the task of the warrior was onerous, necessitating round the clock vigilance' (1980:16). Fighting could last up to one month. Fragile alliances were made between leading men so that groups could gain numerical superiority. Successful attacks provided 'short term security' (ibid.:19). In a situation of constant absorption of refugees, brotherhood was as much a matter of political alliance as of kinship. The society depended on women's labour to produce much of its food. The fact that in subsistence women put in more and received less, according to Donaldson, was the result of the men's time-consuming role as warriors (1980:17, 18, 21, 22, 29). Hence the experience of the Orokaiva could well be part of a general Papua New Guinean experience, although most evidence is for Highlands New Guinea.

European contact in Northern Province established peace by an outside authority so the occasion for intertribal warfare gradually ceased and the reasons for intergroup feasting were curtailed. Compulsory carrying, roadwork, cash cropping and tax

4The Orokaiva with the low density of 4.4 per square mile are categorized as 'never fighting for land' (Sillitoe 1972:53, 58).

5Cf. K. Heider (1970). The Dugum Dani of West Irian show further evidence of this.
paying, however, ensured that men were withdrawn from the subsistence sector for considerable periods of time. World War II aggravated this situation. The village societies were able to survive by relying on the labour of women. It became the normal course of events for many men to be temporarily absent from the village but for the government and commercial interests to take no responsibility for the social welfare of these villagers. In times of sickness or old age it was the village which had to offer welfare. In this way villagers were subject to 'super exploitation'. The product of their labour was appropriated and their long-term needs beyond daily food provisions were not met by employers.6

It is appropriate now briefly to consider the work of Modjeska (1977) on the Duna of Central Highland New Guinea, as this work, influenced by French Marxist anthropology, is one of the few ethnographies considering organization and change from the viewpoint of production, and there are some interesting parallels with my Orokaivan material. Modjeska stresses the importance of the household7 as the major unit in production. The household produces potatoes, pigs, houses, clothing, tools and utensils. Temporary imbalances are solved by exchange (1977:106; 1978:11). In spite of principles of sex equality women in fact are dependent on men in the division of labour. They are not consulted in land business, they do not own axe blades and are not considered capable of clearing gardens, building houses or manufacturing shovels (ibid.). Women have less access to the means of production in terms of both resources and recognized technical knowledge. Garden plots are prepared by partnerships consisting of males and females but the men make the decisions and the women obey. Increased pig production is preferred to increased leisure time for the moral, social purpose of sharing and exchanging with people beyond the household.

Modjeska established that the women are exploited by the men8 in terms of production time involved in the growing of sweet

6Gregory (1979:397ff.; 1982:142-6) gives an excellent summary of the role of the neo-classical economists in setting up this situation in PNG. Early recommendations of the 1970s suggested wage levels which required that the subsistence sector subsidize the monetary sector. Meillassoux (1981:107-26) discusses this same situation for the third world in general and in relation to the short-term rotating labour migration in Europe.

7Men sleep apart from women and children so Modjeska calls it a homestead (Modjeska 1977:106).

8Modjeska says that although Duna male-female relations are not examples of class exploitation in a classical Marxist sense there is evidence of an incipient class system. The ideology and belief system of the male lineage is like the repressive superstructure of

(Footnote 8 is continued on next page)
Although it seems to Modjeska that in energy expenditure\(^9\) the work inputs are more equal, he still maintains that men extract the surplus productive labour of women as there is a release of time which allows men to involve themselves in outside activities involving knowledge, travel and power. They are thus able to reproduce a social formation reinforcing the sexual division of labour and stressing male-male lineage and inter-village relationships (1977:243).

In Duna society it is the production of pigs which is made possible by the appropriation of surplus labour (1977:339). The extra work which women do growing sweet potato can be effectively taken from them in that men control the exchange of the pigs which eat the surplus sweet potato. Pigs, as symbolic substitutes for human beings in death compensation, brideprice and sacrifice to ancestors, have exchange value as well as use value (1977:252-87; 1978:13). The production of pigs is essential to the political and religious institutions of the social formation (1978:13).

Modjeska's more recent work concentrates on the concept and social reality of value in pigs. He finds that it is more profitable to look at the role of pigs in mediating human life and guaranteeing social reproduction than to pursue the search for the heart of the relations of production and to be predictably disappointed on finding them to be 'structures of kinship' (1982:51, 52). I have tried to demonstrate that it is important to get to the heart of the organizational forms operating in production both in the search for generalization and comparison in the Melanesian ethnographic area and in the understanding of the impact of colonialism.

In spite of the Orokaians' longer interaction with colonialism and involvement with the capitalist system of production, there are still some obvious similarities between them and the Duna.

Footnote 8 continued

a state in that physical coercion is used to get obedience (Modjeska 1977:252, 255, 256; 1978:16). As the word 'exploitation' does have connotations of class in Marxist literature I have chosen to avoid it. More recently (1982:69) Modjeska has chosen to stress the complementarity in the male-female productive unit: 'The domination and presumably exploitation of women by men must be understood in terms of the relations of two classes of labourers, exchanging products and services.'

\(^9\)I have some misgivings about calorific expenditure figures. Every female task was listed as less energy-consuming than those tasks of the men, and this seems unusual in consideration of the loads carried and terrain covered by the women. This impression is reinforced by the work of McArthur showing that adult Highland women lose more weight/height and skinfold thickness than men as a result of strenuous garden work and caring for families (1974:108).
The household unit is vitally important. Women are more dependent on men in the sexual division of labour and, in that men put in less time towards daily subsistence requirements, the women have some of their surplus appropriated. There is an ideology which enjoins obedience from women and condones force by men against them, while depicting the partnership as complementary and balanced.

As I have already outlined, in Duna society the raising of pigs is made possible by the appropriation of surplus labour. It is unlikely that this was exactly the case among precontact Orokaiva owing to the smaller number of pigs, the importance of taro as an exchange item in its own right and the existence of manufactured feather headdresses and shell necklaces as valuables. In recent times the evidence from Koropata, as presented in this monograph, suggests that the appropriation of surplus means freed time for the men. This time is used by Koropatan men in efforts to gain money, power, or a combination of both.

The discussion of cash activities (Chapter 6) demonstrates some of the avenues pursued to gain such wealth and power. Small individually owned tradestores absorb much 'spare time'. Purchasing trips and store manning are more time-consuming than the returns warrant in classical economic reckoning. Truck business involves the time spent waiting for bureaucratic approval, waiting for passengers in Popondetta and waiting for frequently needed repairs. Truck business and co-operative tradestores hold within them the promise of group wealth, something worth working towards and waiting for. Meanwhile, however, they provide a valuable service (mobility and food that can be obtained and cooked quickly) and an indication of an ability to compete with the powerful in the outside world. The inauguration of new cash crop ventures such as coffee and oil palm absorbs much of the freed labour time of the men and the money which is eventually made from them contributes to future production units through the provision of brideprices. The money can also be used in an effort to seek power in another arena, as by contributors to church funds. The smaller market-oriented cash crops are less relevant to a discussion of appropriation of surplus.

Some men use their freed time trying to gain money by gambling. This practice is particularly prevalent when coffee money has been paid or when one or more wage labourers return to the village. It is a way of circulating money to some who see no other way of obtaining it. The wage earners and recipients of large coffee returns tend to be the losers, the men who in the midst of a game call for their wives to send a further K10 down to the gambling shelter.

Besides involvement in cash activities in the village there are of course several men whose freed time is invested in wage labour. Most young Koropatan men want to work in Port Moresby or another major Papua New Guinea town for at least one or two years,
although finding work has become more difficult recently. One or two of the adult men absent from Koropata in 1977-79 returned home to take up oil palm blocks rather than continue in clerical or semi-skilled positions in Port Moresby. Students in the senior year of the Anglican secondary school a few miles from Koropata, although aiming for professional or skilled positions, indicated in a questionnaire that they did not want a lifetime of wage labour.\footnote{Eight wanted to work fewer than 10 years, 8 wanted to work 10-19 years, 12 wanted to work 20 years and 5 wanted to work 25 years. Students were aged about 16.} All Koropatans view wage labour as a temporary life experience, many hoping to return to the village young enough to become a high status village leader.

The investment of freed time in wage labour does not often bring wealth and power. Families left at home suffer because of lack of male expertise in various tasks, and when the wage labourer returns there is often little to show for long absence. The expenses of urban life consume most of the unskilled worker's wages, so often he comes home with only a radio, a few clothes and greater sophistication.

Finally, in the discussion of use of man's freed time it is worthwhile to mention involvement in activities which may be perceived as leading to greater power and influence. From Koropata there are one or two men on the primary school committee, one on the church committee, one on the Martyrs Memorial School board of directors, one a chairman of Etija United Business Group,\footnote{Etija Business Group was established in 1974 when over 5000 village shareholders in Saiho Census Division contributed K10,500 to supplement a Papua New Guinea Banking Corporation loan of K40,000 so that a garage and workshop in Popondetta could be bought. Further money was borrowed to buy four trucks which were rented to the National Works Authority. The idea was to create a scheme whereby village PMV owners could service their trucks in their own workshop and could invest their profits. By 1977 petrol and parts supply and telephone were cut off due to bad debts but the business group faltered along until 1978 (Wi and Vani 1978:3-4).} one a councillor, one a Local Government Committee man and one a Village Magistrate. All these positions enhance the status of the incumbent and in some cases can offer power, for example, to make decisions on the spending of group funds or to expel a student. The men who take on these positions do not neglect economic avenues towards wealth and power; they are often successful coffee growers or business entrepreneurs as well.

Hence an important consequence of an organization of production, which relies to some extent on the labour of women to provide daily subsistence, is that men are freed to involve themselves in
political and economic activities beyond the household, and beyond the village. All present indications from the Koropata material support the interpretation that the benefits in cash and power gained from these activities are being concentrated in the hands of the men. Men now have greater control than women of the spiritual and temporal education of their children through church and school committees, whereas in the past education or socialization would have been the task of both men and women. New male roles of Village Magistrate and Village Councillor have the potential to override the informal mechanisms of dissent used by both men and women in former times. Ultimate control of cash earned, cash saved and direction of spending is in the hands of the men.12

It still remains to draw together historical and ethnographic material in order to identify the links or channels between the village economy and the colonial, capitalist or world economy outside. The nature of the early colonial experience has already been outlined early in this study. Government, mission and commercial representatives worked to advance each other's interests with a greater or lesser degree of co-operation. Compulsion involved in construction of the capitalist economic infrastructure (roads, bridges, export crops) was justified in terms of raising the level of 'civilization' and benefiting the Orokaivans. The post-independence economic system, while it is ostensibly guided by an eight-point plan advocating small-scale development and self-reliance, follows pre-independence patterns of monopoly expatriate company control and large-scale appropriation of natural resources by overseas financed ventures (Gregory 1979; Donaldson and Turner 1978). The primary effect of the extremely large injection of Australian aid to Papua New Guinea since the 1960s 'has been to create a massive bureaucracy based on the Australian model, staffed by bureaucrats fed on Australian food' (Gregory 1979:401).13

In examining the structural links between the macro national economy and the economic organization of Koropata village we see first that there is a link common in all colonial societies which is brought about by force and maintained by the legal system. Villagers were and still are required to pay tax. More recently since schooling has been made compulsory there is the added 'tax' of compulsory school fees. Second there are the links brought about by force but maintained in the long run by a combination of socialization by the powerful colonizers and the indirect influences of other processes impinging on the village economy. Labour power is treated by the law as a saleable commodity. As shown by demands

12See Strathern (1979) for a similar account of the Melpa, Highlands New Guinea.

131972-73 food imports totalled $A47,734,000, 84 per cent from Australia, mainly canned meat, canned fish, white rice, flour and sugar.
for payment when an activity involves profit (see Chapter 6) the history of compulsory work and the experience of payment for labour influenced the people too, to see their own labour as a commodity with use value and with exchange value as well under certain circumstances (see Gregory 1979:399-401).

Cash cropping too was brought about by legislative force (see Chapter 2) but was reintroduced and extended under policies of official encouragement from the powerful. The early force, the socialization and the indirect compulsion stimulated by tax requirements and new subsistence needs led to a compulsion for Orokaivans to sell part of their produce. Certain items planted with sale in mind came to be seen therefore as saleable commodities.

New needs are often the result of villagers seeing intrinsic good in Western products, but there is one category that has become a need at least partially as a result of force. Clothing has been the object of both government and mission lawmaking (Wolfers 1975:46) but is now a recognized essential need for the villagers. To a lesser extent mobility and Western food were initially forced upon the people as a result of compulsory work programs but they are now wanted, both for their intrinsic value and for the power which they are believed to give.

Further links between village and capitalist economy are structured basically as a result of desire for Western technology. In some cases this desire becomes a need and the traditional alternative cannot be taken up again. Villagers were only too willing to replace essential subsistence tools and utensils with Western items. The skills for making the traditional alternatives have been lost. Labour-saving Western axes, bush knives, smaller knives and cooking pots fall into this category. Equipment required for new styles of building could also be included. All must be replaced through the cash medium.

Other equipment has been desired simply because it eases the labour and difficulty of a particular subsistence task. Shotguns, iron-ended spears, goggles, lanterns and nylon fishing nets made hunting and fishing easier and have, according to the

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14 It appears that labour for subsistence production is not viewed as a commodity. The question of labour being seen as a commodity is complicated by the notion of profit sharing in cash activities (see Chapter 6).

15 A trivial example is the carving of prices, K2, K3 on young watermelon destined for the market. See Gregory (1982:155-9) for a general discussion of the emergence of primary commodity production.

16 The maintenance of aluminium cooking pots seems in fact more labour intensive than that for clay pots.
villagers, contributed to decimation of game and fish as well as
to a decreased need for co-operation in the tasks. As hunting and
fishing are marginal to the success of the subsistence economy,
the need for iron-edged spears, goggles and so on provides a more
tenuous link with the outside economy.

As regards co-operation and technology, it is worth mention-
ing here that although improved tools such as hammer and nails,
steel axes and shotguns allow a decrease in co-operation, this is
not a necessary result. The large-scale village hunt and the
inauguration of cash crops show that there are long-term social
and economic reasons for periodic co-operation.

A fourth bracket of new needs consists of those utensils
required so that villagers may emulate the Europeans, acquire
perhaps some of their power, and feel less ashamed of what they
perceive as their own technological inferiority. Items such as
plates, forks, dishes, towels and sheets are considered to be
essential household requirements.

Another link which has been formed as a result of positive
initiative from the people has actually survived in spite of
opposition from the outside power. The importance of marriage for
the total reproduction of the society has been outlined. Within
marriage, the difficulty of amassing a brideprice has continued
through time. The monetary element of brideprices has inflated in
accord with the greater ease with which villagers can acquire
cash. The social group has acted to maintain the significance of
the brideprice and the opportunity to demonstrate status and
power.

The end result of these processes is that at least part of
the social group is forced to sell labour or commodities in order
to buy essential goods and to pay taxes and brideprices. The
outside colonial-capitalist system appropriated surplus while at the
same time creating dependence. As a result of early colonial force
it was men who were to be that part of the social group compelled
to wage labour or to grow cash crops. This fitted well with
traditional organization in which men were absent through the
political demands of warfare and feasting. However, it did extend
the situation so that women were called upon to do more of those
daily work tasks which had been seen as the role of men. Even if
the reinforcing ideology of sexual complementarity had broken down,
the new outside powers did nothing legally to temper the ultimate
physical superiority of the males: there was no official repression
of wife beating or construction of an alternative model of marriage
in law. Hence there was nothing in the law of the new power to
inhibit a man's reliance on his wife or sister for much of his
subsistence. While men control household money there exists the
potential for greater inequality between men and women. As money
can be hidden in banks it has the potential to be stored and to
accumulate for a longer period than traditional items and, more
importantly, can then be exchanged for almost any other item, transactions made for profit being possible within the capitalist system. As the Melpa men say (Strathern 1979:544), 'Money is too "strong a thing" to be left to women to manage'.

The effect of colonial compulsion on institutions contributing to the social reproduction of the village is less obvious. Although wage labour ostensibly withdraws men from the opportunity to participate in life-crisis ceremonies, the pre- and post-independence governments have been tolerant in regard to obligations following a death.\(^{17}\) Compulsory schooling and the banning of homicide have more certainly contributed to the end of male initiation ceremonies and the curtailment of female puberty ceremonies.

The system of centralized bureaucratic government entailing a centralized force of law and order reduces the need for the Orokaiva man to devote time to political manipulation between his own and neighbouring villages. It seems that the time which in the past was used to settle matters of war and peace may now be invested primarily in activities aimed at acquiring cash, as a means to wealth and power.

It has been shown that the economic links between the village and the capitalist system have made elements of wage labour and of cash cropping vital to the continued functioning of the village society. They have also constituted an appropriation of surplus and a creation of dependence. Tax and school fees must be paid; axes and cooking pots must be replaced; clothes, bedding and kitchenware should be bought; and brideprices must be paid to secure a new socially-ratified economic and child-rearing unit. However, Koropatan society manages to meet these conditions without radically altering basic structures of its own social and economic organization, even though its consumption of Western goods and provision of cheap labour without social welfare costs makes it, in a sense, an integral part of the capitalist system. Social concerns are more important than daily productive work for most once tax, subsistence tools and a few luxuries have been paid for. Wage labouring is rarely seen as a permanent occupation and cash crop involvement of the past has made little impression on the daily subsistence schedule.

The reason that the Koropatan villager is able to limit his involvement with the outside capitalist system is that within his

\(^{17}\)Australian colonialism followed the rules of the Australian Public Service but broadened the terms of 'close relative' so that leave could be obtained to attend funerals of more 'distant' relatives. The armed services had more scope for paying the bereaved's fare to the funeral but both government bodies allowed considerable leave and monetary leeway when there was a death (Tony Murray, Staff Officer, LaTrobe University, pers. comm., 1982).
village he has the means to reproduce himself. Every Koropatan
man is guaranteed access to clan land as a birthright. Up till
now there has been enough subsistence land for everyone. Besides
land every Koropatan has access to the use of his own labour for
his own benefit. He is not forced to work for another's benefit.
In addition to his own labour, because of kinship, residence and
exchange links, he has access to a network or group of kin for
help in the few irregular co-operative tasks necessary. Third, and
related to this, every man has access to a wife, to complete the
adult working unit and bear children to ensure continuity over the
generations. The kinship network guarantees a brideprice that will
ratify the marriage according to the society's requirements. It
does, however, seem necessary now for one member of the kinship
network to have access to a reasonable amount of cash through wage
labour or cash cropping. Brideprices of K500 to K1000 cannot
usually be amassed through wide collection of small donations.

Within the village the Koropatan economic system basically
fits Amin's characteristics of 'precapitalist formations', set
out as follows. Labour is organized on an individual nuclear
family basis and partly on a collective basis drawing on the ex-
tended family, clan or village. The principal means of production—
land—is owned collectively by the clan. Use of land is granted
freely to all clan members, though not necessarily on an equal
basis. A producer cannot be separated from the means of production.
Distribution of the product must be made in terms of rules closely
associated with kinship organization. There should be no commodity

This characterization broadly fits the Koropatan material
but in many senses is too general to offer detail of the actual
operation of the economic processes and to predict where the
influence of capitalism will make permanent structural changes.
Here I tentatively offer a more detailed model based on the Koropata
material but having possible relevance for other Melanesian
societies. Organization of labour is partly on a household and
partly on a wider kinship basis. It is not wise to restrict the
latter to clans, extended families and villages. Conversely it is
advisable to stress that kinship ties can be created by co-residence
and exchange. Therefore this characterization of Amin's can be
modified to read: the household is the unit of work concerned with
daily productive activities, while a wider kinship network or group
is used for irregular economic tasks and for involvement in life
crisis or other activities contributing to the social reproduction
of economic units.

Gregory shows how land has not emerged as a commodity in Papua
New Guinea: 'Only 3.33% of total land area has been alienated ...'
(1979:403). Meillassoux (1981:110-11) stresses the importance of
the safeguarding of land from private appropriation to the continua-
tion of the domestic mode of production. The domestic economy can
be better exploited if it is preserved.
On the matter of land ownership it is worth adding that, although use and control of land in the short term is the province of the household, it is ultimately the larger kinship unit which guarantees long-term land use for future generations.

According to Amin, in a pre-capitalist society a producer cannot be separated from the means of production, and use of land is granted freely to all members. For Koropata in the past model and present reality these comments pertain only to the male members of the society. A woman has only indirect access to land and to axes, building tools, fire and spears through aid and permission from a man; her father, brother, husband or son. Therefore all men have full access to the means of production as a birthright, while women have limited access.

Although it is a wide characterization, Amin's 'distribution according to kinship rules' is still problematic. In Melanesia distribution of produce beyond the household is usually closely associated with strategies to improve long-term economic prospects or to create political alliance. However, these strategies may be played out within a model of, for example, affinal obligations. For the Koropatan, daily distribution of subsistence foods within households reveals an inequality in that the labour input of a woman does not match her returns. Men put in slightly less labour and receive slightly more in subsistence returns. 'Surplus' beyond what is necessary for daily subsistence is normally controlled by the men and distributed, within the kinship idiom, to fulfil social obligations.

As a result of the history of contact with capitalism Koropata does not exactly fulfil the condition of 'no commodity exchange'. However, in subsistence activities from which it is anticipated that no monetary profit will be made, labour and goods are not exchanged as commodities. The model of economic organization in Koropata is thus based on the following conditions. All men have access to the means of production. Differences between the productive input of women and men; between daily and irregular production; between household and larger kin group co-operation and between 'subsistence' and 'surplus' areas of production create dual organizational forms which together allow long-term reproduction of the economic structure.

Where capitalism developed historically on its home ground it superseded former modes of production. However, where peripheral capitalism develops, as in Papua New Guinea, away from the metropolitan centre of capital, it subjects and transforms other modes without destroying them (Amin 1976:22). Amin describes the pattern

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19This is more specific than Gregory's (1982:116) notion of the ambiguous use of gift or commodity relations according to social context.
of transition to peripheral capitalism. Traditional manufactures and crafts are ruined without replacement by local industrial production. In the national economy there is a distortion towards export as productivity in the metropolitan centres of capitalism remains superior to that on the periphery. In the peripheral areas there is excessive growth of administrative expenditure and a leaning towards the development of light industry (Amin 1976:199-202). This typification fits well with recent analyses of developments in Papua New Guinea.20

The developments towards capitalism in a peripheral area are not a result of indigenous agricultural or industrial revolutions. Authorities, according to Amin, make deliberate attempts to monetize the economy, usually imposing taxes and the compulsory growing of export crops. As the people are forced to search for money they are forced to sell their labour as a commodity (1976:204-5). The historical section of this study has demonstrated the working out of these processes in the Northern (Oro) Province of Papua New Guinea, although labour and products are seen as commodities only in certain spheres.

The apparent paradox is that, in spite of the capitalist influences to which it has been subjected, Koropata is still able to organize its economy basically along subsistence and pre-capitalist lines.21 It appears that the subsistence 'mode' is dominant in the village economic organization. However, in reality the outside capitalist mode is dominant because the villagers are subjected to tax payments and in the past have had their surplus labour appropriated.22 Capitalism has set the limits for the operation of the village economy but in this case the limits have not been as restrictive as they might have been. There has been no forced commoditization of land and the extraction of surplus has not stifled traditional economic organization. In fact the traditional economic organization, once pacification was achieved, had the flexibility to allow for the absence of men for short periods.


21In underdeveloped countries subsistence agriculture is almost entirely outside the sphere of capitalist production but is totally involved with supplying labour and exploiting commodities for the sphere of circulation. As capital is not involved in production, the relations of production are domestic (Meillassoux 1981:95).

22See also Gregory (1982:146-7). Although the gift economy is the reference point for PNG villagers, 'the reality is that the commodity economy is the high road and the gift economy the low road, in that the former dominates the latter'.
The 'generous' limits resulting from the colonial-capitalist economy in this case have led to the impression that the traditional subsistence-oriented economy is dominant. There is no guarantee however that these limits will be maintained. The power to alter them is in the hands of the national government working within the strictures of a world capitalist system. Any decisions made by them could reveal, in a more obvious form than has been apparent up till now, the limits on development and dependency of the village, and could challenge the persistence of the 'subsistence' balance of household autonomy and kin network co-operation.
Epilogue: the Oil Palm Scheme

Since 1979 Koropata has been involved in a massive scheme for Oro (Northern) Province which entails company, smallholder and village plantations of oil palm. As demonstrated already (p. ) Koropatans entered the 'village' aspect of this scheme with enthusiastic co-operation. They made use of old land tenure conversion blocks and helped to create new blocks to be individually planted. They drew on clan and kindred ties to assemble working parties to clear the secondary forest.

The Oil Palm Scheme has the potential to lead to closer, stronger links with capitalism and to alter the sexual division of labour. It involves the clearing of 4 hectares of land on individual blocks created pragmatically on clan land but not legally registered with individual title. Oil palm block holders are entitled to a bank loan (K1830 in 1979, K2800 in 1982) to cover equipment, materials and a permanent house on the block. It was originally predicted that one and a half units of labour would be required to work three to four days a week to earn K20 a week. It was expected that the male householder would be the full unit. Harvesting of the palm fruit continues throughout the year and cannot be delayed for social considerations. The Commonwealth Development Corporation (UK) in association with the PNG Government provides the infrastructure of roads, transport, processing factory, shipping outlets for the oil tankers and the machinery for the payment of the villagers.

In 1979 on the basis of this information I predicted that the scheme had great potential to alter radically the shaky equilibrium between subsistence organization of production and the demands of outside capitalism. The complementarity and patterns of reliance of the traditional sexual division of labour would be threatened. With an income of K20 a week (almost double the minimum rural wage of the time) the temptation to buy tradestore food and neglect gardens may be so great that women may begin to rely on men for daily subsistence provisioning. Men may lose that freed time to participate in co-operative housebuilding, feast-giving and life-crisis ceremonies to ensure social reproduction. Indirectly, the co-operation of a kinship network could decline in
favour of a more atomized household economy, relying on cash and
government for future security.

Further predictions concerned the unstable world price for
oil palm and the villagers' indebtedness resulting from the initial
bank loan. A declining price would make it difficult to repay
loans within the expected time and villagers could fall permanently
into debt. I saw the lynchpin for permanent structural change,
however, to be land tenure. If the oil palm blocks were to be
converted to individual tenure and the high potential population
growth rate realized (see pp.72-3), the guarantee of land for sub-
sistence for the young men of Koropata would end. Compulsion to
seek permanent wage labour would create a greater dependence on
the capitalist system.

In 1982 I was able to observe the fruition of the 1979
plantings. In July and August 1982 most Koropatans made their
first sales of the oil palm fruit, and many were bitterly disap-
pointed with the returns. In 1982 Koropata had also ceased to exist
as a nucleated village. Three wide oil palm roads had been graded
and villagers had taken advantage of the loan to live separately on
their blocks in two-roomed, iron-roofed 'oil palm' houses. Koropata
main village consisted of two houses; two other houses had only
been recently vacated after the death of an old man and an old
woman. Only four households remained in the lower settlement and
of the twelve hamlets on the blocks of 1978 only five remained,
with about half the former number of households. After the demise
of the Endi-Ambotohane business group, many of the members of
these clans became part of the Oil Palm Scheme, leaving the settle-
ments to take up blocks along the access roads.

Were the predictions about labour requirements of oil palm
plantations fulfilled? In 1982 some oil palm advisers claimed that
only one person was needed to work two days a week to maintain and
harvest the palms. It was rumoured that some smallholdings were
run by women, while their husbands took jobs in the town. This
was not the case in Koropata. Here men took the major responsib-
ility for oil palm work, being helped by their wives and occasionally
by other relatives for the regular 10-day harvest. Although it
was not possible to repeat the time surveys of 1977, 1978 and 1979,
owing to the geographical spread of the households, observations
confirmed that the original predictions of one and a half labour
units for three to four days a week were basically correct. If
the time was not actually taken in the hard work of weeding, spray-
ing or harvesting, it was spent waiting for the nets of harvested
fruit to be weighed and picked up, or for the monthly payments to
be made.

Every household continued to keep subsistence gardens of
course, as there had only been an alternative source of food in
the last two months, from oil palm payments. It did seem, however,
that women were playing an even more important role in gardening
activity and that tradestore food was becoming a more important part of the diet. Information gathered from men who went to Popondetta immediately after receiving their payment cheque (varying from K10 to K45 for the first month) confirmed that store food and beer were popular items to be bought in exchange for oil palm money.

The permanent materials oil palm house owned by twenty-eight of the fifty-two Koropatans living individually on blocks¹ did not have the expected effect of ending co-operative labour on buildings. Almost all households had built large rest shelters or an additional traditional house to satisfy social needs and accommodation requirements for large families. The two-roomed oil palm house is not large enough for the average Koropatan family and does not allow for customary socializing in open shelters outside the home.

Labour has been diverted from pig raising. Whereas households owned an average of 2.8 pigs in 1978, in 1982 the average was 0.75 per household, a range of 0 to 8, most owning 0 to 1. On the other hand, most households had built chicken houses and many owned 10 to 20 chickens. Chickens are a more viable proposition than the pigs which damage oil palm fruit and devastate the sweet potato gardens close to living quarters. They also require less extended kin co-operation for provision at feasts.

In general, oil palm had withdrawn Koropatans, men in particular, from subsistence gardening for significant and regular amounts of time. The substitution of pigs for chickens and the provision of a permanent house constituted what appeared to be insignificant releases of labour time. The pattern of reliance on women for daily harvesting appeared vulnerable.

It is now worthwhile to consider the importance of clan and kindred co-operation. In 1982, as mentioned above, traditional housing was still required and in general involved some co-operation beyond the household. Co-operation was also in evidence, on a limited scale, for the regular 7-10 day harvests. If two or three households of brothers or cousins organized themselves quickly they could work on each other's harvests in turn. As there were only three or four days before the nets were collected larger group co-operation would put successful individual harvests in some danger. As harvesting was still something of a novelty, the very young and very old of a household joined in to help push wheelbarrows and collect dropped fruit portions. To harvest 480 palms alone would be arduous indeed.

While co-operative labour among adult householders had ebbed since 1979, for the young men of Koropata it was reaching a new

¹Others were waiting to fulfil requirements for receipt of the house.
zenith in 1982. Youth groups have flourished at one time or another in many areas of the province but this time they achieved a new prominence and credibility in Koropata. These youth groups were really junior versions of the former clan business groups. They ran tradestores, chicken runs, cleared soccer grounds and organized soccer teams, and cleared oil palm blocks for K5 to K7. One youth group received a development loan to develop its store, scone oven and chicken business. Representatives of several youth groups attended youth training courses at a coastal centre in Oro Province (Pongana). Here they learned bamboo work and business procedure.

Co-operation and kinship solidarity still persist for important life crises, particularly marriage and death, though it appears that the new lifestyle does impinge. Marriage arrangements are organized with respect to the labour requirements of oil palm and restrictions on the bereaved working after a death appear to have been eased in relation to oil palm harvests. Communication between villagers has now deteriorated. Information about particular life-crisis ceremonies may not reach all relevant people in time for thoughtful discussion before the event. The durability of both economic co-operation and the social co-operation necessary for long-term social reproduction may depend on both the price of oil palm and the attitude to separate living, given that the most important variable, individualization of land tenure, seems an unlikely development to emanate from the present government.2

The price of oil palm has varied markedly, from K4 to K80 a tonne between 1974 and 1982. In August 1982 it was K14 a tonne, so low that the company decided to reduce loan repayments and avoid disappointing the village growers too much. Such disappointment was difficult to avoid in Koropata, given that several of the older growers were convinced that the great weight of the palm fruit, compared with coffee, would bring enough money to buy a motor vehicle in the first month. At the second payment several Koropatans loudly expressed their disgust and the ex-councillor suggested that, to demonstrate their unhappiness with oil palm returns, all block holders should refuse to harvest for the next month.3 Such a plan of action, though not followed on this occasion, could have dire effects on the efficient and profitable operation of the central processing factory, if taken up on a wider scale. It is plausible that a depressed market for oil palm combined with general dissatisfaction with separate smallholder lifestyle might contribute to a return to former reliance on subsistence gardening, if these factors occur soon enough.

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2See Gregory (1982:162-5) for a discussion of legal and social forces which have worked against the commoditization of land.

3Since 1982 the price has risen slightly and growers appear to be more satisfied (Napoleon Meme, Koropata 2, pers. comm.).
In general Koropatans were pleased with their 1982 lifestyle: proud of their growing palms and of their permanent houses. However, some dissatisfactions gnawed away at the euphoria. A few leading men, after less than a year, were disenchanted with the boredom of separate living. They missed the evening discussions and storytelling from visitors, and the shouts of children running from one end of the village to the other. Since the planting of oil palm about ten young babies had died, an increase felt by some people to be due to separate living (and implicitly therefore due to an upsurge in sorcery). The current success and enthusiasm of the youth groups prompted one leader to suggest that, as there was not enough room on the plantation blocks for these young men bound by friendship and a common clan, they should rebuild the main village when they married. Hence, attitudes to separate living, though generally positive, were beginning to include doubts on the efficacy of such a changed lifestyle.

While the national government refrains from individualizing land tenure and taking legal action against those who do not repay loans, the Koropatans have a short-term negative option. They can, if the oil palm price is low and separate living no longer appealing, refuse to harvest, revert to a reliance on subsistence gardens and move closer to these in hamlets. Too long a period relying on the strongly reinforcing salty and sugary store-bought food would make this option unlikely. If followed properly, the Oil Palm Scheme operates on the principle of perpetual indebtedness of village plantation holders. The loan takes 14 years to repay. The oil palms reach peak production in years 9 to 11 and then fall off. In the fourteenth year the palms should be cut and a new loan taken out to obtain young plants, fertilizer etc. A company adviser suggested that oil palm prices should be kept low so villagers are forced to harvest all of their crop, and that electricity should perhaps be installed so villagers had a regular bill to pay and hence a regular need for money.

The path to the peasantization of Koropatans is thus clearly marked. The stage is set for a much stronger tie to the outside economy. Less obvious, but just as important to an understanding of the changes taking place, is the alteration of the nature of the sexual division of labour and the decreasing opportunity for the solidarity within clans and ego-centred networks of kin to be activated and to work towards long-term social reproduction. The traditional organization of production, a 'subsistence' balance of household autonomy and kin network co-operation, is confronted with the strongest challenge since the arrival of the Europeans.
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