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INFORMATION FLOW AND INNOVATION DIFFUSION

IN THE

EAST SEPIK DISTRICT, PAPUA NEW GUINEA

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ABSTRACT

This study is concerned with the diffusion and adoption of innovations in the Dreikikir Local Government Council Area, in the East Sepik District of Papua New Guinea. Two major hypotheses are examined; first that information movement is closely associated with the patterns of innovation diffusion and adoption, and with post-adoption use of innovations; and second, that increasing accessibility to information from the outside world is associated with increased desire for rapid and far reaching change among village people, but that the information they receive and the manner in which they perceive it, causes their responses to be disturbed and inadequate.

The study investigates, within a frame of general theories of polarised development, the flow of information from national centres through communication networks to the rural villages, which are the lowest orders of a hierarchy of central places. Almost all studies conclude that "backwash" effects will be much stronger than "spread effects" in a developing economy, unless deliberate action is taken to remedy the situation. The Papua New Guinea government is pledged to reduce inequalities between rural and urban areas, between income levels and between regions. To do this a better understanding is needed of how innovations reach rural areas and what happens when they are received by village people.

The first hypothesis is investigated by deriving a set of communication fields from various sources, including a pre-colonial ceremonial exchange network, and from foot tracks and road networks, which have existed in various periods between 1900 and the present day. Measures of accessibility from villages to places and roads in 1972 are derived from details of the personal movements of individuals in 1972. Experiences of places beyond the study area, and of the location of kin, and receipt of personal mail are also taken into account. Mass media are investigated and found to have an insignificant influence in the flow of information. The pattern of diffusion and adoption of a number of clearly identifiable innovations which have spread in the study area since 1900 are then reconstructed and compared to the patterns of information flow. Although it is not possible to investigate this relationship statistically, the patterns are seen to be closely related. The relationship between the degree of participation in innovative activities in villages in 1972 and their access to various points, is investigated using rank correlation

tests. The highest associations are found to exist between participation and access from villages to the all-weather highway leading east to the main town and port.

The second hypothesis is investigated by studying the reactions of the village people to the innovations which have spread into the area. Some of the innovations which have been adopted have been associated with small scale commercial activities, rice and coffee growing, retail trade store enterprises and passenger motor vehicle operations. Others have been related to attempts by villagers to bring about the Melanesian millenium, activities which are commonly known as 'cargo cult'. The perception of both these activities by villagers is examined, and the patterns of diffusion and adoption of them compared. In both cases patterns are found to be similar. It is argued that villagers have been motivated by their colonial experiences, to seek the possession of material wealth and power similar to that seen to be in the possession of Europeans and urban dwelling Papua New Guineans. A detailed account of the area's colonial past, and ten first hand narratives by innovative leaders are offered in support of this argument. That the reactions of village people have been greatest in those areas which have the best access to information flow is shown by referring back to the patterns established in the investigation of the first hypothesis.

The implications for future national development are twofold. First, village people may totally or partially abandon their present commercial activities, because they do not fully satisfy their highly inflated expectations. Second, millenarian-type movements may become more common, more politically oriented and more militant. Under these conditions, the introduction of growth inducing innovations into villages in rural areas will become increasingly difficult.

"The Chief

Leave us alone, for when you come
Among us we are nothing,
We have no voice anymore"

'Waitara'

Keith Sinclair

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PREFACE

The final drafts of this thesis have been written in Port Moresby, Papua New Guinea. Port Moresby suffers from some of the disadvantages of the peripheral places described in the following pages, information from world centres takes a long time to get here. Two works of direct relevance to this study (de Souza and Porter 1974; Brookfield 1975) did not reach Port Moresby until late 1975. On the other hand teaching and living in Papua New Guinea during 1974 and 1975, especially since September 1975, when the country became independent, has been a stimulating experience. During this period I have been able to visit villages in what are now the Northern, Western and Southern Highlands Provinces. There I found conditions essentially similar to those described for the East Sepik, a lack of articulation between the centre and the periphery and a resultant confusion, frustration and anxiety among village people. The need to urgently recognise this problem, and to seek solutions to it became even more apparent.

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To the people of Dreikikir, gratitude for assistance and insights into aspects of life which go far beyond the bounds of this thesis, and in particular, to the people of Tumam, with whom we lived for 15 months, and who we will never forget, a great debt is owed. If I had not felt bound by a promise to them to complete this work, which in so many ways is their story, a strong possibility exists that it would not have been finished.

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Bryant Allen,
Port Moresby,
December, 1975.

INTRODUCTION

CHAPTER 1

INTRODUCTION

Innovation diffusion is viewed by many writers as an important part of the development process. In 1955, Perroux, in arguing that the basic causes of structural and developmental change in an economy were "Schumpeterian innovations", suggested that sectors of the economy in which were clustered innovative industries, and centres best connected to them, grew faster than their counterparts (Lasuen 1969). The basic concept that growth occurs at points in economic and geographical space, and spreads through linkages to other points is also found in the arguments of Hirschman (1958) and Myrdal (1957). Friedmann (1972) in his "general theory of polarised development", defines development as a system of successive innovations, which, under a range of conditions, move out of the centres in which they are generated, and spread to other centres located at the highest points of potential interaction within a communication field, and from there to points at lower levels of interaction.

That growth stimulating innovations frequently do not spread effectively from growth centres is also recognised by these writers. Myrdal, in particular, has stressed that economic market forces will tend to increase regional differences, and unless deliberate measures are taken to control "backwash" effects and stimulate "spread" effects, slow growing areas and sectors of an economy will fall increasingly behind faster growing areas. Hirschman appears to argue for a period of deliberate imbalance in developing economies, but, presumably, with the long term objective of regional equilibrium (Higgins 1968). Friedmann (1972) in his analysis postulates an "authority/dependence" relationship developing between what he terms core areas, and peripheral places, with information reaching the latter from the former, creating effects similar to Hirschman's "backwash effects". Because the core is the administrative centre as well as the economic centre, it exercises authority over the periphery. Core areas are unlikely to relinquish their authority, without a challenge from peripheral places, a process which occurs through social and political unrest. Friedmann further argues, that this process leads to the eventual emergence of new core areas in what was formerly the periphery.

Friedmann's analysis assumes the effective movement of information between the core and the periphery. In Africa, studies of innovation diffusion have been undertaken at a macro-level as geographies of "modernisation" (Gould 1964, 1970; Riddell 1970; Soja 1968). These studies have related the spread of "modernisation" to changes in the spatial organisation of communication networks and hierarchies of places. While the paths along which "modernisation" spread have been identified, the measures of "modernisation" have tended to be activities of the colonial administration and economy, and not of the indigenous people. Soja (1968) has himself suggested that the spatial patterns created under colonial powers may not be suitable for economic growth in an independent country. Furthermore, these studies do not convincingly demonstrate that "modernising" influences moving through the networks have reached the rural villages, which are the lowest order in the hierarchies. Misra (1970) in India, and Mabogunje (1971) in Nigeria, show that lack of articulation in national communication networks and hierarchies can result in the lowest levels, the rural villages, not being effectively linked with core areas. Information which does reach rural villages may be more disruptive than growth inducing, as a number of studies in Papua New Guinea have shown (Rappaport 1971; Waddell 1972; Clarke and Ogan 1973). Another study (Howlett 1973) has argued that rural change in the New Guinea Highlands is "terminal", and will not proceed beyond a stage in which tribesmen will become smallholder peasants.

The government of Papua New Guinea has adopted a set of social and economic objectives, known as the 'Eight Aims'¹. Four of

1. The Eight Aims are: (1) a rapid increase in the proportion of the economy under the control of Papua New Guineans; (2) more equal distribution of economic benefits including equalisation of incomes among people and equalisation of services in different areas of the country; (3) decentralisation of economic activity, planning and government spending, with an emphasis on agricultural development; (4) an emphasis on small scale artisan activity; (5) a more self reliant economy, less dependent on imports; (6) an increasing capacity to meet government spending needs from locally raised revenue; (7) a rapid increase in equal and active participation by women in the economy; (8) government control and involvement in those sectors of the economy where control is necessary to achieve the desired kind of development (Papua New Guinea Central Planning Office 1973).

these objectives contain specific reference to the spread of economic and social benefits to rural areas, where in 1971, over 90 per cent of the population was resident. The Papua New Guinea Improvement Plan 1973-1974, refers specifically to three areas of inequality which the government will attempt to reduce; rural-urban inequality, income inequality and regional inequality (Papua New Guinea Central Planning Office 1973). To achieve these objectives, development agencies in Papua New Guinea will need to ensure that information about growth stimulating innovations are effectively transmitted to the rural villages. As polarisation effects are likely to be very much stronger than trickle-down or spread effects in a developing economy such as Papua New Guinea, it is important that knowledge of how information reaches villages in rural areas, and how village people react to it, is available to planners and extension workers. Diffusion studies in developing economies have been undertaken at the macro-scale, such as the "modernisation" studies in Africa, and the meso-scale (Brown and Lentnek 1973) but micro-scale studies of the spatial diffusion of innovation into subsistence economies similar to those in Papua New Guinea are rare².

This study is firmly based at the village end of the communication networks and central place hierarchy. It is concerned with the relationships between communication networks established by the colonial administration and the movement of information through them, but it also investigates the lack of articulation between the rural villages and the higher levels of the central place hierarchy, the restriction and distortion of information passing through the networks from the centre to the periphery, and the reactions of villagers to information which reaches them from the outside. Their struggles form a background to whole study, for as Torsten Hägerstrand (1970), the pioneer of modern diffusion research has recognised, "Regional science is about people not just about locations".

DIFFUSION OF INNOVATIONS

Two areas of the literature on innovation diffusion most relevant to this study are those of rural sociologists on the adoption of innovations and those of geographers on spatial diffusion.³ Because

2. Garst n.d. appears to have studied factors other than infrastructure and centralised decision making, but his 1973 paper, 'Spatial diffusion and information diffusion: a Kenyan example', *Proceedings of the Association of American Geographers* 5, 75-80, was not available at the time of writing.

3. Reviews of the voluminous literature generated by research on innovation diffusion include Lionberger 1960, Rogers 1962, Katz *et.al.* 1963, Jones 1967, Brown 1968, and Brown and Moore 1969. The first four papers deal largely with diffusion in social groups, in particular farmers, and the last two papers are on spatial diffusion.

most of this research is based on industrialised economies, it is not wholly applicable in this study. In particular, models of the adoption process, the characteristics of adopters and the characteristics of innovations, which influence rates of adoption, are wanting. However, much of the material on the communication behaviour of individuals is relevant, as are many parts of existing models of spatial diffusion.

Spatial Diffusion

Diffusion is the spread of an innovation in space over time. The spread occurs because information about the innovation is passed from a point in possession of the innovation, to a point not in possession of the innovation. Geographers have tended to concentrate their investigations on the characteristics of the space across which communications take place, and the characteristics of places which are derived from their relative location in the space.

The characteristics of the space across which messages are sent, and the relative locations of sender and receiver, have been conceptualised as being influenced by "force-field biases" by Brown (1968) after Rapoport (1951, 1957). Distance, either geographical or abstract distance, such as cost distance, is an all-pervading bias in spaces of all types. The friction of distance means that as a general rule, most communication will take place between points located closest to each other. However, if spatial biases are not uniformly distributed, communication may be easier between some points, than others. As Morrill (1970) explains, "The fact of spatial separation causes diffusion to spread gradually, and the differential quality of space causes the spread to be more general in some areas than others".

Spatial inequalities may exist for a number of reasons. There may be physical barriers to movement such as water bodies or mountains, or communication facilities may differ in quality and quantity. Political barriers may also prevent movement or communication. Differences in languages or social class may be just as effective barriers to movements as mountain ranges. On the other hand although relatively large physical distances separate some groups of people, they will still communicate, for example migrants will communicate with their families, and branches of a business will communicate with one another.

A concept developed to investigate communication behaviour is the "mean information field". This measure specifies, within a

given area, the mathematical probabilities of interaction and contact between points located within the space. Mean information fields have been derived from surrogate measures of interpersonal communication, such as telephone traffic between centres, and migration statistics (Hägerstrand 1966, 1968; Marble and Nyusten 1963; Wolpert 1966). Mean information fields were used by Hägerstrand (1968) to simulate the diffusion of a number of items, and replicate closely, the patterns of the original diffusion. He was led to conclude that the most important factor influencing the pattern of spatial diffusion, even in industrialised countries, was inter-personal communication.

This is an important finding for innovation diffusion research in developing areas, where complex electronic facilities for communication either do not exist, or cannot be used by the mass of the population and the mass media are ineffective, because it suggests that the basic mechanism which 'powers' the diffusion process, is similar in all cultures. It suggests that if the communication behaviour of a group of people can be established, it will be found to be closely related to the pattern formed by the diffusion of innovations in the same area.

Adoption

In simple terms, adoption is the act of beginning to use an innovation, or of taking part in an innovative activity. The pattern of diffusion of an innovation in space is usually related to the changing spatial patterns of adoptions, over time. There are problems with this approach, however, for the process influencing the spread of information about an innovation may be different from those influencing the adoption behaviour of the people in receipt of the information. Sociologists have mostly related adoption behaviour to individual personal characteristics⁵, but geographers have suggested that location, relative to other adopters, or "the neighbourhood effect (Cliff 1968) is an important variable. However, van den Ban (1960), Coughenour (1964) and Fliegel (1969) recognise the importance of the attitude towards change within a whole community or "locality group", on the adoption decisions of individuals.

5. For examples, see Brien *et al.* 1965; Becker 1970; Chattopadhyay and Pareek 1967; Coleman *et al.* 1959; Crouch 1970; Goldsen and Ralis 1957; Fliegel 1965; Junghare and Roy 1963; T. Moulik *et al.* 1966; T. Moulik and Lokhande 1969; Madigan 1962; Obibuaka 1967; Rogers 1967, 1969; Smock 1969; Tulley *et al.* 1964.

Personal characteristics commonly found to be most highly associated with the early adoption of an innovation are age, socio-economic status and intellectual ability. Similar characteristics are identified in their "modern men" by Smith and Inkeles (1966), and in the "entrepreneurs" of Hagen (1966) and Poponoe (1968). Early adopters are likely to be younger, more mobile and to have had wider than normal experiences. Case studies of Papua New Guinean "entrepreneurs" (Crocombe *et al.* 1967; Finney 1969) show them to have similar characteristics.

A serious criticism of many sociological studies of adoption within communities, is their almost complete lack of interest in the history of group with which they are dealing. Bock (1970) criticises Rogers (1969), for ignoring Colombia's colonial past and any sense of political process in the villages under study. One of the major themes in this study is the manner in which the contact between the villagers and the colonial power was a primary motivating force behind the rapidity and frequency of the adoption of innovations. Hagen (1962, 1851) asks,

"Since the stability of the structure and functioning of traditional societies is great...what forces will cause a group to emerge which abandons traditional ways and turns its energies to the tasks of technological advance?"

He argues that colonialism, where outsiders come uninvited and conquer by force, provides an unqualified demonstration that the structure of the indigenous society is of no importance. The colonial power interferes with customary patterns of leadership, the economic functioning of the indigenous society and the religious and ceremonial aspects of life, and even where there is no direct interference, the coloniser makes it clear that he considers the old life to be of no value. Hagen terms this phenomenon "withdrawal of status respect", and argues that it is this perception by some people that they are no longer respected by the outsiders with whom they have contact which causes them to seek dramatic changes to their old way of life.

Mannoni (1956) goes even further, arguing,

"...a colonial situation is created...the very instant a white man, even if he is alone, appears in the midst of a tribe, even if it is independent, so long as he is thought to be rich or powerful, or merely immune to the local forces of magic, and so long as he derives from his position, even though only in his most secret self, a feeling of his own superiority".

Geographers have previously recognised the impact of colonialism (Buchanan 1964; Blaut 1970; Brookfield 1972). A study of innovation diffusion in a rural area of a colonial country, cannot ignore this factor.

To return to the subject of adoption, many sociological studies use a model of the adoption process formalised by Lionberger (1960) and Rogers (1962) and justified as being appropriate by Bohlen (1967). They model the adoption process as a series of stages through which an individual passes before making a decision whether or not to adopt an innovation. An individual first becomes aware that an innovation exists, he then becomes interested, he evaluates its utility, he tries the innovation and finally decides to adopt or reject it.

A serious criticism of this model has been offered by Coughenour (1965), who argues that farmers in the United States cannot recall accurately the times they first became aware of an innovation, became interested, and so on. He found in a test-retest experiment in Ohio, that the dates farmers gave for various stages varied by up to three years and by up to three standard deviation units. The error increased with time. He suggested that innovations not more than 10 years old should be studied, and that the adoption process should be set into an historical context of other notable events, preferably documented, to allow a continuous cross-check on farmers' information.

Another criticism of the Lionberger-Rogers model is made by von Fleckenstein (1971) who found it inappropriate in the context of rural peasant farmers in Northern Thailand. He has proposed (von Fleckenstein 1972) a model of five stages, awareness, community decision, initial adoption, crisis, continuation or rejection as being more appropriate. He suggests that adoption is largely a community decision and follows rapidly upon awareness, which also tends to occur almost simultaneously for all members of the community because of the nature of village communication networks. Only after adoption, does the community find the innovation has hidden costs, or is beyond their technological capabilities. A crisis develops and the community may decide either to discontinue using the innovation, or may continue using it, but at well below "100 per cent utilisation" (Rogers 1962).

A further shortcoming of the Lionberger-Rogers model is the lack of attention it places on post-adoption behaviour. It appears to

be implicitly accepted in most studies employing this model that once an individual has adopted an innovation, he will continue a "100 per cent utilisation of the idea". Many cases of under utilisation or abandonment of introduced cash crops exist in Papua New Guinea (Brookfield 1972; Crocombe 1964; Crocombe *et al.* 1967; Finney 1969; Fairbairn 1969; Ogan 1972; T. Moulik 1974). This behaviour has obvious implications for the satisfactory long term development of the national economy.

Another factor which is considered to influence the rate at which an innovation is adopted, is the characteristics of the innovation itself. Considerable argument has developed over which characteristics are the most important⁶. However, much of this material is not applicable to the situation in which this study was undertaken. This is because none of these studies adequately tackles the problem of the differences between the 'actual' characteristics of an innovation, and those characteristics which are 'perceived' by the potential adopters. Kivlin and Fliegel (1967) recognise that farmers may perceive innovations in quite a different manner from that of an extension agent, and they find that "middle-scale" and "small-scale" dairy farmers in the United States perceive different characteristics of the same innovation as being important. They suggest that this factor may be very important in developing areas. In a later paper, (Fliegel, Kivlin and Sekhon 1968), they find that Indian farmers are comparable to United States farmers in the characteristics of an innovation which are perceived as being the most important, but that they differ in their reactions to these factors. Capital investment and substitution of technology for human labour are disincentives in India, whereas they are incentives in the United States. But the crucial problem of farmers misperceiving the 'actual' characteristics of an innovation are not discussed.

The perception, potential adopters have of an innovation, is directly related to what sort of information they receive about it. The sociology of information flow and innovation diffusion has also been the subject of much research by rural sociologists. They have been most interested in sources of information external and internal

6. Most of this debate has been carried out in the pages of *Rural Sociology*. See for example Griliches 1962 and Rogers and Havens 1962.

to a community (Jacobs *et al.* 1966), communication behaviour within a social group, the influence of the mass media (Katz 1957), the use of different sources of information at different stages of the adoption process (Mason 1964; Sawhney 1967), and the identification of individuals within a community who provide information to their fellows (Rogers and Cartarno 1962). Again, the findings from this research are not entirely applicable in this study.

These studies in general, assume information reaches individuals from one of three sources; another person from within the community, known as "localite source" (Rogers 1962), a person from outside the community, a "cosmopolite source", or from the mass media, an "impersonal source". Some individuals are more likely than others to be the source of personal localite information than others. These people have been termed "opinion leaders" and those to whom they pass on information, their "followers". Opinion leaders are found in these studies to frequently provide the link between a community and cosmopolite information sources. The latter are usually extension agents or salesmen. Opinion leaders are found to be younger, better educated and to be more geographically mobile.

A serious flaw in many of the sociological studies is the lack of any attempt to relate the identification and behaviour of "opinion leaders" and their "followers" to the social group or community of which they are a part. The conflicts between customary leaders and younger men are rarely discussed, and kinship is usually ignored. Bock's (1970) criticism of Rogers' (1969) work, that what is lacking is any sense of villages as human communities, can be levelled at most of these papers.

Another failing in much of the sociological works is the implied assumption that information passed from extension workers to villagers, or in some way or another, from technologically 'advanced' areas to technologically 'backward' areas, is passed without deterioration in the quality or quantity of the information. Effective transmission of information does not occur in developing areas, and evidence exists that distortion also occurs, even in the most 'advanced' areas (Woolmington 1973).

Kavadias (1966) in his discussion of the assimilation of scientific and technological messages by "backward" people, argues that if a message which is received, is to be properly understood, it must have a "frame-of-reference" in the receivers' minds. Because the

minds of "traditional" peoples are dominated by "myth" the message will almost always be perceived within a frame dominated by "mythical" explanations of the universe. Traditional people perceive space, time and causality in a different manner from "rational" people. Space is essentially qualitative, time cyclic and sometimes reversible, and causality is related to innumerable "invisible" forces which govern the elements of the world. Thus, "ideas received by traditional peoples from the rational world will either be likely to be misunderstood, or rejected". Although better terms than "myth" and "rational" could be suggested, Kavadias' approach is more applicable to the problems encountered in this study in relation to the communication of information about innovations into rural villages in Papua New Guinea, than the studies cited above. Kavadias suggests, that without previous anthropological and other social science groundwork, messages passed to traditional peoples will produce psychological effects which will, in the short term, aggravate the non-assimilation of further messages, and in the long term, create conditions which will disrupt attempts to bring about planned social and economic change. People will become distrustful, frustrated, anxious and will indulge in compensatory and escapist behaviour. He suggests that information transmission in such a psychologically disturbed climate will be difficult indeed.

Kavadias also predicts that as a message is passed from individual to individual, and from group to group it will be changed slightly at each passing because it cannot be assimilated by the receivers, who therefore, adapt it to their own frames of reference, before passing it on.

Innovations

In abstract terms, innovations have been conceived as ideas. Tarde (1903, 145) for example, described an innovation as,

"...the thing which is invented, the thing which is imitated, is always an idea or volition, a judgement or purpose".

More recently Barnett (1953, 7) has defined an innovation as,

"...any thought, behaviour or thing that is new because it is qualitatively different from existing forms. Strictly speaking every innovation is an idea, or a constellation of ideas",

but qualified his definition by stating that an innovation must involve a reorganisation or recombination of elements and not merely the addition or subtraction of elements from an existing idea. The economist Schumpeter (1947, 151) also employed the term innovation,

defining it as a "creative response" on the part of individuals, by "any doing of things in a new way", which results in an increase in productivity. This may be achieved by the introduction of a new food, a new method of production, opening a new market, exploiting a new supply of raw materials or creating a new organisation within an enterprise.

Innovation was originally used by anthropologists to mean "a continually occurring process within a culture" (Linton 1936, 306), but recent usage implies that almost all social and cultural change is the result of acculturation, the movement of items from one culture to another, or of planned change (Ponsioen 1962).

Environmental Influences on Adoption

Within any particular space there are likely to be unique elements which will influence the adoption of innovations. In North America and Europe for example, the amount of land cultivated by an individual has been found to be positively related to adoption (Copp 1958; Fliegel 1956; Kivlin and Fliegel 1967), but in developing areas, no clear relationship has been found to exist (Roy *et al.* 1968; Fliegel 1968; Rogers 1969).

Differences in land tenure or in rights of access and use of land may also influence a farmer's decision to adopt. Cross-cultural differences in the organisation of land tenure have prevented any general findings for this variable, but security of tenure has been found to be positively related to adoption (Lionberger 1960; Roy *et al.* 1968; Mellor 1969; Elder 1962).

When dealing with land tenure, a distinction must be drawn between the "ideal model" of the system, (patrilineal inheritance for example), and the tenure system as it operates. Lea (1969b) has shown that the Abalam tenure system is, in practice, extremely flexible. Firth (1969) suggests that many traditional land tenure systems offer an individual a fair range of choice in the selection of land for agricultural activities, through a wide range of amorphous ties to cognatic and affinal kin, provided the individual has the ability to exploit the system to its fullest extent.

The total amount of land available to an individual or a community may also influence to what extent an agricultural innovation is adopted and exploited. Land availability is related to the suitability of an area for the cultivation of certain crops. If an individual does not have land suitable for the cultivation of a new

crop, or does not have suitable land within a reasonable distance from his residence, he may not adopt. The zonation of land use around villages or residences (Prothero 1957; Morgan 1969; Blaikie 1971; Brown and Brookfield 1967) indicates that village farmers do take account of the influence of distance and the returns from a crop. This factor could be expected to be particularly important where all produce is moved by human portorage. The distance factor can also be expected to influence the cultivation of a cash crop which has to be carried to a market point. This factor is directly related to the characteristics of the space under study discussed previously.

The social organisation of communities will also impinge on individual decisions to adopt an innovation. Ortiz (1967) lucidly describes how a traditional farmer must take into account not only his physical environment, but also his social environment, when deciding which course of action will give him the greatest utility. He may not be able to adopt an innovation without assistance from others, which will, because of strong institutionalised obligations require him to reciprocate at a later time. If the farmer is involved in a ceremonial exchange system, the extra demands of his innovatory activity may require him to withdraw from exchanges. Contrary to Fisk's (1962, 1964) assumption that ceremonial activities are "leisure" time available at low or nil cost for investment in a new form of production, this cost may prove to be too high for all but a few highly deviant individuals.

HYPOTHESES

This study investigates two major hypotheses: the first is, that information flow is closely associated with patterns of innovation diffusion and adoption, and the patterns of post-adoption use of innovations; the second is, that increasing contact with the outside world, (which is synonymous with improved accessibility to information flow), is associated with increasing desire for rapid and far reaching changes among village people, but the information they receive and the manner in which they perceive it causes their responses to be disturbed and inadequate.

The arguments are presented in the following manner. First the area selected for study is described to establish the particular characteristics of the diffusion space, relevant to the study (Chapter 2). The advent of colonial control between 1900 and 1942, and the experiences of village people in the 1942-45 war are described in some detail (Chapter 3), to establish firstly, that these have been deeply

disturbing events, and secondly, to provide an historical sequence upon which to hang other material. A description and analysis of communication networks before colonial contact, between 1921 and 1942 and since 1945 follows (Chapter 4). These networks are used to derive communication surfaces. The communication behaviour of individuals in 1972 is described and from this material communication surfaces based on accessibility to an administrative post within the study area and to the main all-weather vehicle road leading from the area, east to the largest town, are constructed.

The diffusion of a number of innovations between about 1930 and 1972 are described (Chapters 5, 6 and 7) and the pattern of their diffusion and adoption in different parts of the study area are related to the communication surfaces described. Post-adoption participation in innovative activity in 1972 is analysed spatially (Chapters 6 and 7).

The association between measures of participation in innovative activity in 1972 and a number of factors including land availability, village size, availability of capital, accessibility to a cash crop buying point and accessibility to an administrative post and the all-weather road link with east are tested using, where data are suitable, a rank correlation (Chapter 8).

Parallel and related to these arguments is a description of the reaction of the village people to the steadily improving accessibility to information from the outside world. Before 1946 information was imposed upon villagers, or offered to them from a position of power. Since the Second World War, improved accessibility has resulted in increased contact with a centralised, bureaucratised administration. The village people have reacted by seeking their own sources of wealth and power. Two main sources of power have been tried, one viewed by the administration as legitimate and rational economic behaviour, small scale commercial activities, in particular the cultivation of rice and coffee for sale, and the other frequently viewed as illegitimate and irrational behaviour, the rituals and practices associated with attempts to bring about a Melanesian millenium. The reasons for this behaviour and the implications for national development in Papua New Guinea are presented in Chapter 8.

METHODOLOGY

This study was originally conceived to be an investigation of the spread of rice and coffee growing in the Maprik Sub-district of the East Sepik District of Papua New Guinea, within the framework of

innovation diffusion theory. This area was selected for study because it is one of the most densely settled lowland areas of Papua New Guinea, both crops have diffused there relatively recently, and the chances of being able to generate village level production data appeared to be good. A field reconnaissance was begun in September 1971 after approximately one month archival research in Port Moresby government offices. It was found that the Dreikikir Local Government Council Area⁷ (Figure 1.1) best satisfied the broad requirements of an area in which administrative and cultural boundaries generally coincided and in which both crops were under cultivation. Tumam village was selected as a base for the overall study mainly because it is centrally located and is large enough for a case study.

About three weeks were spent assisting village men to construct a house in which my wife and two young children could live for 13 months. During this period contacts were made with men who had been leaders in the innovative activities described later in the study. Also, during this period, the people of Tumam were becoming increasingly involved in new religious-political movement known as the Peli Association. This led to the discovery that a millenarian-type movement had occurred in all parts of the area in 1956. Discussion with Tumam men led increasingly to the realisation that these movements were perceived in a similar manner to the small scale commercial activities which I had come to study. A decision was therefore made in November 1971, to treat them as innovations and include them in the study, together with rice and coffee growing.

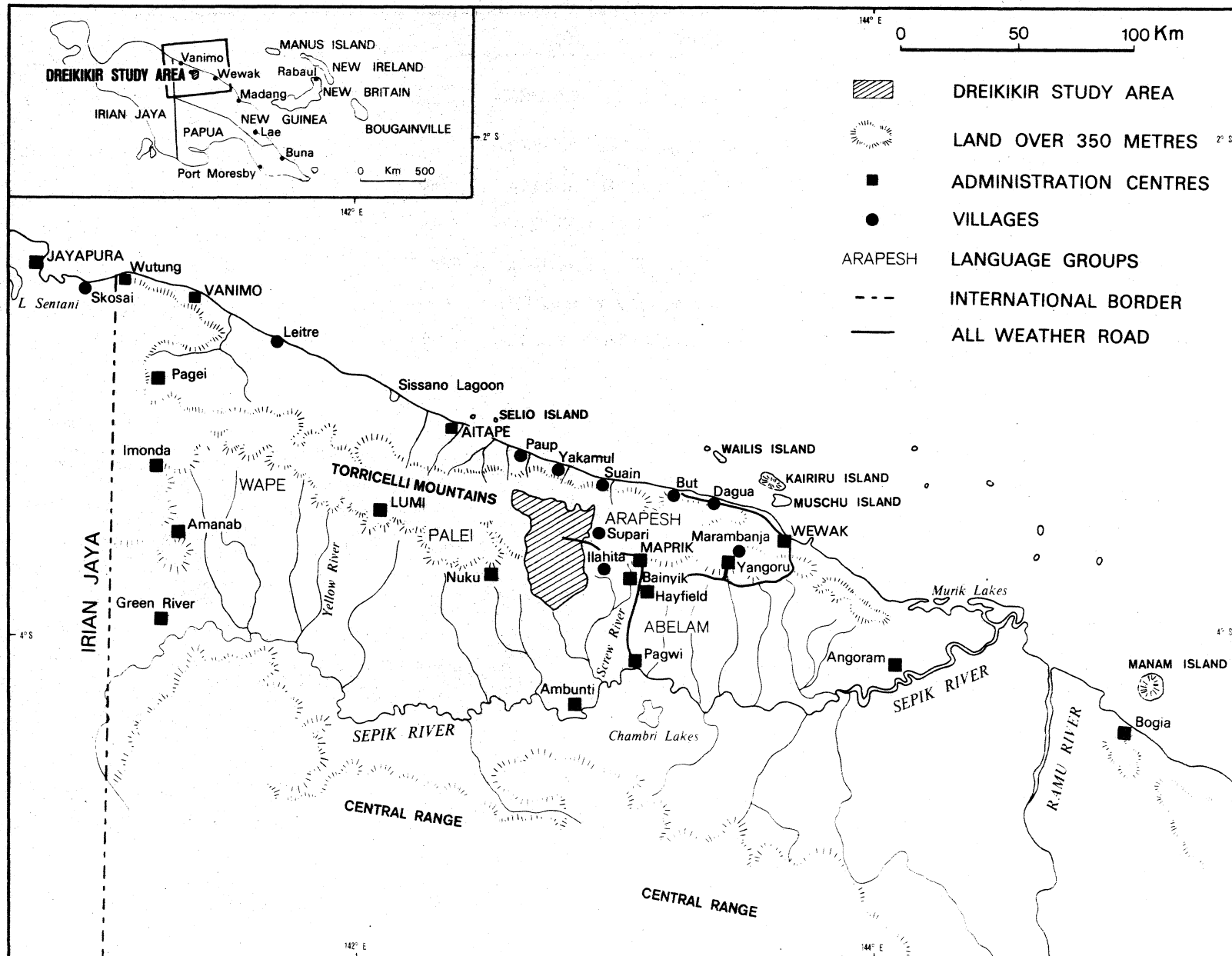
I was joined by my family in Port Moresby in November 1971 where further archival research was undertaken. We arrived back at Tumam in early December and remained there until December 1972.

Data Sources

Information presented in this thesis is from a number of sources. Documents and archival material was consulted in Port Moresby, Wewak, Maprik and Dreikikir, as well as in the Commonwealth Archives and the Australian War Memorial, Canberra. A translation of the German Colonial Gazette on microfilm in the Menzies Library, ANU

7. A detailed fold-out map of the study area can be found in the end papers of the thesis. Although village data are all reduced to ratios of the total adult or adult male population, a map showing the distribution of village populations in the Dreikikir area is presented in Appendix G.

FIGURE 1.1 LOCATION OF THE DREIKIKIR STUDY AREA



provided brief references to the period before 1914, and a number of published articles and books referring to the pre-war period in the study area were used. These sources provide dates of notable events and a sequential frame, but they contain an interpretation of events from only the point-of-view of the outsider. Unstructured interviews with individuals and groups throughout the study area provided another interpretation of the events, and in many cases brought them to my notice for the first time. For in numerous cases, events which were recounted to me by villagers, were documented only after my return to Canberra.

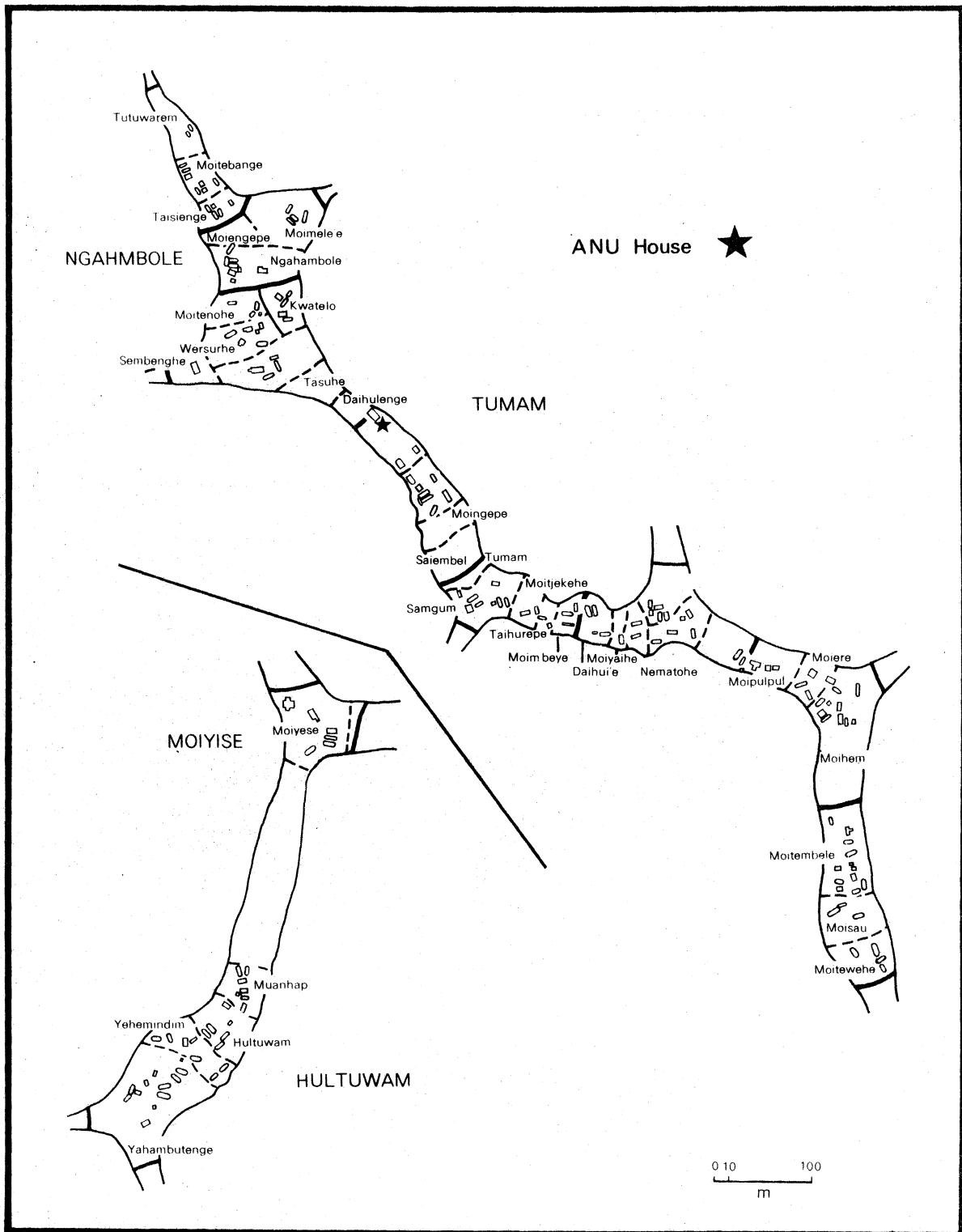
Leaders of the innovative activities described in this study were identified from administration reports, and during discussions with Tumam men. They were visited, in their villages, more than once in most cases, and their narratives recorded in Pidgin. Translations are presented in Appendix C. The reader is urged to consult Appendix C before reading too far into the thesis, certainly before proceeding with Part II.

Unstructured interviews were conducted with groups of men in 71 of the 75 villages in the area. Walking tours were made to all census divisions. On arrival in a village, contact was made with a leading man, the work explained, and an invitation issued to a number of men for a night-time story telling session. Men I tried to get to come to these meetings were ex-village officials, any old men who could remember contact events, men who had been local leaders in any of the innovative activities which were under study, ex-mission catechists, ex-policemen, ex-servicemen and present day leaders, including Peli Association committeemen. These meetings in almost all cases, proved an outstanding source of information.

The research was presented to informants as an attempt to record and tell people in Australia and other parts of the world, their recent history in particular their involvement in the activities under study. People responded enthusiastically to this approach insisting that I should record only stories which were known to be accurate. The interviews covered a wide range of topics and often carried on well into the early morning hours. A checklist of topics covered is presented in Appendix A.

Tumam village was used as a case study. Soon after arriving a tape-and-compass survey was made of the village, all houses plotted on a map (Figure 1.2) and a village census carried out. Basic

FIGURE 1.2 TUMAM VILLAGE, 1972



Source: Tape and Compass Survey, 1971.

genealogical details were collected from each household, which included clan and dual division affiliations. Later 75 males, heads of households, were interviewed systematically. Their participation in past innovative activity, their labour histories, work experiences, location of relatives outside the village, personal movements, radio listening preferences and printed matter in their possession, were investigated. In addition details of their gardens in 1971 and 1972 were recorded as a cross check on a garden survey which was carried out simultaneously. All gardens were surveyed by tape-and-compass, crops and tenure recorded. All interviews in Tumam and elsewhere, were carried out in Pidgin, except where an aged informant could not speak Pidgin, in which case an interpreter was used. In view of the number of mutually unintelligible languages in the area selected for study, no attempt was made to learn a vernacular language.

Rice and coffee production data and cooperative membership numbers were generated from individual grower receipts and records in the share registers of the Sepik Producers' Cooperative Association, Hayfield. Coffee tree numbers were drawn from individual grower census sheets held at Dreikikir. Individual records were coded and a computer used to tabulate data by village. Further details of these sources are provided in Appendix B. Peli Association membership was collected for each village from committeemen of this movement who were required by their leaders, to keep a record of how many people had joined.

Orthography

In the text Pidgin words are underlined and vernacular words italicised. Although it is not correct to form the plural of Pidgin words by adding 's', this has been done to avoid confusion over whether a word is plural or singular. The spelling of Pidgin words follows Mihalic (1971) and where Pidgin words are used which are not included in this dictionary, simple phoenetic spelling is employed. Vernacular words are spelt phoenetically, with /' / indicating a glottal stop.

PART I

THE DREIKIKIR AREA

CHAPTER 2ASPECTS OF THE PHYSICAL AND SOCIAL SPACE

Spatial and sociological diffusion studies, the two main areas of diffusion research, are concerned with essentially the same phenomenon, the effective flow of information across space. In the first case the space is geographical, in the second, social. The effective flow of information is constrained by barriers to communication, physical and social, and by the characteristics of the nodes of origin and destination, be they places or people. The first part of this chapter describes the major physical aspects of the Dreikikir Local Government Council Area, as they relate to these considerations. The second part of the chapter describes traditional intra- and inter-village relationships. It identifies the major social, political and economic groups involved, describes the types of relationships which took place between them, and discusses their functions as they relate to the movement of information and the adoption of innovations.

THE TORRICELLI FOOTHILLS¹Surface Configuration

The study area comprises a strip of country approximately 30 kilometers wide and 45 kilometers long, on the southern, or Sepik, fall of the Torricelli Mountains. Part of the Bewani-Torricelli-Prince Alexander chain, the Torricelli Mountains run parallel to the coast of northwestern New Guinea, reaching a little over 2,000 meters at the highest point. To the north of the range lies a relatively narrow coastal plain. The mountains consist of several heavily dissected semi-parallel ranges, with steep north facing scarps. From near the watershed, on the southern fall, Tertiary sediments, mudstones, sandstones and conglomerates, form a wide band of foothill country which runs south to merge into the alluvial sediments of the Sepik plain. South flowing streams have dissected the soft Tertiary materials into an intricate ridge and valley pattern, with relative relief between 200 and 300 meters in the north and decreasing to the south.

1. Haantjens (1972) contains a detailed description of the physical aspects of the country between Aitape and Ambunti.

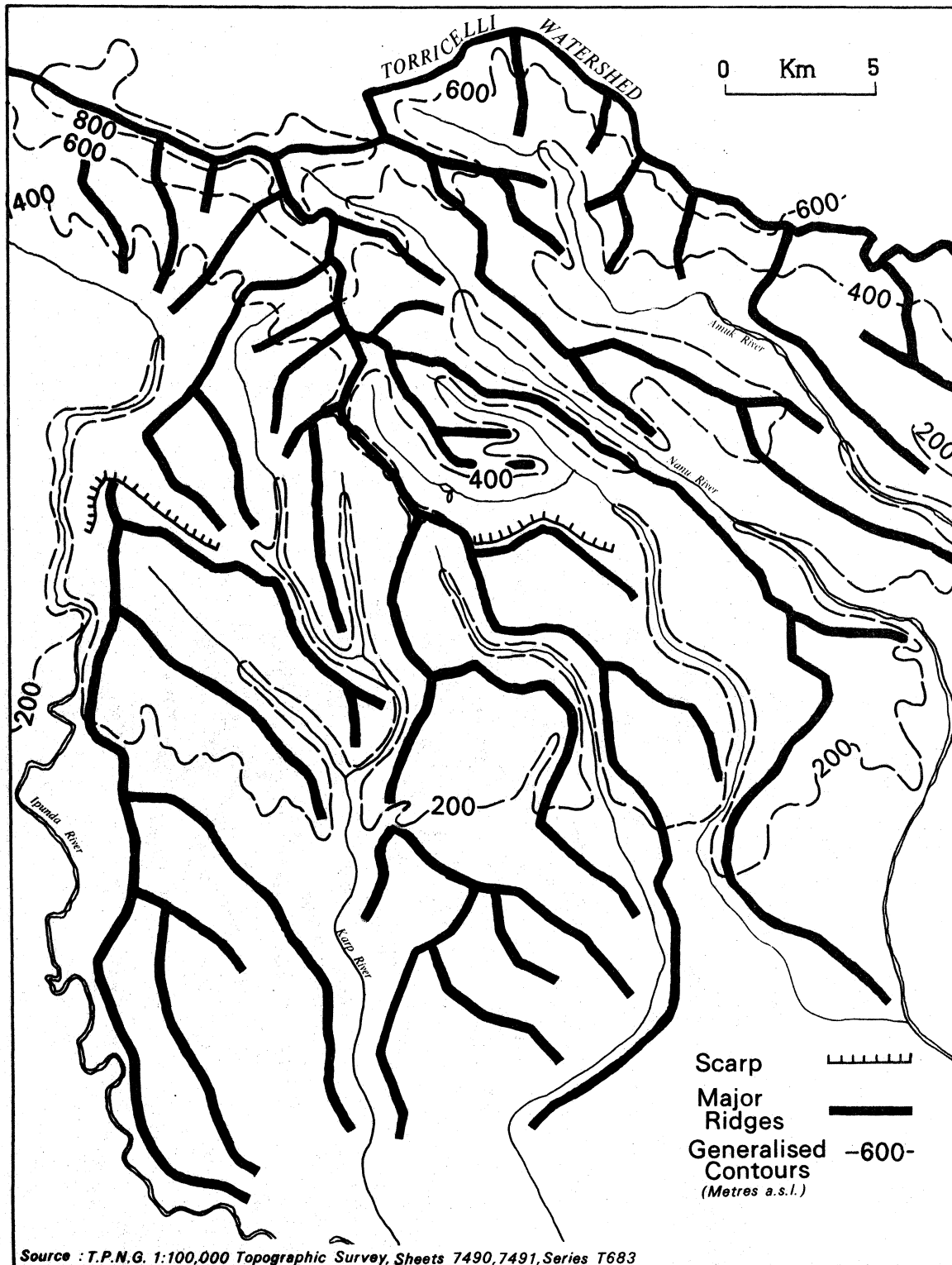
A variety of slope forms occur in the study area. Overall they are characterised by moderate to strong slumping, which has given rise to a characteristic pattern of emergent crests and steep slopes near the top of the ridges, generally concave upper slopes, mounds of slumped material midway between ridge and valley bottom which creates swampy patches, and convex lower slopes with incised streams. Most ridge summits are generally accordant, with the exception of an area in the north-west, where slumping has created a very uneven ridge pattern. A north facing scarp cuts across the area from west to east. This scarp is particularly marked in the west where it is in the order of 100 meters and causes a sharp break in ridge top accordance. Figure 2.1 shows the major physical features of the study area.

With one exception, all villages are located on ridge tops and all major lines of communication now follow ridges wherever possible. Prior to European contact, the influence of the ridges upon communications appears to have been less significant. Then tracks were overgrown, barely discernible, and often followed precipitous routes. Townsend (1968, 66) describes the ascent to Arisili from the Amuk River in 1921 as, "so steep that one was forced to climb up holding on to lengths of lawyer cane dangling down the cliff face". Following contact, tracks were cut and re-routed to avoid, where possible, major ascents and descents. From this time on, the pattern of ridges began to have an increasing influence on the location of main routes.

Climate

Climatic records for the area are unsatisfactory. Continuous rainfall records have been collected at Dreikikir for only six years (1966-1972) and no regular temperature or relative humidity readings have ever been taken. Annual rainfall at Dreikikir Patrol Post for the six years to 1972 averaged 1702 mm (67 in) McAlpine 1972,61). Total rainfall recorded at the same station for 1969 was 1753 mm (69 in), for 1970, 1778 mm (70 in) and from January to October 1971, 2184 mm (86 in) (Swainson 1972). Of more concern however, is the seasonality of rainfall because of the manner in which it influences communications and determines the growing season of annual crops. Figures presented by McAlpine (1972,61) show that for the six year period, 32 per cent of the average annual rain fell between January and March, 22 per cent between April and June, 18 per cent between July and September and 28 per cent between October and

FIGURE 2.1 MAJOR PHYSICAL FEATURES, DREIKIKIR STUDY AREA



December. Thus 60 per cent of the rain received in those years fell between October and March. McAlpine finds there is a 13 per cent variability in total rainfall at Bainyik, the station most similar to Dreikikir, and a 30 per cent variability in October to March rainfall. No figures are available for Dreikikir Patrol Post on the length of rainy and rainless periods.²

Temperature recordings collected by the writer over a broken 15 month period show a mean maximum temperature of 30°C and a mean minimum of 22°C. The maximum temperature recorded was 34°C and the minimum 19°C. The highest temperature was recorded at 1500 hrs in September and the lowest on a very wet, misty morning in March. During the rainy season, damp, heavy mists are common in the mornings.

Thunderstorm activity is common and frequently takes the form of heavy afternoon downpours preceded by strong winds. Violent electrical storms occur less frequently, but lightning flickers about the horizon every night.

With increased rainfall between October and March walking tracks and unsurfaced vehicle roads become saturated. Where drainage is impeded bogs form and in other areas the mudstone becomes extremely slippery. Movement on foot requires greater effort and in areas where vehicular movement is heaviest wheel ruts form until even four-wheel-drive vehicles become bellied, and moderate grades become difficult and sometimes dangerous.

The knowledge that heavy falls of rain can be expected from late September on, influences gardening activity to a great extent. New gardens are cleared and burned during August and September and yams are planted to catch the rains. The early or late arrival of the rain causes concern, as does too much or too little rain. Unseasonal rain, or squalls which approach from an unusual direction are blamed upon magic made by people in other villages, and slit gongs are sounded in protest.³ Droughts are not unknown but appear

2. An examination of the daily rainfall recordings for Dreikikir Patrol Post produced a suspicious number of rainless weekends, followed by some very wet Mondays.

3. At Kubriwat informants described how their fathers had forced the Moiwhak hamlets to retire some kilometers east to their present site. When asked why the tiny hamlet of Manglen had been left untouched they retorted, "If Manglen has been destroyed, who would there be now to beat the slit-gongs and stop the rain which comes from the Urats?"

to be rare. Variation of climate over the study area appears to be minimal, but no information exists with which to check this impression. If yam growing provides any guide, areas at higher elevations receive more rain. In the northwest, yams give way to taro and banana gardens supported by sago production. The yam is well adapted to wet and dry season regimes (Coursesy 1967,71), but Urat gardeners maintain that too much rain is worse than too little, as the growing tubers will rot in the ground if the soil becomes saturated for long periods. During dry periods they will survive until rain is again received when they will resume growing. Sago and taro however can withstand wetter conditions. Some extensive areas of grass in the southwest suggest a drier climate.

Vegetation

A tall lowland hill forest with an irregular canopy is the most common primary vegetation in the study area, but it has been extensively replaced by secondary forest. Even apparently untouched areas of forest, such as that west of Yubanakor and north of Daina, are said by local people to have been the site of a number of former settlements, and would therefore have been cut and gardened. Below 600 meters above sea level the majority of ridges have patches of *Imperata* and *Themeda* grasses (Heyligers 1972).⁴ Sago stands occur in valley bottoms and other swampy areas formed by slumping.

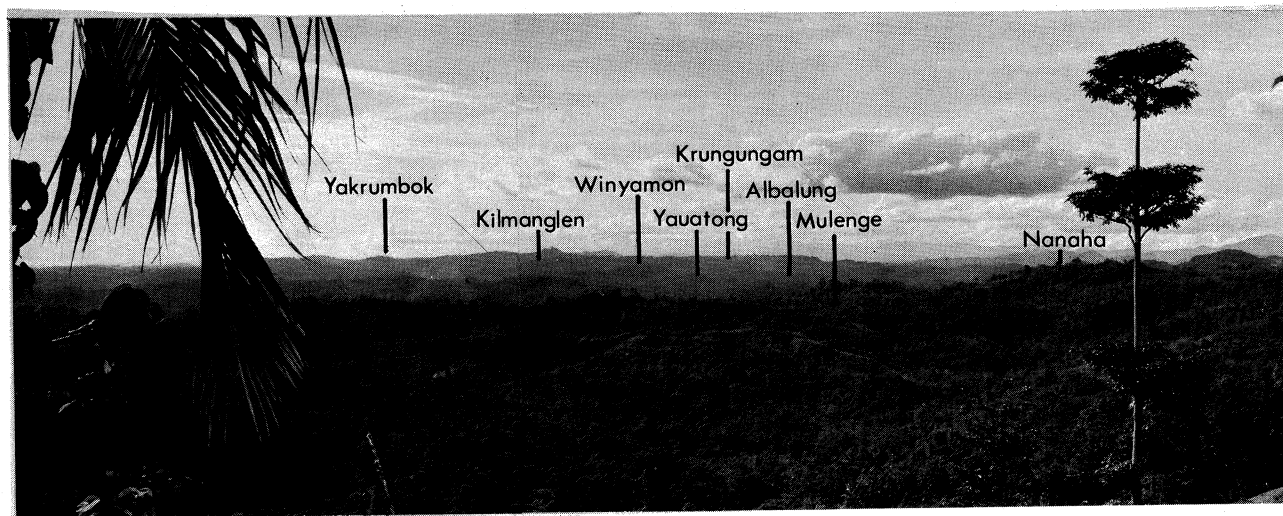
Earthquakes

The study area lies in a major earthquake zone. Two large shocks have occurred in the area in the first half of this century, in 1907 and 1935. The latter occurred at about 1130 hours on the 20th September, 1935, with a magnitude of 7.9 on the Richter Scale and an epicentre near Lumi (Haantjens and McAlpine 1972,9) and caused widespread damage throughout the study area. The earthquake is vividly remembered by people who experienced it.⁵ Many village houses collapsed, fissures appeared in the ground and the hill country was

4. Tumam men relate how, before the introduction of steel axes, gardens tended to follow the ridge tops, rather than running from the ridge down into the valleys as they do now. With steel axes they were able to cut further down into the valleys, and thus the shape of gardens has changed, as well as increasing in size. It seems likely that this factor, combined with less soil moisture on the ridge tops, has allowed the grasses to become dominant.

5. For example see Appendix C, Mahanung's narrative. The earthquake has been incorporated into many millennial-type myths which circulate in the study area.

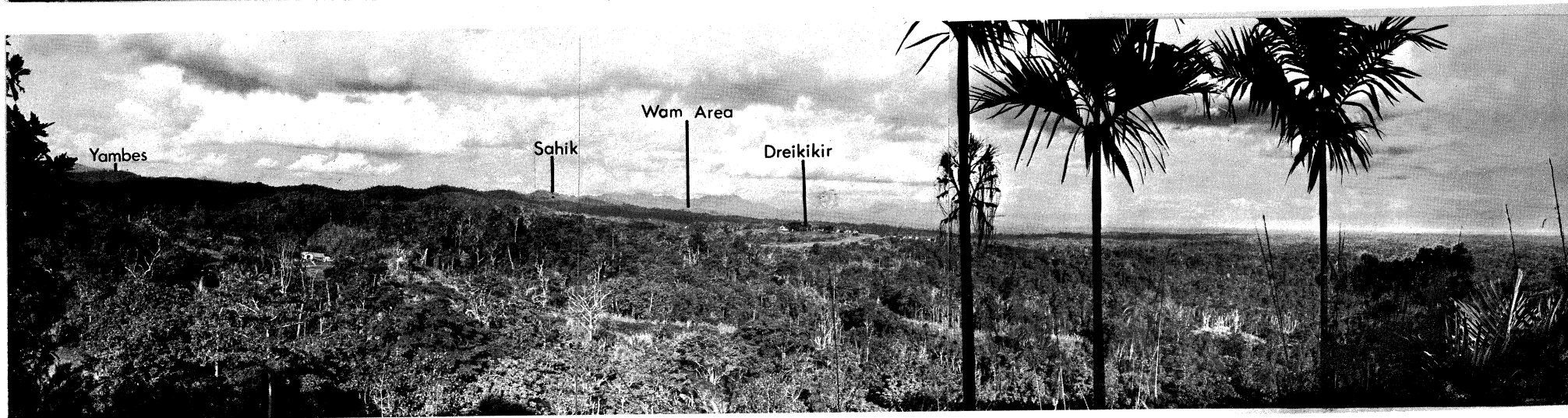
PLATE 2.1 PANORAMIC VIEWS WEST AND EAST FROM MUSEMBELEM VILLAGE



A. View west across Nanaha village to the Urim Census Division.

B. View east to Dreikikir Patrol Post, Yambes and the Wam Census Division.

A

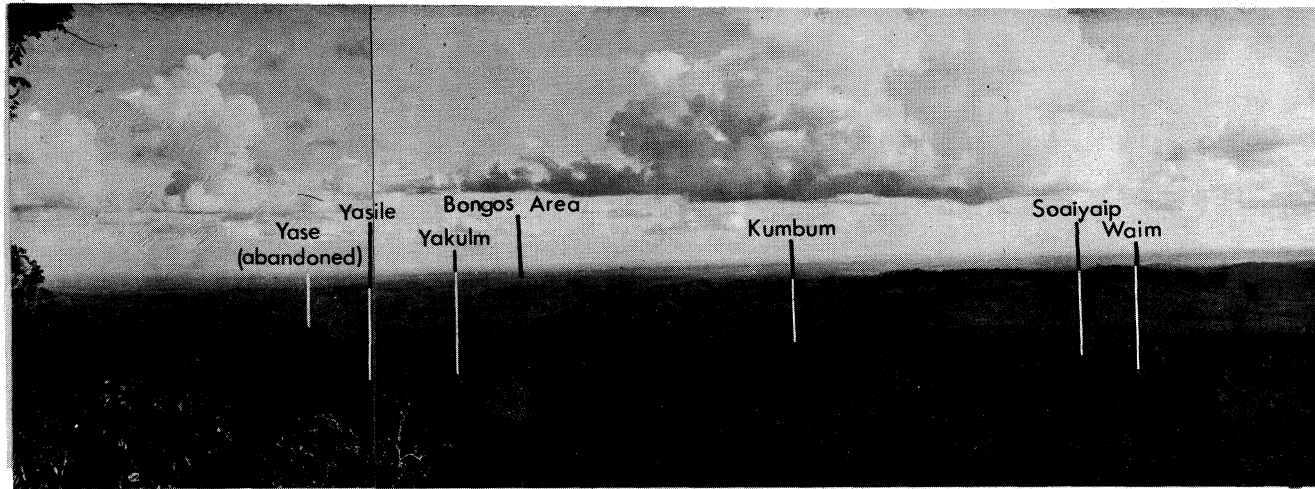


B

PLATE 2.2 PANORAMIC VIEW SOUTH FROM SAHIK VILLAGE



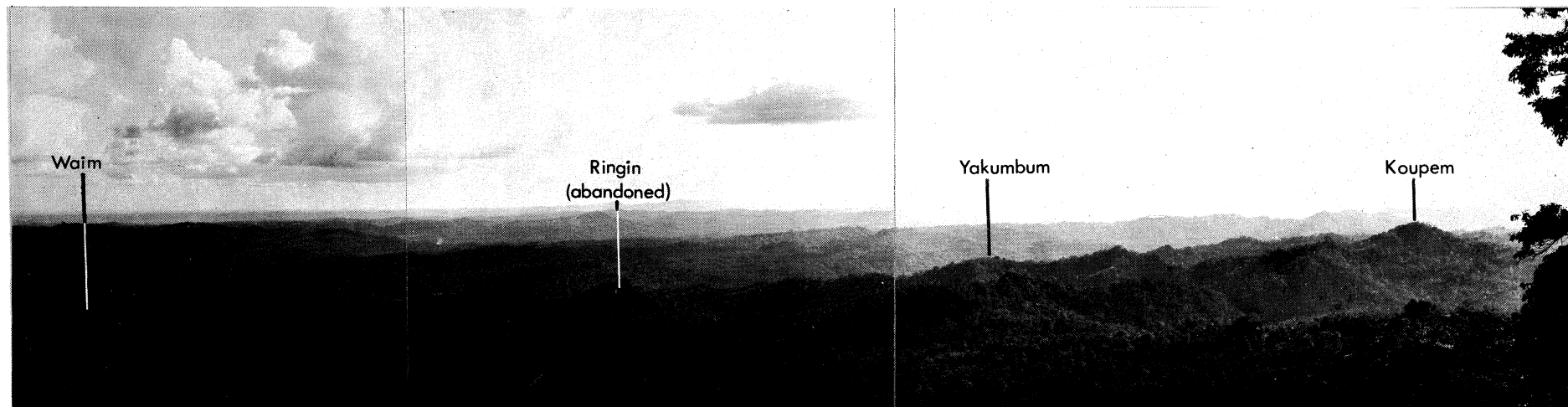
PLATE 2.3 PANORAMIC VIEWS FROM SEREPMEL VILLAGE



A. View south over Kombo Census Division to Gawanga Census Division.

B. View west into West Sepik District over northwestern Kombo villages.

A



B.

scarred by huge landslides, "extending as far as the eye could see" (Carey 1935,11)⁶. Rapid mass movement in the form of debris avalanches of soil and vegetation blocked rivers. The lakes near Musengwa village approximately two kilometers west of Dreikikir Patrol Post were formed during this earthquake.

Plate 2.1 presents a series of panoramic views photographed in the northern part of the study area. Photography in the southern part is difficult because views are almost always concealed by vegetation.

THE PEOPLE

Only those socio-cultural aspects of the Dreikikir people related to the flow of information and the adoption of new ideas will be considered here. Because of the lack of previous ethnographic or anthropological studies in the area, I have, as a comparison, drawn on material on the Abelam and Arapesh groups to the east, who have been the subject of a number of intensive studies (Forge 1965 1970a, 1970b, 1971; Kaberry 1940/41, 1941/42, 1966; Lea 1964, 1965, 1966, 1969; Mead 1968, 1970, 1971; Tuzin 1972, 1973). I believe this is justified⁷, but it has the inherent danger of my seeing more of Abelam

6. See also *Rabaul Times*, 11th October, 1935. The occurrence of a large earthquake remains a constant threat to modern communications and development. The present Sepik Highway passes through areas of geologically unstable rocks. A large earthquake would result in the destruction of the road in many places and the probable destruction of numerous bridges.

7. The broad similarities of the Torricelli-Prince Alexander foothills cultures are discussed by Tuzin (1973,20) who writes, "the populations of the mountains display broad cultural conformities in contradistinction to groups of the lower foothills or plains". Tuzin suggests the Mountain Arapesh as described by Mead (1968, 1970, 1971) show more similarities "in general adaptiveness" to the Wapei speakers near Lumi, than to the geographically and linguistically closer Southern Arapesh.

The linguistic relationships of languages spoken in the study area and the Arapesh and Abelam languages are presented below in the body of the text. They suggest broad cultural links between the six Torricelli phylum groups in the north of the study area and the Arapesh; the Kwanga speakers may be expected to reflect closer links with the Abelam speakers on their eastern boundary, as both languages are classified as Middle Sepik stock languages by Laycock (1973).

Blood group genetic analysis has failed to distinguish any statistically significant genetic differences between the Dreikikir groups, and Abelam and Arapesh speakers (Booth *et al* 1973; MacClennan *et al* 1960).

Linguistic analysis, oral traditions and the present location of the groups, suggests that at some time in the past the Torricelli speakers stretched in an unbroken band along the foothills of the ranges. The expansion of Sepik River populations, including Middle Sepik, Ndu family speakers, north to the foothills, created a salient

(cont'd)

and Arapesh culture reflected among the Dreikikir people than actually exists. Readers should be aware of another limitation. During 13 months in the study area, although I visited all but four of the 75 villages included in the study, I was living in an Urat village, and obviously my fieldnotes on the social and cultural aspects of the area are biased in favour of this group. Notes taken during brief visits to other villages often could not be adequately rechecked and therefore contain an element of uncertainty. Throughout the study area however, the broad underlying cultural pattern is similar. From north to south there is a gradation in population densities and hence the potential intensity and possible permutations of social interrelationships, but the same general principles apply. When at Urat example is used to illustrate a point, however, it should be understood that it may not be applicable, in every aspect, to non-Urat speaking groups.

7 (cont'd)

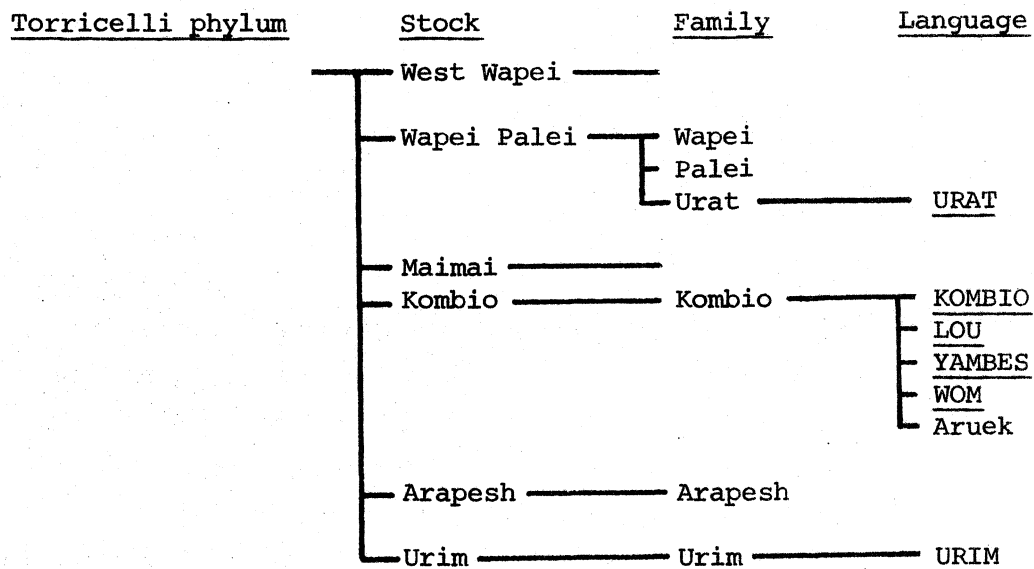
south of Maprik, and a split in the Torricelli group south of Wewak where Middle Sepik speakers have reached the coast. Kwanga speakers are thought to have moved north early in this expansion period and to have preceded, and later to have come under pressure from, Abelam speakers who now occupy the Wosera. (See Lea 1965,42.)

Similarities also exist in material culture, but the relative locations of each group *vis-a-vis* one another and their ecological locations are also an important influence. A house type identical to that shown by Mead (house type "g", 1970, 102) is used by Kombio, Yambes and Urim speakers. Urat, Wom and Kwanga speakers traditionally built a house without walls, the A-frame roof forming a wall, similar, but not identical to, Arapesh and Abelam houses to the immediate east. The bow was in everyday use among the Mountain Arapesh (Mead 1970, 175), but bows were traded along the coast from the west. The six Torricelli phylum groups in the Dreikikir area use the bow, but many bows are manufactured by Urim, Lou and Wapei speakers to the west. In contrast, the Ilahita Arapesh scorn the bow as a coward's weapon (Tuzin 1973, 60). Kaberry (1940/41, 345) notes the Abelam at Kalabu had "adopted" the bow for hunting birds, but gives no source. Wosera Abelam do not appear to have possessed the bow and Kwanga men remain suspicious of it and rarely use it. Mountain Arapesh men traditionally wore a g-string and the women wore a g-string or a small skirt. In the Dreikikir area only Lou and Kombio speakers wore any form of genital covering, Urat, Urim, Wom and Kwanga speakers being completely naked during everyday activities, as were Abelam and Southern Arapesh speakers.

This material suggests a broadly similar regional culture pattern, influenced by adaptation to ecological conditions and diffusion between adjacent groups, which have tended to smooth out the sharper differences between the groups having their cultural origins in the Sepik River area and those which are foothill and mountain cultures. Thus the careful use of the Arapesh and Abelam sources is justified.

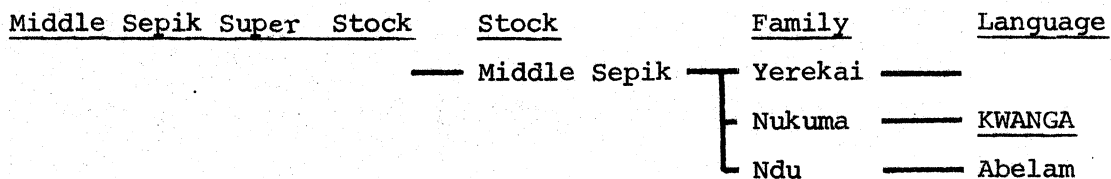
The Language Group

Figure 2.2 shows the language groups within the Dreikikir area⁸ and their relative locations. The relationships between these languages are described by Glasgow and Loving (1964) and Laycock (1968, 1973). With the exception of Kwanga, Laycock places all the groups in his Torricelli phylum (1973,7,72). Their taxonomic relations are as follows:



(Laycock 1973,72-73).

The Kwanga language, Laycock places in the Middle Sepik stock of the Sepik-Ramu phylum:

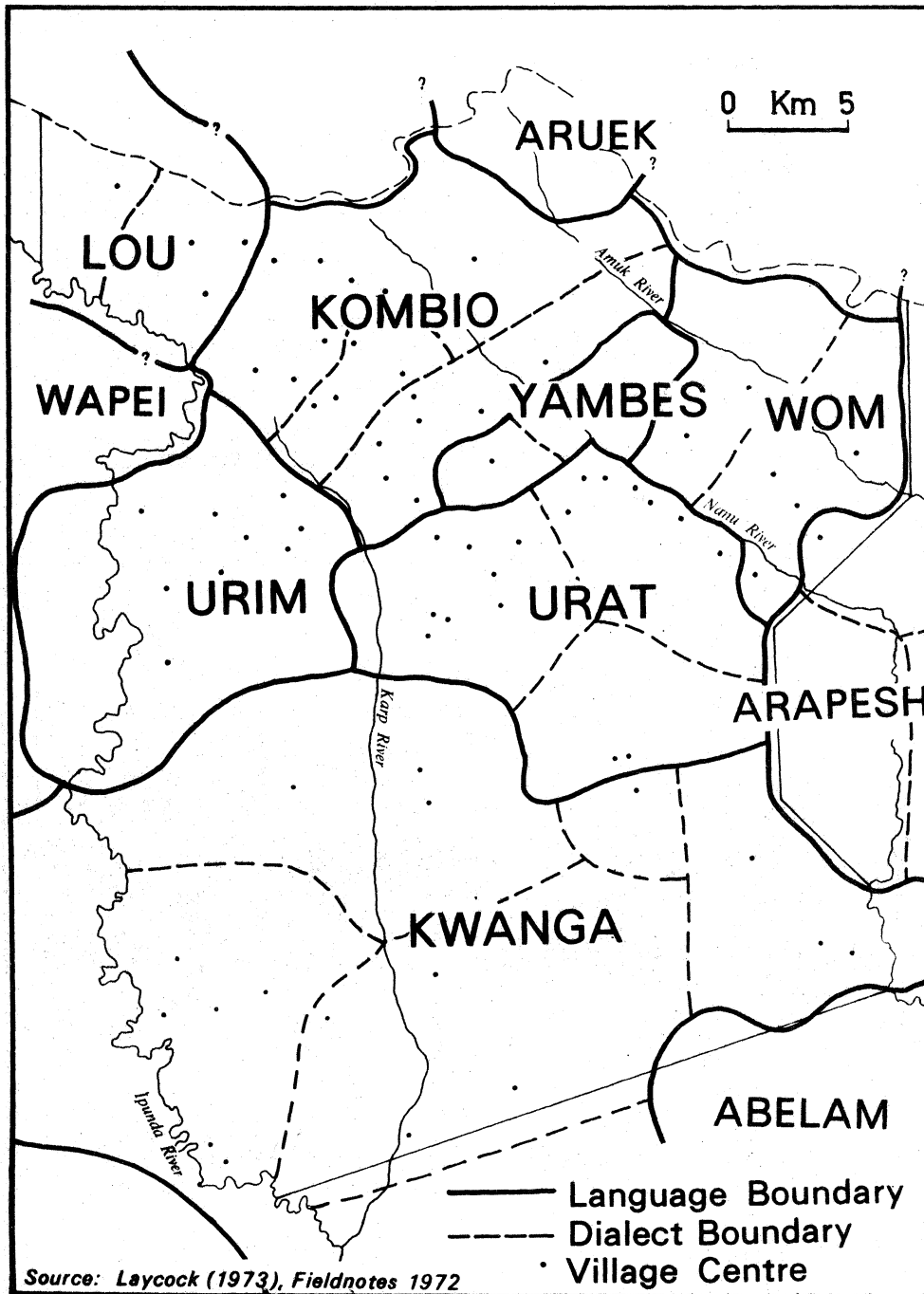


(Laycock 1973,74-75).

Further discussion of the linguistic relationships between the groups is not warranted, but the mutual intelligibility of the languages is important. With some exceptions, each language is unintelligible to every other language, but all dialects of a language are intelligible to all speakers of that language. The level of intelligibility between dialects varies and appears lowest in the Kwanga group. Within the boundaries of his own language group however, an individual can, with a little effort, carry on a satisfactory

8. The Urim and Kwanga languages extend beyond the boundaries of the study area, Urim to four hamlets west of the Keang River in what is now the West Sepik District, and Kwanga west of the Ipunda River to the Seim villages, and east of the Nanu River to the villages of Sunuhu and Kamanakor. The Lou language extends across the watershed as far north as Afua, a village about six kilometres from the coast.

FIGURE 2.2 LANGUAGE GROUPS, DREIKIKIR AREA



conversation.

Along some of the language boundaries true bilingualism occurs, but this is not general. The northern Aruek speakers of Mihet and Labuain villages can, according to northern Kombio and Wom informants, speak the dialects of the latter two, but Kombio and Wom speakers cannot reciprocate. Yambes speakers in the villages of Sahik, Sumul and Whaleng can speak the northern Wom dialect and Yambes speakers in Yambes village can speak southern Kombio and western Urat dialects⁹. Emul villagers in the western Urat group can speak Wom southern dialect fluently and use it and Urat interchangeably. The people of Wareli, the sole Arapesh speaking village in the study area, use Arapesh and Wom interchangeably.

Leaving aside these cases of bilingual villages, traditionally only older and more experienced men who took part in exchanges with nearby villages in another language group and women who moved between language groups as wives, (and often their children), were bilingual. These cases occurred in all villages adjacent to a language boundary. With the spread of Pidgin, the need for bilingualism in local languages has decreased, despite increasing opportunities to come into contact with other languages. Only the intellectual challenge of learning to communicate in another language remains as a motivation, and this has limited appeal.

Prior to contact, groups did not identify themselves by language or dialect, except in a very general way. The present identifying names were most likely unknowingly created by Administration officers. The Urat for example, had no overall name by which they knew themselves. The western Urat called themselves *yerhe* ("us" in the broadest sense) and called the eastern Urat *wusiyepngau* ("our language"). But Kombio speakers knew them as Urat. Likewise, Urat speakers knew the people to the south of them as Kwanga, and once written down, these names have become accepted and people now identify with them. But previously, although there was recognition of groups using a similar language, the spatial activities of individuals were too restricted and the area covered by one language group too large, for language to become a major symbol of identification.

9. Yambes men claim their linguistic abilities are sure evidence that their language was the original language of the area, and by association, their ancestors must have been the first men in the area. Wom, Kombio and Urat men disagree, but they cannot deny that Yambes men can speak their languages fluently.

The two main points to be drawn from the linguistic material are: first, that the diversity of languages (seven generally mutually unintelligible languages in an area of approximately 12750 hectares) can be expected to have slowed the movement of information across the study area, prior to the spread of Pidgin as a *lingua franca*, but that some language groups (for example Yambes), certain key villages (for example Emul or Labuain) and the more active and aggressive individuals, provided channels through which information would have been funnelled from one language group to another. Secondly, the language groups did not provide an identifying focus for the individual. This was provided by the village.

The Village¹⁰

The villages of the study area are like islands in a sea of drab green forested hills, marked by the shining fronds of coconuts which stand above the forest, crowning the prominences and ridgetops upon which the villages are built. Ridgetop locations and deep forested valleys accentuate an impression of villages isolated from one another. Houses in the village hamlets cluster in semi-circles around central plazas of hard, bare clay, or line the narrow ridge top, as if focussing everyday social relations back into the village, lest they should dissipate in the surrounding forest (Plates 2.4, 2.5 and 2.6). Old men describe the villages of their childhood as series of semi-isolated hamlets, separated by patches of tall undergrowth. Houses were closer together and the forest overhung and sometimes covered their rears. Tracks between hamlets were narrow and overgrown, and people walked everywhere in single file. Entrances and exits to hamlets were often fenced and sometimes a ditch, pallisaded with sharpened sticks, was dug across the track,

10. A "village" is defined for the purposes of this study as the residential group, using in common a defined area of land. This differs, in some cases, from settlements listed as villages in the *Village Directory* (1968). For example, Arisili, Bengil and Tumamba, in the Wom Census Division are censused as separate villages and listed as such in the *Village Directory*. People from them use a common area of land and distinguish no internal boundaries which reflect residential location. Individuals move between settlements, but this is not reflected in the census figures, because they know to which settlement they officially belong and they assemble there at census time. In this study Arisili, Bengil and Tumamba are defined as "hamlets" of a "village".

to guard against surprise attacks¹¹. A watch tower was often built in a nearby tree. Pigs lay in the porches of the houses, the number of pigs outside any particular house indicating the importance of its inhabitant. Men spent much of their leisure time squatting or sitting in the shade of the mens' house or haus tambaran, built in a central and usually dominating position in the village, its painted facade rising above the drab sago thatching of the dwelling houses¹². It was before the haus tambaran that the initiations and exchanges which formed the central and unifying feature of village social and economic life, were performed. These ceremonies were the avenue by which skilled and ambitious men could gain status and authority in a society in which ascribed authority had virtually no place, but in which the potential equality of all men was, and remains, a dominant ethic¹³. They were also the means by which individuals, families and larger groups were linked together into functional village units and by which villages were linked together in a wider network of exchange relationships. Between the apparently isolated hamlets and across the broad forested valleys, there was in fact a web of relationships and ties based on kinship, ceremonial exchange, trade and warfare.

These relationships are now examined at three levels: the family, the clan and the dual division. They attempt to demonstrate how face-to-face relationships were established and maintained within and between villages, how these relationships formed networks and how men, women, foodstuffs, valuables, trade goods and by implication, information, travelled back and forth along the links. They also attempt to show how individuals could attain positions of power in a dominantly egalitarian culture and how such men were to a large extent (although not to the extent demonstrated by New Guinea highlands big-men), in control of the flows of all commodities, including

11. Two such ditches may be seen on tracks leading from the Tau villages, west to Kubriwat and south to Waremenekor. In 1948, when an administration patrol approached Masalaga village, a southern Kwanga village, to arrest men involved in inter-village fighting, it was confronted by "fences made of limbom planking 12 to 18 feet high, stoutly erected with a small opening as the only means of exit or entrance. One road...had three such barricades, one behind the other. A watchtower overlooked the road". (Morris 1948).

12. The only haus tambaran observed in the study area was one built in Kwatengisi in 1975. It was smaller in all dimension than the well known Maprik area houses. The ridge was more level. The facade was covered with bark paintings, but they were not organised into an integrated design. Haus tambarans in the eastern Kwanga are reportedly larger.

13. The Dreikikir societies reflect the generally accepted view that "most New Guinea societies are without any form of ascribed status and certainly none that carried rights to any form of political differentiation from one's fellows". (Forge 1972, 533).

PLATE 2.4 AERIAL VIEW OF A SECTION OF TUMAM VILLAGE, 1972



PLATE 2.5 AERIAL VIEW OF YAM GARDENS BETWEEN TUMAM AND HULTUWAM, TUMAM VILLAGE, 1972



PLATE 2.6 PART OF TUMAM VILLAGE FROM SAMGUM SECTION, 1972

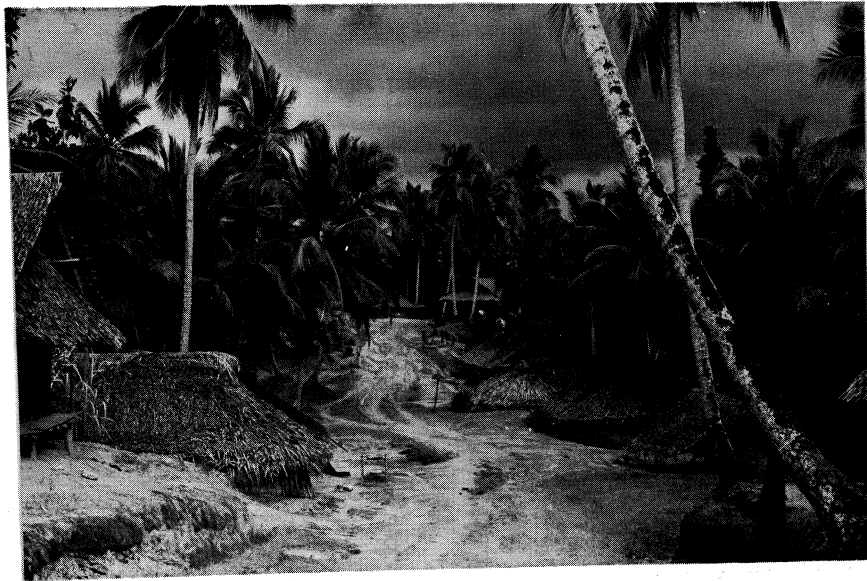
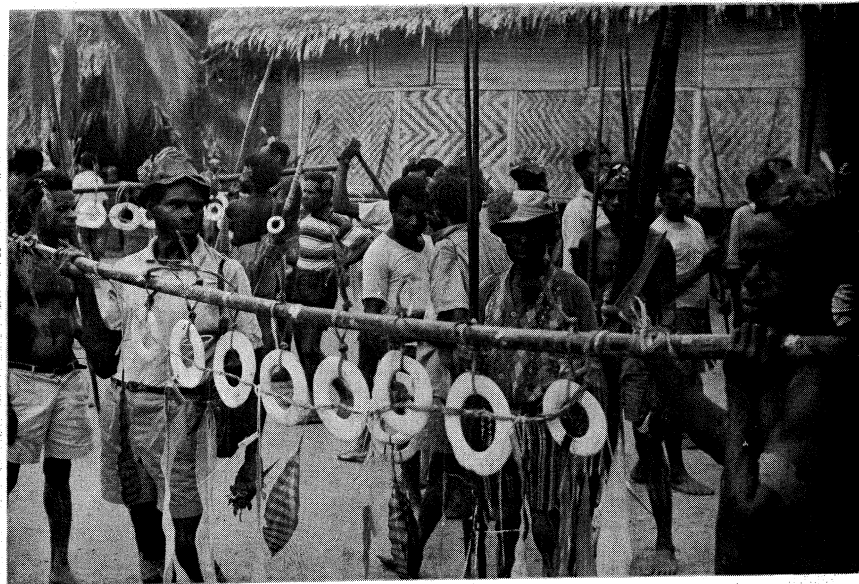


PLATE 2.7 MEN WITH SHELL RINGS AT A TAMBARAN CEREMONY, ILAHITA VILLAGE, 1972.



Note: Ilahita village is in the Muihang Census Division, and was not included in the study area.

information, through the networks. A brief discussion of how the individual viewed his environment precedes an examination of internal village relationships.

The World of the Villager

Communication between two individuals can be conceived of as the transformation of abstract ideas in the mind into audible or visible signals which are transmitted to a receiver, who transforms them back into abstract ideas. Within a single culture communication in this manner proceeds in a reasonably satisfactory manner because both sender and receiver have relatively similar sets of codes which they use to transform or translate the thoughts into signals and vice versa. But in a cross-cultural situation communication between human beings is frequently beset with difficulties because socialisation in different cultures creates different sets of codes in the individuals concerned. Because this study is concerned with the movement of and reaction to new ideas, some attempt to comprehend the "world view" of the village people is necessary. A full investigation would be a separate study and only a general presentation is attempted here. It relies in part on a discussion of religion and magic in Papua New Guinea by Lawrence (1972).

The world of the Dreikikir people was inhabited by a wide range of supernatural beings as well as people. Natural spirits, known generally as masalai in Pidgin, plants, animals and dead ancestors as well as creator spirits and culture heroes were known. The natural spirits dwelt in known localities, often in waterholes or streams; ancestor spirits in the forest on their clan land. Spirits could transcend the normal human limitations of distance and time. Some of them were believed to have created or been involved in the discovery of, food plants, artefacts, dances and ceremonies used by villagers in their everyday social and economic life. Some plants and animals were thought to have spirits capable of intelligent thought and human-like emotions.

In order to ensure the cooperation of spirits, ancestors, plants and animals in social, economic and political activities it was necessary to employ ritual and magic ranging from small personal purification ceremonies before planting or harvesting certain crops, to large initiation ceremonies involving more than one village. During ceremonies of this type ritual secrets and sacred knowledge believed to have been originally given to men by supernatural beings was revealed to initiates. The revelations were staged and invested

power in older men who had learned more than the younger men; the knowledge was believed to play a very important part in a man's success in life as a hunter, gardener, lover or political leader. Sacred knowledge passed on through ceremonies and believed to have a supernatural origin was not clearly distinguished from empirical knowledge. Both were applied in pragmatic solutions to everyday problems. As Lawrence (1972,1011) describes,

"...the activities of the gods and spirits in helping mankind have no mystical quality. They are believed to take place on the same plane of existence and to have the same validity as those of human beings working at any joint task. Work is regarded as a compound of secular and ritual techniques, both having the same empirical reality; both require cooperation between inhabitants, humans and spirit beings, of the same geographical environment."

These beliefs proved to be extremely important determinants of the reactions of Dreikikir people to the flow of new ideas and goods into their area in the early years of the twentieth century.

Internal Village Relationships: the Family

Within the village an individual's most intimate interpersonal relationships occur with his cognatic and affinal kin. Kinship relations are warm, close and spontaneous; kinship terms are preferred to names; children show genuine affection for parents; husbands and wives in private conversations, spoke with affection of and respect for their partners; grandchildren spend much of their time, and are generally indulged by, their grandparents; and kin cooperate closely with each other, rendering reciprocal assistance in activities such as gardening and housebuilding, as well as spending leisure time together, and visiting each other frequently. An almost complete lack of avoidance relationships, exists¹⁴. Matrilineal kin links are valued, despite a strong patrilineal ideal. Relations with one's spouse's kin, especially the parents, are considered important.

Inheritance is normally patrilineal but a man may decide, or have it suggested to him that he "follow the road of his mother", in other words, ally himself with his mother's kin, rather than his

14. Some avoidance occurs between Urat fathers and their sexually mature sons; they do not eat together, nor does the father consume food or drink prepared by his son. They do not enter one another's houses. It is said the younger man's sexuality will drain the older man's vitality and induce premature aging. Similarly a mother may not assist her daughter during childbirth.

father's. The commonest reason for this action is a surplus of male heirs in one family and a shortage in another, but it remains an option open to an ambitious man seeking to initiate new relationships or to gain access to land, labour, or support in a political enterprise.

Sister exchange exists more as an ideal than a regular practice, but very often when there is no one suitable to exchange for a bride, one of the bride's children will later return to her family, to balance the debt. An important relationship exists between mother's brothers and sister's sons; adoption by a mother's brother is not uncommon. The relationship was also reflected in ritual. During childhood however, an individual moves freely among all his kin in the village. In general, matrilineal relations are considered important, and crop up frequently in discussions about descent and inheritance.

Although marriage usually means a woman moves to live with her husband, it is not uncommon for the male partner to accompany his wife to live with her kin, and to plant gardens on their land for a number of years, following marriage. In the case of serious misfortune a man may seek refuge with his wife's kin. If a marriage breaks down and a woman returns to her hamlet of origin, her male children will often remain in their father's hamlet, or will later return there, when old enough to live without their mother. In everyday relations however, a cordial atmosphere pervades relationships with in-laws. Daughters are encouraged to marry within their village of birth and girls who run away to be with a distant lover are often dragged home again by irate parents and brothers. Parents say they fear if all their daughters marry to distant villages they will be left alone in their old age. On the other hand marriage outside the village creates a whole set of new relationships which in some cases are valued and sought.

Restrictions between males and females cut across family relationships. Women are believed to be dangerous to men, especially when they are menstruating, or giving birth to children. Restrictions are placed on sexual relationships during yam planting and harvesting, during pregnancy and the first 18 months of the child's life, during ceremonial activity and during menstruation, when formerly, the menstruating woman was confined to a small house separate from other dwellings. Now she usually remains in the family dwelling, but does not cook for her husband. Older men say an over indulgence in sexual activities is debilitating and shows immaturity and irresponsibility

on the part of the man concerned. Despite this, adultery charges are the commonest cause of serious internal disputes in the village and inevitably lead to fears and accusations of sorcery. Women were not permitted to participate in some parts of initiation and exchange ceremonies, but played an important role as spectators at certain stages of the ceremonies and participated fully in other stages. Much ritual was kept secret from women, and a woman who was suspected of having discovered a secret was either killed or brutally assaulted, and her demise blamed upon a tambaran spirit. Today women take little part in village meetings and even when their opinions are sought, they are reluctant to speak before a gathering.

A broad division of labour occurs on sexual grounds. Men are responsible for housebuilding, for cutting the forest trees, for planting and harvesting yams. Women clear undergrowth in the gardens, weed, carry yams back to the storehouses, collect firewood, carry water, and care for children. Cooking and child care are often shared. Women are considered to be better than men at carrying heavy loads, which they sling from their foreheads, thus they invariably carry much heavier loads than men. Men carry on their shoulders, using a pole where convenient. Domestic disputes are not uncommon, but usually are not taken seriously by anyone except the participants, who will shout abuse at each other until they tire, or until the husband, considering he must take a stand or be made a fool of in front of his peers, hits his wife. It is considered right that a man should hit his wife if she is obviously lazy or disobedient, just as a wife may withhold her labour or go back to her parental hamlet if her husband is a poor provider. Children are expected to assist in household tasks and in the gardens and older children are expected to look after younger children while their parents are working. A child being chased towards the gardens by an irate mother is not an uncommon sight.

To summarize, a man's most important kinship relations occur between himself and his wife and children, his parents and their siblings, his sister and her children and his affinal relatives. His relationships with females are restricted in a number of ways by taboos. Kin relationships form a network which spreads throughout the village and beyond to other villages. Such links bind together individuals, hamlet sections and hamlets into an integral whole.

Kinship links which extend beyond the village are examined in more detail later in this chapter.

Internal Village Relationships: the Clan

When a child is born, it inherits from its father affiliation to a group larger than the extended family, in which members claim a common ancestry traced through male descent, although they sometimes find it difficult to explain their relationship genealogically. Kaberry, Forge and Tuzin have called similar groups in the Abelam and Arapesh clans. As clans in the Dreikikir area are non-exogamous, and as there are so many exceptions to strict patrilineal inheritance and they are too small to be a dominant political force in the villages, the inability to confirm one's membership genealogically is an unimportant matter.

Clans are localised village groups and although clans with similar names may exist in adjacent villages, there is no special relationship between them at the group or individual level. This factor, combined with the small size of clans (the mean size of the eight clans occupying Tumam village was eleven adult males), and the intensity of interpersonal relationships within the confines of the village, means that the clan organisation becomes subliminal in everyday village activities. Clan members address one another in kinship terms and support one another in economic, political and social endeavours. It is difficult to judge, however, whether it is mutual clan affiliation or merely good neighbourliness which forms the basis of such support. Clans are identified and named after "primary totemic" emblems (Tuzin 1973,120) which are natural species, animals, birds, insects and plants. Clans also possess a secondary emblem, usually the leaf of a plant. These emblems are used as identification as well as for the sending of simple communications, using either the secondary plant symbol in association with some other symbol, a piece of vine with knots tied in it for example. Onomatopoeic rhythms beaten on a slit gong which represent either the name of the clan or an imitation of the call of the clan totem, are also employed.

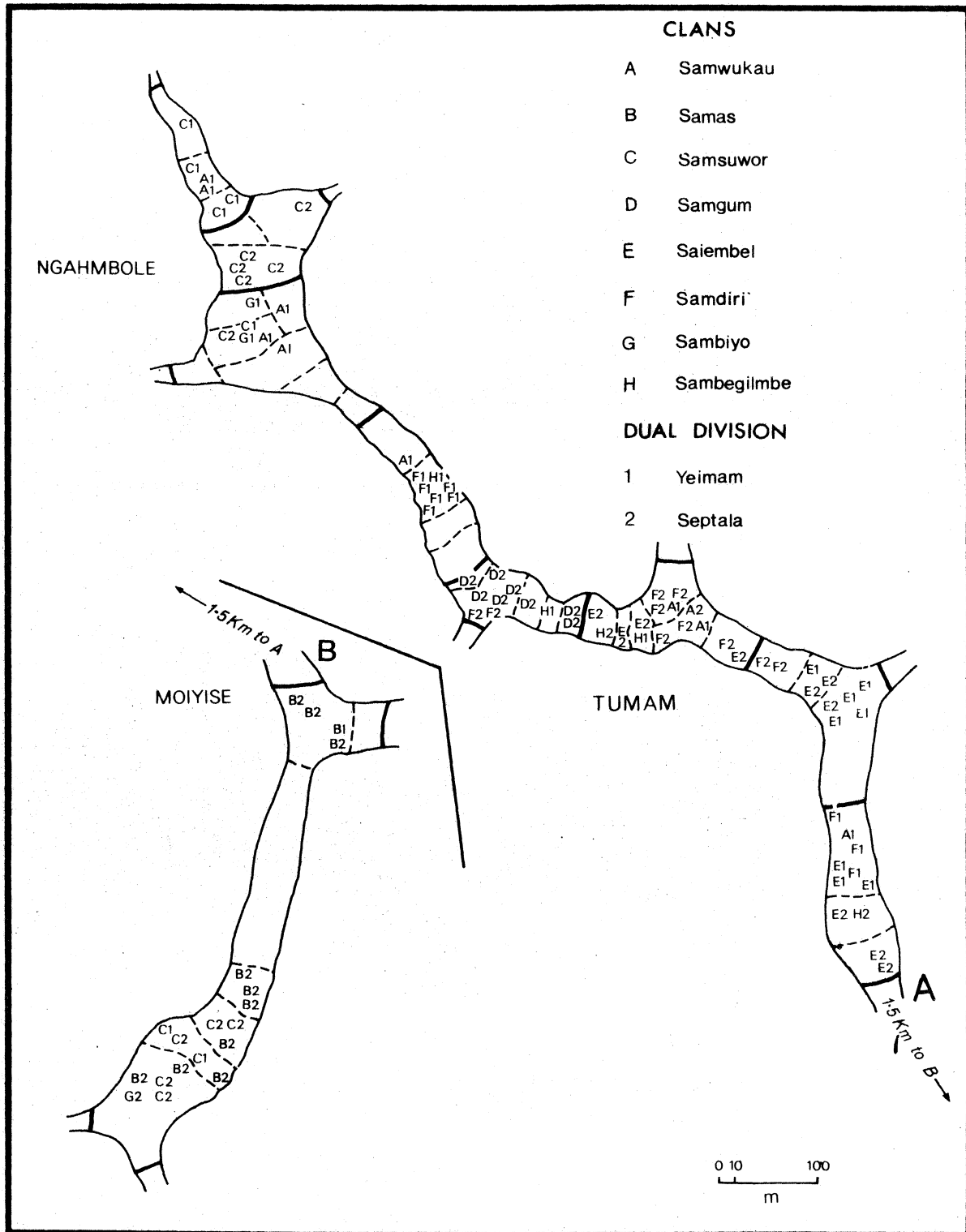
The most explicit recognition of clan groups occurs in the occupation of village and agricultural land; rights to land are vested in the clans and access to land is administered by clan leaders. Land boundaries, the names of blocks of land and the history of the occupation of blocks of land are well known and are often publicly discussed. Tumam clans, for example, claim rights to blocks of land through named ancestors who fought with and defeated the previous occupiers (said to be the ancestors of those people now occupying Tauhundor village). The process of occupying the land and driving

off its previous occupants took place gradually. Villagers explain, "Tumbuna bilong mipela, em i winim pait na em i planim spia long dispela graun", (Our ancestor won a fight and stuck his spear into this land) thereby claiming his rights to occupation. Other rights are traced to gifts of blocks of land from one named individual to another of a different clan at some time in the past.

Such historical origins are reflected in the village location of clan groups. The clans which are descended from original settlers occupy the more elevated knolls in the village, while the lower areas between are occupied by sub-groups of the original clans¹⁵, and immigrant groups who have been accepted into the village at various times in the past. Figure 2.3 shows the distribution of clan households in Tumam village in 1972. The settling clans, *samsuwor*, *samgum*, *saiembel*, *sambiyo* and *sandiri*; occupy well defined and elevated positions and their related break-away clans also form fairly discrete groups. The immigrant clans, *samrukau* and *sambegilimbe* are scattered about, a result of their being taken in by individual clan elders resident in Tumam at the time of their arrival there. *Samrukau* originates from Moihu' a once autonomous village, whose occupants sought refuge in nearby larger villages, from raiding parties directed by Malay and Chinese labour recruiters, during the 1900's. *Sambegilimbe* is a clan from Musendai village which was occupying an isolated hamlet, Goim, on the boundary between Tumam and Musendai, and whose members, with the establishment of Administration control and the cessation of intervillage hostilities, have slowly drifted into Tumam, which is much closer to Goim than is Musendai. Hultuwam hamlet was also established between 1900 and 1914 when the elders of *samsuwor mar* decided to move from the main village into the forest. Since 1945, some have moved back to the main village, and this trend is continuing. *Samas* clan also left the main village in the

15. The distinction between original settlers and sub-groups appears similar to what Kaberry (1966,342) describes as the "founding clans" and "detached clans" in the northern Abalam. Among the western Urat founding clans are known as "the head" (*ndo*) and the detached clan, which is usually descended from a junior line and has budded off from the founding clan some generations past, is called "the chin" (*mar*). This naming is both a reflection of the sub-group's genealogical position and its physical location, on lower ground. Although there may once have been a senior-junior relationship between such clans, there is none today. (Possibly a senior-junior relationship is expressed ritually, but the lack of ceremonial activity made observation of such matters impossible.)

FIGURE 2.3 CLAN AND DUAL DIVISION MEMBERSHIP AND RESIDENCE, TUMAM VILLAGE, 1972



Source: Fieldwork, 1972.

1900's, but established a hamlet at Yapkimba. In 1965, the present councillor led a move from Yapkimba to Moiyise. Prior to this some Yapkima men had moved into Hultuwam with *samsuwor*.

Agricultural land is divided into clan areas, and subdivided into family land which is generally under the control of the eldest active male in the family. Internal land boundaries appear to be static, with groups and individuals, rather than land, being redistributed to maintain a relatively equal access to resources on the part of each clan and each family. Each clan and family block of land has a name and these locality names are known to everyone in the village. The land tenure system is, in practice, extremely flexible. Usufructary tenure dominates at any one point in time because village elders, having decided which ridge or spur is to be gardened in the coming season, invite families from a number of other clans to assist them in clearing garden sites and in using a block of this land to plant a garden for two years. There is a greater propensity to invite another to garden on one's land than to seek an invitation to garden on another's land; the credit created forms a good insurance against unforeseen hazards which may occur in the future. Relatives or good friends from other villages may also be invited to join in the establishment of a large garden. Once the whole garden site has been felled and cleared, internal blocks are subdivided with sticks laid on the ground, and each family becomes responsible for planting and weeding its individual blocks.

The flexibility of the system allows an individual a number of social and spatial choices. In any one year, three or four large areas of land will be cleared under the direction of village elders and an individual must assess the social advantages and disadvantages of gardening with one group or another, against the spatial aspects of distance from his residence. Invitations to garden an area are to some extent, governed by past patterns; garden blocks are well defined and the pattern of cultivation is one of "rotational bush fallow" (Watters 1960,35) or an "integral system of shifting cultivation" (Conklin 1957,2). Thus if, in the last generation, one man's father invited another man's father to garden a named block, the sons are likely to repeat the pattern, gardening blocks previously

gardened by their fathers¹⁶. Very often an individual will cultivate a block within a larger garden area, while cutting himself a smaller garden closer to home, perhaps with the assistance of his son, or brother-in-law. Men commonly invite their sisters to garden with them, and the sister's son is thereby given access to the land when he is mature.

To abstract the main features of the clan system, clans are descent based groups localised on the village; membership, although determined primarily by birth, may be changed during one's lifetime by adoption and by personal choice; clans form semi-discrete residential groups and are the landholding group, but residence and land tenure are, in practice, extremely fluid, and the systems of organisation very flexible. Membership in a clan, determines to some extent, where an individual resides and tends to direct his extra-family relationships towards men of his own clan; if he is planning to cultivate a new garden, he gains access to the required land through his clan, and in regard to all land matters is under the direction of the clan leaders, although there are many ways around their authority.

Internal Village Relationships: the Dual Division

In common with many other Sepik groups the people of the study area demonstrate a dual division of all adult males in a village into two "identical" groups. Affiliation with one group or the other is inherited patrilineally, but is subject to adjustments, adoption and deliberate transferral of individuals from one group to the other, in order to maintain an approximately equal number of men in each group. The groups are ritually opposed in ceremonial exchanges and in initiations into the secret men's cult, now widely known by the Pidgin term, tambaran. The dual division deeply influences all aspects of village life, determining to a large extent relationships between people within the village, and links between villages.

16. Fallowing in Tumam gardens appears to average at least 25 years with some variation occurring relative to the distance from the village. Gardens being cleared at the end of 1972 had last been cut 40 years before. My informant, who was over 50 years old, could remember helping his father garden the area when he was a child of about 10 years. Nearer the village garden fallows are shorter and gardens are used slightly longer, taro being planted and replanted and bananas cultivated there for up to five years after the second yam crop has been harvested. Ceremonial yam gardens are not cultivated in the study area.

What follows must be read only as an introductory description of duality in the Dreikikir area, based largely upon observations in Tumam village and supported by interviews in villages throughout the study area. The basic structure of a division into two identical opposing groups was recognised by informants everywhere, but discussions were conducted in Pidgin with minimal use of local terms, and the descriptions received were probably simplified and superficial. Informants tend to simplify any explanation of the dual organisation, and unless one asks the right questions, or can observe the groups in action, the outcome is likely to be a description of a simplified ideal model, which perhaps bears little resemblance to the everyday operation of the system. The problem of variation across the study area remains. Evidence from nearby groups¹⁷ suggests that dual organisations are less complex in smaller villages and more complex in larger villages. This is logical; binary division of this type quickly creates too many sub-groups for a small village to handle. There are just not enough men to fill all the ritual "pigeon-holes".

Two basic relationships exist between members of the opposing group. One is an exchange relationship which exists at two levels, the first between individual exchange partners and the second between the groups as wholes. The other is an alternating initiator-initiate relationship directly related to the tambaran cult. The two relationships are linked, structurally and symbolically, but here I will discuss only the functional aspects.

17. Among the small Mountain Arapesh villages (Alitoa contained 87 people), Mead (1971) observed "two sorts of dual organisation, both virtually functionless...one vaguely connected with feasting and one vaguely associated with the initiation cult". In Kalabu, a northern Abelam village of 489 people in 1940, Kaberry does not formally recognise the existence of a dual division except in passing when discussing exchange partnerships (1940/41,256). However Forge (1970a, 270) briefly describes the dual organisation among the Abelam he was studying. It appears to be identical with that observed in the Dreikikir area. Bateson (1958,245) describes a more complex division in the Iatmul on the Sepik River, in which a primary division is cross-cut by a second division. Tuzin (1973,155) describes an even more complex system of divisions within divisions in Ilahita, an Arapesh speaking village of 1,439 people. He agrees (personal communication) that such complexity is unlikely to occur in the Dreikikir area.

Much of my approach to the problem of duality in the field, benefitted greatly from discussions with Donald Tuzin, and from his unpublished discussion paper, 'Dualism Among the Ilahita Arapesh'. However, he cannot be held responsible for any conclusions I have drawn.

In Tumam each man formerly had an exchange partner in the opposing division, which he inherited from his father¹⁸. The cessation of exchanges, deaths, and continual movements of individuals to and from employment outside of the village has disrupted this pattern and it is no longer fully functional. If his father died, the son could take over his father's relationship with the father's partner, or he could enter into an exchange relationship with his father's partner's son. An individual could, however, enter into a relationship on his own initiative. This option was exercised commonly by an ambitious man who, noting the existence of a similarly ambitious individual in the opposing group, would enter into a relationship with him. If the exchanges of food between them surpassed, in quality and quantity, those of the majority of other partnerships in the village, the two men would rise in status and authority. Exchange partner relationships were qualitatively different from those existing at the dual division level. Exchange partners aimed at maintaining a balance between each other, rather than openly competing. Partners were often good friends and frequently exchanged food in an everyday context. Only if one partner became lax would the other react by publicly pointing out the imbalance which was occurring. Of course, in the pragmatic world of village politics exchange partners could become rivals and fierce competition could take place. But balance was the overriding objective of exchange partnerships.

In contrast, relationships between halves of the dual division were characterised by intense competition. The opposing group were seen as a constant threat and source of danger. An older villager recalled being told by his side's leader when still a youth,

"They are our wild pigs. They are our enemies. Be careful or the wild pigs will eat you. If you are not vigilant they will ruin you. If your yams are not good, they will shame you."¹⁹

18. The terms "dual division" and "exchange partner" translate to Pidgin and Urat as follows: dual division = hap morota (Pidgin, meaning half of the roof of a ridged house) = wosembur. Exchange partner = kavas = wheni yat. The two groups of the dual division are not named, except in relation to the tambaran in their possession.

19. "Em i wel pik bilong mipela. Em i pait bilong mipela. Lukaut long ol wel pik, em i no kaikai yupela. Sapos yu slak, bai ol i bagarapim yupela. Sapos mami bilong yu nogut, bai ol i kilim yupela."

Yam exchanges occurred annually following the main harvest around September. The harvest of each group was kept a closely guarded secret against attempts made by each side to assess the quantity and quality of yams possessed by their opponents. Exchanges took place in a highly charged atmosphere. Preceded by a day of eating and a night of dancing, during which exchange partners prepared cooked yams and pigs for each other, the exchange of uncooked yams began early in the morning with both groups assembling their yams on the central plaza. Tensions mounted as first one group and then the other presented yams to their opponents. Yams were marked with paint to ensure they could not be fraudulently returned by the opposition. Tactical moves were employed to gain an advantage, such as holding in reserve a number of large, good quality yams, for a sudden last minute presentation when it became apparent the opposition had "shot its bolt". Leaders were employed in co-ordinating their group, supporting younger men and making up deficits from a personal supply of yams, and watching carefully for any sudden move on the part of the opposition. If one group succeeded in presenting a greater quantity of food to their opponents than the latter could return they became the subjects of ridicule and abuse. Throughout the exchanges, mocking calls and abuse were heaped by one group upon the other, and aggressive speeches were made by leaders on both sides. Oratory was an important skill, well developed among leaders. In this atmosphere fights were common although seldom serious. Leaders actively discouraged fighting saying "the yams are our spears", but younger, ambitious, aggressive men were often ready to physically challenge their opponents.

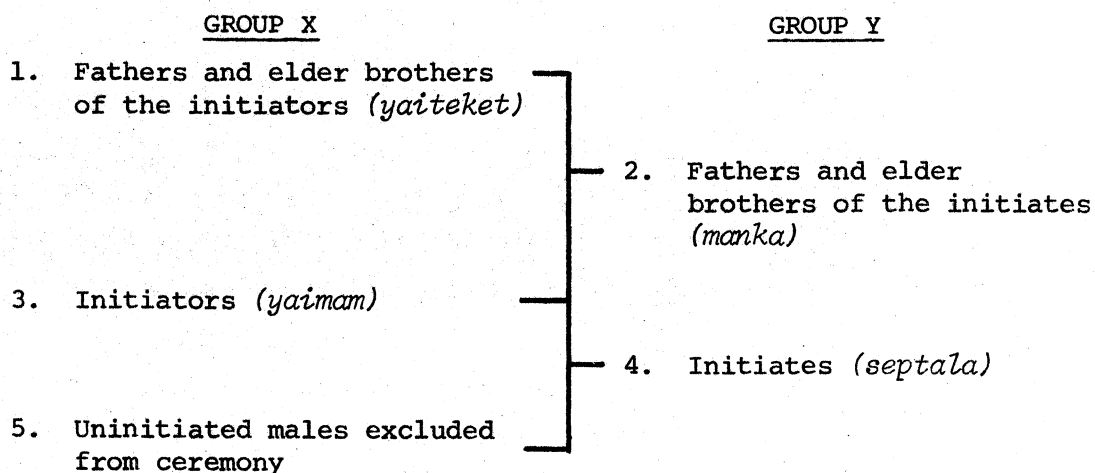
Yam exchanges in most villages in the Dreikikir area have been either stopped or reduced to public displays. One of the reasons offered for the cessation of yam exchanges in Tumam is the frequency of brawls which occurred, although this is probably an *ex post* rationalisation. Indentured labour, the missions, millennial movements and cash cropping have all had an impact. However, when I left the area in November 1972, Yaurang men were about to stage their first exchange for a number of years, and had constructed enclosures and special yam display houses in preparation. Exchange partnerships remain between older men who present to each other food, yam soup and wild pork usually, but younger men are tending to ignore their traditional obligations in this respect. Yam exchanges also occur during disputes, when one of the disputants may suddenly present a

great quantity of food to the other. Tuzin (1972,246) describes such a confrontation and presentation between the Arapesh villages of Ilahita and Lehinga during a land dispute. Individuals may also present yams to an opponent as a challenge.

The other function of the dual division was the initiation of males into the secret tambaran cult. Tambaran has a range of meanings in the Dreikikir area, but in the broad sense it refers to ceremonies in which ritual secrets are exposed to initiates; in a more restricted also refers to a concept which informants find difficult to describe in Pidgin but which they variously describe as "a dangerous thing" or "a big thing". They deny the tambaran is a spirit but point out it can cause illness and death, and by implication, is a being of some sort. Proper association with the tambaran will result in a youth growing into a strong handsome man who will be successful at yam growing. The tambaran is inimical to women.

The Urat ceremonies were performed by one half of the dual division who initiated their exchange partners' sons. The groups were related in the following way:

DUAL DIVISION



(After Forge 1970a,270)

One of the groups is said to be in "possession" of the tambaran, and is therefore the senior group at that point in time. Group X is senior to Group Y, and X3 will initiate Y4. X1 may advise X3 on procedural matters, but will remain in the background during the actual ceremonies²⁰.

20. The Urat terms translate as follows:

yaiteket = fathers behind *manka* = grandfathers/grandmothers
yaimam = fathers/mothers *septala* = children

Y2, the parents of Y4, are not permitted to be present at their sons' initiation, but may give advice to them beforehand. At the next ceremony X and Y will exchange places, Y becoming senior to X, and Y4 initiating X5. Five named ceremonies were performed at Tumam. They were graded, but individuals could be initiated into them in any order; younger men could be expected to have been initiated into say, two of the grades, whilst older men might have a complete knowledge of all grades. A full cycle, of one to five could take up to 40 years to complete and thus only a few individuals were ever initiated into all grades. However, it was possible for an ambitious man to present himself for initiation in another village, if he had kinship ties there. Detailed descriptions of the ceremonies are not warranted here and a general description only is offered to explain the number of important relationships, stimulated by the tambaran cult.

Within the village, the initiators would begin the ceremony by cutting a new slit gong and pulling it from the bush to the main plaza. They would then begin the construction of the tambaran house, assisted by men from the senior initiating group of nearby villages, who were supplied with food in payment for their services. The house was completed before the yam harvest, and after the yams were stored, the initiates were summoned to the plaza by the slit gong and there secluded in a special house. Sometimes this seclusion took place in the forest. It lasted up to three months. Immediately prior to seclusion the initiates were subjected to various ordeals, including beatings with nettles and superficial penile incision and bleeding, all at the hands of the initiators. They received instruction in ritual, oratory, yam growing, cleanliness and sexual matters. During seclusion initiates were fed large amounts of food, particularly wild pork. At stages of the various ceremonies they were shown accumulations of traditional valuables, in particular shell-rings and at the end of their seclusion they were decorated for a "coming out" ceremony, with shells, birds-of-paradise plumes and coloured leaves.

Partly because no one village could supply enough wild pork and shells, and partly because the relationships themselves were valued, villages entered into reciprocal relationships in which they loaned each other shells for the duration of a ceremony and presented each other with pigs at appropriate stages during initiations. Men from one village would travel in a party to another village, carrying a pig strung on a pole, or carrying rings and shells, roped to sticks to avoid damage (Plate 2.7).

Women were excluded from all but a small part of the tambaran ceremonies; they provided an audience at the more spectacular displays, and were involved carrying food and firewood to the plaza on which the tambaran house was located. The rest of the time they had to avoid the area completely. They were told the food they supplied and the pigs coming into the village were being consumed by the tambaran, which had also consumed their sons, whom they would be lucky to see again.

Because a man's dual division affiliations are inherited, it is difficult, as well as unrealistic, to attempt to examine the dual division separately from clan and family structures. Table 2.1 shows the Tumam clans and their relationships to the dual division

Table 2.1 CLANS AND MOIETIES IN TUMAM VILLAGE, 1972

Clans	Group		Total Adult Males
	X	Y	
samdiri	14	6	20
saiembel	5	9	14
samgum	-	11	11
sambegelimbe	4	-	4
samsuwor	5	12	17
samas	2	10	12
samwukau	8	-	8
sambiyo	4	-	4
	42	48	90

in 1972. Note that the four larger clans have split and thus have members in both groups, whereas the smaller clans all belong to one group or the other. If residential location in the village is plotted by membership of the dual division, (Figure 2.3) groups which appear to be more discrete than clan groups are formed²¹, but due to the shape of the village and the interrelationships between clans and the dual division it is not possible to easily test whether clan or dual division membership determine most, where an individual will reside

21. Prior to the cessation of ritual activities, spatial discreteness between the moities appears to have been even greater. All the anomalous cases which appear on Figure 2.3 are the results of shifts of residence since 1956. That year saw the last initiation ceremony, and the occurrence of the millenarian activities (which is one of the innovations under study). The year is well remembered and forms a convenient temporal marker.

in the village. Given the activities of the dual division, this affiliation would seem to be the more important.

The dual division thus influences internal village relations by forcing all adult males to identify with and support one group or the other, at least once a year. By placing individuals in an intimate exchange relationship it creates a further network of relationships within the village, which because of the discrete locations of group members, tends to bind the village together as a unit. The groups themselves are placed in a very competitive relationship, both in yam exchanges and in their reciprocal initiation duties, but because the successful outcome of the exchanges or the initiations requires the presence of both groups, the result is again a unifying effect.

Leadership in the Village

The dual organisation also has an important influence on the characteristics of leaders. Exchange partners can draw attention to themselves by exchanging large amounts of food, a public demonstration of their yam growing and pig hunting abilities. Between groups, shrewd political and economic judgements, organisational ability and powers of oratory are repaid by public support. In the egalitarian atmosphere prevailing, the selection of leaders is not a simple procedure. Dual division leaders tend to be older men, who, with a greater knowledge of ritual and the possession of secrets plus records of good yam harvests are natural choices as leaders. The selection of men to lead the whole village usually takes place in public. For example, if the village is faced with a dispute with another village over a pig, or a woman, men will assemble and debate the issue at great length. Gradually one or two men will display a greater knowledge of precedent, or of the intricate kin relationships involved. But more importantly they will demonstrate their ability to present their arguments in a clear and appealing way, and to force home their points with a vigour which cannot be matched by others. Men who support them will run up to them and place outstretched hands on their chests or upper arms²². A show of reluctance on the part of men wishing to lead is considered

22. Among the Ilahita Arapesh it is the custom to show public support for a speaker by running up to him and slapping lime against his chest with a resounding smack. Slapping a man on the thigh with lime is a demonstration of disagreement. Urats did not possess lime or *Areca* nuts before contact.

proper, but once selected they are expected to act in a slightly dictatorial and tyrannous manner, exhorting or forcing people to achieve a chosen end. Leaders who fail to brow-beat others into co-operation are blamed for the failure of public enterprises, even when there is widespread apathy towards the project. Leadership is thus fairly fluid. Consistently good performances in public debate and in practical situations give a man considerable power, but no established leader is secure in his position for a poor decision or a sudden reversal of fortune will open the way for others. Prior to European contact, such men became known outside of their own villages and dominated inter-village relations. With a retinue of experienced men they travelled to other villages with food and decorations for tambaran ceremonies, or in search of trade goods, shell rings, pigs, clay pots and salt. The spatial dimensions of their movements and the inter-village networks so formed are central to this study for, with these men flowed not only material commodities, but also information and new ideas. Relationships between villages are now examined.

Inter-Village Relations: Links between individuals

Inter-village relationships are initiated when individuals are permanently relocated in another village, when men from one village attend initiation ceremonies in another village, when men trade with men from other villages, or when two or more villages enter into a dispute and resort to violence.

The main reason for relocation is marriage. Women are not formerly exchanged between individual villages. A village may draw women from many nearby villages, particularly those with which a reciprocal tambaran link exists. As an indication of the spatial dimensions of one village's marriage patterns, the village of origin of the 81 married women resident in Tumam in 1972 is presented in Table 2.2

The Tumam example shows links through marriage with 11 other villages, a mean distance of 3.5km, or less than one hour's walk, away. The relatively high number of women from Tauhundor is said to be a recent development, a result of Tauhundor women carrying rice and coffee to a storehouse at Tumam. Clearly a preference exists for marrying within one's village of birth, but given the importance of affines and the propensity for men to maintain strong ties with their mother's family, particularly the mother's siblings, kinship links formed by marriage are one important determinant of inter-village

communication networks ²³.

Table 2.2 VILLAGE OF ORIGIN OF MARRIED WOMEN, TUMAM, 1972

Village of origin	Straight-line distance from Tumam (km)	Number of Women	Percent
Tumam	n.a.	49	60.5
Musilo	1.0	5	6.1
Musingwik	1.0	8	9.8
Musembelem	2.0	2	2.4
Musengwa	2.5	1	1.3
Moiwhak	3.0	3	3.7
Mulenge	3.5	1	1.3
Nanaha	4.0	1	1.3
Moihuk	6.0	1	1.3
Porombil	7.5	1	1.3
Tauhundor	8.0	7	8.6
Musendai	8.5	2	2.4
$\bar{X} = 3.5\text{km}$		81	100.0

The relocation of individuals also took place as a result of disputes and fighting within and between villages, and from the gradual expansion of core villages in a budding-off process. Except where a village was completely destroyed and its inhabitants scattered, such movements created links between one settlement and another. A typical case is that of Bepuwi of Tumam village whose father, Nintahi'e, when a child, was rescued from a burning house at Musengwa by men from Tumam, following an attack on Musengwa by Yambes. Nintahi'e was orphaned by the fight, so remained in Tumam until an adult. In a subsequent attack on Musengwa he returned to assist Musengwa against Yambes, was arrested by Robert Melrose and gaoled at Aitape. He escaped from gaol and disappeared into the mountains behind Aitape, never to be seen again. Bepuwi remains in Tumam where he has full rights as a village member, but he has land rights and owns sago in Musengwa, and regularly visits his cousins who still reside there.

23. Information contained in the old Village Census Books includes details of inter-village movements, particularly that relating to women. The old books have been replaced by a census form which contains less information. The prospects of extracting details of inter-village movements of women from the old books was investigated. They are hand written and have been subject to much amendment and crossing out, and individuals are referred to by name only. It was decided that to trace out the information required would take more time than I had available.

Similar cases exist in Tumam and in villages throughout the study area. Following European contact, movements of this type became restricted, and since the establishment of an effective administration, have ceased. More recently the construction of vehicle tracks and roads has again stimulated relocation of hamlet sites, but this has occurred within village boundaries.

Intervillage relationships: the tambaran

The most important and regular intervillage contacts occurred as a consequence of reciprocal obligations generated by tambaran initiation ceremonies. When an initiation ceremony was about to be undertaken a local area peace was agreed upon. Intervillage disputes and vendettas were put aside for the time being. Intervillage movement in comparative safety became possible²⁴. Thus these intervillage links, prior to contact, formed the most important communications network in the study area, and determined to a very large extent the dimensions of networks based upon kinship and trade. An analysis of the tambaran exchange network is presented in Chapter 4.

Intervillage relationships: trade

Intervillage trade took place within the limits of the network established by ceremonial exchanges. The most important pre-contact trade items were shell rings and other shell valuables, salt, and clay and manufactured pottery.

As with the Arapesh (Mead 1970,175) large shell rings (Urat = *wuhiyan*) were the chief valuables in the study area. The origin of the rings was not known but was suspected to be supernatural. Informants throughout the area were asked where their fathers had obtained rings and what items they had traded for them. In all cases rings were obtained from villages to the east, and entered the study area from Arapesh and Abelam villages beyond the eastern boundaries (Figure 2.4a). Smaller rings (Urat = *ngembere*), ropes of circular roughly worked shells, small cowries and dog whelks, and baler shells were also traded into the area, some from the Wapei to the west, some through Labuain and Mihet in the mountains to the

24. That this general rule was broken at times is evidenced by references in oral histories, to surprise attacks upon villages celebrating tambaran initiations. Such attacks would only be occasioned by very serious disputes however, for they destroyed the reciprocal arrangements necessary for the initiations to proceed satisfactorily.

north and some from the east. The most common return trade is said to have been pigs.

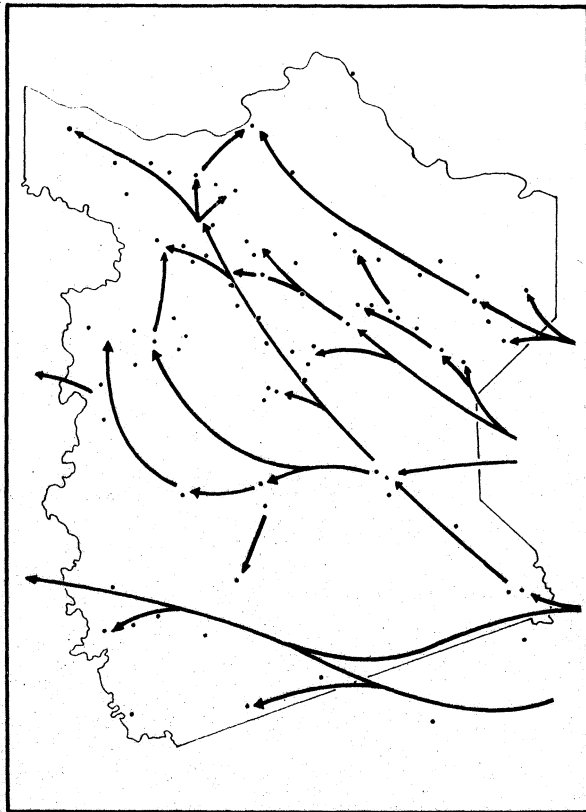
The most common source of salt in the study area was formerly potassium salt manufactured by burning parts of the green sago palm spathe, leaves from a forest tree and from a vine, with dry coconut husks. This process is still in use today. The ingredients are packed into a broken cooking pot, the coconut husk ignited and the bundle allowed to smoulder to a fine ash over a period of three or four days. The ash is placed in a coconut fibre sieve and water is poured through it. The solution formed is used as a stock for a staple vegetable soup. The solution was apparently never evaporated to provide a dry powder salt. Salt manufacturing by this method was observed in villages throughout the study area.

A less important source of salt was a number of salt springs located within the study area (Figure 2.4b). I was able to visit only one such spring, that near the Tau villages, but was told the others are similar, but smaller. At Tau, fairly clear water carrying a lot of rusty coloured fine sediment, wells up slowly from an artificially enlarged spring. There is no evidence of salt manufacture at the site now, and informants state salt was never made there. Rather water from the spring was collected in bamboos and used as saline water in soups and for drinking. Trade involved allowing another village access to the water, and presumably because of the widespread manufacture of potassium salt and the difficulty of transporting salt water, the water from springs does not appear to have moved very far.

Salt from the ocean entered the area from the Aruek villages in the north, but it originated from Ulau on the coast, and much less regularly, from Paup via Afua, a village speaking a Lou dialect midway between the northern margins of the mountains and the coast at Paup. This salt was manufactured from salt-impregnated driftwood which was burned to a fine ash. Northern villagers did not travel to the coast before contact, although they knew of the existence of the ocean. Trade through Afua is said to have been characterised by a history of ambushes and deaths, and face-to-face contact was avoided by leaving trade goods at an appointed place in the forest.

Throughout the area cooking and eating vessels are manufactured from local clays but there are at least six deposits of clay which are valued for their texture and the absence of stone fragments. The two most important are located near Yaurang and Sahik villages and clay

FIGURE 2.4 PRE-EUROPEAN CONTACT MOVEMENT OF TRADE ITEMS



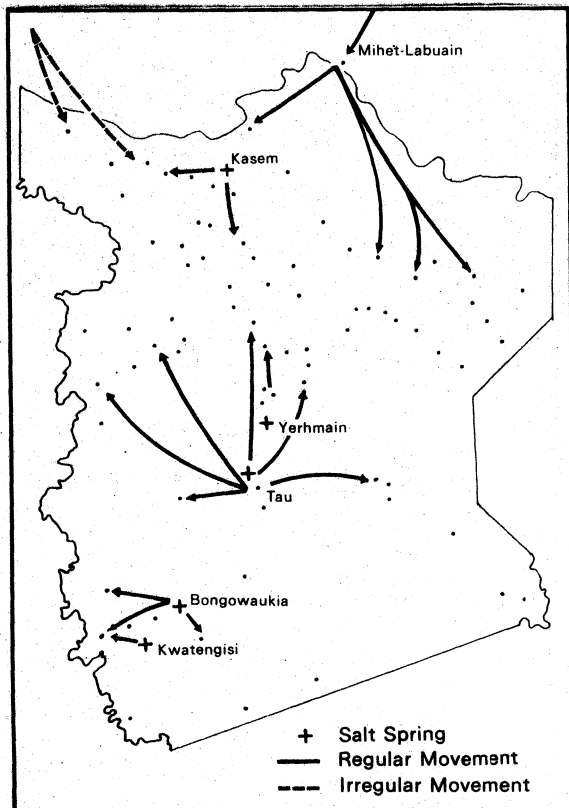
A. Movement of shell rings.

B. Movement of sodium salt.

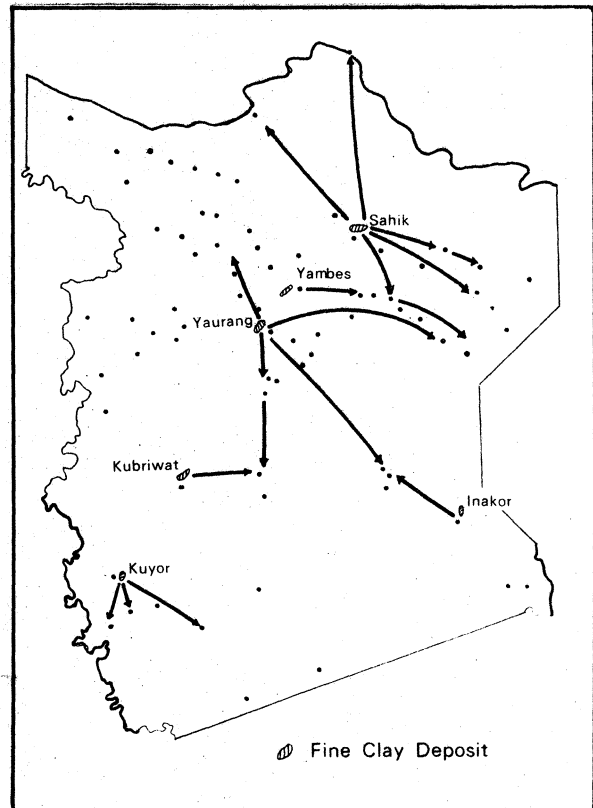
C. Movement of fine clay.

0 5 Km

A.



B.



C.

Source: Fieldwork 1971-72.

and manufactured pots were traded from these villages to Wom and Urat villages, as well as north to Mihet and Labuain (Figure 2.4c). Finely formed and decorated coil pots were made by men as presents to their exchange partners and fine clay was in demand for these items. Apart from this, the widespread availability of suitable clays for everyday pottery, prevented pottery becoming an important trade item²⁵.

Similarly, there appears to have been no important movements of stone axe blades, as occurred in the highlands. Throughout the area informants maintained that all axes were manufactured locally from stones found in stream beds and that only rarely were axe blades traded. They pointed out the large sandstone concretions which outcrop on the ridges as well as in stream beds, and which bear multiple shallow grooves, worn by the polishing and honing of axes, as confirmation of their information. Further confirmation is provided by a sample of axe blades collected in the area²⁶. The material from which these blades are manufactured was identified by Bureau of Mineral Resources geologists in Canberra, who were conducting field surveys in the study area in 1973, as being rock which occurs in the Torricelli Mountains, and which is a common component of local stream bed material. This material would have been available to almost all villages in the study area. Southward movement of cylindrical sago hammers, manufactured by the Lou and Kombio speakers did occur. These contrast with the cruder hammers manufactured from roughly worked axe blades, broken accidentally or deliberately which were commonly used by the Urat and those to the south of them. Today, sections of iron pipe, mounted in traditional fashion, have replaced both the cylindrical and straight edge sago hammers in most villages.

25. A large potsherd exposed after rain in a road cutting near Musebelem village was not immediately recognised as such by a number of older men. One even suggested it was a bomb fragment (split 250lb aerial bomb cases are common in the area). When finally convinced that it was indeed pottery, they could only suggest it was made by some unknown, previous occupiers of the area. It is probable however, that this pot has been traded into the area most likely from the north coast. It is manufactured from a red clay, is not decorated and has a turned overneck. It and a large number of smaller fragments were given to the Department of Anthropology and Sociology, University of Papua New Guinea.

26. Approximately 40 axe blades, mostly small (less than 10 cm in length), which were collected in the study area were given to the Department of Anthropology and Sociology, University of Papua New Guinea.

Trade between villages and between local areas was thus not the most important component in intervillage communication networks. With the exception of rings, other trade items were not in short supply in the foothill region in general, and hence no strong trade patterns developed. Only the shell rings developed any significant pattern of movement.

Before leaving the subject of trade, the problem of betel nut should be noted²⁷. Of the groups within the study area, only the Kwanga speakers traditionally chewed the *Areca* nut. Only there were gourds and lime spatulas part of the traditional material culture. Betel nut chewing was also well developed among the Arapesh and Abelam. The non-diffusion of this item poses a problem given the movement of shell rings from the Kwanga north and the existence of ceremonial links previously described. *Areca* palms are now cultivated throughout the area and are said to have spread mainly from the coast after contact, with some northward movement, again, after contact. No adequate explanation of this situation can be offered.

Intervillage relationships: warfare

The final aspect of intervillage relationships to be considered is that relating to warfare. Villages were likely to come into dispute over land, women and pigs. Two types of fighting are distinguished by informants. That known as pait in Pidgin, included formal and informal skirmishing while that known as woa in Pidgin, was an all-out attack upon a village with the object of destroying it and killing as many of its occupants as possible. In both cases, intervillage alliances were entered into. These were negotiated by village leaders and appear to have been based upon short term and extremely pragmatic, Machiavellian, political doctrines. I found an attempt to collect brief notes on former allied and enemy villages almost impossible because of the rapid fluctuations in relations which informants described as occurring between their village and their neighbours and the various levels at which alliances and enmities took place. For example two villages could be involved in constant skirmishes over a period of years, but would band together to participate in a surprise attack on a third village. These

27. The information that the Urat people had not traditionally possessed *Areca* was brought to my attention by Mr G.W. Swainson, Dreikikir Local Government Council Advisor. Further questioning revealed that people to the north had also only recently come into possession of betel nut.

fluctuating alliances reflect the generally unstable and extremely fluid political atmosphere engendered by an acephalous social structure and egalitarian ideals.

Fighting itself was disorganised by any standards. Skirkishing generally took place at an agreed upon place and time and involved spear throwing and dodging, the latter being a highly developed art. The death or serious injury of two or three men on either side would cause the fighting to be adjourned. Men who were skilled fighters were admired, but it was not an all-important specialist art. Bravery was a virtue but foolhardiness was not, and unwillingness to fight brought no great social shame or stigma. All-out attacks were usually surprise attacks or ambushes, carried out at night or shortly after dawn. Houses, preferably with the occupants inside, were burned, and killing went on unchecked until the villagers under attack were completely routed, or until they had repelled the attackers. Woa often involved alliances between up to ten villages, who were usually rewarded for their assistance to the instigators with pigs, shell rings, and usufruct land rights. For example, the destruction of the village of Wundai which once occupied the site of the Dreikikir Patrol Post is said to have been carried out by men from the villages of Nanaha, Musengwa, Musembelem, Musilo, Tumam, Musingwik and Daihungai at the instigation of Musembelem. But constant skirmishes occurred between these "allies" before and after this attack.

Military activities gave rise to intervillage links which were neither as stable, nor as extensive, as those created by ceremonial activities.

CONCLUSION

This chapter has described those aspects of the people indigenous to the Dreikikir area and the physical environment in which they live, which relate directly to the effective flow of information within and between villages. The physical environment appears not to have exerted a great influence except in the location of villages on the ridges. The village of residence was, and still is, the focus of individual activity spaces, and between villages a close network of links existed based on kinship ties, ceremonial activities and to a lesser extent trade and military alliances.

Before 1900 the flow of innovative ideas through the networks was at low level. Villages were almost completely independent in their everyday subsistence needs and exercised social, political

and economic autonomy. The foothills zone in which the Dreikikir area is located exhibited a broad cultural conformity and although dances, songs, weapons, ceremonies and forms of social organisation were always spreading, the diffusion waves possessed low levels of energy, moved slowly and caused scarcely a ripple on everyday life in the villages. When Malays, Chinese and Europeans landed along the north coast they contacted the extremities of networks which covered the whole of the populated areas of the country and connected the Dreikikir area to the coast. These contacts sent high energy pulses rippling through the networks which, in a remarkably short period of time, reached some of the most isolated areas of Papua New Guinea.²⁸

The following chapter is concerned with the repercussions of outside contacts on the Dreikikir area, on the networks which existed there and on the people themselves.

28. Hughes (1971) describes how the arrival of outsiders on the coasts of Papua New Guinea appears to have stimulated increased trading and exchange activities in the Highlands, then almost completely isolated physically from the coastal lowlands.

CHAPTER 3THE COLONIAL IMPACT

The relationships between the formal study of innovation diffusion and rural development have been explored in Chapter One. There it was argued that geographers must be aware of, and must take into account, more than purely information movement and communication network factors, if they are to avoid superficial, and even trite, statements about the process of change in developing countries. The experiences and attitudes of the people involved and their perceptions of themselves, their local area and the changes which they, and outsiders, are attempting to bring about are also a vitally important part of any attempt to understand this complex process.

In this chapter changes in the lives of the Dreikikir people brought about by the invasion and colonisation of Papua New Guinea by Asians and Europeans are described. The first outsiders to enter were Malays, Chinese and Germans. They were followed in 1915 by Australians and in 1943 by Japanese. The physical presence of these groups, and the often forceful imposition of their administrations, economies and religions on village people, effectively removed from them the autonomy and self determination which they once held. Colonisation also superimposed new, and distorted old, communication networks and stimulated a massive increase in the amount of information flowing through them.

It is argued that these experiences have had a deep impact on the minds and lives of the Dreikikir people and have motivated them in the years after 1946 to make several determined, and at times dramatic, attempts to regain their lost autonomy.

INITIAL INTRUSIONSMalays, Chinese and Germans

The first permanent European settlement on the north coast of the Sepik Districts took place in 1894, when a German trader and recruiter, Kärnbach, established a post on Seleo Island, east of Aitape (Moses 1969,63). In 1896 the Catholic Mission of the Holy Ghost Society of the Divine Word (SVD) established a permanent station on Tumleo Island, offshore from Aitape. In 1897 the Neu Guinea Compagnie took over Kärnbach's post, moved it to the mainland and established Berlinhafen (Aitape). In the same year they established a smaller post at Dallmanhafen (Wewak) (Moses 1969,63). It is

likely however, that Chinese and Malay traders and bird-of-paradise shooters had already established trade contacts with people dwelling on the islands off Aitape. Cheesman ([1938],36) suggests that for at least 200 years before Europeans established themselves at Hollandia (now Jayapura) on Humboldt Bay, Irian Jaya, Chinese and Malays had been involved in bird-of-paradise expeditions which penetrated well into the northwestern Sepik River valley¹. Descriptions in the Urat of a precontact disease with all the symptoms of smallpox suggest that even these distant contacts had widespread repercussions². Rowley (1958,74) notes that Chinese were well established at Aitape and were in competition with the Neu Guinea Compagnie there, in 1900, and that they "were often prepared to risk their necks trading well outside the competence of the law".

In 1902 a German botanist, R. von Schlechter entered the

1. Evidence that Malays had penetrated inland as far as villages south of Lumi is provided by a patrol report by E.W. Oakley, Assistant District Officer, Aitape District, 1932, who together with surveyor H.D. Eve, was attempting to find a route for a vehicle road from Aitape to the Sepik River, when on September 10th, 1932, "...a party of approximately 50 natives armed with spears and arrows rushed into camp...Two constables from Vanimo recognised a few words of Malay pidgin and enquiries revealed we had encountered natives formerly in touch with Malay bird hunters. The hamlet... Yeriwi and a village...Tabatinka...had, prior to 1921 been occupied by Malays from Hollandia who had lived here for some months, whilst engaged in shooting Birds of Paradise..." (PR No. A3/32-33, South Wapi Extending to the Sepik River, August to October 1932, CAO No. AS13/26 Item 21).

2. Urat informants at Tunam village describe a disease which they term *rethuke*, which has not occurred within living memory, but which is described with clarity and which is obviously still feared. My informants said they were unhappy talking about it, lest it should return again. Symptoms are said to include a very high temperature, pus filled sores on the face and body, and death in almost all cases. If the disease appeared in a neighbouring village all contacts with that village were banned, and anyone going there was prevented from returning home. Individuals afflicted, were isolated in the forest and if they died were buried beneath the waters of a stream, or in a lake, so that the "heat" of the disease could not escape. The Urats normally exposed the dead on platforms or trees in or about the village. It is unlikely this disease was measles, as measles and chickenpox occur at present, without causing serious illness. A smallpox epidemic is reported to have "ravaged the coast of Kaiser Wihelmsland" in 1897 (*Official Handbook of the Territory of New Guinea, 1937*).

Torricelli Mountains from Paup and crossed the watershed to camp the night of the 22nd April, 1902, near the site of the present village of Mup in the northwest Kombio census division (Schlechter 1903). On the 23rd April he moved down the Keang River until in the late afternoon his party was attacked from the rear and shots were fired in retaliation. One of the attackers was thought to have been wounded. Von Schlechter withdrew the next day and returned to Aitape. In 1909 he again crossed the range but penetrated no further south than the vicinity of Mup village. Von Schlechter was probably the first European to cross the Torricelli Divide. Elsewhere along the range Malays and Chinese were the first outsiders to come into contact with the northern villages.

The penetration of the area by Chinese and Malays took place in two phases. The first contacts resulted from bird-of-paradise shooting expeditions from bases set up along the coast at Yakamul, Ulau and Suain. Following the north flowing Drinumor, Harech, Dandruiad and Danop Rivers inland, the shooters came into contact with Kombio speakers at Nialu village of the Harech-Nanu divide and Aruek speakers at Mihet and Labuain villages on the Dandriaud-Amuk divide. The latter villages, to the immediate north of the study area, had trading and ceremonial links with northern Yambes and Wam villages. Eye witness accounts of the first contacts, suggest that the bird shooters were not prepared for long range expeditions, and did not expect to find such large populations lying behind the coastal mountains. According to two old men who witnessed the event, Natuhombel of Arisili and Sopohon of Sumul, the first outsider to enter Wam was an unknown Chinese who was guided to Bengil hamlet or Arisili village by men from Labuain village. He moved on quickly to Sumul village and after spending a night there, returned towards the coast. A short time later, a man known only as a "Malay" did the same. In the Kombio area the first contact is said to have been a Chinese known as Ah Long who visited the villages of Komala and Koupem in a similar way. In both cases, the outsiders were accompanied by coastal men and guided by men from Torricelli mountain villages, who could speak the Kombio and Wam dialects used in the villages contacted. Ah Long demonstrated the power of his rifle on a village pig, purchased with salt. At Bengil, the anonymous Chinese held a similar demonstration on wooden fighting shields.

The bird shooters were at first, not interested in penetrating further inland. They re-visited the same villages, distributing trade goods, steel knives, beads, paint, cloth and salt. They allowed two Sumul men to accompany them back to the coast, and soon a handful of men from the northernmost villages in the study area had spent some time on the coast. They were given work planting coconuts, and were taught to speak some Pidgin. Some were taught to use shotguns and became "siutbois". These men were sent home with a supply of cartridges, tinned meat and salt. They shot birds-of-paradise, ate the flesh, and mounted the skin and plumes on pieces of softwood, which they exchanged with the Chinese on the coast for more cartridges and trade goods. At least nine men in the study area were given shotguns: Nalkombe, Mahetei and Himbile of Arisili village, Tekerembe of Selnau village, Elilep, Wandorok and Akamboro of Komala village and Akoarin and Ansaiwilk of Sangaien village. There were probably others³. New plants were also introduced: 'Chinese' taro (*Xanthosoma* sp.), cucumbers, pawpaw and betel nut.

Although the Chinese did not venture far into the study area, the effects of even these limited contacts were felt over a wide area. Villages in contact with the coast came into possession of trade goods unknown in villages to the south, most importantly, steel cutting implements. Large machetes were brought inland from the coast by northern villagers, deliberately broken and reworked into smaller blades and traded for shell rings and pigs with villages to the south. Villages as far south as Tauhimbiet, and possibly further, received their first steel from this source. The movement of steel and other goods from the north to the south, instead of from the east, as was the pattern prior to contact, began a trend which was to continue until the end of the Second World War.

The knowledge that firearms were superior to bows and spears also spread rapidly. Men in possession of shotguns sometimes allowed themselves to be 'hired' by the partners in disputes, to settle the argument in a decisive fashion. When Tumam and Musilo villages became involved in a land dispute and the latter village

3. Information from village interviews. Neither Nialu nor Yasum villages were visited and it is possible men from these places were given guns, although informants elsewhere said not.

succeeded in burning a number of Tumam houses, Tumam leaders sent an emissary to Mahetei at Arisili, a Wam village. Mahetei came with his shotgun and when the fighting resumed the next morning, he hid behind a phalanx of shields and fired point blank into the Musilo warriors. One man, Bepelat, was killed, and another, Luiai, seriously wounded; many others were peppered with shot. In another case Mahetei was requested to kill a Warengame man, and did so. The dead man's relatives then paid Tekerembe to kill the person who had hired Mahetei⁴.

German labour recruiters had been operating on the coast east and west of Aitape from 1894 and the increasing demand for labour probably influenced the Chinese bird-of-paradise shooters to turn to recruiting as a more lucrative occupation. Their knowledge of the area south of the mountains and their previous contacts with Kombio and Wam speakers, made this an obvious place to seek recruits. With larger and better equipped expeditions, manned by coastal men as well as men from Kombio and Wam villages, Chinese recruiters penetrated further inland. The result was a widespread upheaval of village life on a scale previously unknown.

At least four Chinese were actively recruiting in the Dreikikir area between 1905 and 1920, Ah Long and three others, known to villagers as Kasing, Tulhoi and Nihing. The general reaction to the approach of the Chinese in previously uncontacted villages was one of abject fear. It was believed that the Chinese were spirits and rumours from the north indicated they were probably malevolent. Women and children fled the villages, leaving only a handful of warriors to face the invaders, and if sufficient warning was received this rearguard would also decamp, leaving a deserted village. To overcome this problem, the Chinese allowed their indigenous assistants to make surprise raids into unsuspecting villages, often at dawn. In the panic that followed young men were

4. There are interesting similarities between the manner in which these siutbois were 'hired' and attitudes towards sorcerers. A sorcerer is rarely blamed for causing a death; the responsibility lies with the people who "hire" him. So it was with the shotguns. I know of no other instances of firearms being used in traditional disputes, and it appears to be unusual in the New Guinea context.

The person killed by Tekerembe was Hiyala Ningaha, the father of the bisnis leader, Wangu Wangu. The men killed and injured at Tumam were from Ngahmbole, a large section of Tumam village, which had sided with Musilo in this particular dispute. For a first hand account see Appendix C, Mwalhiyer's narrative.

grabbed and tied up, together with women. Older men were held off with shotguns. Married women were raped and released and younger women taken as wives by the raiders⁵. Suitable youths were led off to become indentured labourers. If older people were caught in a village, or in a garden, they were used as hostages and released only in return for a young man, suitable as a labourer. Little resistance was offered and few people seem to have lost their lives⁶.

Usually between four and six suitable youths were taken in a raid. The trauma of the first few weeks following their capture is not hard to imagine. Led from their villages with their hands tied, expecting certain death, they were released a few hours later, then too far from home and too afraid of the hostile countryside in which they found themselves, to think of escape. From the top of the ranges they viewed the ocean for the first time, an incomprehensibly large expanse of treeless open space to people raised among forested hills. The coastal people ridiculed their nakedness and their fear of the ocean breakers. They walked along the beaches to Aitape, were informed in a language they did not understand that they were being indentured for three years, were placed on board a ship and transported to Rabaul, Manus or Kavieng, there to begin work, cutting grass or planting coconut plantations.

Some men never returned from their indenture. They died of dysentery, pneumonia and other diseases. Those who came back to Aitape after three years were, men of wide experience in the white man's world, relative to their fellows who remained in the bush. Many were thrust into positions of power as administration appointed village officials, usually tultuls. Many appointments took place at

5. Two women captured in this fashion are said to have married Chinese. Tendange from Pelnandu village married Nihing and lived with him at Aitape until she died. Another married Tulhoi and lived at Yakumul. Her sons, Kabisung and Samiyek are thought to have accompanied their father to Rabaul. Urat women taken into Wam villages in this fashion created strong links between the two areas. Children born to them were sent back to their mother's villages to balance the debt, and the relationships were strengthened by further exchanges.

6. The deaths of three men by shooting were recounted to me during the fieldwork, one at Yakumbum, one at Ringin and the third at Mulenge near Nanaha village. In each case a frantic parent had attacked the raiders with a spear and was shot down before he could get close enough to do them an injury.

The use of hostages was common in New Guinea labour recruiting. The *Rabaul Times* documents one case, that of Albert Dudley, who was alleged to have tied up two old men in a Madang village in order to "use the old men as hostages to induce their young relations to ransom them by entering a contract (*Rabaul Times* 15 March, 1929).

Aitape, and villages had officials appointed to them before they had received a visit from a German officer. Oral accounts indicate that only the northern Wam villages were visited by German patrols under a European officer, but it is probable that patrols commanded by indigenous police constables penetrated further south. European officers visited the northern Wam villages once before 1912 and again in 1912. On the first visit Salihe and Nuhugembe of Arisili village, which is comprised of a number of scattered hamlets, were appointed luluai⁷. Nuhugembe's descendents possess a large German bayonet, presented to him as a badge of office.

From their contacts with coastal people and experience with Germans on the plantations, these first village officials knew something of the power of the administration⁸. The location of their villages on the northern margins of the populated area south of the Torricelli Mountains allowed them to dominate the paths from the coast into the study area. They not only controlled the entry of trade goods but also the flow of information out of the area to the Germans at Aitape. They captured and ransomed labourers returning home to villages in the south and in raids on their traditional enemies they were assisted, under the guise of recruiting, by Chinese, and later, German labour recruiters. When necessary, they could call upon the German administration to put down their enemies, as the luluai of Arisili did in 1912. His village had become involved in a dispute over land with the neighbouring Urat village, Misim. In a series of skirmishes, Arisili had gained the advantage, but in a subsequent fight an important Arisili man was speared and died.

7. "The luluai of the Trust Territory remains as a reminder of a German experiment in the formation of 'unions' of village groups under leaders who were vested with limited police, bureaucratic and magisterial functions...The Germans appointed a second villager, the tul tul...In the luluai's position the Germans tried to place someone with a high indigenous status. The tul tul was used partly to maintain a liaison with the government office; he was chosen for his knowledge of government practices, and of pidgin, the *lingua franca*" (Rowley 1965,83).

8. For example, between 1900 and 1910, the *German Colonial Gazette* lists 10 punitive expeditions undertaken in the vicinity of Aitape. Houses were burned and any show of resistance was met with rifle fire. Firth (1973,163) notes that punitive expeditions along the Aitape coast, including the shelling of villages from the sea, often resulted from the coastal villagers preventing inland villagers from moving freely to and from the administration post at Aitape.

His death shocked Arisili and they retired in disarray. The luluai sent two men to Aitape to report the 'murder' and a German officer led a patrol of armed police which camped at Arisili and from there raided Misim. The village was burned, including the haus tambaran, and two men were killed and two seriously wounded by gunfire⁹.

In villages to the south, life became increasingly chaotic. Hide-aways were constructed in the forest away from the main village sites and guards were posted to keep watch for raiding parties. The German surrender in 1914 and the handover of the Aitape post to Australian soldiers in 1915, did nothing to reduce the chaos.

Australians

The Australian soldiers who were posted to Aitape in 1915 were inexperienced in bush work and made little or no attempt to contact the village officials appointed by the Germans inland of the Torricelli range, or to control labour recruiters, who continued to operate much as they had done prior to the German surrender. Matters came to a head in 1918 when two German labour recruiters, Stendel and Kommling, were killed by men from the Kombio villages of Yasum and Samark. The Australian District Officer at Aitape called for urgent reinforcements from Rabaul and when they arrived, probably some weeks later, mounted two punitive expeditions. The first was either in receipt of deliberately false information or else failed to properly identify the villages alleged to have been involved. The villages of Sahik and Sumul were burned and Porombil was set alight, but after police withdrew, villagers were able to save half of the houses. Samark village was then correctly located, found to be deserted and burned. A village some distance away, Mup village, was also burned, apparently because this was where one of the Europeans had been killed, although not by Mup villagers. Word reached Aitape that the killers were boasting that any white man who entered their land would be killed and a second expedition was mounted. This

9. This account was received from Arisili and Misim informants in 1972. The *German Colonial Gazette* (1912-13) reports, "Orat natives murdered those of Damon [Tumambe hamlet], afterwards resisting police with bows and arrows and spears. This cost four Orat people their lives." The discrepancy in the number of deaths suggests the patrol did not inspect those shot, but left them where they had fallen. The patrol took a number of opportunities to demonstrate its rifles in the Wam villages.

expedition found Samark rebuilt but again deserted. Warriors were found in nearby regrowth however, and allegedly attacked the patrol with spears. Police opened fire, killing 12 men. En route in and out of the area the patrol is said to have abducted a woman from Sangaien and killed two men from Nialu¹⁰.

The killings sent a wave of terror through villages to the south. Kombio speakers sought refuge with Urats, but Urats, fearful of reprisals, abandoned their villages and returned to their forest hide-aways. In at least one case, clan leaders decided to stay there permanently and the site remains occupied today. Meanwhile a new District Officer had been appointed to Aitape with instructions "to assure the people that no further action will be taken to punish them for their crime". In 1919 he reported that "reconciliation will be a matter of some difficulty" and recommended that "no further action be taken"¹¹. The Administrator "concurred" with this recommendation and the people affected were left alone, to come to terms with their situation.

The Australians do not appear to have investigated the reason for the initial killings, although one document mentions briefly that Stendel's men attempted to take a woman from a village by force¹². Local informants state the two Europeans were killed because they insisted upon taking as recruits, a group of youths who were in the middle of an initiation and to the village leaders, this was the last straw. Reed (1943,153) quotes Pfeil, a German recruiter and administrator, who observed that the greatest shock of contact often occurred when village people first realised that the invaders were not going to go, and that their presence was not temporary.

10. This incident was first brought to my notice by Urat people recounting how Kombios had taken refuge with them, following the killing of a European in the Kombio area. I later followed up a promising reference in Rowley (1958,201) to papers in the Australian War Memorial. They are memoranda from Brig. Gen. G.J. Johnson to Mr T. Trumble, Secretary, Department of Defence, Melbourne, dated 7 June, 17 June, 1918, and 28 February, 1919. An eye witness, Dosalai who now lives near the Tong Aid Post, provided a major source of information. He was aged about eight years at the time. Men in villages all over the northern part of the study area have some knowledge of the incident. Dosalai claims 20 men were killed, but I have used the lower figure, quoted by Johnson.

11. Johnson to Trumble, 28 February, 1919.

12. Johnson to Trumble, 17 June, 1918.

Whether or not this occurred in the Kombio is not clear, but if allegations in the official report are correct, it appears as if there was a determined effort to drive out Europeans, and to kill any others who intruded. The Australian officer received no explicit instructions and probably had little control over his German trained policemen. Rowley (1965,66) notes that after the Australians took over the police in 1915, it was often the police that decided the course of action in difficult situations¹³.

The deaths of the 12 men and the widespread destruction wrought seems to have convinced the villagers concerned that further open opposition to outsiders entering their villages would be self-defeating. In 1923 the District Officer, Aitape reported,

"In the area east of Aitape the natives are of a very good type. They are industrious and there is no evidence of cannibalism among them. They are not now hostile but in 1918 and 1919 they bore a very bad character, two German recruiters having been murdered by them..." (*Report to the League of Nations*, 1923,58).

With the advent of a civil administration in May 1921 a policy was adopted of extending the influence of the Administration beyond those areas known to be under "government control"¹⁴. The new administration outlined its objectives in the field of "native affairs". They included action against the "evils" of labour recruiting, improvement in the health of indigenes, improved village living conditions, the introduction of "useful" plants, education, the introduction of "healthy forms of amusement" and to extend the influence of the Administration through parts of Territory not yet under government control (*Report to the League of Nations* 1914-1921, 22). In accordance with this policy, increased patrolling from District Offices was instigated.

13. In addition to their inexperience, Australian officers posted to New Guinea during this period were probably influenced by Europeans already living there. Lyng's (1919,163-64) descriptions of "Papuan and Melanesians" illustrate the point. Posted to New Guinea with the Australian Military Forces and later appointed District Officer, Madang District, Lyng wrote, "...deceitfulness and suspicion far from exhaust the defects of the Kanaka. A German missionary...describes the natives in the Gazelle Peninsula as being deceitful, suspicious, callous, cowardly, avaricious, theiving, hypocritical, ungrateful and lazy;...every trader and planter who has lived amongst the natives in any part of the Possession corroborates [this] statement."

14. Townsend (1933,424) describes the five categories of influence distinguished by the Administration in 1921.

By 1923 patrols had re-established contact with Wam and Kombio villages formerly within the German area of influence and by 1926 had contacted most villages in the Wam, Kombio and Yambes language areas, as well as some Urat villages¹⁵. In 1927 a patrol intervened in fighting between Yambes and Musengwa villages, and in 1928 a further patrol spent some time in the area "consolidating" earlier contacts¹⁶. Patrols penetrated further south, contacting in 1929, the northern Gawanga villages of Kubriwat and Tauhundor and Tauhimbiet. Some men from Wosambu were also contacted¹⁷, Also in 1929, the then District Officer, Robert Melrose, led a patrol from Aitape, through the Dreikikir area to the Screw River, and south to the Sepik River. In doing so he contacted the eastern Gawanga villages of Inakor, Apangai and Yubanakor¹⁸. In 1933 G.W.L. Townsend, accompanied by H.D. Eve entered the study area from the south, en route to Aitape from Ambunti. In a brush with Masalaga villagers two men were shot and killed (Townsend 1968,212-216). This patrol moved north contacted Wosambu and recontacted Kubriwat¹⁹. The southwestern Gawanga villages were not visited by an Administration officer until 1941²⁰, but they had been previously contacted by three Europeans, one a labour recruiter, probably J.H. (Diwai) Wood, and two unknown men, most likely surveyors from Oil Search Limited, a company involved in prospecting for petroleum.

GOVERNMENT INFLUENCE

As the frontier of "government control" moved further inland the majority of villages became part of a system of administration, and subject to new rules and regulations. They became

15. Local men state "Tomsen" was their first European contact. This would be Oliver Thompson, District Officer, Aitape, 1923.

16. Led by Robert Melrose, DO, Aitape (*Report to the League of Nations* 1927-28,60).

17. *Report to the League of Nations* 1928-29,88.

18. *Report to the League of Nations* 1929-30,96. Some Urat men accompanied Melrose to Ambunti and from there to Wewak by sea on board the M.V. *Thetis*.

19. *Report to the League of Nations* 1934-35,29. Masalaga informants say Townsend's party was thought to be a group of "Sepiks" who periodically attacked Masalaga hamlets. After the shootings they abandoned their village and took refuge on a less accessible site.

20. Personal communication, Mr D.M. Fenbury, November, 1972.

part of a new economic system as the plantations on New Ireland, New Britain and the Madang District developed demands for more labour. They became the recipients of a new religion, Roman Catholicism.

Kiaps²¹

The extension of government influence invariably meant two major changes to village life. All resort to violence as a solution to disputes became banned. Leading villagers were appointed as village officials, granted certain legal powers over their fellows, and made responsible to the District Officer. The banning of all warfare and homicide lifted the restrictions formerly imposed upon personal movements by enemies and dangerous strangers. Personal horizons suddenly expanded from 10 kilometres, to 50, 100 and more. As men moved through the territory of their former enemies and travelled to the coast, there occurred what Rowley (1965,70) terms "an intellectual revolution" upon which all future social, economic and political growth depended. This was perhaps, the most fundamental and important change consequent upon the establishment of government control.

But *Pax Australiana* also had negative effects. Restraints on fighting increased feelings of insecurity and helplessness engendered by the earlier recruiting raids. An aggressive neighbour could encroach upon a village's land, and all that could be done was to send word to the kiap at Aitape. The problem could not be resolved until the next visit by an administration officer, which could be up to six months into the future. If finally goaded into a fight the complainants could be arrested and imprisoned. Disputes which remained unsettled at the time government control was established nagged village leaders. Villages on the credit side of the deaths ledger could taunt their neighbours and the latter could only sit and fume; or turn to sorcery. Informants claim that only since they have been prevented from fighting, has sorcery become a dominating factor in everyday life. Disputes between individuals which would have formerly been settled by a short, sharp outburst of physical violence now became interminable verbal battles, giving

21. Kiap is the Pidgin word for an Administration officer.

neither disputant satisfaction. Above all, the enforcement of the peace provided a constant reminder to village men of their subservience and the power of the European officer and his indigenous police.

Administration officers were instructed to appoint men of high status as luluai. But because of their ignorance of the political structures of the villages in which they were making appointments, they were forced to rely upon the advice of officials from villages already under control. A number of the most astute luluai were appointed as paramount luluai (Pidgin = wetpus) and were given jurisdiction over larger groups of up to 15 villages. These were usually linguistic groups or sub-groups. Villages in which bilingualism was common were obvious places to appoint such men. Paramount luluai were appointed at Arisili village in the Wam area, Yambes village where Kombio and Urat are spoken, Misim in which Wam and Urat are spoken, and later, at Tumam. The paramount luluai met the administration officers as they entered their territory and accompanied them through it. Because neither the officer nor his police could understand the local languages, almost all government business was conducted through these men, often with the additional complication of a Pidgin speaking tultul interpreting Pidgin into the local language.

Village leaders who had achieved their positions by traditional methods were deeply suspicious of the newcomers. Some of them were prevented from attacking the European officer only by the presence of luluai, tultul and returned indentured labourers who came with a contacting officer, who explained to these men in their own languages, that to do so would result in their deaths. Apparently frustrated and powerless, traditional village leaders withdrew and allowed younger men to be presented to the officer to be appointed as luluai. There is rarely a coincidence between the names of the commonly acknowledged big-men of that time, and the names of those men who were first appointed as luluai. Thus men who had not risen all the way 'through the ranks', were placed in positions of power and supported in them by the government. Although there were no murders of luluai, as occurred on the Sepik River, it is probable that there was a great deal of tension generated in many villages, by these appointments.

It is now very difficult to discover how the establishment of government control affected the dual organisation, and the exchange relationships and rivalry between the two groups. It is likely however, that the mere knowledge that there existed a power, external to the village, which was greater than local leaders, caused a fundamental change in attitudes. Although not at first apparent, this was probably partially responsible for the abandonment of exchanges and initiation ceremonies during the 1950s.

It is doubtful, however, if the traditional village leaders could have functioned effectively in the new positions. Luluai were part-time officials and full-time villagers and much of their existence involved a schizoid protection of their fellows from the power of the Administration while satisfying the visiting officer that the law was being upheld in the village. Many traditional leaders were too proud and arrogant to have bent in the wind in the manner required of a good luluai. That some broke under the strain is demonstrated by the killing of a Patrol Officer at Wanali village, to the west of the study area, in 1939²².

The village luluai were responsible for ensuring that instructions issued by a visiting officer were carried out satisfactorily before the next visit. Administration officers were most concerned with village hygiene, disputes, and minor misdemeanours, many of which arose directly from the refusal of some people to obey the edicts of the luluai, and with the condition of walking tracks between villages. Village hygiene entailed changes in the disposal of the dead and inspections of housing and latrines. Hitherto the dead had been either exposed on a platform in a tree, or buried in a shallow grave in the floor of a house. After decomposition, bones were usually removed, cleaned and placed in dwelling houses or carried on the person. Among the Urat, the bodies of important men were placed on platforms in the village because it was believed that the smell of their decomposing bodies should remain within the village. Small parts of the body of an important man were ritually cooked and

22. The officer was speared after he had twice severely reprimanded village officials over the untidy state of the village (*Report to the League of Nations* 1939-40). *Pacific Islands Monthly* August 15, 1939 reported, "Wanali village was visited for the first time in 1928, and since has been visited many times by patrols, and by geologists engaged in the search for oil, and there had been no cause to anticipate trouble." Apparently the officer believed he could insult the village leaders with impunity.

eaten in recognition of quantity of food the man had produced and distributed during his life. These practices were repugnant to Europeans and the Administration claimed, probably with some justification, that they were a source of infection and disease. The practises were banned. An area of ground near the village was laid out as a burial ground and all bodies had to be buried within it. Officers checked census books against the number of new graves and if traditional burials were discovered, relatives were forced to exhume the body, regardless of the state of decomposition and place it in the cemetery. Exhumations and the burning of houses in which burials had been made continued until the early 1950s.

To facilitate patrolling kiaps instructed luluais to organise village labour to cut back the forest along major routes, to grade steep pinches and to lay timber across streams and muddy patches. Heavy rainfall and the rapid growth of vegetation made this a never-ending task and one which was intensely disliked by villagers. But in this way, a network of formed walking tracks was constructed leading inland from the coast, over the mountains and throughout the study area. The network of "kiap roads" as the tracks were known, was superimposed upon the pre-contact network formed by ceremonial and trade relationships between villages. Although the earlier relationships were maintained, the movement of men between villages was channeled along the new tracks because they offered greater ease of movement. Some of the old routes fell into disuse while others were used less often. The tracks also channeled the movements of people to and from the coast. The advantages this afforded to the northernmost villages has already been described. Villagers in the north were nearer the coast and visited it more frequently. They possessed a better knowledge of affairs on the coast, including the activities of Europeans, as well as possessing greater amounts of trade goods and salt, which were highly valued in villages to the south.

When an administration officer was on patrol and arrived in a village his first task was to arrange for the villagers to be "lined". All people officially resident in the village were lined

up in a prescribed order²³ before the village rest house, counted and sometimes also examined by a medical assistant. Names were checked off in a village book held by the luluai, births, deaths and pregnancies were noted and the new statistics entered. The major justification for this procedure was to monitor the number of men being recruited as labourers from each village and to discover people in need of medical care. It served, however, as "the most obvious and common indicator" of the relationship between the government officer and the villager (Rowley 1965,86). The European had the right to order the whole village to assemble and to prosecute those who absented themselves without excuse. The European was the 'boss' and the villager had to do as he was told. If the tracks were overgrown or muddy, if the village was untidy or dirty, if latrines were not being used, or if children with sores were not presented for treatment, the officer had the right to prosecute individuals and to upbraid the luluai before the assembled village. Although the luluai might do his best to protect his fellows from prosecutions, invariably men were arrested and taken to Aitape for trial. There, justice was dispensed in a fairly cavalier manner.

"No depositions were taken, no summary of the evidence appeared anywhere. When imprisonment was awarded, the Court Register was the authority for holding the prisoner in gaol as no warrant of detention was issued" (Townsend 1968,48).

Perhaps it is not necessary to explain that visits by the kiap were not enjoyed. They disrupted everyday life, and the knowledge that visits were going to occur at regular intervals, created much anxiety.

Recruiters and Planters

The indentured labour system which evolved in New Guinea after 1921, influenced the Dreikikir area in two ways. First, it brought people in the villages into contact with Europeans other than Administration officers, and secondly, it resulted in large numbers of men living and working outside their home area for 12

23. Administrative Order No. 519, issued in 1917, decreed that the "form of line" was to be: "old men without wives or children; fathers of children; their wives; children, all males and single females in order of age; male children's wives; children of male children; single men whose fathers are dead; widows, single women whose fathers are dead, women whose husbands are absent, or those whose husband's father is dead" (CAO CP661/15 Commission on the Late German New Guinea, 'Papers of the Commission', 1919). Before this order was achieved, there occurred much shouting, swearing, cuffing of ears, and slapping and punching of villagers, by New Guinean policemen.

months or more. Experiences beyond the village undoubtedly committed the old society to a path of sweeping change. But, as with contact, and government control, the experiences men underwent on the plantations and in the towns, served to emphasise the dominant position of Europeans and the subservient position of Papua New Guineans. The caste society of Rabaul was, for hundreds of contract labourers from 1921 to 1942, the perceived model of European society.

Labour recruiters in New Guinea did not earn themselves a very good reputation. Reed (1943,183) quotes a saying common in the country around 1490, "there never was nor will be, an honest recruiter". Despite their reputations, and notwithstanding the anecdotes of two ex-Administration officers (McCarthy 1963; Townsend 1968), villagers in the study area were generally able to establish and maintain more satisfying personal relationships with labour recruiters, than with kiaps.

Very little is known of the personal backgrounds of the three recruiters most active on the study area. One, Charlie Gough, achieved posthumous reknown,²⁴ but inquiries in Australia immediately following his death in 1936, established that "Gough" was an assumed name and failed to find any next-of-kin²⁵. Walter John (Wally) Hook and J.H. (Diwai) Wood also appear to have maintained little or no ties with the past. Hook was a patrol officer at Vanimo in 1922, but moved to recruiting after being apprehended smuggling bird plumes, a traffic which had been banned in 1921. Married to a part-New Guinean woman, he was based at Aitape. Marshall (1938, 6,34-36) describes him as

"...dressed in light cotton khaki, a lean hardy individual although not what you might call tough...But he can manage an unruly line of carriers with a word and a look...he has an extraordinary library of small compact editions and two dozen of these accompany him, as inevitably as the food supply, on all trips. He is what is known as 'good with natives'."

24. Gough was speared to death at Lehinga village east of Dreikikir in 1936, when trying forcibly to recruit a village lad in an area closed to recruiters. His death and the subsequent arrest of his killers is described at some length by McCarthy (1963), and Townsend (1968). It also made headlines in a number of Australian newspapers of the day.

25. Commonwealth Archives Office, Document No. CRS A518, Item R841/1 'Natives. Attacks by natives. Sepik District' 1936-1948.

People who knew Wood personally know nothing about his background, except that he was on active service during the 1914-18 war.

With the spread of village officials, the worst of the pre-1918 abuses associated with recruiting ceased. It quickly became known that whereas before, all whitemen had power, power was now restricted to government officials, and recruiters found it necessary to use persuasion in the place of force. Marshall (1938, 66) describes Hook's recruiting technique as follows:

"His special technique of "buying" [recruiting] consists of lying reading in the house-kiap [government rest house] until the tentative cough of a prospective recruit sounds at the door. If nobody coughs, Wally moves on to the next village. Usually they cough pretty readily. If the prospective recruit has his parents' permission to go away to work, Wally writes down his name phonetically, also that of his father and the luluai, presents him with about fifteen shillings worth of silver or goods and so he is "bought"."

This account tallies closely with descriptions by village men of their own recruitment. Marshall (1938,69) claims Hook was careful not to over recruit a village. Similarly Akolasa recounts how Wood refused to recruit him because he was too young (Appendix C). Whatever his sentiments toward village people, only a shortsighted recruiter "mined" rather than "husbanded" his human resources. Between 1937 and 1939, Wood, in correspondence to Mr E.T. Fulton who was gold-mining north of Maprik, complained of the behaviour of other Europeans because of the way it was affecting his recruiting.

"...My second trip was a decided failure around Wosera [Ndu speakers bordering the Dreikikir area to the south east]. I just arrived after ———, the Patrol Officer had shot a village up, a chap named ——— had had trouble with his boys in another direction, his boys getting out of control and raping marys [women], on top of that I met ——— coming from the other direction a couple of days after his boy had shot a kanaka, so you can imagine what recruiting would be like in that area after they were finished." (E.T. Fulton, personal communication, May, 1973. The names of the men concerned have been deleted at Mr Fulton's request.)

The new recruits accompanied the recruiter towards the coast, "with a growing retinue of followers...mostly women laden with food, wailing and groaning as if their hearts would break" (Marshall 1938, 70). At Aitape they were paraded before the District Officer and made their mark on a contract. They then awaited shipping to transport them to their place of indenture.

It is a truism that "the experiences of the migrant worker ...has a most profound effect upon him and the rest of the village" (Rowley 1965,108), but what sort of experiences and what type of effects resulted from periods of indentured labour? In moving from the village to the mine, plantation or town, the labourer moved from a small community based largely on kinship and group obligations, to one which was part of a larger economic and social system and in which strong caste barriers had been established between blacks and whites. One effect was the labourer became aware of something larger than his own village the first stirrings of regional sentiments. As Kokomo Ulia, MHA for the Dreikikir Open Electorate from 1968-72 expressed it,

"First I was a man of Emul village. Then, when the kiap came I became an Urat. Then when I went to Rabaul, they said, you are a Sepik now." (See also Appendix C).²⁶

The period of indenture also served as an educational experience. Men learned to use new tools, shovels, pickaxes, saws, hammers and nails; to operate machinery, copra driers, petrol driven engines, generators, ships' winches; to handle explosives, to operate sluices, to construct roads, and a myriad of other minor new technical skills which had been unknown in the village. New needs were created in them; they became accustomed to new foods, rice, tinned meat and fish, salt, sugar, tea, flour, as well as to clothing of foreign manufacture, without which they felt undressed. They also learned new social skills, loyalty to non-traditional groups, new forms of leadership, and a new language Pidgin, a *lingua franca* with which they could communicate with men from beyond the boundaries of their language group, and with Europeans. They learned of the existence of lands and nations other than Germany and Australia, which existed beyond the horizons of their recently expanded world. They saw at first hand, European standards of living and through contacts with Europeans, became increasingly aware of the relative status of Europeans and Papua New Guineans in the colonial society.

26. Kokomo continued, "...and now I am a New Guinean". A number of men in the study area bear the characteristic scars of Sepik River initiations, swirling circles around the breasts, and cuts on the back. It appears that regional divisions were sharply drawn on the plantations, and the vigorous Sepik River men insisted that other men known generally as 'Sepiks' submit to Sepik River initiations.

The place of the Papua New Guinean in the system was perhaps, expressed with the greatest clarity in the continuous debate during the 1920s and 30s over the indenture system, its penal sanctions, and its regulation against corporal punishment. The Australian Administration had to answer annually to the Permanent Mandates Committee of the Council of the League of Nations, but it also had to face the demands of business enterprise in the Territory. The planters and miners of New Guinea were vociferous in their condemnation of the manner in which the Administration sought to satisfy the League of Nations. Employing a crude form of social Darwinism these groups argued,

"the natives...have, as yet not reached the evolutionary stage when they can be relied upon to give free labour" (*Rabaul Times*, July 14, 1933).

The Administration, although they conceded that New Guineans were,

"people whose cultural standards, ethical codes and mode of life generally were almost the exact antithesis of the Western conception"²⁷

maintained that the penal sanctions "apply to both employer and labourer"²⁸. Rowley (1965,103) concludes that,

"At the best...the government tried to humanise the situation by according the worker, as far as possible, (without wrecking the system) opportunities to protect his interests...Even at the worst, the principals of good husbandry²⁹ were applied, to discourage the most severe abuses."

The corporal punishment issue began in 1915, when the Australian Government ordered the New Guinea administration to ban all forms of corporal punishment for misdemeanours by labourers. Representatives of German based trading and plantation enterprises reacted sharply with a letter to the Administrator, which, after noting that New Guineans were "human beings of the very lowest standard in the whole world", predicted a dramatic increase in assaults, rapes and murders,

27. R. Melrose, Acting Director of District Services and Native Affairs to the Government Secretary, Rabaul, 22 September, 1938 (Commonwealth Archives Document No. CRS A518, Item P828/1).

28. *Ibid.*

29. A correspondent to the *Pacific Islands Monthly* in January, 1934, noted, "No sane overseer or planter these days flogs his boys; he would be injuring himself; he wants their help and aims at keeping them straight and in good health, as he does with a *useful horse*" (my emphasis).

as well as a falling away of production due to "laziness"³⁰. Twelve years later *Rabaul Times* was still arguing, that,

"Good work in normal quantity will never hurt anyone, and the sooner the natives here are made to work the healthier they will be, and the less call there will be for...large quantities of medicine for curing of native ailments which are nothing more or less than the result of pure laziness on the part of the Kanaka. In addition to making him healthy it would make him honest, though, there is no getting away from the fact, that corporal punishment properly and justly administered will have to be applied here until such time as the Kanaka is taught honesty is the best and most painless policy" (*Rabaul Times*, 23 March, 1929).

The system is epitomised by the figures presented in Table 3.1 which summarise the most common offences by Europeans and New Guineans against the Native Labour Ordinance and Regulations between 1926 and 1936. During this period, 3,685 New Guineans were charged with "desertion", that is leaving their place of employment without permission, and a further 3,118 were charged with "neglect of duties" which include "failure to perform satisfactory work" and "disobedience". In contrast, the most common offences committed by Europeans were assault, that is physically striking a labourer, and failing to pay wages due. The New Guinean was a unit of labour to be exploited as the instrument of the employer. He was "denied for the term of employment the status of a social being" (Rowley 1965, 103).

Despite these conditions some men signed on again at the end of their contracts, and a number did not return permanently to their villages for long periods. They became foremen on plantations or moving to the towns, became domestic servants, cooks, storemen, ships' crews and policemen. Many of these men when interviewed, appeared to be the most intelligent, innovative and adventurous. They stand out as men who, fascinated by the overwhelming power and wealth of Europeans, spent many years unobtrusively, but intensely, observing European life. In their relationships with Europeans, they experienced to a greater extent than plantation labourers, the weight of the caste and racial discrimination which was rife in the major towns of New Guinea. New Guineans were expected to know their places.

30. F. Ehmann, R. Spangenberg and H.R. Whalen to Col. S.A. Pethebridge, 4th September, 1915, (Commonwealth Archives Office, Commonwealth Accession CP 661/15, Bundle 1).

TABLE 3.1 MOST FREQUENT OFFENCES AGAINST THE NATIVE LABOUR ORDINANCE AND REGULATIONS, 1ST JULY, 1926 TO 30th JUNE, 1936 (a)

RACE OF OFFENDERS	MELANESIAN				EUROPEAN			
	Desertion ^(b)	Neglect of Duties ^(c)	Other	TOTAL	Assault on a Labourer ^(d)	Failure to Pay Wages Due	Other ^(e)	TOTAL
Number of Convictions 1926-36	3,685	3,118	399	7,202	243	37	365	645
Percentage of Total	51.2	43.3	5.5	100	37.6	10.7	51.7	100.0
Acquittals	187	156	-	-	81	6	-	-
Acquittals as a Percentage of Convictions	5.0	5.0	-	-	33.3	10.7	-	-
Total Offences by Race as a Percentage of Total Offences	91.8				8.2			

- (a) Table presents the two most common offences for the period. Offences by persons classed as Asiatics are excluded.
- (b) Includes 'Absent without leave'.
- (c) Includes, Failure to perform satisfactory work, Disobedience.
- (d) Excludes manslaughter, which fell under the Queensland Criminal Code.
- (e) Most common 'Other' offences were 'Failure to render a schedule of labourers, Failure to supply rations and issues, illegal recruiting.

Source: Reports to the League of Nations on the Administration of the Territory of New Guinea, 1926-1937.

As Reed (1943,246) observed,

"In Rabaul and other main centres, the castes never mingle except for business reasons. Natives never enter stores except on errands for their masters... There is contact of course between personal servants and Europeans, but even there Europeans seldom joke with their boys or seek any level of interest."

Perhaps there were exceptions, but this situation is reflected in accounts given by men from Dreikikir who were in Rabaul at this time.

Relationships between Papua New Guinean men and European women were also a source of tension between the races. Men who worked as personal servants were acutely aware of the dangers of making, or appearing to make, sexual approaches to European women of any age, but the high levels of alcohol consumption among European men and the existence of lonely and unhappy European women inevitably led to involvements. For some Papua New Guineans the outcome was a beating and gaol, for others merely a great deal of anxiety³¹.

Those men who were in Rabaul and its environs in 1937 underwent an experience, which made a deep impression on them as individuals as well as on their fellow villagers to whom they recounted the story, upon their return home. When Vulcan and Matupi Islands in the Rabaul Harbour erupted on the 29th and 30th May, 1937 an estimated 424 New Guineans were killed together with two Europeans and one Chinese. The town of Rabaul was buried in mud and pumice, and smoke and ash from the volcanoes created conditions of pitch blackness during daylight hours. A number of men from the study area who were in Rabaul, or were working on plantations near Kokopo and Kerevat witnessed the darkness, the towering column of smoke and the glow from the incandescent craters during the course of the eruptions. In villages in

31. A man, now aged over 60, confided in my wife that he had become involved with a European woman while a personal servant in Rabaul before the 1942-45 war. He became so worried at her demands that he broke his contract and returned home. He asked my wife not to tell me, because whitemen "get very angry about these things" and he did not want to go to gaol at his age. A man in another village told me in passing he had been in gaol in Rabaul. When I asked him why, he became very embarrassed and wanted to break off the conversation. It transpired his mistress had ordered him to wash her while she was showering, and her husband had returned and discovered them together in the shower. The man was punched and kicked before being taken into custody by the police. He was gaoled for six months, and said he still worried about it, lest Europeans find out, and hold it against him.

the Dreikikir area the event is frequently recalled, for to many men it was evidence of the existence of supernatural forces which, with the proper rituals, could be harnessed to serve New Guineans in their struggle against European dominance. Catholic missionaries in the area had preached about hell and the event was explicable in these terms. A group of men said, that after being told by a missionary, "If you ignore the word of God where will you go? You will die and you will go to the place of fire", they understood the eruption had been caused by Jesus as a warning to Europeans to mend their ways.

Those who returned home often found it difficult to settle down to everyday village life after the "excitement of the towns and the labour lines" (Rowley 1965,109). Many, after remaining a few years, took another contract and in this fashion came and went from the village to a number of different jobs and locations. Returned labourers were often blamed for disturbances in villages by patrol officers, who viewed them with some suspicion.

The indentured labour system was thus responsible for a number of important changes in the villages of the study area. First it introduced villagers to labour recruiters, men who were generally less authoritarian than Europeans with whom they had previous contact. It transported large numbers of men out of their village environments and expanded their personal horizons to include much of the north coast of New Guinea, and the islands of New Britain, New Ireland and Manus. The labourers 'mental map' now included semi-mythical places like Sydney and England which floated somewhere in the ill-defined periphery of their minds³². It brought large numbers of men into closer contact with Europeans and their lifestyles. These contacts were riven with basic racial, cultural and economic differences, perpetuated by Europeans to their advantage and the Papua New Guineans' disadvantage. Village men who served a three year contract may have returned home healthier physically than when they left, but it is doubtful if they were healthier mentally. The almost total refusal of Europeans to treat Papua New Guineans with respect,

32. See for example, the map drawn by a Manam Islander for Burrige (1960,10,240) which includes Manam Island, Rabaul, Port Moresby, Aitape, Manus, North America, South America, Germany, England, Tokyo, and "Unknowland".

or to enter any kind of person-to-person relationships, frustrated and worried village men, and was to be a basic motivating force towards change in later years.

Missionaries

Mission activity was largely confined to the coast prior to 1921. The Society of the Divine Word established stations at Yakumul (St. Raphael's) in 1910, Ulaul (St. Vincent's) in 1911 and Paup in 1915³³. Father Eberhard Limbrock the founder of the New Guinea mission, although interested in the hinterland found he was unable to spare personnel to establish any permanent base behind the mountains³⁴. However a number of exploratory trips were made. Limbrock himself visited Nialu³⁵, and it is likely priests from Tumleo travelled from there to Ambunti via the northern part of the study area³⁶. Father Heinrich Meyer, who was based at Yakumul and Ulaul until 1922 is remembered in the Wom area, where he made a number of visits. He is said to have camped in a tent near Bengil hamlet, Arisili village, but little else is remembered of him.

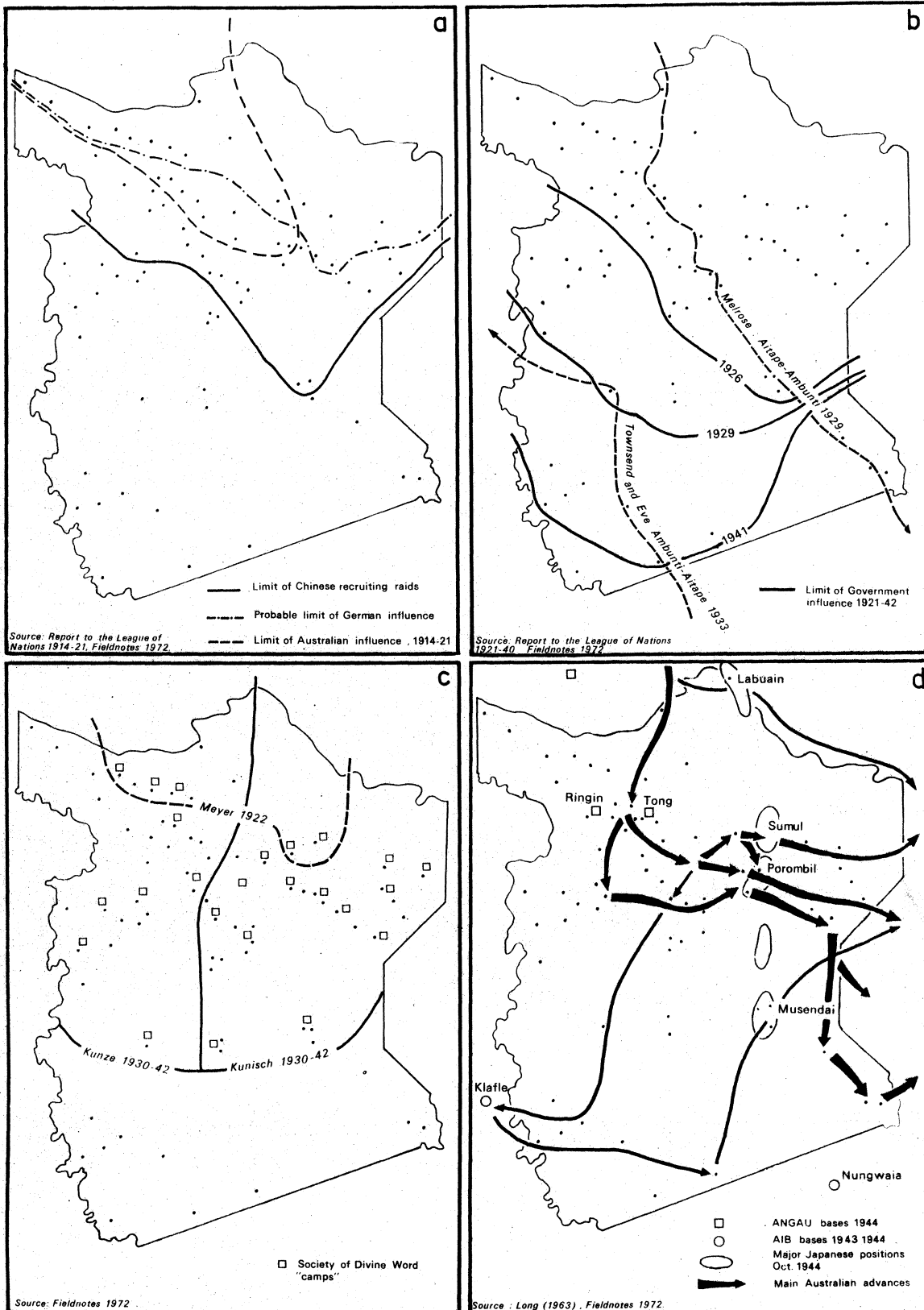
33. Personal communication, Dr R. Wiltgen SVD, 17 April, 1973.

34. Personal communication, Dr R. Wiltgen SVD, who writes, "Father Arnold Janssen SVD, founder of the Society of the Divine Word, repeatedly asked Father Limbrock when he would go into the interior. Limbrock listed five roads into the interior in his letter of the 22 February 1907, from Yakumul; Sepik, Ramu and Markham Rivers, and Alexishaven...Limbrock did not have the men to send to the interior, and in February, 1906, had 24 languages in his six mission stations...He did not feel he could handle more languages at the time."

35. Dr Wiltgen states that Father Iwo Schäfer told him that Father Limbrock was taken by Father Meyer to Kombio, the name by which the village of Nialu was known until about 1946.

36. Dr Wiltgen notes that Father Schäfer described how from Kombio (Nialu) to Ambunti, the hinterland people were naked, which implies that SVD priests had made this journey. In 1929, during his patrol from Aitape to Ambunti Melrose was attacked by Abelam speakers at "Majugabi" located somewhere on the Nanu River. After making contact with his attackers Melrose found they had been in touch with Europeans "20 years earlier" who had used firearms against them. (*Report to the League of Nations 1929-1930*, 96). Tuzin (1973, 36n) notes that, "Ilahita informants report that early in this century ...a patrol entered the area from the Aitape direction." This "patrol" is said to have killed an Ilahita man on the Nanu River, and two men from Kamanakor. It is possible the mystery Europeans were SVD priests.

FIGURE 3.1 ADMINISTRATION, MISSION AND MILITARY ACTIVITIES, 1900-1945



- a. Penetration to 1921
- b. Limits of Government influence 1921-1942.
- c. Area under the influence of the Society of the Divine Word, 1918-1942.
- d. Military activities, 1943-1944.

The 1914-18 war and the defeat of Germany seriously impaired the work of the Society of the Divine Word, and it was not until the 1930s that members of the mission again entered the Dreikikir area. Two priests, Father Edmund Kunisch, who arrived at Ulau in 1930, and Father Richard Kunze, who was posted to Yakamul in 1930, made strenuous efforts to establish mission influence in the villages south of the mountains. They were already known to men from the study area who passed through Ulau and Yakamul *en route* to and from labour contracts, or who visited the coast for salt and trade goods. Kunisch and Kunze began establishing camps, houses, chapels and school buildings, all made of local materials, at selected sites throughout the northern half of the area. Kunze worked in the western part, including the Kombio and Urim speakers, and Kunisch the eastern area occupied by Wam, Yambes and Urat speakers. The only Gawanga villages contacted were Kubriwat and the Tau villages. Figure 3.1c shows the location of the 25 camps they constructed between them. At each camp they attempted to place an indigenous teacher, or catechist, usually men from coastal villages.

The approach of the two priests differed. Informants in Kunze's area describe how he immediately attacked the tambaran cult, pulling secret paintings and ritual objects out of the spirit houses and forcing women to view them. At times he broke up initiations, swinging a stout stick and sprinkling holy water over the participants and the enclosures in which the ceremonies were taking place. Participants were told it was "wok bilong Satan", the devil's work, and that they would be consumed by fire if they persisted. Older men had to be physically restrained from killing him by younger men, who, having experienced something of the European world beyond the study area, realised both the futility of killing one European, and the likelihood that terrible retribution would follow.

Kunisch on the other hand, although he spoke against the tambaran, appears to have been more concerned about sorcery, a theme which found some sympathy with many villagers. Informants speak of him with respect, as a quiet person, who never attempted to force change.

Throughout the area an almost complete lack of understanding of the purpose of the mission existed. It was assumed that in some way, here was a power greater than any traditional sources. People did not oppose the missionaries for fear of punishment. Some

men were very interested in the rituals they observed. Services were partly in Latin and a number of informants still believe this was done deliberately so that village people would not know how to speak to "God". An interesting reaction, limited largely to Urim, Urat and Wam villages, is an open annoyance that the schools established by the SVD taught nothing but bible studies and hymn singing. One man expressed his annoyance, saying,

"These schools, were not real schools. We did not learn to read or write, or to speak English. We sang, that is all."³⁷

From the schools, youths were chosen to undertake training as catechists at mission stations on the coast. The most promising were sent on from Yakamul or Ulau to Kairiru Island, where they stayed up to two years before returning as local teachers to the coastal stations. Whether organised by European priests or by coastal catechists, the schools were not popular. Many men who attended as children recall only the constant canings received for all manner of misdemeanours. Of those who attended, none can explain what they were taught, although a few can still recite by rote, snatches of pidginised Latin litany and psalms. At first parents encouraged their children to attend, but as enthusiasm waned brow beating and threats of physical punishment were all that maintained attendances³⁸.

Some insight into the manner in which the mission was viewed is gained from reactions to the 1935 earthquake. During the period of aftershocks, a group of Urat men, together with some Kombio speakers who joined them *en route*, travelled over the devastated mountain tracks to the mission station at Ulau, and presented the priest there with a pig and traditional valuables, bird plumes and

37. "Dispela skul, em i giaman skul tasol. Mipela no skul long rit na rait, nogat. Mipela no skul long tok Inglis. Mipela singsing tasol."

38. Informant Ihati (Adolf) Nimbalmi, a retired catechist living at Selni village, who was selected by Father Kunisch to attend the training school at Kairiru Island in 1935.

shell rings³⁹. As Mahanung explains,

"He said, 'What do you want?' We said we had come to pay him to say a prayer for us because the earthquake had wrecked the village...We told the people we had brought back something from the priest. We did not know what it was, but we brought it back. The earthquakes kept on, but they became smaller. Then they stopped" (see Appendix C).

Another demonstration of the whiteman's power, an incomprehensible power, but a power which had to be acknowledged, and if possible, used to advantage.

The mission was able to spread only the most superficial concepts of Christianity before 1942. Villagers readily accepted that the missionaries possessed great magical powers, or had access to such powers. After some early interest, except in times of stress, such as the earthquake, there was little response. It quickly became apparent to the people that the secret of the powers was not going to be revealed, but would have to be earned by abandoning many features of traditional life. Most were not prepared to do this. The mission did provide a limited education for a small number of village men, and gave some of them status as catechists, but catechists were among the first to turn against the mission when there appeared to be an opportunity to drive out Europeans for good. Kunze's attacks upon the tambaran, and the general disapproval by the mission of traditional ceremonial and ritual activities, almost certainly created concern and anxiety. The tambaran ceremonies, based upon the gradual disclosure of a series of secrets which were always kept from women, were particularly vulnerable to the type of exposure given by the priest. However, the metaphysical aspects of the concept appear to have overcome the exposure of its more concrete manifestations, because the ceremonies

39. Marshall (1938,18) recounts how the recruiter Wally Hook met a group of Palei men carrying a black rubber dog, a child's toy, in a case, across the mountains to the coast, to the priests, because they believed that the dog (which they called the "child of God") was possibly the cause of the earthquake, and they wanted the priests to stop the aftershocks.

It is now widely held in the study area that the earthquake was caused by a catechist, who under instructions from the priests, poured holy water over a rock on the summit of Mt. Daum, where a powerful creator spirit is believed to dwell.

continued until the early 1960s⁴⁰.

But despite physical, cultural, economic and psychic penetration of the Dreikikir villages by labour recruiters, administration officers and priests, they remained on the periphery of the wider world. Then, in 1942, they were enveloped in a war between major world powers, a war which was to have as great, if not greater impact, than all that had happened before.

THE SECOND WORLD WAR

During 1940 and 1941 contract labourers from the study area became aware of an increasing uneasiness among the Europeans with whom they came into contact. Rumours of an impending "bikpela sik" (great illness) circulated, and administration officers began refusing to allow the re-employment of labourers whose contracts had expired. The labourers were instead ordered to take the first ship home. But in January and February, 1942, when Japanese aircraft bombed Rabaul and other New Guinea mainland towns it became widespread knowledge that a "narakain man" (another type of man) was coming and Europeans were preparing to leave. By March Japanese troops were in control of Kavieng, Rabaul, Gasmata, Lae and Salamaua and most Europeans who had not fled were either dead or in captivity. Many men from the Dreikikir area were living and working in these areas and over the following three years experienced close contacts with Japanese, American and Australian troops, and gained first hand knowledge of the horrors of modern warfare.

In the Sepik District, Japanese troops landed at Wewak in December 1942, and established airstrips there and at Dagua and But. Following defeats in Papua and further defeats in the Madang and Morobe areas during 1943, the Japanese 18th Army withdrew to the northwest of New Guinea. Their supply lines cut, they attempted to

40. Tuzin (1973,330) describes how the secret of the tumbuan, costumed youths who were said to be supernatural beings, was accidentally exposed to Ilahita women. The tambaran leaders later opposed the continued use of the costumes, arguing that now the women knew the truth, the men would be exposed to shame and ridicule. The costumes continue to be used however, and Tuzin suggests that women may always have been skeptical of the claims of men regarding the tambaran, but were extremely careful to conceal their real thoughts on the matter. He points out however, that as a spiritual entity, the tambaran is as real to men as it is to women.

establish "self-support" units inland of the Torricelli and Prince Alexander Mountains, and when that failed began living off the land. In 1944 and 1945, Australian troops pushed east from an American beachhead at Aitape in a two pronged easterly move along the coast and inland behind the foothills. The people of the study area then found themselves in the midst of a savage fight between embittered Australians⁴¹ and desperate Japanese troops.

The Japanese

Although the Japanese established themselves on the coast in 1943, the inland areas were not entered until mid-1944. First contact between the Japanese and the Dreikikir villagers were through coastal men who had been appointed civil officials by the Japanese. They came inland, contacted the Australian appointed village officials in the Dreikikir area and ordered them to proceed to the coast. The Japanese appointed their own officials, (kiapatan), in each village as well as appointing regional officials, who had powers similar to the paramount luluai, and who were known locally as kiap kohora⁴². Officials at this level were appointed at Selnau for the Wam area, Porombil and Musebelem for the Urat area, Labuain for the Kombio-Suain area and Yakrumbok for the Urim and northern Kwanga.

Because of subsequent experiences with the Japanese and the re-establishment of the Australian administration, it is now difficult to assess the initial reactions of villagers to the arrival of the Japanese. In general it appears to have been one of cautious optimism. The Japanese were in larger numbers on the coast than the Australians had ever been and there was much speculation about their purpose, intensified by factual accounts of the large amounts of equipment and supplies they were stockpiling, and the airstrips they were building. The Japanese told their newly appointed officials they were to forget about the Australians, who were said to have gone forever. The Japanese, according to an Australian New Guinea Administrative Unit (ANGAU) report written in July 1944, told people,

41. Long (1963,327) writes, "During the exacting fighting...the Australian troops became increasingly convinced that the campaign was not worth their blood and sweat...The fact that in this bush warfare far more than in open warfare the best and bravest were those who were killed,...made the men more bitter."

42. Kiapatan is fairly obviously derived from "captain", but the origin of the term kohora, is not known.

"Just now times are hard, but as soon as we have finished off the whites...we will send many ships laden with cargo and you will all have clothes, shoes, blankets and fire-arms, canned food in abundance and all the utensils you desire. The white skins are cowardly, they ground you down and exploited you, but we will treat you as men. We are mighty, and we are your friends and your ancestors."⁴³

The same report describes "acts of criminal violence" in the Aitape area, in which a number of Catholic mission catechists were involved. Many Japanese agents were catechists from the coastal villages between Aitape and Dagua. At Dagua a coastwatcher reported "Vailala ideas prevalent"⁴⁴. Many villagers were not convinced however, and arguments and discussions took place as to the best course of action. In Tumam for example, a group of men were sent to the coast to find out what was happening and to report back. Near But they experienced an Allied air attack. Aircraft strafed the airstrip and flew so low along the beaches that the terrified villagers could see the pilots. They were Europeans. The Australians were not gone. The position became distressingly clear. They had become a weak and helpless party to a dispute between two infinitely more powerful groups, both of whom demanded their allegiance. The future had become completely unpredictable and their decision was to withdraw as much as possible, to live from day to day, and above all, to avoid becoming committed to one side or the other. Needless to say, they felt their helplessness keenly.

These attitudes were demonstrated tragically, early in 1943. The recruiter Hook had taken refuge, together with his wife, children and an unidentified Chinese, at Musebelem, an Urat village. When men from Yakamul entered the area to kill him, nobody seriously attempted to stop them, and some were persuaded to help. Hook was well known and liked and his death saddened many villagers. The Yakamuls threatened Japanese reprisals if they were opposed⁴⁵, but

43. Patrol Report No. 4 of 43/44, Aitape, Papua New Guinea Archives.

44. ANGAU War Diary, 19 March, 1943. The Vailala "madness" was a Papuan millenarian movement involving mass hysteria, which occurred in 1919. The report does not make it clear whether people became hysterical or whether they merely believed the Japanese represented the coming of the millenium.

45. An ANGAU report notes, "Even in civil times the Yakamuls [a coastal village] exerted an undesirable influence on the Kombio-Urat area. During the Jap occupation they roamed the area frequently and under the guise of Jap police, threatened, abused and generally acted in an overbearing manner", ANGAU War Diary, 'Brief Survey Hinterland Operations, 18 May to 2 June', September, 1944.

the Australians, if they returned, would also certainly punish people for this death. Most villagers turned their backs on the incident in the hope that they would not be implicated and would thereby avoid recriminations from either side.

The major task given to Japanese appointed village officials was to organise a steady supply of labour. Groups of villagers were required to work for periods of up to three weeks at a time of the coastal bases. Some men were taken to Irian Jaya by ship where they worked with Japanese labour troops building an airfield. During this period villagers were generally well treated. Fear of the Japanese military police was felt by Japanese soldiers and New Guineans alike, and seems to have led to something of a spirit of *camaraderie* between them. It is probable that many of the Japanese troops in the labour battalions were from rural backgrounds⁴⁶ and some were not Japanese, but Koreans and Taiwanese. They were nearer the Papua New Guineans in background and outlook than any other outsiders with whom the Papua New Guineans had come into contact. At first the Japanese paid for the labour and provided supplementary food, fish and rice. However, as Allied pressure increased, conditions worsened. There were more beatings and less food. An Urat man who was in Aitape in early 1944 saw many labourers from Dreikikir, particularly Kombio men, die of sickness and malnutrition. He himself was hung by his hands in the sun for 12 hours for attempting to run away. The increased bombings created more hardship, but the chaos allowed many villagers to escape. Some were told to go home by sympathetic Japanese officers.

In April 1944 American troops landed at Aitape. They were relieved in October by the Australian 6th Division. In October, 1944, there were approximately 35,000 men of the Japanese 18th Army remaining in the Sepik area. The 41st Division, of approximately 4,000 men had its headquarters at Balif, eight kilometers east of the study area, with major defensive positions held by the 238th Regiment at Sumul, Porombil and Labuain, and the 239th Regiment at Musendai, Apos and Asanakor. Soldiers in the 41st Division had fought in the Lae-Salamaua campaign, the Finschafen-Ramu battles and at Aitape. Most had retreated on foot from the Huon Peninsula or further east. Over

46. In 1940, 49.9 per cent of the Japanese population was classified as "rural" (Trewartha 1960,135).

1,000 men were sick and the rest were short of food, clothing, weapons, ammunition and medical supplies (Long 1963,291). Australian aircraft dropped leaflets in Pidgin, warning villagers to leave their villages and to not cooperate with the Japanese in any way whatsoever (See Appendix D), and it became increasingly difficult for the Japanese to obtain carriers and food. The lack of cooperation was viewed as aggressive action on the part of villagers and orders were issued to,

"destroy all living quarters, food and other material resources in accordance with the adopted policy to penalise the enemy natives while rendering the utmost protection to the friendly ones."⁴⁷

West of the Labuain-Asanakor line, small bands of troops scavenged for food. They killed all village livestock, pigs, dogs, cassowary and poultry, uprooted the more accessible gardens and cut down numerous coconut palms. In an attempt to obtain carriers they captured villagers and forced them to carry. Some were held hostages to ensure others would not attempt to escape, and those who ran away were executed if caught. As the situation became increasingly desperate, Japanese soldiers shot at villages on sight and began cannibalising some of those killed⁴⁸. Although ANGAU and American patrols had penetrated the Kombio area, and it was increasingly apparent the Japanese would be defeated, it was possibly the discovery of cannibalised bodies that finally caused people to openly commit themselves to the Australian cause. As a Misim man explained,

"If the Americans and Australians had not come they would slowly have eaten all of us!"

Villagers made contact with ANGAU officers and were given instructions on the use of hand grenades and stolen Japanese rifles. Japanese soldiers were killed in villages, on tracks and in gardens; traditional weapons were used, as well as firearms. Appointed villagers reported to ANGAU officers on Japanese movements, and larger groups of troops were bombed and ambushed. There was a further incentive. Individuals assisted the Australians and Americans

47. *Southeast Area Operations Record* Part 3, 18th Japanese Army Operations, Vol. 4, 1946, 174.

48. Documentary evidence of cannibalism in the study area, is cited by Long (1963,278), of Japanese soldiers cannibalising their own dead. In the 17th Australian Infantry Brigade Report on Operations in the Aitape-Wewak Campaign, November 1944-September 1945 the discovery of cannibalised bodies of villagers is reported.

and killed Japanese soldiers in an attempt to redeem themselves in Australian eyes, for real or imagined wrongdoings during the Japanese occupation. Throughout this period villagers lived in forest hide-aways and small hamlets isolated from the main villages. They lived on famine foods which grow wild in the forest, and on small amounts of yam and taro which could be retrieved from gardens. All cooking had to be done at night, as smoke attracted Japanese soldiers and Australian bombers. It was a time of great hardship.

In 1942 many men from the study area were on indentured labour contracts. Many of those working in the Madang and Morobe Districts walked home along the coast, a six months journey, but those on New Ireland and New Britain found themselves under Japanese administration. On New Ireland, most indentured labourers were drafted into labour gangs, building roads and airstrips, and gardening to provide fresh vegetables for the occupation forces. They were taught to grow rice, corn, tomatoes, sweet potatoes, tapioca and peanuts. One of the leading rice innovators and a number of other men, first learned to grow and harvest rice while working for the Japanese (see Appendix C, Misiyaiyai's narrative). The troops in charge of gardening operations worked with the labourers, and they often held discussions in which views and beliefs were exchanged on a variety of subjects. Some labourers were trained in small arms and platoon infantry tactics, using wooden rifles, while others were placed in charge of local villagers, who were less enthusiastic about the Japanese occupation. During the final few months of the war most of these men hid in the hills, emerging to give themselves up to Australian and American troops. They were all sent home in 1946.

Many of the labourers at Rabaul were less fortunate. When Japanese forces landed at Buna in July, 1942, they had with them "1,200 Rabaul natives, impressed...to act as porters and labourers" (Milner 1957,61-62). In August a further 900 New Guineans from Rabaul arrived with the main invading force. Most of these men were indentured labourers who had been rounded up on the Gazelle Peninsula, and tricked into thinking they were being sent home. They carried supplies in the Owen Stanley's and worked in the Buna area until it was taken by Allied forces in December, 1942. During this period living conditions became increasingly severe. On the Kokoda Trail,

"frontline ration was down to less than a cupful of rice per day...By 17 September...there was not a grain of rice left...for issue to the troops" (Milner 1957,98).

The carriers were forced to scavage from local gardens, and some were killed by villagers. As they neared the coast they were subjected to daily bombing, as well as starvation. When the Japanese withdrew across the Kumusi River, they abandoned many of the carriers. An ANGAU officer described them;

"[They] were in a terrible state. They had been half starved. One showed me wounds in the back where he had been prodded by Japs forcing him to carry when utterly exhausted. They gave me harrowing accounts of Jap brutality. No medical attention when sick and death by the bayonet. Their faces showed what they had been through."⁴⁹

Another group was observed at Wairopi.

"A big number were in an emaciated condition and sick, while others were bloated from eating abandoned Japanese rice supplies."⁵⁰

By the time the Japanese were defeated at Buna, all the carriers brought from Rabaul who had not died of starvation or of wounds were in Australian hands. Their story is taken up again below.

The Australians

Following the American landings in April 1944, ANGAU officers began leading patrols into the study area, accompanied by American troops. Bases were established at Ringin and Tong, and supplies were airdropped on these sites⁵¹. The purpose of these patrols was to collect information of Japanese activities, to take prisoners, to contact villagers and turn them against the Japanese, and to recruit carriers and escort them to the coast. To the south, Australian Intelligence Bureau (AIB) patrols established camps and supply dumps at Yubanakor village, and at two villages just outside the study area, Nungwaia and Klafle. Their purpose was to collect information on Japanese activities⁵², and to do this they had established a network of "agents", New Guineans who were sent to various places to pose as villagers and observe the Japanese. Coordination between the two groups was poor⁵³.

49. ANGAU War Diary, September, 1942, Appendix 44, 'Report of Kokoda L of C, Native Carriers during Campaign Owen Stanley Range, Kokoda, Gona, Buna' by Capt. H.T. Kienzle, 9.

50. *Ibid.*, 13.

51. ANGAU War Diary, September, 1944.

52. Feldt 1946,377.

53. Personal communications, D.M. Fenbury, December, 1972; E.T. Fulton, May, 1973.

By June 1944, ANGAU influence extended into the Kombio, Urim and northern Urat villages, and was "achieved through a judicious mixture of terrorism, threats, past influence, friendliness and bribes"⁵⁴. At Musebelem, four men from nearby villages who had assisted in killing Hook were executed. All Japanese appointed officials were arrested and brought before European officers, and their activities investigated. Kiap kohora were sent to Aitape as carriers. At least one other man was shot for cooperating with the Japanese after being told not to⁵⁵. Informants state other executions occurred in the Wam area. At Aitape a number of Yakumul men were shot after trials conducted by ANGAU officers. Descriptions of executions, including one vivid eye-witness account of a condemned man digging his own grave, leave no doubt that the swift 'justice' administered by the Australians left a deep impression in many people. In 1972, when men were discussing boycotting the national elections, an act which was believed to be against the law, men said they would do it, even if the government shot them for it, as they had done during the war.

Carriers were recruited on a quota basis from all villages in the northern part of the study area. Only about 10 per cent were reported to be volunteers⁵⁶.

Leaflets dropped by Australian aircraft were also unequivocal about cooperation with the Japanese;

"If you remain with the Japanese you will eat our bombs."

"If you help the Japanese you will die with them."

But there were also promises:

"[We have] food, more than enough. Tinned meat, rice, tobacco, biscuits, sugar, ...knives, shovels and spades. Many, many. Our ships have brought [this material] to Aitape."

Some of the leaflets were signed by G.W.L. Townsend, District Officer, Sepik, in 1942, and these "letters from the sky" are a common topic of

54. ANGAU War Diary September, 1944.

55. ANGAU War Diary, September, 1944; "Waikus of Ben led a small Jap party around the area after I had propogandered his area. No further action will be necessary." Waikus's son told me in 1972, his father had been taken out of the village and shot by policemen accompanying an ANGAU patrol.

56. ANGAU War Diary, September, 1944.

conversation even today⁵⁷.

Late in 1944, the Australian 6th Division began to advance east. The Japanese opposed them with what they called "decisive ambush", which involved digging in on tactical sites, often villages, and withdrawing only after a fierce fight. The Australians used numerous air strikes, strafing Japanese positions, and bombing with high explosives and jellied petrol. Villages on the main lines of advance were completely levelled. A number of villagers were accidentally killed by bombing⁵⁸. As the Australian troops moved east, the carriers recruited earlier by ANGAU were allowed to remain in their villages of origin, although a number of the younger, unmarried men, accompanied the Australian troops until the end of the war. Some who showed ability were armed and employed as forward scouts and guides.

Although the Japanese did not occupy the far southwestern corner of the study area, villagers there did not escape the war completely. An AIB patrol of Papua New Guinean soldiers became involved in a shooting fracas in Kuyor village after they attempted to abduct a woman. Seven villagers were killed and the village was set on fire⁵⁹.

The former labourers left by the Japanese at Buna were, by 1944, serving the Australians as carriers or combatants in various parts of the country. After recuperation they were given the opportunity of joining the 1st New Guinea Battalion, later to be reformed into the Pacific Islands Regiment. Those not selected were returned to carrier lines. In 1945 unrest occurred in both combat and carrier units over continued and obvious disparities in pay and conditions between Papua New Guineans and Europeans.

"The idea grew up that the native soldier should be entitled to expect similar treatment to Australian infantry...Several native platoons had experienced occasions in action when green Australian troops had not shown up particularly well...These occasions were the subject of much unfavourable comment by the natives" (Long 1963,264).

57. Copies of leaflets dropped over the study area are held in the Australian War Memorial, Canberra, and are reproduced in Appendix D.

58. At least five people were killed at Tau when aircraft mistakenly bombed the villages. People were assembled for a ceremony. A similar error caused three deaths at Nialu.

59. Patrol Report No. 3 of 45/46, Aitape, Papua New Guinea Archives. See also Appendix C, Akolasa's narrative.

Fighting occurred between Papua New Guinean and European soldiers. The Australian command responded by issuing Papua New Guinean troops with proper shirts, shorts and badges of rank, and gave them a pay rise. Their importance in the fighting was recognised by General Blamey, the officer commanding the Australian forces, who noted, "any mass action or mutiny in the next few months would be disastrous" (Long 1963,264). Men from Dreikikir were involved in these incidents.

The Japanese surrender in August 1944 resulted in the swift demobilisation of most New Guineans serving in the armed forces. They and the carriers were sent home. Before leaving the battle zones, many men from the study area received, what they interpreted as, promises from Australians of material wealth in later years, in return for their war efforts. An Urim villager, Minilam, a veteran of the Kokoda, Buna and Aitape campaigns thought he was promised,

"Bren guns, machine guns and that sort of thing. Trucks, bulldozers, good food, cartridges, Owen guns [and] cars. That is what they told us."
(See Appendix C.)⁶⁰

He was seriously disturbed at having to hand back his weapons, and did so only after receiving what he thought were definite commitments on the part of Europeans to provide weapons and other goods to him in his village at a later date.

In late 1945 villages in the study area were described in an ANGAU report as being,

"...neglected for up to 12 months, the houses being in a poor state of repair."⁶¹

A census conducted in the Urim area in 1945 showed a 32 per cent decrease in population from 1941⁶², and a report on the Urat villages showed "a somewhat similar drop in population over the four years". Almost all seed yams had been lost, and there was a serious shortage of pigs, poultry and economic trees. A field hospital established at Yambes remained and an Administration officer began the construction of a patrol post at Dreikikir. This was the situation which confronted villagers and returning servicemen and carriers in 1946.

60. There is an interesting similarity between this man's interpretation of what Australians were preparing to give New Guineans, and Yali's. Yali, an ex-serviceman who later became the leader of a large millenarian movement in the Madang area, thought he had been promised "houses with galvanised iron roofs,...electric light, and motor vehicles, boats, good clothes, good food" (Lawrence 1964,124).

61. ANGAU War Diary, 10 October, 1945. The census's were taken by the same officer, who stated he believed this decrease was probably less than the actual decrease, because of absenteeism at the earlier count.

62. *Ibid.*

Apart from the loss of life and the physical destruction of resources, the war had two major, and apparently contradictory effects on the Dreikikir people. It reaffirmed their position of inferiority and impotence in the face of outside invaders. They had been completely unable to resist the demands placed upon them by the Japanese and the Australians. Those who had attempted resistance had risked and incurred physical violence or death. They had long felt their powerlessness when confronted with firearms, but the destructiveness of the full paraphernalia of modern war and the cruelty and inhumanity of the Australians and Japanese towards each other, was shocking⁶³. The villagers' view of their situation is exemplified by the explanations offered by Japanese appointed officials who were paraded before an ANGAU officer to explain their apparent cooperation with the Japanese. One said,

"We are sorry, but we are like women. We were here. But where was the man who had married us? You came and married us. Then you went away. Now we were not like men. We were not like you. How could we overcome other men? We were like women."⁶⁴

In contrast to these attitudes, the war also made people aware that the inferior position of New Guineans was not necessarily part of the natural order of things. Contacts with soldiers, Australian, American and Japanese, who showed little of the racial bigotry of the pre-war European society, experiences in battle and the minor revolt against the Japanese in the villages had taught many people that they were capable of doing some things as well, if not better than, Europeans. As Hogbin (1951,287) explains, Australian soldiers had neither a vested interest in New Guineans as units of labour, nor feared them as a threat to their social status. Therefore they were able to meet them on a relatively equal person-to-person level, and in some cases to offer genuine friendship. New Guineans began to view themselves differently. The increase in their

63. Villagers formerly showed each other little mercy in battle, but rarely did fighting become a destructive elimination of the enemy. A number of informants grimly recalled how hard the Australians were on the defeated Japanese, shooting the sick and throwing them into the bush, and preventing villagers from providing those well enough to walk, with food. They were also shocked by the way Japanese beat up Europeans at Rabaul, and refused to feed them properly, and by their treatment of Indian prisoners-of-war.

64. Mwalhier, Ngahmbole hamlet, Tumam village. See Appendix C.

self esteem was expressed in a questioning of the discrimination practised by the old European regime, which some Australians were determined to maintain during and after the war. The ablest of these men became an embarrassment. To the Australians in general they were heroes, but to the old order they were "insolent" and "cheeky" upstarts. One solution was to send them home to their villages, and so the new attitudes were carried into the study area. In the small village communities, men who had been in contact with these ideas were to have great influence.

POSTWAR CHANGE

The pace of change increased in the study area after the Second World War. Two main forces were involved, one internal to the area and the other external. Within the area, returned servicemen, policemen, labourers and many villagers, were determined not to return to the conditions prevailing immediately prior to the beginning of the war. Their efforts comprise much of the balance of this study and at this point only a broad perspective is offered to enable the reader to better place the detailed material which follows.

Externally, Australian government policy on Papua New Guinea changed sharply in 1946 from pre-war *laissez-faire* to a concern with rapid development. Spending in the Territory increased tenfold between 1947 and 1963 and nearly doubled again between 1963 and 1968. Little of this investment was aimed at the subsistence sector, but strenuous efforts were made to increase the cash income of villagers through the introduction of marketable crops. Infra-structural development also occurred in the form of major roads, and the building of schools, health centres and administration posts away from the main coastal centres.

Administration and Missions

At Dreikikir, a beginning was made in 1946 of the construction of a permanent patrol post. Villagers constructed a light aircraft landing strip and a European officer was posted there. The post was closed temporarily in 1947 and reopened in 1949.

In the extreme south, where contact had been minimal before the war, events took place in 1948 which suggest villagers believed they could resist government control. Fighting between Masalaga village and an outlying hamlet of Abegu spread north. A patrol sent to investigate was threatened with spears, bows and arrows and hand grenades taken from an arms cache. This patrol withdrew, recruited

reinforcements from ex-servicemen in the Urat and Wam areas, armed them, and returned. No resistance was offered to the larger body, but many people hid in the forest and the patrol was offered no assistance with firewood, food and water. Arrests were made and a number of wartime weapons were confiscated. Villages were described as being in "a filthy condition" and tracks were overgrown and had to be recut to allow the patrol through⁶⁵.

In 1949 the Dreikikir area ceased to be administered from Aitape, and fell under the jurisdiction of a new subdistrict headquarters at Maprik, 50 kilometres to the east. The patrol post was reopened and a programme of regular patrolling of all villages begun. The construction of a vehicle track suitable for four-wheel-drive vehicles between Dreikikir and Maprik was completed in 1950. What was formerly a five day walk to Aitape was reduced to an eight hour drive or a two day walk. In addition the orientation of the lines of communication changed from north to south, to east to west.

An army aid post was removed from Yambes to Dreikikir in 1950 and shortly after a beginning was made on the establishment of aid posts in the villages. The patrol post was temporarily closed again between 1955 and 1957, but apart from that period, officers of the Department of Native Affairs, later known as the Department of District Administration, patrolled all census divisions in the area carrying out general administration, censuses and court work.

Mission activities did not recommence immediately after the war. The SVD had sustained severe losses of personnel and materials and for some time after 1945, was prevented from using German born missionaries in New Guinea. Young Americans were recruited, but at first they concentrated on rebuilding the devastated coastal stations. In 1950 the first permanently manned S.V.D. mission in the study area was built at Dreikikir. By 1952 a second station was located at Bongos. Yasip Mission was completed in 1960, Dato and Tau in 1968, and Arisili in 1969.

In 1949, the South Seas Evangelical Mission (SSEM), a fundamentalist Protestant mission with experience in the Solomon Islands, began a reconnaissance of the Sepik area. Their first mission was established at Dreikikir in 1950, just prior to the Catholic

65. Patrol Report, 'Investigation of Tribal Fighting, Gawanga area, Aitape Sub-district, 1948'. Dreikikir Patrol Post.

mission. A second SSEM post was built at Ilahita to the east of the study area in 1951 and another at Balif, north of Ilahita in the same year. When the Dreikikir airstrip was temporarily closed in 1952, the SSEM withdrew to Balif, which was on the Maprik to Dreikikir road. Then in 1957 they built a station at Misim and a second at Musendai. An airstrip was completed at Brukham in 1958 and another mission opened there. Further missions were opened at Yubanakor in 1958, Yakrumbok in 1961 and a house for a missionary was completed at Tumam in 1970.

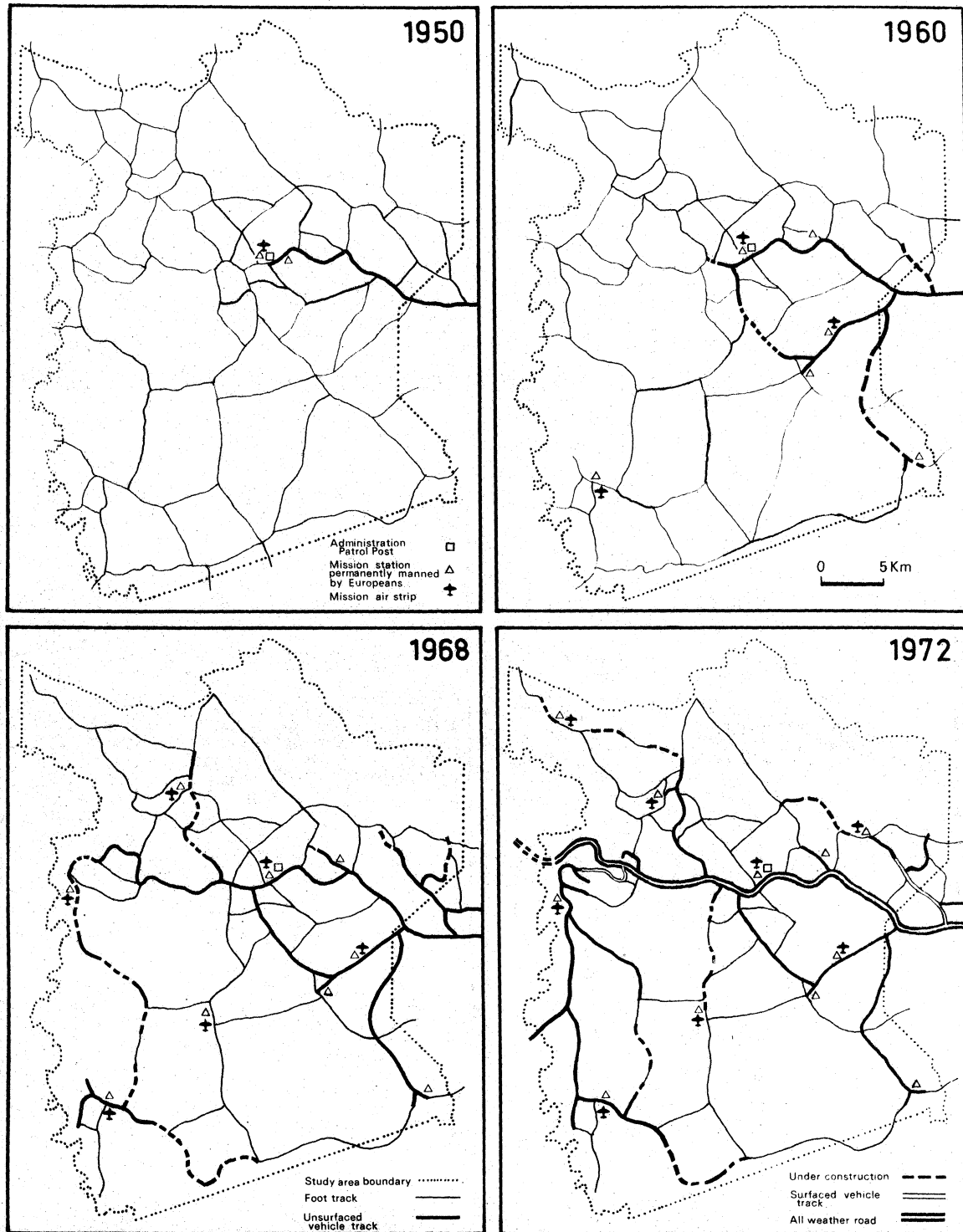
The missions immediately became involved in education. The SSEM began an adult literacy programme in an attempt to enable more people to read Pidgin translations of the Bible. When mission and administration education services became integrated, both missions established primary schools. In 1972 the SVD mission operated schools at Yasip, Arisili, Tau, Dreikikir and Bongos; the SSEM a primary school at Brukham, and a young ladies bible school at Yakrumbok; government schools were located at Dreikikir, Mahli near Emul village, and Yakrumbok. The SVD maintained a infant welfare hospital at Yasip and operated a service to many villages by vehicle and aircraft.

Roads and Airstrips

In 1946 the Dreikikir area had no vehicular roads. By 1972 there were approximately 190 km of access and feeder roads and 40 km of secondary roads. Figure 3.2 shows the development of the existing road network, as it evolved from the original east-west link between Maprik and Dreikikir. Roads have been constructed on or near the crests of major ridges, from the north and south, to link with this road. The difficulty of building roads across the grain of the country has resulted in a tree-like pattern, in which few roads are linked laterally at their extremities.

The Sepik Highway, an all-weather road designed for speeds up to 50 km per hour, was begun at Wewak by Australian Army engineers in 1962. In 1965 the construction was taken over by the Papua New Guinea Public Works Department with some contracts being tendered to private companies. Local labour was employed where possible. The road is surfaced with river gravel, and all rivers are either bridged above flood levels or are crossed by a low-level concrete pad. During heavy rains the road is sometimes closed temporarily at crossings, but closures are generally not longer than five or six hours. The Sepik Highway reached Maprik in 1968, and the Dreikikir

FIGURE 3.2 DEVELOPMENT OF THE VEHICULAR ROAD NETWORK 1950-1972



Source : Department of District Administration, Patrol Reports, Maprik and Dreikikir, 1948-1972.

Patrol Post in 1970. In 1972 the roadhead was located immediately west of the study area in the West Sepik District.

Administration officers and village leaders both believed roads were synonymous with progress. In their reports, officers continually allude to this relationship, and although "progress" is nowhere defined explicitly, it appears to have meant to most officers increased participation in the monetary economy by villagers. Lack of roads is isolated in a number of reports as the reason for lack of participation in cash cropping because of the difficulties of carrying the crop to a market point, and two reports postulate a negative relationship between roads and 'cargo' activities. The motives of village leaders are more difficult to pinpoint. Men who were prominent in organising road building were also involved in pioneering cash cropping and other commercial ventures. They seem to have believed that roads would provide a link with the outside world along which the wealth of the towns would flow into their villages. Both groups of men saw it as their duty to construct roads. For the officers it was a clearly defined task which they sincerely believed would provide benefits to village people, in contrast to some other duties which they were required to undertake. Village leaders increased their standing in their local communities through successfully organising work parties and encouraging or forcing people to work on the roads. Both groups overestimated the benefits roads would provide, and underestimated the engineering problems associated with roadbuilding and maintenance in this environment. Administration officers were however generally more realistic about possible routes, and village leaders often pressed ahead, sometimes against the advice of officers, and sometimes without asking for advice. As a consequence a great deal of labour was invested in roads which either needed extensive realignment or have never carried any vehicles larger than motorcycles.

Even greater wastage of labour occurred in the construction of 'airstrips'. Village leaders began airstrips and continued their construction against forceful advice from administration officers at three sites, Supari, Brukham and Arisili. At the first two places aircraft attempted to land but the approaches were too dangerous. At Arisili, construction was abandoned when enthusiasm ran out before the strip was half finished. It would also have been unsafe.

A further stimulus to road and airstrip building was provided by missions. Wherever a mission station has been established

a road has been constructed to it. Missionaries frequently promised villagers they would operate a retail trade store, if the villagers would build the road. Missions have built seven airstrips in the study area. In addition two other strips have been built by missionaries which proved, after construction, to be unsafe.

Contract Labour and Migration

Contract labour quickly became established again after the war, but under new legislation. Contracts were shortened to a maximum of two years and one year contracts were allowed. Individuals were also now able to seek employment as casual labourers. A casual labourer

"...did not sign any contract; he paid his own way to the place he hoped to find employment; and he did not return home at the end of any set period...the preferred destination of half of them was the town" (Ward 1971,83).

Many men moved from contract to casual labour at the end of an initial contract; some became established in a town, and have not returned home. Such men have become semi-permanent urban dwellers. They provide a link between the village and the town. Young men who leave the village for the town, invariably seek relatives or men from their home village. Letters from them are received in the villages. Dreikikir men can be found in most of the main centres of Papua New Guinea, in a variety of occupations. From them, information dribbles into the village; with increasing literacy the flow of information increases.

Political Development

Two major political changes occurred between 1964 and 1966. In 1964 the first elections for seats in a national legislative assembly were conducted. Elections have been held since in 1968 and 1972. Many Members of the House of Assembly (MHAs) have had difficulty in understanding their role, and in explaining it, and the function of the House of Assembly, to their constituents⁶⁶. Villagers are confused about the purposes of elections and the meaning and significance of other political changes which have taken place. In 1972, people complained that their past two MHAs had not visited them enough, and had used their offices to gain access to wealth which they had not redistributed to their supporters, but had used to build themselves

66. See for example, Parker and Wolfers (1971,29); Olewale, Titus and Nombri (1972). Allen (in press) presents the results of an attempt to assess knowledge of political developments in a Dreikikir village in 1971.

European type houses and to purchase vehicles.

The appointment of locally elected MHAs had a beneficial influence on the attitudes of administration officers, towards both village people, and their own positions. It is probably fair to suggest that most administration officers holding lower level field posts, believed the elections were premature, somewhat distrusted the motives of the new MHAs, and believed they would abuse their positions. Thus they became more sympathetic towards the aspirations of the ordinary villager. Furthermore, the presence of an MHA with access to the upper levels of the Administration in Port Moresby, caused many officers to reassess their own positions. Certainly, they became less autocratic⁶⁷.

In 1966 the Administration introduced a Local Government Council (LGC) to the Dreikikir area. The establishment of the council was not sought by villagers, and in some areas they had to be persuaded to accept it. Council wards were declared and nominations were called for. Most of the former luluai stood for office, but many were defeated, and replaced by younger men. The Council meets once a month at Dreikikir. At its meetings it discusses and makes decisions, under the guidance of an advisor, usually an administration officer, on how money available to the Council should be spent and on policies relating to development and welfare within the LGC area. The council is now, together with the government departments concerned, responsible for schools and aid posts. They are also required to give priorities to, and make applications for funds, for roading extensions and upgrading. Tax rates and rules are decided by the council. The role of the council in the Dreikikir area as seen by the Council Adviser in 1972 was as follows:

67. A letter from the Maprik Subdistrict office to all patrol posts, before the elections in 1964, pointed out, "...within 10 months there will be two elected members from this subdistrict sitting in the House of Assembly. We will retain the peoples' confidence if we can keep abreast of their problems and aspirations and if we may be of assistance. If we cannot do this we may suddenly find that ADOs and POs are out of the picture and that people are taking their problems to their MHA" (Monthly Intelligence Reports, Correspondence File, 3 July, 1963, Dreikikir Patrol Post).

In 1964, the District Commissioner warned the officer-in-charge at Dreikikir, "...in Dreikikir you have an exceedingly shrewd MHA, and unless we are just one jump ahead of him all the time we could be in serious trouble" (Correspondence attached to Patrol Report 2 of 64/65, Dreikikir Patrol Post).

"The Council has certainly helped promote greater unity and more awareness of Dreikikir as a whole....Most people still view it as an arm of the Central Government, but they still value it as a forum for expressing peoples' views. They consider it a definite improvement for two major reasons. The first being that they can choose their own leaders through the electoral system every two years, and the second is that the amount of local taxation is their own decision."⁶⁸

But people still do not think of the council as "theirs". It was imposed, if ever so gently, and they are only prepared to support it while it is providing benefits which originate from the government. The rapidity with which villagers joined an organisation which overtly opposed the councils, the Peli Association, in 1972, was a demonstration of these feelings.

Innovative Activity: a Brief Chronology

The series of events which are the central concern of this study have not yet been placed in the postwar scenario. A brief chronology is offered here prior to the detailed discussions which are presented in Part II.

Immediately after the war, the first ideas concerning the monetary exchange economy were carried into the Dreikikir area by men returning from the war. Best expressed by the Pidgin word "bisnis" these ideas were manifested in various forms of behaviour between 1946 and 1972. The first involved the establishment of retail trading stores and the cultivation of hill rice. The former activity involved only a handful of men, but rice growing affected almost the total adult population. Between 1950 when the first rice was planted and 1955 when it reached the most remote villages in the area, the majority of villagers experienced cultivating a crop for cash sale for the first time. For a number of reasons rice growing was discontinued by most villages after three or four years.

In 1956 a millenarian or "kago" movement spread rapidly through the study area. It was interrupted by the arrest of its leaders by an administration officer. Although this was not the first penetration of the area by such ideas, this was the first major manifestation of them. After 1956, smaller movements appeared in the more isolated villages, some reviving earlier ideas and some the result of continual introductions from outside. The ideas have

68. G.W. Swainson, Adviser's Annual Review 1971/72, Dreikikir Local Government Council, 26 July, 1972.

never totally disappeared. One of the arguments of this thesis is that both bisnis and kago activities have been motivated by essentially similar tenets.

In the late 1950s and early 1960s agricultural extension officers began visiting Dreikikir villages in preparation for the introduction of coffee. Rice continued to be cultivated in a minority of villages and some people remained members of the rural cooperative society they had joined so enthusiastically in the 1950s. Coffee became established in the 1960s and today provides the major source of monetary income in the area. Two other forms of bisnis to appear in the 1960s were cattle farming and passenger motor vehicles. A minority of villages had invested in cattle by 1972, but many villages, not all with road access, had purchased a motor vehicle. With administration assistance the cooperative movement was reorganised and in 1972 most adult males were members of a local cooperative society which was a member of a regional cooperative association, the Sepik Producers' Cooperative Association (SPCA) based at Hayfield, 16 kilometres south of Maprik.

In 1971 a second major millenarian movement developed near Yangoru Patrol Post, 100 kilometres east of Dreikikir, and spread into the study area. This movement known variously as the Peli Association, the Mt. Turu Christian Democratic Association and the Seven Association, was based on a set of never clearly defined political and religious beliefs. Followers participated in a number of rituals which had the superficial object of producing money. One of the two leaders was elected to the House of Assembly in 1972, but resigned, to be replaced by a follower in 1974.

In Part II the adoption and diffusion of these bisnis and kago ideas is analysed in order to investigate the diffusion process, and problems associated with rural development, in Papua New Guinea. Before that however, in Chapter Four, a more detailed description, and where possible analysis, of the changing communication networks is presented.

CHAPTER 4COMMUNICATION NETWORKS AND INFORMATION FLOW

Colonisation wrought changes as severe to the indigenous communication networks of the Dreikikir area, as it did to the culture, economy and society of the villages, and the psyches' of individuals. This chapter identifies the most important of these indigenous networks and the associated information field, and describes changes which occurred in them as other networks were imposed and superimposed at various periods between 1900 and 1972. Changes in the relative accessibility of villages in the area to the central places which developed as a result of colonisation and the influence on communications of vehicle roads are supported by an analysis of the personal movements of people from one village in 1972 and the movement of information across the study area in the same year.

This material provides the reader with the necessary information to proceed to the second part of the thesis, the study of the diffusion of a number of selected innovations. The manner in which changes in the patterns of communication and associated information fields has influenced spatial patterns of diffusion is a central argument of the thesis.

COMMUNICATION NETWORKS, PAST AND PRESENT*Pre-contact communications*

A good opportunity to investigate communication patterns in the Dreikikir area before contact by foreigners is provided by the tambaran initiation exchanges described in Chapter 2. To reiterate briefly, initiations were conducted by half of the dual organisation in a village. When they were preparing for the ceremony and during it, they could call upon food, labour and other assistance from men of the similar half of the dual organisation in other villages. These reciprocal exchanges were the most important inter-village link and were the basis for trade and marriage ties; villages rarely traded with or exchanged women with, villages with which they did not also have ceremonial obligations. Villages had contacts with a number of surrounding settlements, and even if no direct contact occurred between two given villages in any one year, it was highly likely that men from those villages would come into contact with each other in a third village at which they were both attending a

ceremony. Regular, balanced two-way links such as these were the major vehicle for the movement of information through the area prior to contact.

Information was assembled during fieldwork showing with which villages, each village in the area had formerly maintained regular, reciprocal, ceremonial links. Because these links were reciprocal, the responses from the men in any particular village could be checked in other villages. In this manner a double check of the links was possible. Surprisingly few anomalies were detected and they were rechecked, usually by visiting the Patrol Post during a council meeting and finding men from the village concerned.

This information was plotted as a graph (Figure 4.1). Where two villages are known to have had reciprocal ceremonial obligations, a link is constructed between them. Distance and terrain are not taken into account because the relationship took place irrespective of these factors. This graph was transformed into a connectivity matrix (Figure 4.2) in which links between villages are represented by a "1" and no links by a zero. To calculate the relative accessibility of villages to each other, the matrix was powered to produce a solution matrix, in which each village is indirectly connected to every other village. A summation of the rows and columns of the solution matrix provides a measure which has been called an "accessibility score".¹ Links with villages beyond the study area were included.

Table 4.1 presents accessibility scores represented by percentages of the total connectivity of the solution matrix. Villages are ranked in order of accessibility. On Figure 4.3, isolines of accessibility are plotted and each village included in the table is identified, excluding villages outside the study area. A number of insights are provided by this analysis.

1. Network analysis is now a common technique for investigating transport and communication networks. See for example, Haggett 1967; Garrison 1960; Gautier 1968; Carter 1969; Pitts 1965; Abler, Adams and Gould 1971.

FIGURE 4.1 PRE-CONTACT CEREMONIAL LINKS AS A GRAPH

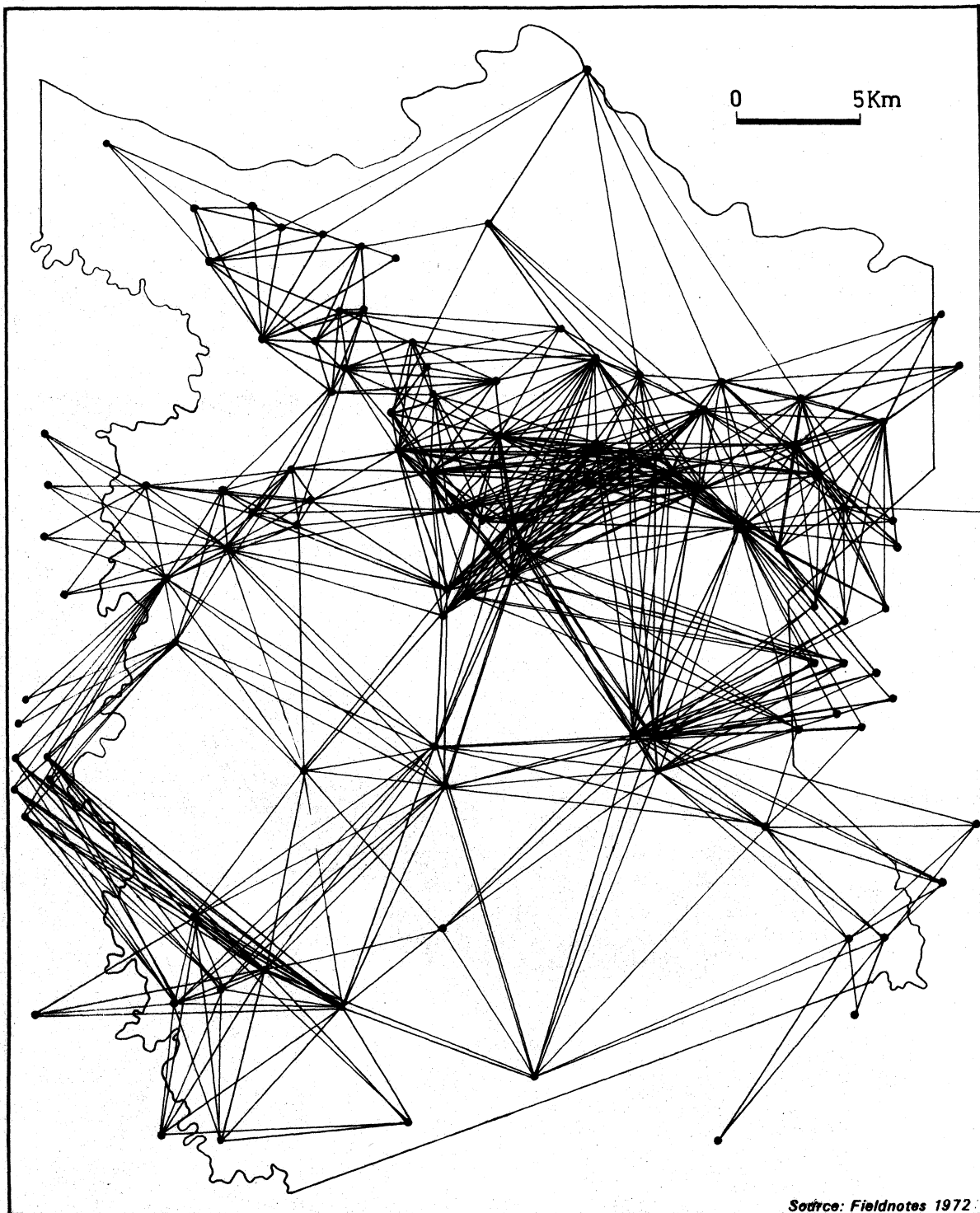
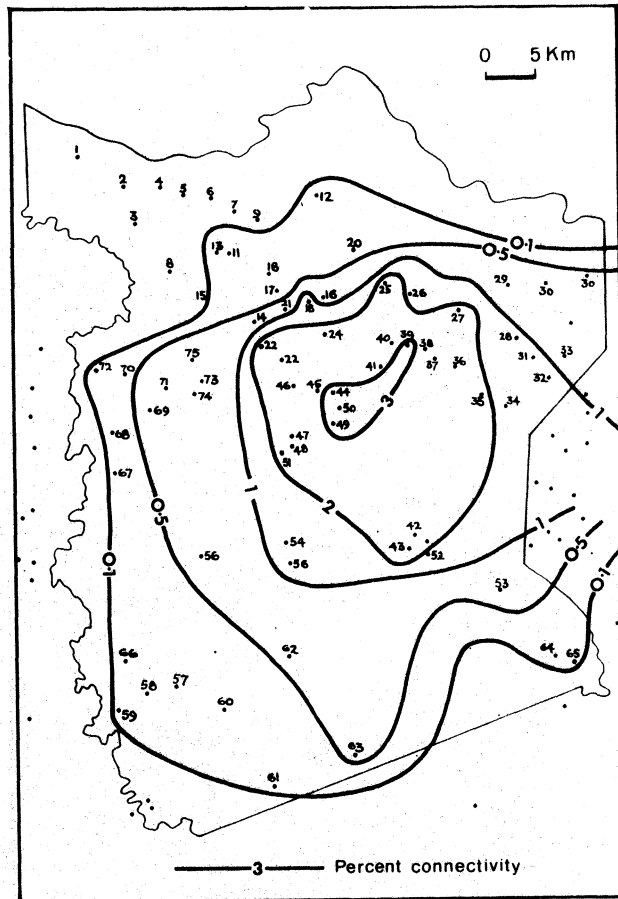


FIGURE 4.2 PRE-CONTACT CEREMONIAL LINKS AS A CONNECTIVITY MATRIX

INPUT MATRIX

The figure displays a large connectivity matrix, labeled "INPUT MATRIX", with rows numbered 1 through 106. The matrix consists of a grid of 0s and 1s. A prominent diagonal line of 1s runs from the top-left corner (row 1, column 1) to the bottom-right corner (row 106, column 106). The matrix is symmetric, with 1s also appearing in the upper and lower triangular regions, indicating connections between various elements. The density of 1s is higher in the upper-left and lower-right quadrants, suggesting a hierarchical or clustered structure. The overall pattern represents the connectivity between 106 different ceremonial links.

FIGURE 4.3 PRE-CONTACT CEREMONIAL LINKS - ACCESSIBILITY SURFACE



Source: Fieldwork, 1972.

Table 4.1 Pre-Contact Ceremonial Links - Accessibility Scores

No.	Village	Connectivity %	Rank	No. of Routes	Mean distance of routes (km) [a]
50	Musingwik	3.1314	1=	27	6.4
49	Tumam	3.1314	1=	27	6.7
39	Porombil	3.1030	3	27	5.8
44	Daihungai	3.0001	4	22	5.2
41	Musenau	2.9927	5	21	5.3
37	Misim	2.9908	6	26	5.8
48	Yerhmain	2.9692	7	28	6.7
45	Musengwa	2.9533	8	22	5.1
35	Emul	2.9514	9	36	7.5
40	Namaisung	2.9185	10	24	4.9
38	Asiling	2.9049	11	22	4.8
47	Moiwhak	2.8555	12	27	7.0
24	Yambes	2.8525	13	26	5.2
42	Musendai	2.8507	14	33	9.3
46	Nanaha	2.7262	15	26	5.4
36	Pelnandu	2.6866	16	23	6.0
51	Musilo	2.6751	17	23	5.2
25	Sahik	2.6336	18	24	6.3
43	Museng	2.6135	19	34	9.4
27	Arisili	2.5217	20	24	6.0
23	Yalangel	2.3652	21	23	5.2
22	Yaurang	2.0016	22	22	5.0
52	Apos	1.8591	23	19	9.7
26	Sumul, Whaleng	1.4647	24	13	4.6
54	Tauhundur	1.4483	25	23	10.2
55	Tauhimbiet	1.3258	26	21	10.1
28	Selnau	1.3526	27	17	6.0
34	Luwaite	1.2847	28	16	4.9
32	Bana	1.2476	29	17	4.7
31	Warengame	1.2247	30	17	4.6
19	Setnyam	1.0385	31	12	3.1
30	Hambini	0.9946	32	17	5.9
16	Samark	0.9416	33	12	4.4
29	Selni	0.8996	34	14	5.5
73	Albalung	0.8264	35	12	4.5
75	Yauatong	0.7957	36	13	4.6
69	Laningwap	0.7903	37	18	6.5
33	Wareli	0.7623	38	14	4.8
21	Ben	0.7578	39	10	3.3
56	Kubriwat	0.7252	40	14	9.4
71	Kilmanglen	0.6769	41	13	4.8
53	Inakor, Asanakor	0.6827	42	12	7.9
74	Winyamon	0.6613	43	12	5.5
63	Daina	0.6572	44	12	12.3
14	Yakulm (Yase)	0.6323	45	13	3.3
62	Waremenekor	0.5424	46	10	8.2
57	Bongowaukia	0.4679	47	17	8.0
17	Meringe	0.4484	48	11	3.4
68	Yakrumbok	0.4402	49=	19	7.9
67	Pagilo	0.4402	49=	19	7.4
20	Yasum	0.3815	51	5	4.6
12	Sangaien	0.3662	52	6	6.7
58	Kwatengisi	0.3208	53	16	7.6

No.	Village	Connectivity %	Rank	No. of Routes	Mean distance of routes (km)
60	Wosambu	0.2995	54	16	7.1
66	Wesor, Kuyor	0.2961	55	12	7.8
72	Mimbiok	0.2582	56	14	5.2
61	Masalaga, Abegu	0.2529	57	9	9.7
70	Krungunam	0.2452	58	9	3.9
18	Muyem	0.2498	59	6	2.5
64	Yubanakor	0.1970	60=	10	7.0
65	Apangai	0.1970	60=	8	7.3
13	Tong	0.1661	62	7	2.9
11	Yasumboret	0.1401	63	10	3.1
10	Kumbum	0.1232	64	8	3.3
59	Mahamsi	0.1140	65	11	6.8
15	Yasile	0.0876	66	7	2.1
7	Makupmanip	0.0633	67	9	3.7
8	Waim, Soaiyap	0.0604	68	11	3.8
6	Serepmel	0.0227	69	8	4.2
5	Sambu	0.0214	70	6	4.3
3	Yakumbum	0.0180	71	6	4.5
2	Koupem	0.0106	72	8	5.4
9	Nyumatil	0.0081	73	4	4.7
4	Komala	0.0062	74	5	3.8
1	King	0.0019	75	3	4.5

Mihet, Labuain	0.1764	Diameter of solution matrix is 7.
Southern Arapesh ^[b]	0.7866	
Bumbita ^[c]	6.2085	\bar{X} No. of routes = 16.04 Std. Deviation 7.83
Sunuhu, Kamanakor	0.6066	\bar{X} Distance (km) = 5.82 Std. Deviation 2.04
Seim, Klafle	0.4798	
Arokosamei, Bongoimasi	0.1466	
Nungwaia, Weikor, Pa'apuma	0.0945	
Wumerau, Wamgrir	0.3691	
	<u>99.9946</u>	

[a] Straight-line distance

[b] *Southern Arapesh villages*: Wamsak, Amom, Supari, Albinama;

[c] *Bumbita villages*: Aluwingei, Bombita, Bulamita, Bonahoi, Indipi, M'Bras, Salata, Sarom, Saunes, Timingir, Waragom.

The most accessible villages as measured by this technique were the four Urat villages of Musingwik, Tumam, Porombil and Daihungai. Together with a further 18 centrally located villages surrounding them they account for almost 62 per cent of the total connectivity in the network. The least accessible villages were the Lou and northern Kombio villages near the Torricelli divide and the most southern Gawanga villages. The diameter of the solution matrix is seven, which means that information introduced to any village in the network could have been passed to the most distant village after passing through only seven other villages.

The greatest number of reciprocal links maintained by any village was 36 by Emul village. Musendai and Moseng maintained 33 and 34 respectively. The mean number of links maintained by all villages was 16.04². Large villages maintained a greater number of links than smaller villages³.

Despite the high number of links between villages the actual distances travelled between villages were low. The mean distance (straight-line) of links maintained by all villages was 5.8 kilometers. Given the standard deviation of 2.04, it is unlikely the average adult male ever ventured much further than eight kilometers from his village of birth during his lifetime. Oral evidence strongly suggests that excursions beyond the limits of villages with which ceremonial relationships were maintained were not made, and that movement within these limits was made only by well armed groups of men.

The internal network was linked to villages outside the study area in the north through the mountain villages of Labuain and Mihet, which in turn had links with coastal villages. In the east the Southern Arapesh villages of Amom and Wamsak and densely settled Bumbita Arapesh villages south of them maintained links with Wam and eastern Urat villages. The eastern Gawanga villages maintained links with the Gawanga speaking villages of Kamanakor and Sunuhu as well as the Abelam villages of Nungwaia and Weikor which in turn were linked to the Wosera and Ilahita Arapesh further east. In the west the Urim villages had links with the Urim speaking

2. Kaberry (1966,362) writes of the Northern Abelam, "any one village is...the nexus of a system of political relations which embrace some eight to fourteen neighbouring communities".

3. The rank correlation between village size and number of links is 0.66, $\alpha = 0.001$.

villages of Wamgrir and Wumerau and the western Gawanga villages with the Gawanga speaking villages around Seim.

Of these points of entrance to the network, those to the east are, on the measure of accessibility used, notably more important. The eastern links account for 7.7 per cent of the total connectivity compared to only 1.2 per cent for the western links. The most important group in the east were the Bumbita Arapesh villages. It is thus highly probable on this evidence alone that more information entered the Dreikikir villages from the east than from any other direction and that items of information entering from the east would have had a better chance of spreading within the area, than items entering from elsewhere. Movement of information from the Bumbita villages into the central Urat villages, which had better access to the Dreikikir villages than any others, would have had the greatest chance of spreading widely.

Other evidence, linguistic and ethnographic, referred to in Chapter 2, also supports this finding. It is as if the vitality of art and culture possessed by the vigorous and expanding Ndu speakers of the Maprik and Wosera areas, created pulses of energy which dominated the communication networks east and west along the foothills, severely retarding flows from the west. Mountains to the north and grass plains to the south, lightly populated and generally inhospitable, provided barriers to flows from the coast or from the Sepik River.

The arrival on the coast of outsiders and their movements inland through the mountains changed the pattern described, superimposed new networks and provided a greater source of energy with which to push information and ideas inland, across and against the old flows.

"Kiap roads" and changed patterns of accessibility

The construction and evolution of the "kiap roads" is described in Chapter 3. By 1942 these cleared walking routes extended over the mountains and down into the Dreikikir area as far south as Apangai in the southeast and Kubriwat in the southwest. The southern most Gawanga villages were visited only once by an administration officer before 1942 and were not classified as being "under control". Tracks also led into the area from the west and east, but most movements seem to have taken place over the mountains from Suain and Yakamul. With the outbreak of war, the Allied Geographical Section prepared a series of intelligence books, detailing

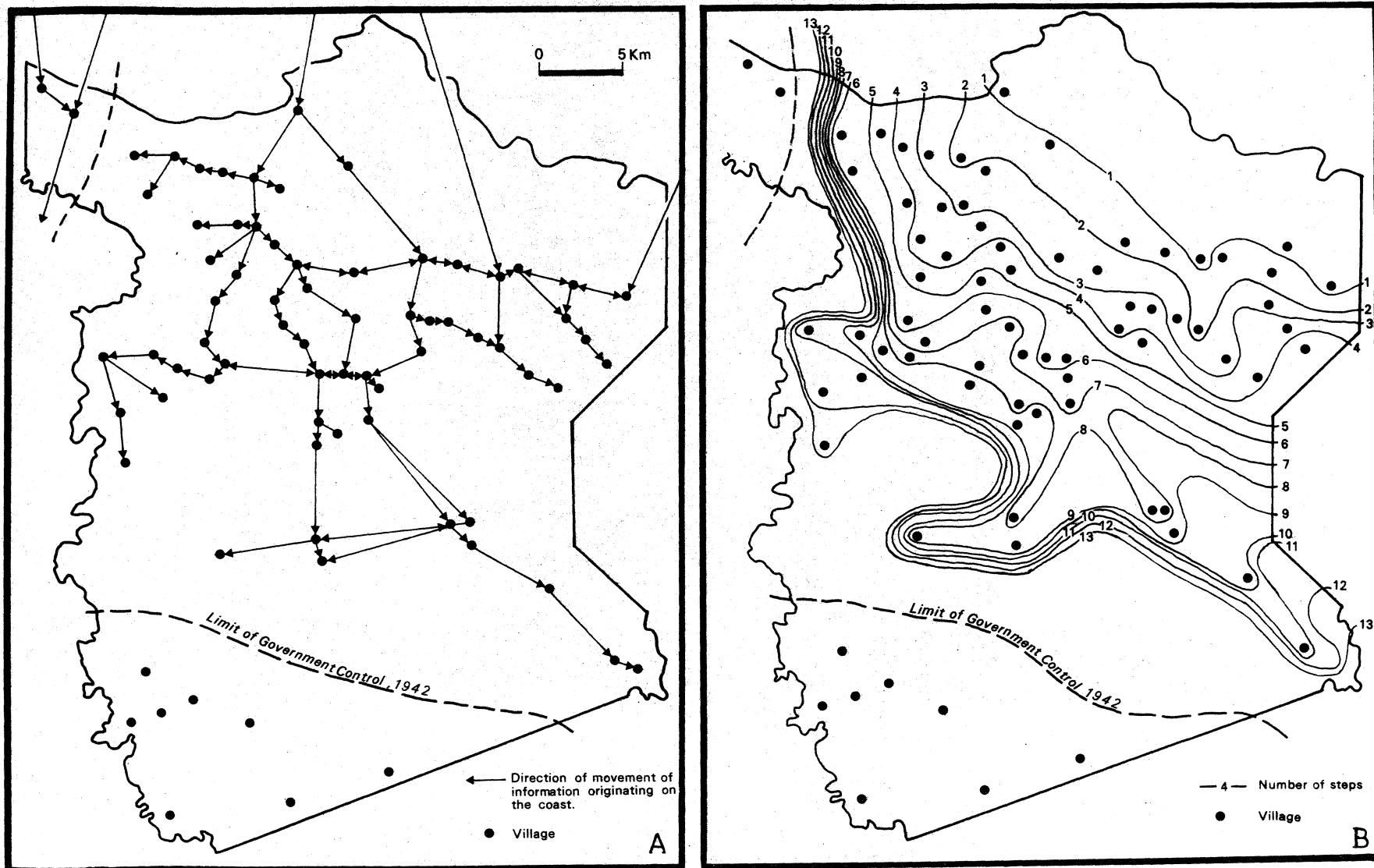
track plans, routes and conditions. Figure 4.4a is constructed from information contained in two such studies⁴. It is assumed that if people were moving inland from the coast, that they would follow major walking tracks. The paths taken are plotted using routes described in the intelligence handbooks. These are the most commonly used paths to the villages concerned. Where a route is equally likely between two villages a two-way flow has been assumed.

Figure 4.4b depicts the hypothetical accessibility surface under these assumptions. It is based on the logic that villagers nearest to the points of entry from the coast would have been more accessible from the coast and would have received greater amounts of information from sources there, than villagers to the south. This would have been so because, firstly, they were physically and temporally nearer the coast, were more familiar with it and visited it more frequently; secondly they had been under government control longer and knew more of the workings of the administration; thirdly men travelling to the coast from the northern villages did not have to pass through other villages, as did men from villages to the south, and so they would not have been faced with the distinct possibility of being harrassed by men from the villages through which they passed; and fourthly, villages nearest the points of entry would have experienced a greater volume of people passing through them *en route* to and from the coast, and would therefore have been more likely to have received information about events on the coast, than villages further south, where the volume of people on the move would have been considerably less. Thus the accessibility surface is constructed on the number of villages a person walking inland from the coast would have had to have passed through to reach any given village, taking the shortest route.

In the period up to 1942, the greatest accessibility to the coast was experienced by the northeastern Wam villages, and this northeasterly bias in the accessibility surface is continued southwards across the study area. The far northwest Kombio villages remained isolated. Although they had experienced some of the earliest contacts the route from Paup to them was difficult and at times of

4. Allied Geographical Section, Southwest Pacific Area; Terrain Study No. 65, (1943), Area Study of the Sepik District, Volumes I and II; Terrain Handbook No. 18, (1944) But.

FIGURE 4.4 ACCESSIBILITY FROM THE COAST, 1921-1946



Source: Allied Geographical Section, S.W. Pacific Area, Terrain Study No. 65 (1943); Fieldnotes 1972

heavy rain dangerous, and the easier routes from Suain and Yakamul to Nialu, Arisili and Hambini were favoured. Figures 3.1a and 3.1b reflect the same pattern. The northeastern villages were the first to come under government control, the first to be linked into the administrative system by the appointment of village officials and the first to begin supplying labour to the New Guinea plantations.

Figure 4.4b is of greater interest however when it is compared to Figure 4.3. Prior to the establishment of the "kiap roads" the dominant movement of information had been from east to west. Villages with the greatest access to this network were the central Urat villages. After 1920 Wam villages and the northeasternmost Urat villages, and some central Kombio villages found themselves with the best relative access to another, more powerful source of information. Some of the most isolated villages prior to 1920 now became some of the least isolated, while some of the least isolated prior to 1920 now became disadvantaged relative to their former positions in the older ceremonial network.

Little long term effects on accessibility resulted directly from the war. Established "kiap roads" were upgraded and for much of 1944 and 1945 were major supply routes from Aitape to the inland operations zone. Villages which had the highest accessibility levels to the coast before the war tended to experience the greatest levels of military activity and suffer the greatest damage. Certain key villages, because of their strategic locations, became supply dumps and staging areas for troops coming and going from the combat areas.

In 1946 the situation reverted much to what it had been before the war. Aitape remained the administration centre for the Dreikikir area and most movement took place along the prewar paths. The replacement of Aitape by Maprik and the subdistrict headquarters quickly changed this pattern. Maprik was less than two full days walk from the Dreikikir Patrol Post along a formed road, whereas Aitape was a minimum of four days travel, two of which were spent crossing the Torricellis at 800 meters and walking down river beds, and narrow gorges, devoid of settlements and proper shelter. Many Dreikikir men had accompanied Australian troops to Maprik as carriers and were familiar with the route. Some had made friends with men from villages along the way. Movements over the mountains to Aitape had fallen sharply by 1950, while movements to Maprik increased just as dramatically.

These events resulted in the reorientation of communication networks in the study area. Like a compass swinging in response to a change in the position of the pole, the communication networks swung from north to east, re-establishing the former, pre-contact pattern. The effect on the relative accessibility of villages is illustrated diagrammatically in Figure 4.5. Villages in the north, which had for twenty years had the best access to the coast and had dominated the paths and the flow of information and goods, were now on the margins of a new network. In the north the direction of flow of information from the administrative centre was reversed, as the flow of water in a river system is reversed when a drainage basin is beheaded. The eastern Urat villages which had formerly been key villages in the precontact communication system were once again occupying the most advantageous locations for receiving and passing on information. The new vehicle track passed through their villages and so did the many men from villages to the north, south and west, who travelled back and forth to Maprik.

The establishment of the Dreikikir Patrol Post also influenced the movements of people. Whereas previously all administrative matters not handled by an officer on patrol had to be referred to Aitape, now many such matters could be taken to the officer at Dreikikir. The site was well chosen for it falls within the line enclosing the four villages which demonstrate the highest accessibility in Figure 4.3, but it did little to alleviate the situation into which the northern villages had been placed by the construction of the road and the establishment of Maprik as a subdistrict headquarters. They remained at the ends of the networks.

It should not be assumed that because access has here been equated with links between administrative centres and villages, that information moving through the networks all had its origins with the administration. That was not the case. But the administrative centres acted as poles in two ways; first they caused people to visit them for goods, services and other things such as courts, and secondly, they were the major points of contact between the outside world and village Papua New Guinea. Administration centres thus stimulated movement, and focussed it on points, in contrast to the situation before their establishment, when movements were of the pattern illustrated in Figure 4.1. When people move they observe new things, see unusual events and hear new ideas, which they recount to other people they meet on the track, or to the people back home, when they

FIGURE 4.5 DIAGRAM SHOWING CHANGES IN ACCESSIBILITY AS A RESULT OF THE CONSTRUCTION OF THE DREIKIKIR - MAPRIK ROAD AND THE DREIKIKIR PATROL POST, 1950.

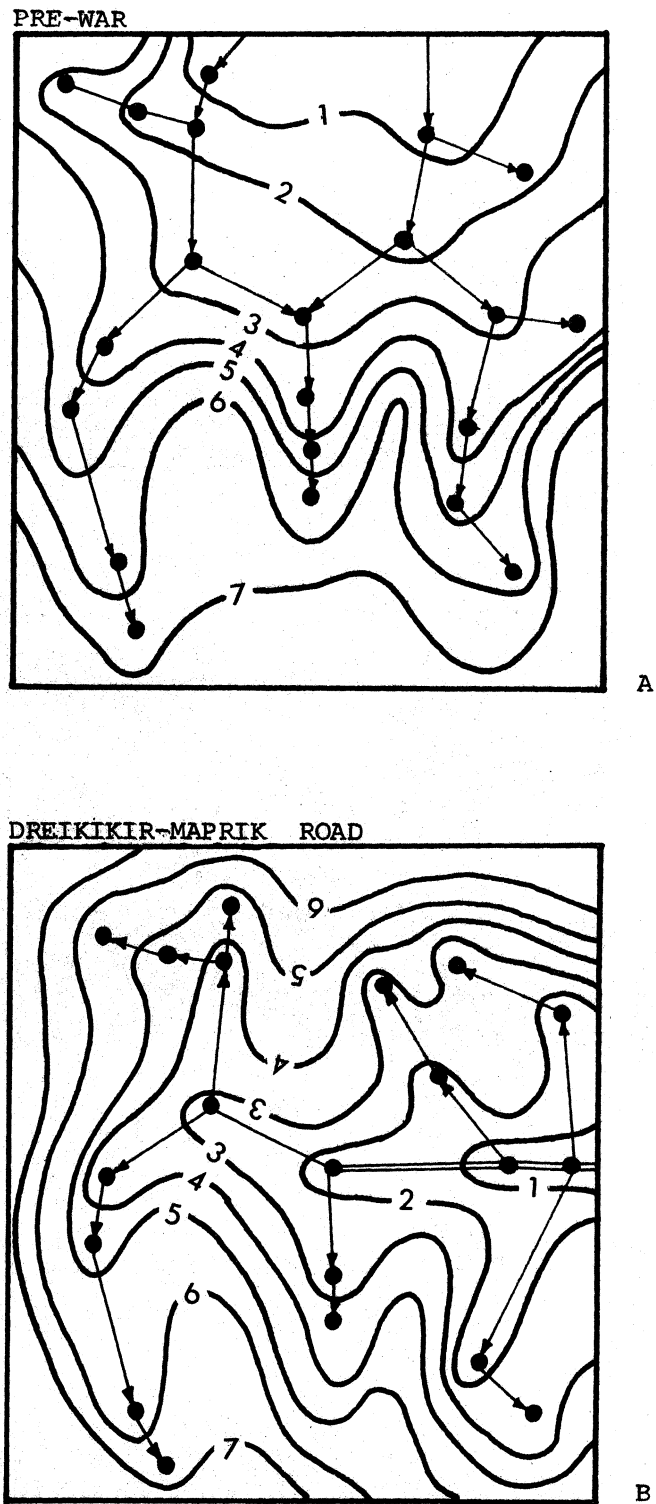
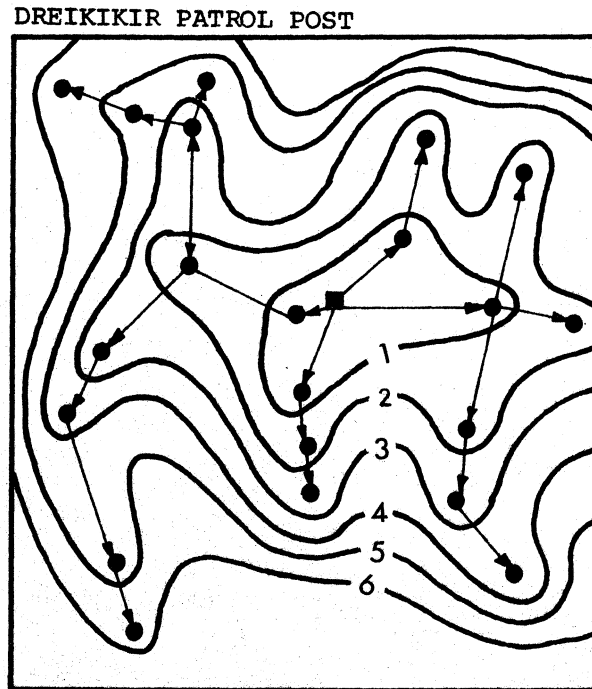


FIGURE 4.5 (Continued).



return. The channelling and directing of the flow of people also resulted in the channelling and directing of the flow of ideas. Information fields developed in which the probability of movement from some points and in some directions was much greater than for other points and directions. The construction of vehicle roads allowed people to move with greater ease on foot, as well as to travel further and faster in motor vehicles. Access to a vehicle road has proved to be an important factor in the reception and adoption of innovations in the Dreikikir area.

The Modern Road Network

The development of the existing road network is described in Chapter 3. The first vehicle road from Maprik to Dreikikir passed through Urat and Wam villages, providing them with road access well before villages further west. A crude measure of the spread of road access is provided by Table 4.2, in which the proportion of villages in each census division located within two kilometers of a vehicle road at various times is detailed.

TABLE 4.2 PROPORTION OF VILLAGES WITHIN TWO KILOMETERS OF A VEHICLE ROAD, BY CENSUS DIVISIONS, 1950-72

<u>Census division</u>	<u>1950</u>	<u>1960</u>	<u>1968</u>	<u>1972a</u>	<u>1972b</u>
	(Per cent)				
Urat	41	71	82	100	41
Wam	9	9	45	67	36
Gawanga	0	7	29	64	0
Urim	0	0	44	100	67
Kombio	0	0	13	58	13
All villages	11	19	40	75	27

Notes: 1972a refers to all vehicle roads; 1972b to the Sepik Highway only.

Source: Dates of road construction are taken from Department of District Administration Patrol Reports, 1948-1972.

These figures provide no measure of the standard of the roads however. For example, although all of the Urim villages are within two kilometers of a road, the road passes through difficult country, has some steep grades, and in places crosses clays, which when wet, pack onto the wheels of vehicles quickly bringing them to a stop⁵. Drivers are reluctant to proceed along the road if weather conditions indicate any possibility of rain. Even so, vehicles are frequently stuck in the Urim for days at a time. By the middle of the rainy season the Urim and Kombio roads are in a very poor condition. Until recently in wet conditions drivers used wheel chains, which damaged the road to such an extent that they became impassable without chains until well after most of the rain had fallen for the year. The council has now banned the use of chains, which means vehicles must either wait until the roads are dry or run the risk of being stuck somewhere along the roads if rain falls during the trip. The road to the western Gawanga villages connects with the end of the Urim road, so it is also a road of restricted use. A common pattern of use of these roads is for drivers to proceed along the Sepik Highway to the mouth of a side road, question villagers about the condition of the road, assess the likelihood of rain, and if all appears favourable, make a dash for their destination. Once there,

5. The Urim road is probably one of the few places in the world where people can be seen pushing four-wheel-drive vehicles *down* hills.

they carry out their task as quickly as possible and flee down the road for the highway before the afternoon downpour. Frequently people wait in vain for a vehicle, carrying a coffee buyer for example, which is prevented from reaching them by rain.

A simple, functional, measure has been used to assess the relative accessibility of villages under the road conditions existing in 1971. This year is used because it is the latest year for which other data, such as rice and coffee production, are available. The measure takes the road, or foot track, distance, between a village and the point or line to which access is being measured, and weights this figure with the number of 40 meter contours which the track or road crosses⁶. Distances on the Sepik Highway are not weighted. This measure takes into account vertical as well as horizontal distances travelled. The question asked most frequently by travellers on unfamiliar tracks is, "How many streams (descents and ascents) to cross...?", not "How far?" or "How long?" When Tumam men were asked to draw a map of routes from Tumam to various points, they drew straight lines for flat areas and sinuous lines for the ascents and descents and verbally emphasised their locations. Alternative measures, such as times, are difficult to collect, and do not take into account whether or not a person is carrying a load, which is an important consideration in the marketing of coffee or rice for example. Weighting distances on the unsurfaced vehicle roads is justified because firstly, most people walk and do not ride, and secondly, it takes into account the difficulty of negotiating these roads in vehicles, and is to some extent a surrogate for the probability of a vehicle reaching its destination. The greater the number of ascents or descents, the less likely a vehicle will get through in wet weather, and the less likely a driver will make an attempt when conditions do not look propitious.

The road and track network upon which the measures were made is presented in Figure 4.6. Plates 4.1 and 4.2 contain illustrations of typical examples of foot tracks, unsurfaced side roads and the Sepik Highway. Accessibility to the Sepik Highway and to the Dreikikir Patrol Post were calculated. The surfaces which

6. All distances and heights measured from the 1:100,000, T683 map series produced by the Australian Survey Corp, using field corrections and amendments where necessary.

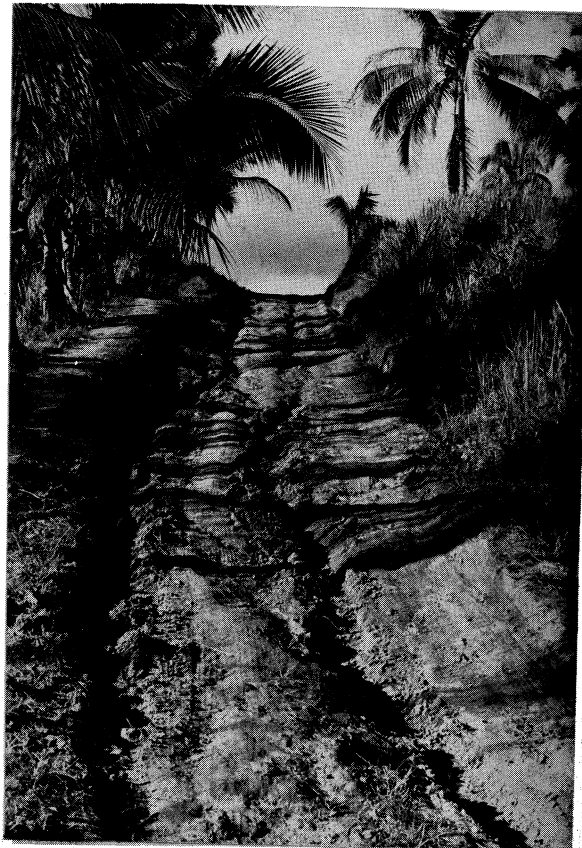
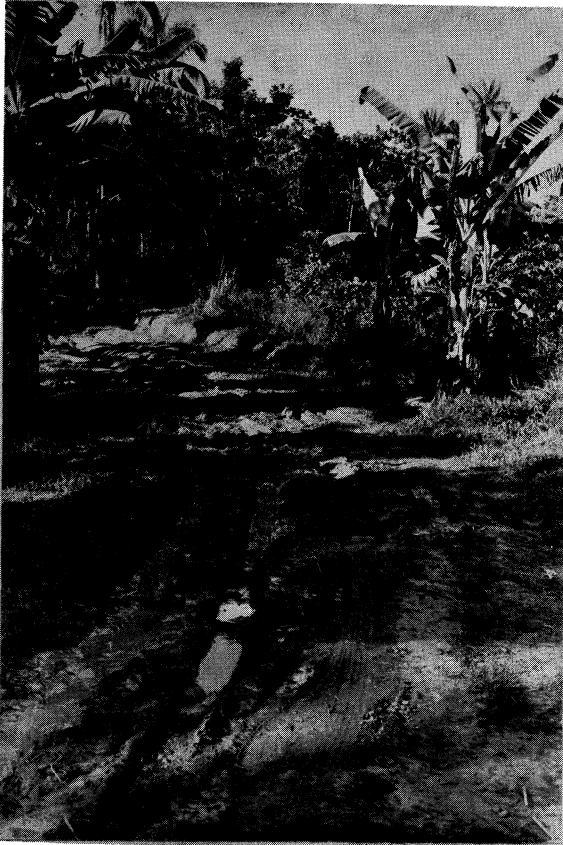
PLATE 4.1 TRACKS AND ROADS I, DREIKIKIR, 1972.



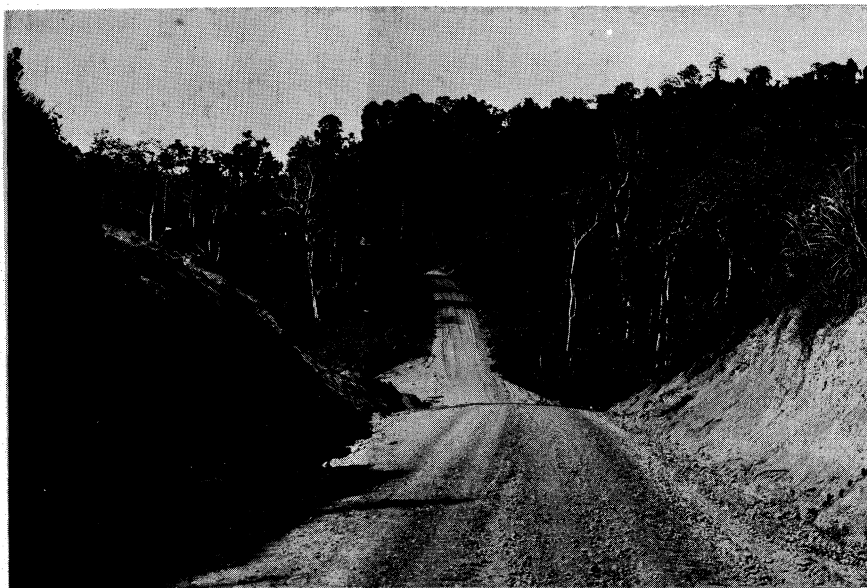
The foot track between Tumam and Musilo, a typical inter-village track. Clay surface, steep ascents and descents, very slippery when wet.



The 'Kombio Road', south of Yasip. Typical unsurfaced side road. Clay surface, poor alignment, timber culverts, insufficient drainage, numerous swampy patches. Virtually impassable when wet.



Two views of the Musebelem-Musendai road under wet season conditions. Typical of unsurfaced side roads, this road cuts up quickly after rain. Water channelled into wheel ruts causes further damage. Water lies in places due to inadequate drainage. Steep places are impassable when wet.



The Sepik Highway between Albalung and the Yakrumbok turnoff. The road is surfaced with uncrushed river gravel from local streams. The mudstones and sandstones showing in the road cutting are unstable when wet.

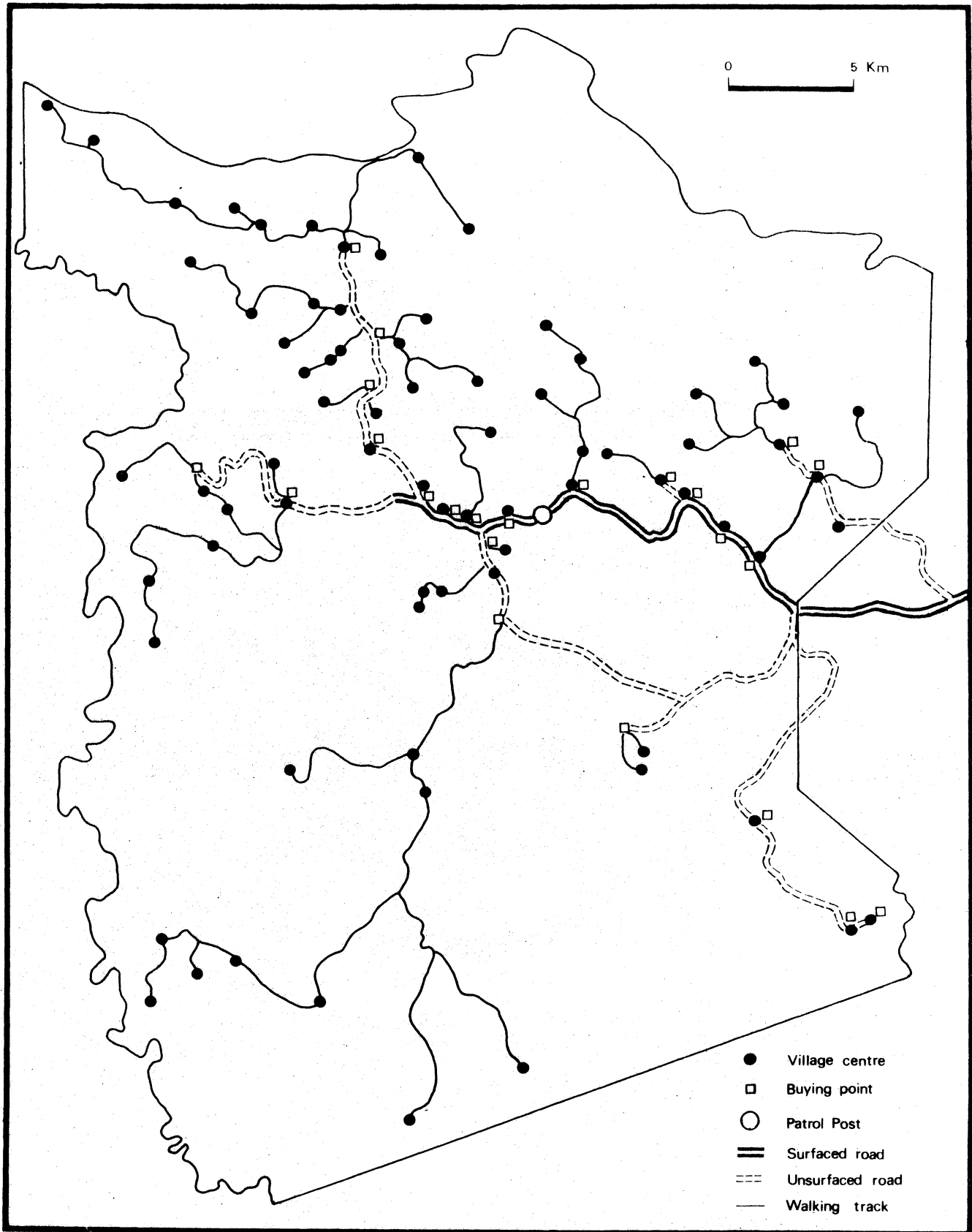
result are presented in Figures 4.7 and 4.8. In Tables 4.3 and 4.4 villages are ranked in order of accessibility. The maps and figures are self-explanatory and little further comment is needed at this point. Urat and Wam villages enjoyed the best access to the Sepik Highway in 1971, and the most isolated villages were northern Kombio and southwestern Gawanga villages. Access to Dreikikir Patrol Post was also greatest in the Urat villages and the most inaccessible villages remained Kombio and Gawanga settlements. Some of the southern Kombio villages had better access to Dreikikir than the most distant Wam villages however. Reference is made to these patterns and those presented earlier in this chapter, in following chapters where patterns of diffusion and adoption of selected innovations are described. It remains the task of this chapter to illustrate how information moves through these contemporary networks, and to justify the contention offered above, that the Sepik Highway and the Patrol Post are an important influence in the channelling and the direction of peoples' movements, and hence of the information which they carry with them. The importance of personal information compared to the mass media will also be demonstrated.

PERSONAL MOVEMENTS, 1972

In Papua New Guinea villages, the mass media is an unimportant vehicle for the movement of information, a point which is treated more fully below. It follows that almost all information is moved by people in sequences of face-to-face contacts. The purpose of the material presented in the first part of this chapter is in part, to show that personal movements in some parts of the study area, are easier than in others. From a village on the Sepik Highway, a man can get up in the morning, catch a passenger motor vehicle (PMV) and travel to Wewak. He can return in the afternoon and sleep in his own house that night. In contrast a man from a northern Kombio village must walk for one-and-a-half days to reach the road, before he can begin to wait for a vehicle. He must of course, also walk home again.

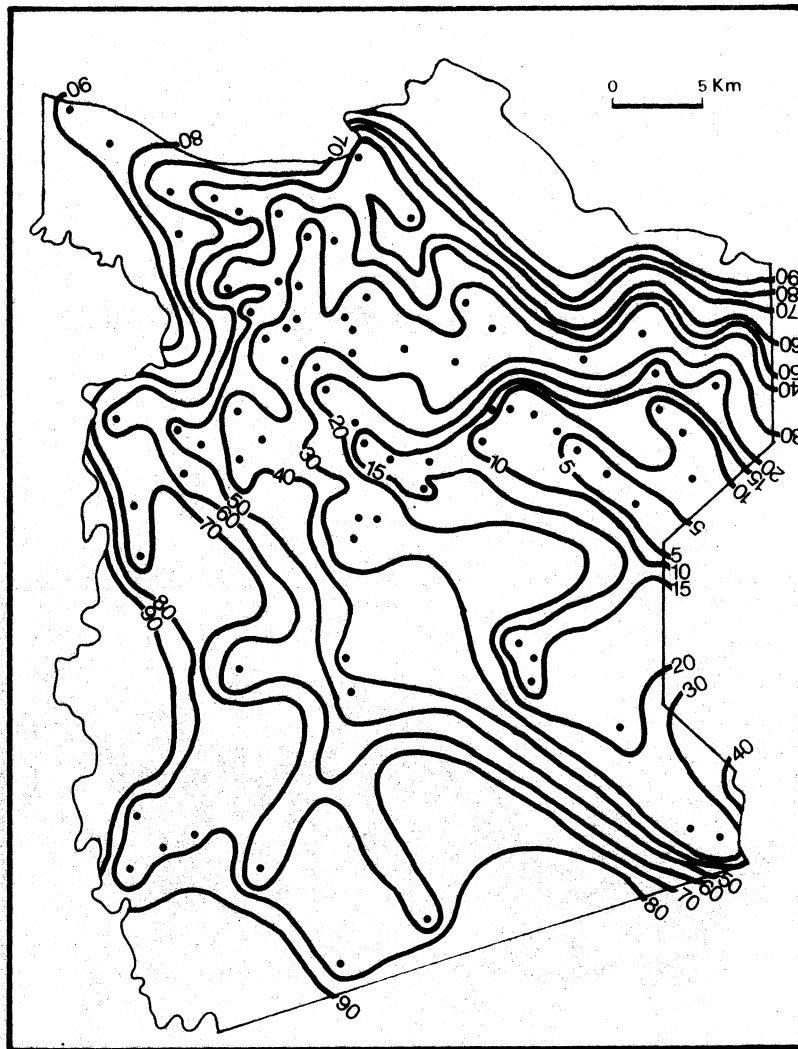
In the course of the fieldwork it was possible only to study the personal movements of people in one village, Tumam. Tumam has relatively good access to the highway (it is ranked 18th equal in Table 4.3) and at the time of the fieldwork, people in the village possessed communally, a four-wheel-drive Toyota Landcruiser utility, which was driven by a Tumam man and was garaged in the village.

FIGURE 4.6 FOOT TRACK AND VEHICLE ROAD NETWORK, DREIKIKIR, 1971



Source: TPNG Map Series T683, 1:100,000, Sheet numbers 7490 and 7491; Fieldwork, 1972.

FIGURE 4.7 ACCESSIBILITY TO THE SEPIK HIGHWAY, 1971



Source: *Fieldwork, 1972; Table 4.3.*

TABLE 4.3 ACCESSIBILITY TO THE SEPIK HIGHWAY, 1971

<u>Village</u>	<u>Census Division</u>	<u>Score</u>	<u>Rank</u>
Luwaite	Wam	0	1
Emul	Urat	1.75	2
Pelnandu	Urat	3.25	3
Misim	Urat	6.25	4
Asiling	Urat	7.25	5
Porombil	Urat	8.25	6
Bana	Wam	9.00	7
Musenau	Urat	9.25	8
Wareli	Wam	12.00	9=
Warengame	Wam	12.00	9=
Moseng	Urat	12.00	9=
Daihungai	Urat	12.75	12
Musendai	Urat	13.00	13
Musengwa	Urat	13.75	14
Musingwik	Urat	14.25	15
Apos	Gawanga	15.00	16
Nanaha	Urat	16.25	17
Tumam	Urat	16.75	18=
Yalangel	Kombio	16.75	18=
Asanakor	Gawanga	17.00	20
Arisili	Wam	17.25	21
Yaurang	Kombio	19.75	22
Ben	Kombio	24.75	23
Musilo	Urat	26.25	24
Moiwhak	Urat	26.75	25
Yerhmain	Urat	27.75	26=
Yambes	Kombio	27.75	26=
Selni	Wam	28.50	28
Hambini	Wam	31.00	29
Yauatong	Urim	32.75	30
Setnyam	Kombio	33.25	31
Yakulm (Yase)	Kombio	33.75	32
Selnau	Wam	34.50	33
Samark	Kombio	35.00	34
Tauhundur	Gawanga	36.75	35=
Winyamon	Urim	36.75	35=
Muyem	Kombio	36.75	35=
Albalung	Urim	37.25	38
Yakio	Kombio	38.25	39=
Meringe	Kombio	38.25	39=
Yasile	Kombio	38.50	41
Tong	Kombio	38.75	42
Sumul, Whaleng	Wam	40.00	43
Makupmanip	Kombio	40.25	44
Yasumboret	Kombio	41.75	45=
Sahik	Wam	41.75	45=
Tauhimbiet	Gawanga	42.25	47
Nyumatil	Kombio	44.75	48
Kumbum	Kombio	46.75	49=
Serepmel	Kombio	46.75	49=
Soaiyaip, Waim	Kombio	49.25	51
Kilmanglen	Urim	49.75	52

(continued...)

Table 4.3 (continued)

<u>Village</u>	<u>Census Division</u>	<u>Score</u>	<u>Rank</u>
Laningwap	Urim	52.75	53
Krungungam	Urim	53.25	54
Sambu	Kombio	53.25	54
Kubriwat	Gawanga	55.75	56
Mimbiok	Urim	59.25	57
Komala	Kombio	60.75	58
Yakrumbok	Urim	64.25	59
Wosambu	Gawanga	64.25	59
Pagilo	Urim	67.25	61
Koupem	Kombio	68.26	62
Daina	Gawanga	70.25	63
Bongowaukia	Gawanga	71.25	64
Kuyor, Wesor	Gawanga	72.25	65
Kwatengisi	Gawanga	75.75	66
Mahmsi	Gawanga	78.75	67
Masalaga	Gawanga	79.75	68
King	Kombio	85.25	69
Mup	Kombio	90.25	70

TABLE 4.4 ACCESSIBILITY TO DREIKIKIR PATROL POST, 1971

<u>Village</u>	<u>Census Division</u>	<u>Score</u>	<u>Rank</u>
Daihungai	Urat	2.50	1
Musenau	Urat	3.50	2
Musengwa	Urat	5.00	3
Musingwik	Urat	6.50	4
Tumam	Urat	6.75	5
Nanaha	Urat	7.00	6
Yalangel	Kombio	12.00	7
Porombil	Urat	13.00	8
Yaurang	Kombio	14.00	9
Namaiasang	Urat	15.00	10
Musilo	Urat	16.00	11
Moiwhak	Urat	16.50	12
Asiling	Urat	17.00	13
Yerhmain	Urat	17.50	14
Misim	Urat	18.00	15
Yambes	Kombio	18.50	16
Ben	Kombio	19.50	17
Musendai	Urat	23.50	18
Moseng	Urat	24.00	19=
Pelnandu	Urat	24.00	19=
Yauatong	Urim	24.50	21
Apos	Gawanga	25.50	22
Yakio	Kombio	26.00	23
Emul	Urat	26.50	24=
Yasile	Kombio	26.50	24=
Tong	Kombio	26.50	24=
Tauhundur	Gawanga	26.50	24=
Muyem	Kombio	27.50	28
Luwaite	Wam	28.30	29
Winyamon	Urim	28.50	30

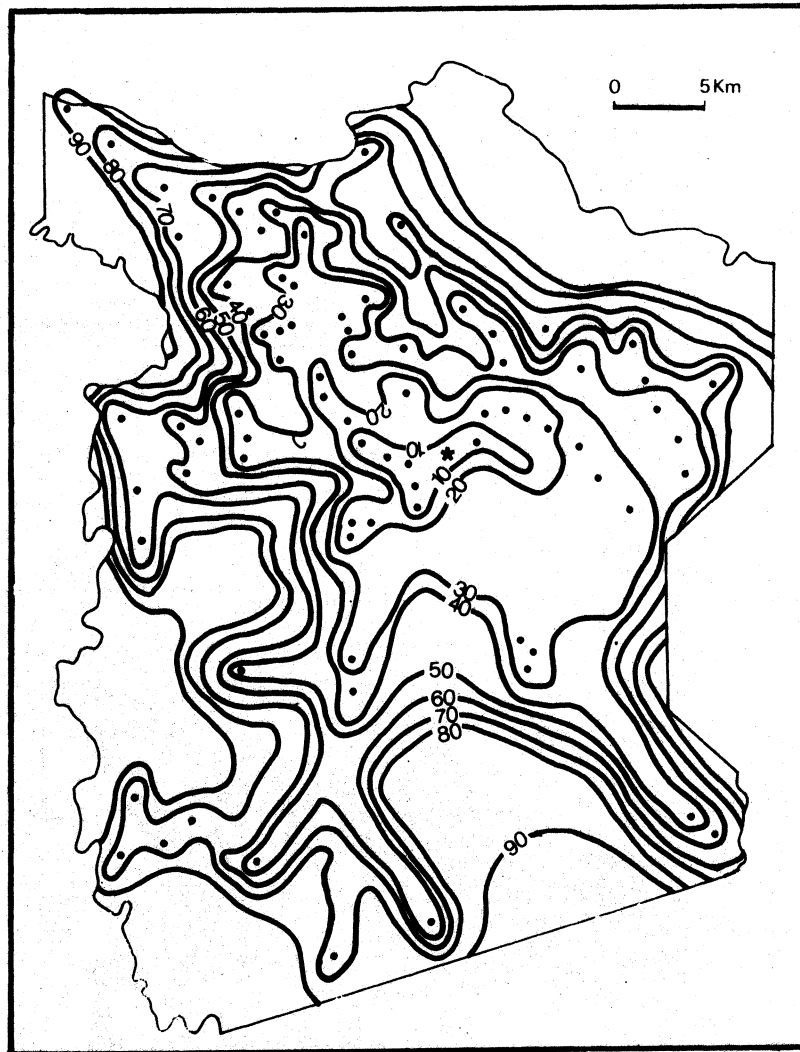
(continued...)

Table 4.4 (continued)

<u>Village</u>	<u>Census Division</u>	<u>Score</u>	<u>Rank</u>
Albalung	Urim	29.00	31
Yasumboret	Kombio	29.50	32
Yakulm	Kombio	30.50	33=
Meringe	Kombio	30.50	33=
Makupmanip	Kombio	31.00	35
Tauhimbiet	Gawanga	32.00	36
Samark	Kombio	33.5	37
Kumbum	Kombio	34.50	38
Asanakor	Gawanga	35.00	39
Nyumatil	Kombio	35.50	40
Soaiyaip	Kombio	37.00	41
Bana	Wam	37.5	42=
Sahik	Wam	37.5	42=
Serepmel	Kombio	37.5	42=
Sumul, Whaleng	Wam	37.8	45
Arisili	Wam	38.00	46
Wareli	Wam	40.30	47=
Warengame	Wam	40.30	47=
Kilmanglen	Urim	41.00	49=
Yubanakor	Gawanga	41.00	49=
Apangai	Gawanga	41.50	51
Sambu	Kombio	44.00	52
Laningwap	Urim	44.50	53
Krungungam	Urim	45.00	54
Kubriwat	Gawanga	45.50	55
Mimbiok	Urim	51.00	56
Komala	Kombio	51.50	57
Hambini	Wam	53.30	58
Wosambu	Gawanga	54.00	59
Yakrumbok	Urim	56.00	60
Selni	Wam	56.80	61
Pagilo	Urim	59.00	62
Bongowaukia	Gawanga	61.00	63
Koupem	Kombio	62.00	64
Kuyor, Wesor	Gawanga	65.00	65
Kwatengisi	Gawanga	65.50	66
Mahmsi	Gawanga	68.50	67
Masalaga	Gawanga	69.50	68
King	Kombio	78.50	69
Mup	Kombio	83.50	70

Personal movements in and out of Tumam are obviously not typical of more isolated villages. They are presented as an example of how people are surprisingly mobile once they have good access to a road, and to illustrate some aspects of the movement of information through the medium of people.

FIGURE 4.8 ACCESSIBILITY TO DREIKIKIR PATROL POST, 1971



Source: Fieldwork, 1972; Table 4.4.

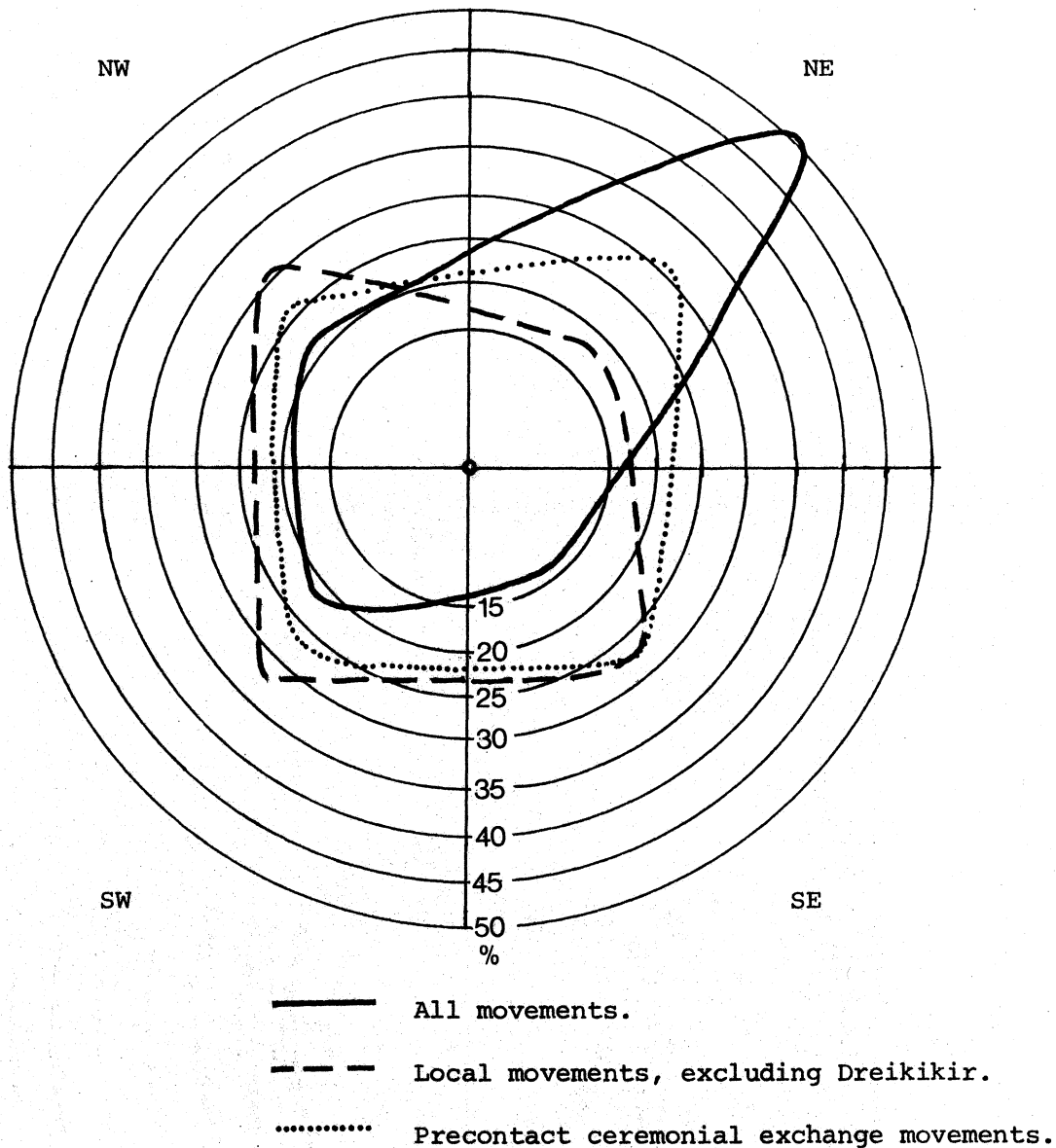
Personal Movements

Records were kept of the personal movements of 74 adult males from Tumam village between December 1971 and October 1972. The findings are divided into movements within the Dreikikir area, and movements outside of the area.

The most important finding from the study of internal movements is the attractive power of the patrol post at Dreikikir. All but four of the 74 men under study visited Dreikikir at least once during the eleven month period, and these four men did not venture out of the village at all because of ill-health and physical disabilities. Otherwise a simple distance-decay function seems to be in force. Villages closer to Tumam are visited more frequently than those further away. The patrol post distorts this pattern however. Figure 4.9 illustrates this point. Prior to contact, Tumam men state they had reciprocal ceremonial relationships with 27 other villages (Chapter 2). These villages were located fairly evenly around Tumam. If quadrants are drawn, centred upon Tumam, 29 per cent of these villages were located in the NE quadrant, 26 per cent in the NW and SE quadrants and 19 in the SW. Visits to other villages in 1972 excluding visits to Dreikikir were distributed 16.5 per cent to the NW, 26 per cent in the SW, 28.8 per cent to the SE and 28.7 per cent in the NE, a pattern not dissimilar to the pre-contact pattern. But when the Dreikikir visits are taken into account visits to the NE are increased to 47.5 per cent of the total.

The construction of the patrol post has thus introduced into what was formerly a relatively isotropic information field, a pole, or a focus. The patrol post provides only two major services, a rural health centre and two primary schools. In addition the administration office sells stamps, money orders and acts as a banking agency; a periodic market operates on Wednesday and Saturday mornings and a Department of Agriculture, Stock and Fisheries (DASF) office is located about one kilometer east of the patrol post. The LGC offices are also on the post. Of the Tumam men included in the survey, most visited the patrol post to attend the health centre or to work at the schools. It was notable that only seven visits were made to consult administration officers and of these five were not made voluntarily, but were to attend courts. Only two visits, both by one man, a local cooperative leader, were made to the DASF office. Perhaps more important than all of these functions is the nature of the patrol post as a public place, a "no-man's-land", which every one

FIGURE 4.9 THE INFLUENCE OF DREIKIKIR PATROL POST ON LOCAL MOVEMENTS FROM TUMAM VILLAGE



Source: Fieldwork 1972.

has a right to visit, and from which, within reason, no one can be ordered off. It is a place where people from other villages can be met on neutral ground. A number of men visited the post "just to have a look", which could be interpreted as "just to have a gossip". Of course, women as well as men, visit the patrol post. In fact they visit it more often than men, for women outnumber men at both the health centre where children are the most common patients, and at the market. Instances of women carrying information from Dreikikir to Tumam were noted frequently.

TABLE 4.5 PLACES OUTSIDE OF THE DREIKIKIR AREA VISITED BY TUMAM MEN BETWEEN DECEMBER 1971 AND OCTOBER 1972

<u>Place</u>	<u>Number of men visiting at least once</u>	<u>Percent of adult males in sample (n = 74)</u>	<u>Total number of visits</u>	<u>Per Cent</u>
Maprik	63	85.1	165	51.6
Wewak	29	39.2	36	11.3
Yangoru (a)	14	18.9	108	33.8
Mihet	3	4.1	3	0.9
Pagwi	2	2.7	2	0.6
Rabaul	2	2.7	2	0.6
Aitape	1	1.4	1	0.3
Nuku	1	1.4	1	0.3
Kavieng	1	1.4	1	0.3
Manus	1	1.4	1	0.3
		<u>100.0</u>	<u>320</u>	<u>100.0</u>

Note: (a) In fact Marambanja village, Peli Association headquarters, located approximately two kilometers east of Yangoru Patrol Post.

Source: Interviews, Tumam village, 1972.

The distortion of the information field by the patrol post is then, a predictable, but none-the-less important demonstration of the attractive power of small, rural, central places. The way in which they function as an information exchange may be as important as their service and administrative functions.

Personal movements outside the study area were even more strongly biased to the east. The Sepik Highway did not extend beyond the western boundary and all vehicular traffic naturally moved to the east. Maprik, Wewak, and the Peli Association headquarters near Yangoru, all east of the study area, were the main destinations of men who travelled beyond the local area during the survey period. One man returned from Rabaul during this period and another visited Rabaul with missionaries in a mission aircraft. Table 4.5 provides a complete list of all places visited. Of the 108 visits to Yangoru, 90 were made by two men, the Tumam Peli Association representatives. One adventurous youth walked to Aitape, and the trips to Mihet and Nuku were made on foot. Otherwise all movements outside the area were made on a motor vehicle.

Although the 108 visits to Yangoru are abnormal and would not have occurred if the Peli Association had not been active, they demonstrate the greatly increased mobility conferred by the new highway. It is most unlikely Tumam men would have made 108 visits, if they had had to walk the 100 kilometers. Visits to the Peil Association headquarters aside, the reason for most of the visits to Wewak and Maprik were to purchase goods for retail trade stores. Although the fare to Wewak was 10 dollars return compared to three dollars return to Maprik, store owners argued that Wewak prices were lower. It was apparent that a number of stores were failing to make a profit because their owners were not taking into account the costs of transport. The excitement of a visit to Wewak seemed for many, to be reason enough to travel the longer distance to buy goods which were available at only marginally higher prices at a wholesale cooperative store near Maprik. A number of plain sightseeing trips were made. In one case women who had never before seen the sea endured four hours of car sickness to collect a bottle of sea water.

Motor Vehicle Movements

The ordinary villager travels infrequently by motor vehicle because he cannot often afford the fare. But PMV drivers and crew are on the road almost everyday, and each night when they return to the village, they bring with them gossip, news and eyewitness accounts,

of events which have occurred many kilometers away. In order to assess the range of PMV movements, a log of trips was kept for the Tumam village PMV for three months from February to April, 1972.

The PMV did not leave the village on 20 per cent of the days during which the survey was carried out, either because of maintenance or breakdowns to the vehicle, impassable roads due to wet weather⁷, or illness or an over indulgence of alcohol on the part of driver. When it did leave the village it visited Wewak on nine per cent of its journeys, Yangoru 11 per cent, Hayfield 25 per cent, Maprik 26 per cent and Dreikikir 28 per cent. (A trip to Wewak automatically implies visits to Hayfield, Maprik and Dreikikir.) Thus on average the vehicle visited Wewak slightly less than once a week, Yangoru almost once a week, and the other places several times a week. At odd times during my period in the village the vehicle also visited Pagwi, on the Sepik River, Yauatong and Yakrumbok, to the west of Tumam, and the Kombio and Wam areas. The frequency of these visits would be about once every four months on average. As is to be expected, the area in which the village PMV operates is also oriented to the east where the roads are best, and almost all information carried back to the village by the driver, crew and passengers on the vehicle comes from the east, in Wewak, Yangoru or Maprik.

Movements prior to 1972: an "experience space"

The movement of a large proportion of the adult males in the study area beyond their villages to undertake labour contracts, and more recently to seek wage labour, is described in Chapter 3. It was shown that visits to other places exposed men to new experiences and some men carried home new ideas, which they attempted to put into practice there. Such movements have a further influence. They sensitise men to the receipt of information from some places more than from others. When men actually visit a place, or more importantly, live there for a period, the probability of them receiving information from that place is higher than the probability of them receiving it from elsewhere. This is because certain things,

7. As the survey was carried out during the rainy season, this frequency may be expected to fall in drier periods. It is possible however, that the driver may be thirstier during the dry season, thereby compensating for any benefits imparted by drier weather.

such as recognition of a place name, or the name of a prominent person, will attract their attention and cause them to listen more closely to a message. Place names appear to be particularly important in this process. Men listening to radio news bulletins in my house remained impassive during news from parts of Papua New Guinea which they had not visited, but when familiar place names were mentioned, even in passing, faces lit up, and men nodded knowingly to one another. To provide a measure of this bias in information reception probability, Tumam men were questioned on which places they lived for periods of their lives, and which places they had visited, however briefly.

Employment in an area can be expected to give a man a better knowledge of it, than a short visit, *en route* to another location. Thus place of employment is, with some exceptions, perhaps a better indicator of the "experience space" of Tumam men than places visited. If this is so, Tumam men are markedly oriented to the New Guinea Islands, where over half have been employed in Rabaul and the Gazelle Peninsula, 47 per cent employed on New Ireland and 23 per cent on Buka and northern Bougainville (Table 4.6). Only two have spent some time in employment in Papua, both of whom were soldiers stationed at Taurama for one year during the 1950s. Outside of the New Guinea Islands, only the Salamaua, Wau-Bulolo area and Maprik stand out as places where a number of Tumam men have spent two or three years of their lives. Those men employed at Maprik were all young men who recently took twelve month contracts with Malaria Control spraying teams working in the Maprik Subdistrict. Only two men have worked outside of Papua New Guinea, at Jayapura, where they were employed by a Chinese market gardener for three years between 1958 and 1961.

Travelling to and from places of employment has given Tumam men the opportunity to visit other parts of New Guinea. The routes followed to the main places of employment have obviously influenced the places visited. Men travelled to the New Guinea Islands from Tumam by walking to Aitape or, after the Second World War, walking to Maprik and flying to Wewak. From Aitape and Wewak they normally travelled by sea via New Guinea ports including Lae and Madang and often via Manus Island. With the exception of earliest labour recruits, most of the men were allowed onshore while the ships were in port, although this was often only for a few hours. In this way 70 per cent of the men interviewed at Tumam had visited Madang,

TABLE 4.6 LOCATIONS AT WHICH TUMAM MEN HAVE BEEN EMPLOYED OR HAVE VISITED

	<u>Employed Only</u>		<u>Visit Only</u>		<u>Employed and Visited</u>	
	<u>No.</u>	<u>Per Cent</u>	<u>No.</u>	<u>Per Cent</u>	<u>No.</u>	<u>Per Cent</u>
Gazelle Peninsula and Rabaul	41	55.4	23	31.1	64	86.5
Wewak	3	4.1	52	70.3	55	74.4
Madang	2	2.7	52	70.3	54	73.0
Maprik	10	13.5	42	56.8	52	70.3
Aitape	1	1.4	46	62.2	47	63.6
Kavieng	21	28.3	22	29.7	43	58.0
Manus Island	2	2.7	34	45.9	36	48.6
Lae	3	4.1	30	40.5	33	44.6
Nuku Patrol Post	1	1.4	32	44.6	33	44.6
Buka & N. Bougainville	17	23.0	5	6.8	22	29.8
Namatanai	14	18.9	5	6.8	19	25.7
Angoram-Ambunti	-	-	19	25.7	19	25.7
Salamaua	6	8.1	5	6.8	11	14.9
Wau-Bulolo	6	8.1	4	5.4	10	13.6
Wosera area	-	-	9	12.2	9	12.2
Yangoru area	-	-	9	12.2	9	12.2
Port Moresby	2	2.7	2	2.7	4	5.4
Hoskings	-	-	4	5.4	4	5.4
Jayapura	2	2.7	2	2.7	4	5.4
Vanimu	-	-	4	5.4	4	5.4
Kieta	-	-	4	5.4	4	5.4
Lumi	-	-	3	4.7	3	4.7
Goroka	-	-	3	4.7	3	4.7
Kundiawa	-	-	1	1.4	1	1.4
Solomon Islands	-	-	1	1.4	1	1.4
Australia (East Coast)	-	-	1	1.4	1	1.4

Note: Excludes movements between 1942-1945 and 1972.

Source: Fieldwork, Tumam village, 1972.

40 per cent Lae and 45 per cent Manus Island. Although they were not ever employed there, 30 per cent of the Tumam men had visited Rabaul and Kavieng, while travelling on ships. If employment and visits are combined it is of interest to note that a greater proportion of Tumam men have experience of Rabaul, which is approximately 1100 km away, than have experience of Aitape, 80 km away, Wewak 180 km away, or Maprik 50 km away. Such an inversion is created by relatively good communication networks at a national level, and poor networks at the regional and local level. Visits are also almost solely restricted to New Guinea. Only two men have ever visited Port Moresby, two Jayapura (in the company of the two who found employment there), and one of the two soldiers attended the 1953 Coronation celebrations in Australia. The Highlands of New Guinea are also outside the experience of almost all Tumam men.

Within the Sepik Districts, men had visited Wewak, Aitape, Maprik and Nuku. Only three men had visited Lumi, four Vanimo and one the New Guinea-Irian Jaya boarder patrol posts. The very restricted westerly extent of the "experience space" of this group of men is immediately apparent. Table 4.7 shows which local areas men had visited before the 1972 survey described above.

TABLE 4.7 EXPERIENCE OF LOCAL AREAS BY TUMAN MEN

<u>Area</u>	<u>Number of Men who have Visited Area at least once (n = 74)</u>	<u>Per Cent</u>
Kombio	49	66.2
Central Gawanga	45	60.8
Southwest Gawanga	42	56.8
Urim	38	51.4
Southeast Gawanga	35	47.3
Wam	31	42.0

The areas with which they were most familiar were the Kombio, to the northwest, where a number had travelled to reach the coast during the war, while the least familiar area was the northeast Wam. The inversion noted above is thus even more marked nearer to the village. Almost 21 per cent of the men who have visited Rabaul have not visited areas occupied by their nearest neighbours, one-and-a-half days walk away.

The war also resulted in the movements of a relatively large number of men from their villages, but if the Tumam case is typical, only a minority were removed beyond the Sepik region. Of the 74 men interviewed at Tumam, 31 had visited the coastal area between Aitape and Wewak, 13 as labourers for the Japanese and 18 as carriers for the Australians. Three men visited Nadzab near Lae, two Rabaul, three Jayapura one the Sepik River, one the Buna-Kokoda area, and two Port Moresby. Forty three men were either too young or escaped conscription by either Japanese or Australians.

INFORMATION FLOW

Thus far, the assumption that information does in fact flow through the networks and information fields identified, has not been demonstrated. In this section an attempt is made to show how information is moved by people. Later the influence of the mass media is discussed.

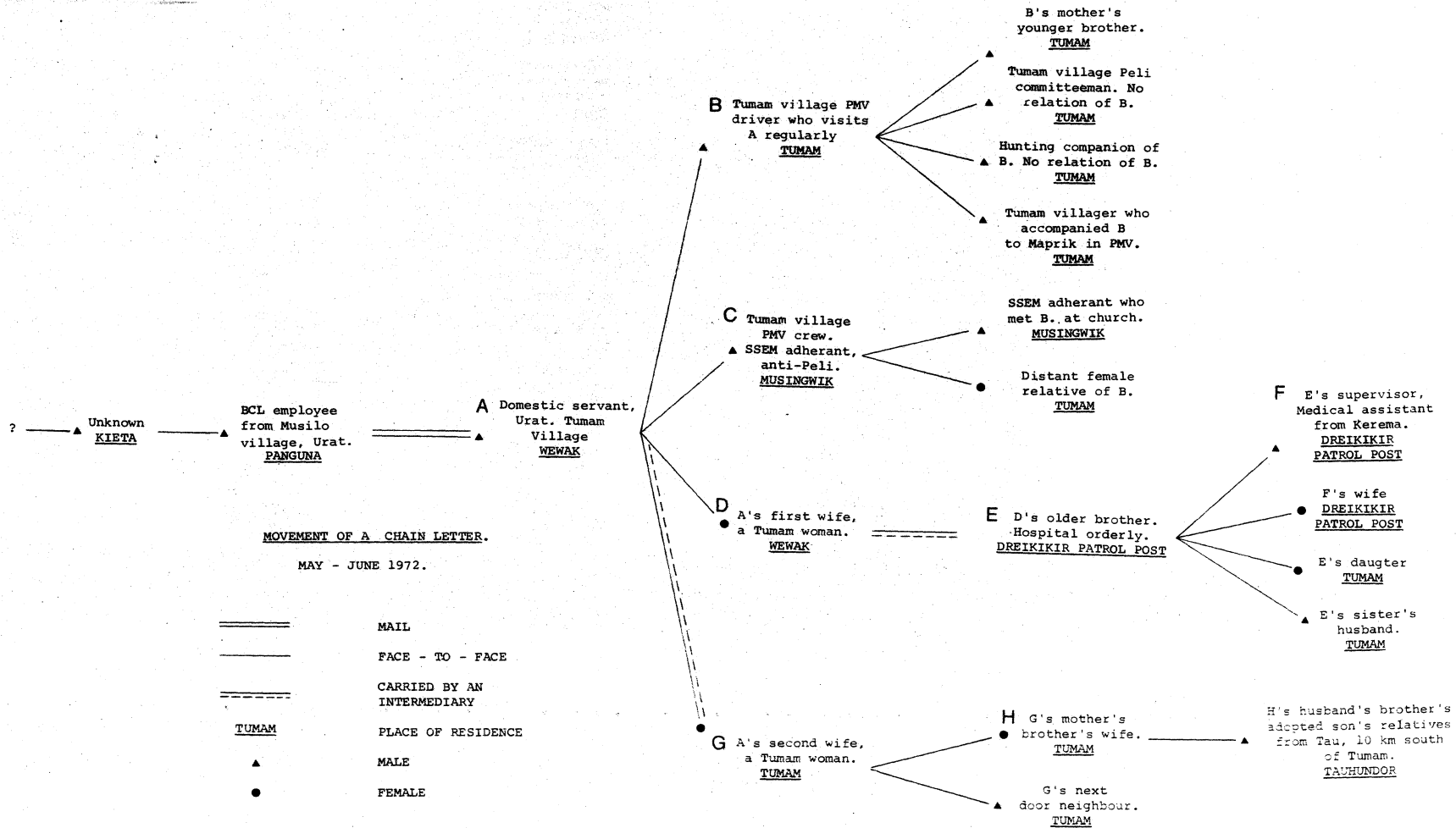
Tracing information is not the sort of field research which can be undertaken systematically, unless clearly identifiable pieces of information are continually available. This is rarely the case. Once a relatively ordinary piece of information has become general knowledge people have difficulty in remembering from whom they first heard it. Attempts to deliberately start traceable pieces of information moving, were generally unsuccessful, and so opportunities had to be awaited and taken when they came along.

Chain Letters, Red Plastic Buckets and Booklets

One opportunity occurred when chain letters originating in Australia spread into the Dreikikir area in mid-1972. Each "letter" contained a list of six persons who had previously been in possession of a copy of the letter and who formed part of the chain. The normal procedure with the chain letters was for the possessor to send 12 dollars to Australia. In return he or she received six copies of the letter, which could be sold for two dollars each. On each letter was the promise, in writing of 12,000 dollars, if the chain remained unbroken. Tumam people did not sell the letters however, but gave them to other people in order that they too might receive some of the promised wealth, and it seems as if all people on the chain had been doing this.

All the letters I viewed in Tumam had originated in Kieta (Figure 4.10), and had passed through an employee of Bougainville Copper Limited at Panguna, an Urat speaker from Musilo village, near Tumam. He had mailed a copy of the letter to a Tumam man working in

FIGURE 4.10 MOVEMENT OF A CHAIN LETTER, 1972



Wewak as a domestic servant, and with whom he had become good friends during a previous labour contract. This man passed on copies of the letter to four other people, the Tumam PMV driver, the PMV crewman from Musingwik village, and his own two wives, one of whom was living in Wewak and the other at Tumam. The latter wife received her copy via the PMV driver who carried it from Wewak to Tumam.

The PMV driver gave copies to four others, his mother's younger brother, the village Peli committeeman, a hunting companion, and a Tumam man who was a passenger on the vehicle the day after he received his copies of the letter from Australia.

The PMV crewman gave away two copies of his letter, one to a friend at Musingwik and one to a woman in Tumam who is a distant relative and who always gave him food when he visited Tumam.

The domestic servant's first wife in Wewak sent a copy with the Tumam PMV driver to her brother who is employed as an orderly at the Dreikikir Rural Health Centre. He in turn gave copies to his superior, the health centre's supervisor, a Papuan, and the supervisor's wife, as well as to his daughter and his sister's husband.

The domestic's second wife gave copies to her mother's brother's wife, and to a next door neighbour. The letter moved beyond Tumam to the Tau villages, 10 kilometres to the south, when the mother's brother's wife gave a copy to her husband's brother's adopted son's relatives from there, who called in to visit on their way to and from Dreikikir Patrol Post.

The pattern formed by the movement of these letters proved to be typical of the movement of information entering the Dreikikir villages from outside the area. In this case, the letter jumped the 1100 km from Bougainville to Wewak by mail. It was then transmitted another 160 km in one jump by motor vehicle. The driver and crew of the PMV visited their fellow villager in Wewak and carried the letters right back into Tumam. They also carried letters for other people. Once at Tumam, the letters moved slowly and over short distances.

Another unlikely example which also demonstrates this pattern of movement, concerned a red plastic bucket which I loaned to Professor Ward, when he visited me in 1972. His vehicle had a leaking radiator and he took the bucket with him to Wewak to collect water from streams on the way. At Wewak he gave the bucket to the Tumam PMV driver, but when the PMV returned the next day the bucket was missing. Someone had removed it from the utility in the dark. The next day a woman returning from the health centre at Dreikikir

told me the bucket was at Pelnandu, a village approximately 10 kilometers east of Dreikikir. A woman from Pelnandu who had walked to the health centre had brought word from Pelnandu that the bucket had been taken from the vehicle by mistake, and would be sent on, when convenient. Two days later word reached me in a similar manner that the bucket was now at Musenau, a village immediately east of the patrol post. The bucket eventually reached Tumam after passing through the patrol post and Daihungai village. This red plastic bucket had moved 160 km in a few hours, but took eight days to travel the 14 kilometers from Pelnandu to Tumam. Word of its location travelled very much faster however. While it was east of the patrol post, messages were exchanged at the patrol post. The bucket itself spent at least one day there, at the health centre, before being carried west to Daihungai. From Daihungai a Tumam woman returning from Dreikikir collected it and brought it home.

These examples both illustrate the easterly bias in the information fields of Dreikikir villages, a bias which occurred in pre-contact times and which has been strengthened by the construction of the Sepik Highway. The function of the patrol post as a pole, and as an information exchange, is also exemplified. My notebooks are littered with snippets of information which reached Tumam from the east, but information from the west is conspicuous by its absence.

Finally further evidence of the way in which information moves was provided by the movements of a Pidgin booklet⁸ which I gave to Ngemgutu, a married man of Hultuwam hamlet, Tumam village. Ngemgutu is aged about 27 years and generally associates with young married men, but spends some time with younger unmarried men. He is literate in Pidgin. During the period he was in possession of the book he was working at the Peli haus paua, a building especially constructed for Peli Association rituals, and was in closer contact with youths and girls than was normal. The contexts of the booklet, which deals with personal and sexual relations between unmarried teenagers, was of particular interest to this age group. However, it also proved to be of interest to older men. Ngemgutu was told he could keep the booklet if he kept an account of everyone who came into contact with it. He did this, periodically providing me with a

8. Trobisch, Walter 1967 *'Mi laikim Wanpela Meri na em i Pren Long Mi'*, Luther Press, Madang (translated by John Sievert).

written list of people who had either read for themselves, looked at, or listened to others reading, the booklet.

Over a four week period at least 30 people came into contact with the booklet, and the booklet itself travelled over 50 kilometers. Of the 30 contacts, 17 were from Tumam village. Eight of these were unmarried youths, three unmarried girls, and six were married males. Of the 13 people from outside of Tumam who saw the booklet, nine saw it while visiting Tumam. Seven unmarried girls and youths from nearby Musingwik and Musilo villages saw it while visiting the Peli camp at Tumam. Of the others, a married man from Tauhundor read the booklet while visiting his mother in Tumam, where she is married to a Tumam man. A man from Yubanakor *en route* to Dreikikir, who became friends with Ngemgutu when they were both working for Malaria Control at Maprik, called into Ngemgutu's house and stayed to read the booklet. Others came into contact with the booklet when it moved out of Tumam. Ngemgutu's wife's mother's sister from Musendai village borrowed it and took it to Dreikikir Patrol Post. There she gave it to another Malaria Control workmate of Ngemgutu's from Tauhundor who carried it back to Tumam, consulted Ngemgutu, and carried it on to Tauhundor with him. A week later a Sepik Producers' Cooperative director walking from Kubriwat village to Dreikikir via Tauhundor was given the booklet to return to Ngemgutu. Later, Ngemgutu's sister's husband borrowed the booklet and took it to the Tau Aid Post where he is employed. Ngemgutu's father visited and brought it back. The number of people who saw the booklet while it was at Tauhundor and Dreikikir is not known.

The main point of including this example is to show how the booklet moved from Tumam south to Tauhundor and Musendai, and north as far as Dreikikir, but did not go further than Dreikikir. The movement of people from villages to the south, through Tumam, to Dreikikir, was the mechanism which moved the booklet. Once again the role of the patrol post is one of a stimulus which causes people to move. It is not one of a centre from which information originates.

Information Flow: the example of the Peli Association

During 1971 and 1972 the most common items of information flowing into the Dreikikir villages concerned the Peli Association. Peli activities at times "overloaded" the networks, blocking the flow of more normal items. The movement of Peli information provided an opportunity to follow information through inter-village networks, and within villages. News of the existence of the Peli Association first

reached Tumam in June 1971, when a PMV driver from Musembelem village, halfway between Tumam and Dreikikir Patrol Post, told a number of men that while in Wewak he had heard that "something big was going to happen at Marambanja". The movement of this information into Tumam and within it provides a complete example of the manner in which internal village communication networks operate. It suggests that such networks are informal in nature and depend more upon the personalities of the communicators and their location in the village than upon formal social groups such as clans or the dual division. Status of individuals is important too, particularly when the person in possession of a piece of information is seeking greater importance in the community, or is trying to shore up his position against competition from others.

The Musembelem driver told nine Tumam men. They all received the information while out of their village, at, or *en route* to or from, Dreikikir Patrol Post. Three were Tumam men employed as a driver and medical orderlies by the Government, and another was employed by a European officer as a domestic servant. Two were the Tumam PMV driver and crew, and three were men walking along the road through Musembelem village on their way back from Dreikikir, where two had been cutting grass at the school and one had been visiting the health centre. The network formed by the movement of this information is represented diagrammatically in Figure 4.11.

Of the nine primary receivers, only three passed on their information to others. The Tumam PMV driver told his father, two village men who live within 100 metres of his home and, at a later date, he wrote and told his mother's younger brother who was working in Rabaul. The domestic servant returned to Tumam and told his father's brother and his son, and a classificatory brother who was his nearest neighbour in Tumam. The third man, who later became Tumam's main Peli Association representative, as well as a "regional" Peli leader, told 11 other men the information.

This man Hundihi was about 36 years of age, had spent two years in Buka on a plantation between 1951 and 1953, followed by two years as a kitchen hand in a Rabaul hotel between 1954 and 1956. After returning home he developed leprosy and was confined to a hospital near Aitape for five years between 1958 and 1963. Between 1966 and 1967 he was employed as a domestic servant at Dreikikir Patrol Post. In 1968 he was baptised by SSEM missionaries, and he had previously attended a Catholic Mission school for one year. Also in 1968 he

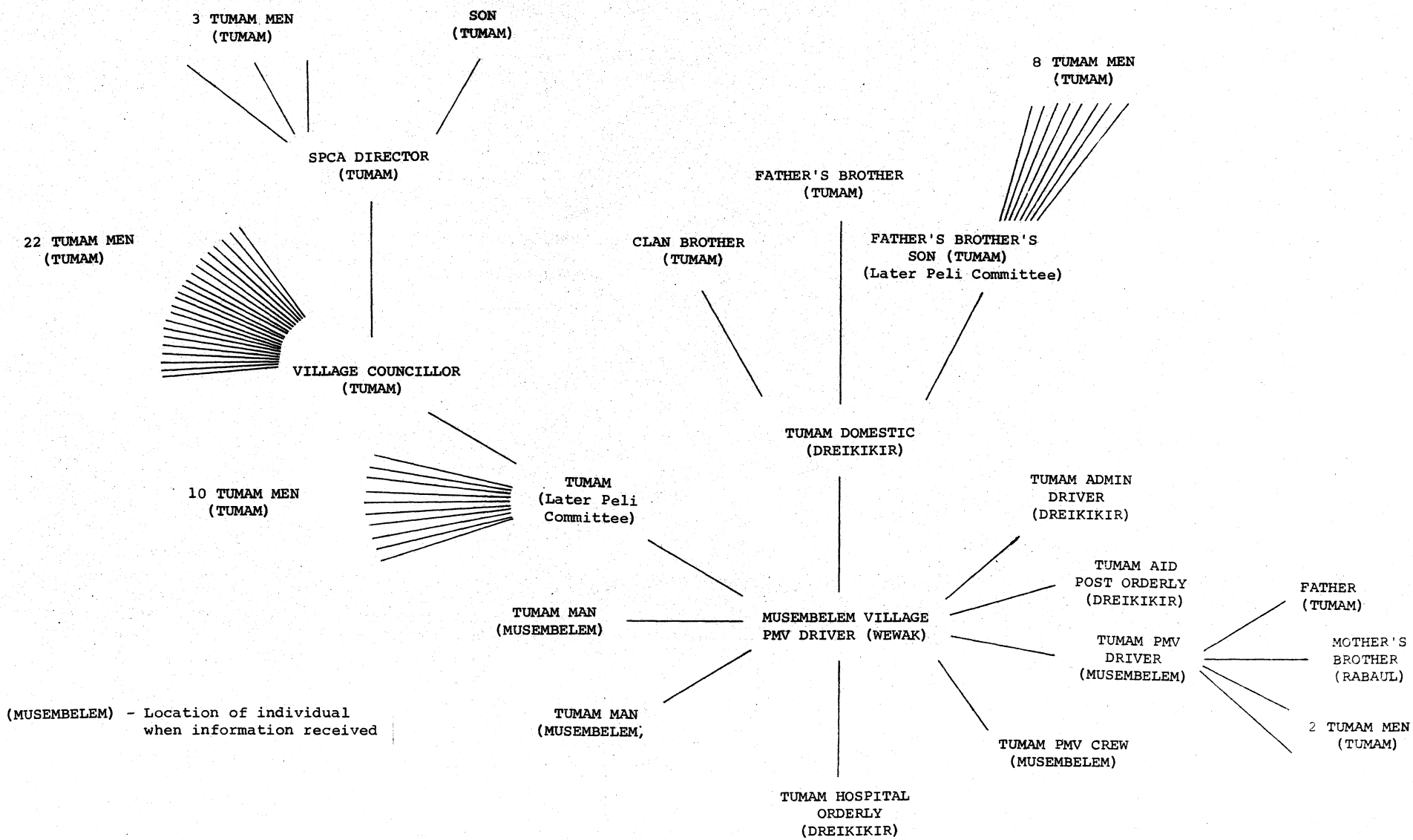
joined the Pangu Pati. In 1965 he successfully established a small store with about 50 dollars capital and had made enough money from it and cash cropping to allow him to contribute 100 dollars towards the Tumam PMV. Only two other men contributed more than this, and both were in receipt of regular incomes as aid post orderlies. Although married for some years, he has no children and has not adopted any. He is well liked by most other villagers, participates in all village meetings, often speaking at length on a wide range of subjects. He owns a shotgun⁹ and is the leader of an informal group of men who hunt together. He had previously indicated that he would accept a nomination as village councillor, but a village meeting had decided that the incumbent should hold the position for another three years. One of the men to whom this man passed on the news about Peli was the present councillor.

Only two of the eight secondary receivers passed on the information. One was the councillor and the other was a younger man of 27 years of age, who later became Tumam's other Peli Association committeeman. The councillor told 23 other men, the greatest number of tellings by any of the passers. All those who received information from him said he was enthusiastic about the news, and it was he who organised a group of men to travel to Marambanja to find out more about the happenings. His early behaviour is interesting because he later became vehemently anti-Peli to the point where he lost almost all support in Tumam. During the latter half of 1972, Peli members boycotted his meetings because, they claimed, he continually disparaged their work and threatened them with prosecutions.

The councillor, Ketei, was about 50 years old. He has spent at least 18 years away from Tumam, beginning in 1936 when he first contracted to work on New Britain, where he remained until 1942. During the war he was recruited as a carrier and saw action between Aitape and Wewak. After the war he worked as a domestic servant at Dreikikir and one officer took him with him to Green River Patrol Post, near the Irian Jaya border, for two years. Despite his years away, he is acknowledged as a clan and dual division leader. About

9. The possession of a shotgun imparts a good deal of status to an individual. It indicates that his fellows believe he has the ability to use it to best advantage, because shotguns are restricted to so many per village, and before a licence is issued the issuing officer consults the councillor of the village concerned. It also indicates he has the 40 dollars required to buy the gun. Possession of a gun also means that a man is regularly involved in the redistribution of meat from hunting, which is a status-giving activity.

FIGURE 4.11 MOVEMENT OF INFORMATION ABOUT THE PELI ASSOCIATION TO TUMAM VILLAGE, 1971



1954 while on leave from Pomio in New Britain, he more or less forced members of the opposing half of the dual division to initiate him into the *mission tambaran*. He is not baptised, is openly critical of the SSEM and delighted in taking as a second wife a woman who had spent three years training at the SSEM bible school for young ladies.¹⁰ He has no coffee garden, although he supports the cooperative movement. He is a strong supporter of the Government but refused to join the Pangu Pati in 1968.

The other secondary passer Borondai told eight other men. He is the son of the leader of the 1956 millenarian movement, Mahanung (see Appendix C) and married with two children. He has never been away from the village for any length of time; he once walked to Aitape "just to see what was there". He is not baptised.

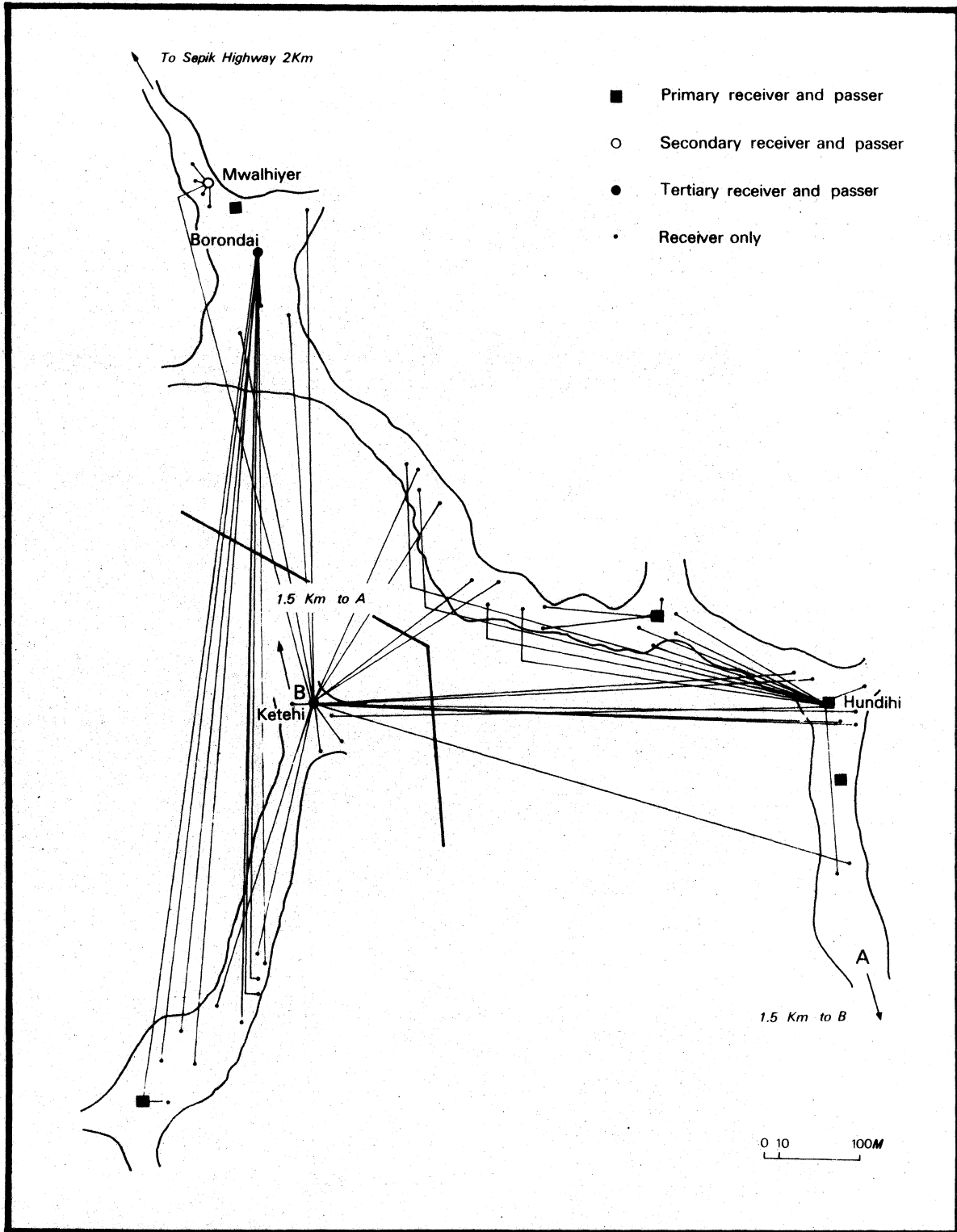
The only tertiary receiver to pass on the message was the SPCA director, Mwalhiyer (see Appendix C), an older man in his late 60s who played an important part in establishing cash cropping in the village in the 1950s. He was not in good health. He told his son and three other men, all nearest neighbours. Eleven men could not remember from whom they had first heard about the Peli Association.

Once the information had spread to the majority of men in the village, a number of men, all passers of the message, decided to visit Marambanja in the Tumam PMV. The party included the councillor, the SPCA director, the two men who were later to become Peli committeemen, two men from another village, one of whom was to become a committeeman, the Tumam PMV driver and crew, plus an SSEM pastor from Tumam. Upon their return, they gave further information to villagers. The councillor and the Peli committeemen-to-be gave enthusiastic support to the movement; the SPCA director said he was not sure and advised people to wait and see what developed, as did the mission pastor.

Later a second group of men visited Marambanja and their reactions were also mixed. Shortly after that increasing amounts of information began to flow from Marambanja to the villages, culminating

10. The SSEM oppose polygamy and tried to prevent the marriage in every way possible, including attempting to get Government intervention. The councillor, in turn, threatened to force them from land which he had given them for a missionary residence.

FIGURE 4.12 THE MOVEMENT OF FIRST INFORMATION ABOUT THE PELI ASSOCIATION, WITHIN TUMAM VILLAGE, JUNE, 1971



Source: Fieldwork 1972.

on the 7th July when survey markers were withdrawn from a mountaintop near Marambanja. It was not until after 7th July that the two Tumam men were appointed committeemen by their fellow villagers. Between the time of the first visit and 7th July, the councillor had visited Dreikikir and had asked the European officer-in-charge whether or not Peli was something the administration approved of and whether or not he should give it his support. The officer told him that the administration did not support it, that it was probably not "true work" and that he should be very careful and wait to see what would happen. He returned to give this advice to Tumam village, but he was too late. People had become interested and enthusiastic, and the men who were to become committeemen had captured their attention, and had so much information to pass on to them, that the councillor began to be moved off the centre of the stage, a process which continued after my arrival in the village. By December, 1971, 64 of the 74 adult males in Tumam who were active and in good health had become members of the Peli Association.

The spatial dimensions of the movement of this information within Tumam village are of interest. The village comprises three main hamlets, Tumam, from which the village at large takes its name, Ngahmbole, to the north, and Hultuwam, closely related to Ngahmbole, one-and-a-half kilometres to the south. As Figure 4.12 shows, the residences of the men who received the message from the Musembelem PMV driver were fairly evenly dispersed throughout the three hamlets. One would be excused for predicting a pattern resembling a series of stars, formed by each receiver telling those men nearest to his own residence. This did not occur. Of the 23 men who received the news from the councillor Ketchi, who lives on the edge of Hultuwam, only five lived in Hultuwam. The rest were scattered throughout Tumam and Ngahmbole. Although Borondai lives in Ngahmbole hamlet, only one of the eight men he told also lives there; the rest live in Hultuwam. Eight out of the 11 men Hundihi told live north of his house, towards the all-weather road and Dreikikir.

It is difficult to make any general statement about this behaviour. Hundihi told most of his receivers on his way home from Dreikikir. The councillor received the information from him when the former stopped at his house late in the afternoon, *en route* to Hultuwam. Ketchi walked to Hultuwam, ate, and walked back to Tumam where he told the news to 18 men who were sitting outside their houses, smoking and nattering as is their wont in the evenings. Meanwhile, Borondai walked to Hultuwam, his childhood home, and did the

same thing there. A clue to the reason why he should go so far afield is possibly found in the average ages of the secondary receivers told the information by each of the three men. The mean age of those who received the information from the councillor (who is aged about 50 years) was 45.1 years, and of the men who received the information from Hundihi, 40.2 years (he is about 36 years of age), whereas the mean age of those who received the information from Borondai (who is 27 years old) was 34.9 years. It is not possible to prove a statistically significant difference between the ages of each group, but the difference of ten years between the mean ages, and the direction of the difference, is similar to the findings of the radio reception experiment described below, which suggested that younger men will pass information on to older men less frequently than they will to men of their own ages or younger.

The communicators appear to have shown no favouritism towards their own clansmen¹¹ but there are some indications that they favoured members of their own dual division. Seven of the eight men Borondai told were members of the same division as himself. Of those men informed by the councillor, 59 per cent were of the same division, but only 45 per cent of the 11 told by Hundihi were of the same division as himself. The evidence is too insubstantial for any definite conclusions to be reached. We may note, however, that again it is the younger man who appears to be the most restricted in his communicative behaviour.

This case conforms to what appears to be the characteristics of information movement in the study area. Information from outside the study area was transmitted from its source to the area in one jump, and after its arrival, it spread from the place of first reception to other villages in a series of much shorter jumps, involving a number of people. Once in the village, another pattern becomes distinguishable.

The information was first introduced to the village by people who move beyond the village more frequently than their fellows: PMV drivers, store owners, members of school committees, wage labourers and so on. Not all of these carriers pass on information, or, if they do, do not tell many other people. Rather one or two passers tell the

11. The percentage of men from their own clans to whom Ketei, Borondai and Hundihi passed information was, respectively, 13.6, 25 and nine.

majority of receivers. The people who were most involved in passing on information were men who were competing for positions of status, power and leadership within the village. In the case above, the two men who passed on the information to the most people were the councillor, Ketehi secure in his position only until the next elections, and Hundihi who later was elected to the position of committeeman of Peli by the village, and who in 1967 had publically stated his ambition to be elected to a position of formal village leadership. As 1972 progressed Hundihi made increasing inroads into the public support received by Ketehi and led a successful boycott of the councillor's village meetings. The other men who passed on the message had already achieved positions of respect in the village, such as the SPCA director and the PMV driver. They had no need to go out of their way to tell people the information, because they did not have the need to "own" a piece of information, nor to begin organising a village reaction to the information.

This case also supports the argument which is presented in later parts of this study, that although much information received in a village is not fully comprehended, village people still react to it, often by adopting a new mode of behaviour. Their "trial" of the innovation begins after they have adopted it. Furthermore, individuals will grasp the opportunity to use information about a new activity to further their own ends, by attempting to become leaders in the new activity, before they have assessed whether or not that activity is going to be truly beneficial to their village or not. In this case, the councillor was the most enthusiastic of all the villagers who first heard about the Peli Association, but after he found that he was not supported by the European officers at Dreikikir Patrol Post, from whom he gained much of his status in the village, he switched to opposing the new movement, although he remained largely ignorant of what it was trying to do.

Within the village, information does not spread from household to household in an orderly pattern. Rather, the pattern of movement depends upon chance encounters between men walking through the village, and upon deliberate acts, men setting out from their houses to visit others to tell them a specific piece of information. A person in possession of a piece of information may tell numerous other men, but exclude his nearest neighbours.

When an outstanding piece of information reaches the village, and the information about Peli was of very great interest to almost all village men, it spreads through the village very quickly. This piece of information arrived in the village about four o'clock in the afternoon, and by late that evening the majority of men had heard it. By the next morning, everybody sleeping in the village that night knew "something was happening at Marambanja". Only people who slept overnight at their garden houses did not receive the news until later.

The mean pass-on rate of the five men who gave the information to others was 1:11.4. If all primary and secondary receivers are included, this figure drops to 1:4.4.

Further insights into information movement are provided by the continual flow of information which occurred between Marambanja and Tumam and nearby villages after this initial adoption period. A resume of field notes taken between December and April will provide an illustration.

23rd December: the village PMV driver brought back news that an altercation had taken place between the Peli Association leaders and Pita Lus, MHA for the Maprik Open Electorate. The driver had been told about the fight at Hayfield near Maprik; he thought it had taken place at Amahop and that books had been involved. The PMV crew this day was a mission supporter and anti-Peli, and he told a group of people attending chapel that evening. The PMV driver told the Tumam Peli committeeman and he told Peli members living near his house.

2nd to the 4th of January: a large meeting was held at Marambanja. Committeemen from a number of villages around Tumam attended, some walking through Tumam on the way there and back. The two Tumam men attempted to go but were frustrated when the village PMV broke down and there were no other vehicles with space for them. They consulted the committeemen from other villages on their return, and later held a village meeting to pass on the second-hand information. This included the fares to be charged on Peli-owned PMVs for Peli members and confused instructions on how Peli members should vote in the forthcoming elections. One report suggested that all Peli members should boycott the poll, and another, from a different man, indicated that a final decision had not yet been made. Late on the 4th, the Tumam PMV returned with the news that all Peli members were to boycott the election, which settled the matter.

8th January: the PMV returned with news that a "devil-meri", presumably a witch, had appeared south of Maprik and was going to help the Peli Association. The Tumam committeeman scotched this rumour, but the committeeman in nearby Musingwik used it in an attempt to frighten a number of non-Peli mission supporters into joining.

19th January: a message arrived in Tumam via Musebelem that all committeemen were to wait by the road for a Peli PMV which would take them to Marambanja. Tumam's two men left hurriedly, but after waiting for 24 hours gave up and returned home. Two days later one of the Tumam men visited Marambanja and returned the next day. He held a village meeting that evening, but had little to report; the movement's leaders were not there, and the previous message had been incorrect.

8th February: a message was received from the Peli committeeman at Musenau village, east of Dreikikir Patrol Post. The message had been carried from Marambanja to Musenau, given to a man walking to Dreikikir who there passed it on to a Peli committeeman from Musingwik village, west of Dreikikir, who in turn gave it to a Tumam woman visiting his village to attend the funeral of a child. This message requested all committeemen to visit Marambanja, which they did.

15th February: a further request arrived. This message was passed on from Tumam to the Tau villages to the south by a Tumam man visiting relatives there. The Tau committee walked through Tumam *en route* to Marambanja the following day.

5th March: a series of rumours reached Tumam from a village to the northeast of Dreikikir Patrol Post. They suggested that on the 23rd of March, Peli secrets would be revealed, and that all full-members would begin receiving a 3000 dollar per year salary, and ordinary members a basic wage per fortnight. The Tumam committeeman again denied these rumours, but the Musingwik committeeman said they were true.

16th March: a message arrived in Tumam from an Urim committeeman, from a village well to the west who was travelling home from Marambanja, that all committeemen should proceed to the Peli headquarters, which they did. They returned briefly to collect some building materials and returned again after an absence of four days. They held meetings and explained how they had been instructed to build the "iden Memorial Gatén", an artificial cemetery. Both said they did not know the purpose of the "gaten" at this time.

21st March: Radio Wewak broadcast a news item in Pidgin which stated that a Peli official had announced that Peli was to form a coalition government with the Mataungan Association of Rabaul and the Peoples' Progress Party. They would demand immediate independence. When Tumam committeemen and Peli members were asked about this item they had no knowledge of it.

26th March: the first news of Peli's money-making activities reached Tumam from Musingwik village. The committeeman there held a meeting and told people he had heard the money factory working, and that Mary and Jesus came every night to assist the operations. The Tumam committeeman said he had heard the noises, but until he saw the money being made he was not going to tell his followers. The Musingwik committeeman visited another village in the area and told people there that, when Peli gained power, "the bayonet of Jesus" would appear and would scourge all non-members and all Pangu Pati members.

29th and 30th March: messages arrived from the main road, asking committeemen to wait for vehicles which would be sent from Marambanja, but on both days no vehicles arrived.

31st March: ABC broadcast a Pidgin news item about Matias Yaliwan's arrival at the House of Assembly, but again no Tumam people heard it.

During April similar activities took place. Committeemen travelled to Marambanja and returned. A large group of committeemen from the Kombio area waited near Musembelem village for four days for transport to Marambanja between the 10th and 14th, but returned home after running out of food. It was now generally believed that Yaliwan would announce his leadership of the whole country, an event which would indicate the imminent culmination of Peli's work. But on the evening of the 19th of April, Radio Wewak announced that Michael Somare had formed a coalition government and would be the leader of the country. A few people heard the early news announcement, and by nine p.m. a large group of men had gathered at my house to listen to the later bulletin. They received the news in silence and left afterwards looking very grim. This was the first evidence of news being received via radio, although later other cases occurred. Two small feasts scheduled for the following day to prepare the committeemen for a ceremony at Marambanja were cancelled as a consequence, and the committeemen left for Marambanja to find out whether or not the radio item was true, for many men had expressed distrust of the radio news. The committeemen returned some days later and told meetings that members must listen to their radios for an announcement from Yaliwan that he had assumed the leadership of Papua New Guinea. Yaliwan did make a statement in the House to this effect, but it was not reported in Pidgin news bulletins and people remained uncertain about the situation.

Some general observations can be drawn from this material. The over-riding importance of the village vehicle in bringing information into the village is well illustrated and reiterates observations made previously. The part played by the Peli committeemen in travelling back and forth to Marambanja and in holding meetings in their villages to report at first hand what was happening at Marambanja is also highlighted. Most village meetings were held at night at the home of the committeeman, and took the form of a report by the committeeman and a question-and-answer session followed by general discussion. Small collections of money were frequently made, partly

to pay the committeemen's PMV fares. (One spent a carefully recorded 149 dollars on PMV fares between July 1971 and November 1972.) One committeeman estimated he had visited Marambanja 70 times between July 1971 and November 1972, and another estimated he had been there about 50 times. The thirst for first-hand knowledge about events, given to them by people they knew and trusted, was most evident among the residents of Tumam. This contrasts sharply with the quantity of information received through the radio. Many news items I thought would interest Peli members they did not hear at all. It was only after their committeeman indicated Yaliwan would announce his leadership via radio that some men listened regularly. They did not keep this up for very long, however. Furthermore, radio news items were not always trusted, for, as is described below, some were obviously not accurate reports of what the Peli Association was doing.

Peli committeemen (and ordinary members) leaving Marambanja with information which they were to pass on to others used every opportunity to do this, but only when they had arrived back within an area in which they knew people personally. Thus a Dreikikir man would not begin deliberately attempting to send information to other Peli men until he arrived back in the Dreikikir area and knew by name the person to whom he wished to pass his message. Once in a familiar area, every opportunity to pass on the information was taken. If riding a PMV, the carrier would ask the driver to pause briefly beside a village. A child, an old woman or any bystander would be given the message and asked to pass it on to a named person. In this way a wide range of people, including school children, women visiting the health centre at Dreikikir with sick children, men visiting the Government office to renew firearm licences or people walking along the road back to the village from their gardens, were given and passed on messages. Because the Patrol Post acts as a pole of attraction, many messages passed through it. Messages from the east of Dreikikir were passed to villages to the west of Dreikikir. The health centre proved to be the place of greatest exchange. There it was always possible to find someone from any of the eight or nine villages around Dreikikir, and frequently people from further away, who could be given a message to pass on to someone, either in their home village or in a village through which they had to pass to reach their home village. In the case presented, a number of the messages received by the Tumam committeemen had passed through the Patrol Post. Others were passed in from the all-weather road, by men *en route* to

home villages. Less frequently, men from south of Tumam passed through the village on their way home, and either spoke with the committeeman personally or told a neighbour the information.

Frequently information moving through these networks was wholly or partially inaccurate. The Tumam committeemen and others waited a number of times in vain for vehicles which were supposed to pick them up. Other information, some fairly bizarre, such as the description of the devil-meri, were received by the committeemen in a similar form, but interpreted and passed on by them in widely differing ways. In Tumam, the committeeman was very careful about what he passed on to his followers, attempting to confirm possibly inaccurate or spectacular news before telling people in general. On the other hand, the Musingwik committeeman used the most bizarre rumours to attempt frightening non-Peli people, frequently embellishing the stories further himself. The source of a number of these rumours was villages in which the issue of whether or not to support Peli caused dissension. Peli appeared to cause the most dissension in villages in which there was no strong leadership or where village leadership was stalemated between two determined personalities. For example, in Yambes village the two main hamlets have long been at loggerheads. The leaders of each hamlet have each had a term as councillor. The serving councillor opposed Peli, and his opponent supported it, splitting the village. At Musingwik a strong-minded mission supporter led a small group which continually attempted to show the illogic in much of the Peli doctrine. The Musingwik committeeman retaliated with stories of horrible natural disasters and divine retribution which would befall them when Peli gained power. Rumours such as this could be traced to both villages. It is apparent that many statements given wide publicity in the national and international press, and said to have their source with the Peli leaders, began in a similar fashion.

Rumours about Peli also spread among Europeans on Government and mission stations. As a matter of course I checked with Tumam informants and Peli committeemen to see if they had any knowledge of rumours about Peli passed on to me by Europeans. In no case did they. At times European-circulated rumours reached the mass media and were published in the national newspaper and broadcast over the radio. Such rumours broadcast in Pidgin and heard in the

village caused Peli members annoyance. They said they believed the Government was deliberately spreading falsehoods about their work, in order to turn people against them. One example will illustrate the point. Shortly after Daniel Hawina was arrested for riotous behaviour in August 1972, it was rumoured in Wewak and Maprik among Government officers that Peli members were planning to murder the District Commissioner. The rumour was treated seriously. At Tumam, the two committeemen who had just returned from a meeting called by Peli leaders to discuss the gaoling of Hawina reported no general feelings of antagonism towards the Government for the arrest of Hawina. Rather, members were annoyed with Hawina's irresponsible behaviour. The constant disparity between rumours circulating among Europeans and rumours circulating in the villages indicates a minimum contact between the two sets of networks.

Information from beyond the local area also reaches the Dreikikir villages. Villagers receive letters from people who are living temporarily or permanently elsewhere in Papua New Guinea, or outsiders come into the area to deliberately attempt to give information to villagers.

Personal Mail

Papua New Guinea possesses an efficient, if relatively expensive, postal service, and many villagers correspond with relatives and friends in distant places by mail. Mail was received and despatched at Dreikikir Patrol Post at least once a week. In addition, mission stations at Dato, Yasip, Arisili, Yakrumbok, Brukham, Tau and Bongos allowed villagers to use their private bags to mail and receive letters, and also sold them stamps. In 1972, it cost seven cents to send a letter anywhere in Papua New Guinea.

For ethical reasons I did not ask Tumam people to show me their personal mail and therefore I know little about the content of incoming letters. Those letters which illiterate people asked me to read to them were concerned only with family matters, although one letter from a man who had left Tumam to seek work in Lae a month previously stated baldly, "Mi qat wok nau", but gave no details of the availability of work in Lae, nor of problems of accommodation there. I was approached more often to write letters than to read them. These outgoing letters almost all mentioned the activities of the Peli Association, most saying they would write as soon as something big happened. Other letters asked long departed sons to return home, pleaded for money, or asked permission to use a certain piece of land.

A series of letters received from Hoskins oil palm settlers contained charges of long distance sorcery and caused the holding of a day long meeting of the clan concerned. The content of the letters is interesting, but relatively unimportant, because personal mail remains a potential means of sending or receiving an important piece of information, if the situation arises.

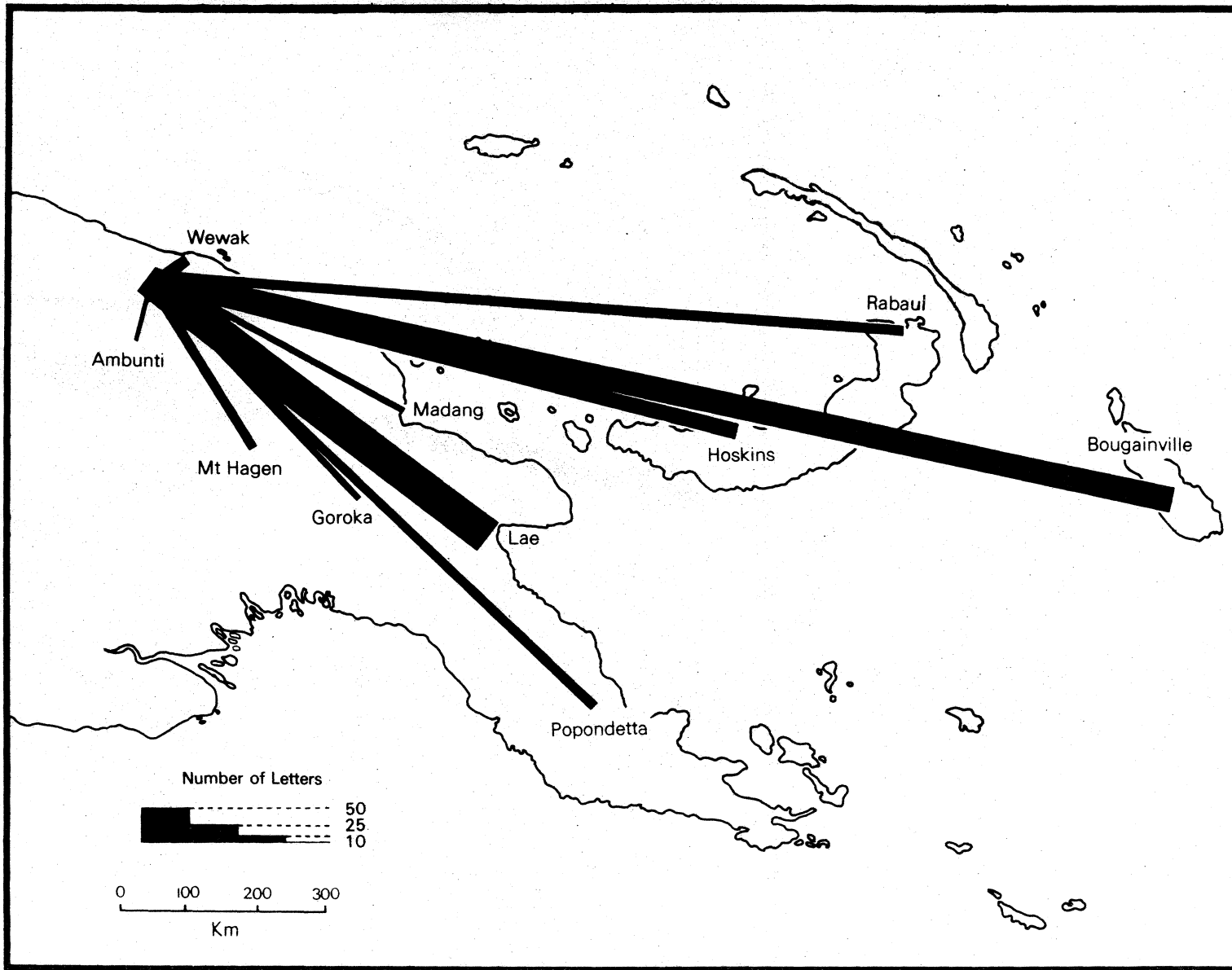
An indication of the potential sources of information via personal mail is contained in the results of three month survey of incoming mail at Dreikikir Patrol Post. This involved noting the postmark of origin on each envelope addressed to a village in the area. The destinations of the letters were also noted, but because it was impossible to obtain details of mail entering the area through other points, this data has not been included.

TABLE 4.8 ORIGINS OF LETTERS ADDRESSED TO VILLAGERS, CARE OF THE DREIKIKIR PATROL POST, APRIL TO JUNE, 1972

<u>Origin</u>	<u>Number of Letters</u>	<u>Per Cent</u>
Lae	52	29.2
Bougainville	32	17.9
Hoskins	26	14.6
Wewak	18	10.1
Popondetta	12	6.7
Mt. Hagen	12	6.7
Rabaul	10	5.6
Angoram	4	2.2
Ambunti	4	2.2
Madang	2	1.1
Goroka	2	1.1
Kokopo	2	1.1
Urmo	1	0.5
Malaita (Solomon Is.)	1	0.5
Ulau	1	0.5
Total	179	100.0

Source: Fieldwork, 1972.

FIGURE 4.13 ORIGINS OF PERSONAL MAIL, DREIKIKIR, APRIL TO JUNE, 1972



Source: Survey of incoming personal mail, Dreikikir, April-June 1972

The pattern (Table 4.8 and Figure 4.13) suggests that most of the letters addressed to villages in the study area are written by people who have left only relatively recently, and that as time passes, the migrant writes fewer letters home. Lae, where a considerable Maprik subdistrict settlement has developed near the Bumbu River at Buko, Bougainville, where a number of Dreikikir men are employed at the copper mine, and Hoskins, where Dreikikir men have recently taken up oil palm blocks, were the origins of 61 per cent of the letters received during the survey. Rabaul and Kokopo, longtime destinations for Sepik migrants, were the source of only six per cent of the letters. Popondetta was the only Papuan source. There, a young Tumam man was attending an agricultural training institute and he wrote all of the 12 letters from the Town. Only 14 letters were received from the Highlands, 12 from Banz near Mt. Hagen where three Dreikikir men were training as aid post orderlies. Notable, is the complete lack of mail from Papua south of the main mountain ranges, and in particular, from the capital, Port Moresby.

The majority of letters received in the villages are written by close relatives. Thus the number of close relatives a person has living outside the village, and the period of their absence largely determine the likelihood of receiving mail. The location of kin will determine the origin of the mail. Table 4.9 shows the number of Tumam men claiming close kin resident in various places. In some cases two people are claiming the same person, but it is felt that this method of presenting the data provides a more realistic measure of Tumam village's information field, than does a listing of the actual number of migrants living in various locations because it shows the proportion of men who have the potential to receive information, or to write and request it from the various places.

A pattern is formed which is similar to that formed by the mail survey except that Bougainville is not included. Lae, Hoskins and Rabaul are the location of most peoples' relatives, Wewak also becomes important.

TABLE 4.9 PROPORTION OF TUMAM MEN CLAIMING CLOSE RELATIVES LIVING OUTSIDE OF THE STUDY AREA, 1972

<u>Place</u>	<u>Number of Tuman Men Claiming Relatives in Given Places</u>	<u>Per Cent (n = 74)</u>
Hoskins	22	29.7
Lae	20	27.0
Rabaul	20	27.0
Wewak	15	20.3
Banz	3	4.1
Aitape	3	4.1
Madang	2	2.7
Maprik	2	2.7
Kokopo	1	1.4
Kavieng	1	1.4
Popondetta	1	1.4
Angoram	1	1.4

Source: Fieldwork, 1972.

Information from Outsiders

Very little information enters Dreikikir villages through official administration networks, through the medium of the council, or through face-to-face contact with officers and extension agents in the village. Outsiders who are involved in attempting to pass information to villagers are administration officers, council advisers, rural development officers, cooperative officers including business development officers, health workers and missionaries.

European cooperative officers visited the Dreikikir area five times between November 1971 and November 1972. Three visits were for the purpose of collecting receipts and calculating and paying dividends to members and no formal extension work was attempted. The officers had to collect receipts from over 500 people, and any questions or chit chat were brushed aside. Two further visits were made for the purpose of holding annual general meetings of the Dreikikir Rural Progress Cooperative. The meetings were chaired by a European officer together with the senior director, Anton Misiyaiyai (see Appendix C). The agenda included the election of committee members, a motion to raise their allowances (not allowed to go to a vote), a talk about the last years business activities by the officer and a

speech by Anton exhorting members to grow more rice and coffee and not to sell to private coffee buyers. After this, the audience, which numbered only about 150 out of an approximate total membership of 1,990 were invited to ask questions of the European officer. Most questions had been organised prior to the meeting. Those attending had decided beforehand which men were the best at speaking to Europeans in public and what questions they should ask. When each question was put, there was much nodding of heads and mumbled agreement. The officer claimed later the same questions were asked at every meeting, and this was indeed the case for the 1971 and 1972 general meetings which I attended. The questions were why is the price of coffee and rice so low, why does the price of coffee fluctuate and why do clerks and buyers steal from the growers? The officer's answers were brief and generally inadequate, and were preceded by a large sigh and a muttered, "Here we go again", to an English speaking assistant. "Here we go again", involved a repeat talk on the theory of supply and demand, and a description of the cooperative method of buying coffee. After the meeting, I asked some men if they now understood why the price of coffee was lower this year than last, and why it fluctuated. They said, "em i tok olosem, maket i pulap, tasol mipela no save gut long dispela samting", ("He said the market is full, but we do not really understand this").

Only one official visit by administration officers was made to Tumam during the 18 month fieldwork period. That visit was to conduct polling in the 1972 elections. Before the elections, "political education" programmes had been given to villagers, but officers at Dreikikir claimed they had received no detailed instructions of what they should discuss, and that their superiors had told them verbally, "Everything is political education these days - do what ever you like." One officer, perhaps not typical of all officers in the service, but one who had spent twelve months at Dreikikir said that political education was a "...waste of bloody time - I spend an hour telling them what the House of Assembly is and the first bloke to ask a question asks me what the House of Assembly is!" Needless to say, the political education extension programme appeared to be ineffective.

No rural development officers made visits to Tumam village during 1972, but two visits were made by rural development assistants, local men, trained and employed by DASF. They held one meeting to find out why people had stopped planting rice. They listened

sympathetically to many men speaking angrily about the price which, they said, had been the same for too long, about the lack of help from cooperative officers and rural development extension officers. Although their knowledge was limited, they attempted to answer questions put to them as best they could, but the outcome was difficult to judge. Most men thought that only officers could change things and meetings with local assistants would solve none of their problems. Access to advice from officers in their offices was difficult. The Papua New Guinean officer posted at Dreikikir suffered from an almost complete lack of supervision by his Maprik superior and was not very highly motivated. At Maprik the senior agricultural officer appeared to be continuously intoxicated. When some men from Tumam who travelled the 50 kilometers to Maprik and paid the three dollar PMV fare, tried to enquire about their applications for re-settlement blocks at Hoskins, they were turned brusquely away from his desk. They arrived back at Tumam upset and angry. There was no doubt they would not return to risk another insult.

Most health workers were fully occupied treating symptoms and had little time to begin attacking the causes. A European nurse working with the Catholic mission at Yasip operated a very effective infant and child health service, visiting groups of villages all over the area. Although she spoke constantly with village women she had little time for explanation and many knew how they were recommended to care for an infant, but did not know why.

The most intensive outside contacts experienced by villagers were those with European missionaries. Missions have built stations near villages and their work leads them to spend many hours talking with villagers. Although they would deny it, the main thrust of their evangelical work has ceased and they are now mainly concerned with the day-to-day administration of the schools and hospitals they have established. However, they remain more accessible to villagers than any other outsiders. The information they give to villagers is frequently distinctively different to that which is received from secular sources, for many evangelical missionaries explain everything in fundamentalist terms. This stance tends to limit their influence to church members but church membership is not an immutable characteristic. In 1972 the evangelical mission demanded that all baptised church members return their Peli membership to Marambanja or face refusal of communion. In Tumam village, the mission churches lost 80 per cent of its regular attenders overnight, and a similar pattern

occurred elsewhere. In addition, the Peli members were alienated and began to view the mission as a protagonist rather than an ally. The Catholic mission made no rules and maintained contact with Peli members. Both missions were giving assistance to village groups to establish retail trade stores, and the Catholic mission was funding a cattle project scheme. In the absence of a systematic study it is not possible to assess the influence of the missions as an outside source of information in any but subjective terms. Many men appear to be disillusioned by the missions, and missionaries who have been in the area since the 1950s agree that in the early stages of the establishment of the missions, people had grossly inflated expectations of the missions and their ability to bring about the millenium. The disillusionment has caused many people to distrust the missions as a source of information, thus reducing their efficacy as an information source. Individual missionaries however, are known and trusted, and their advice is sought at times, although almost always by church members. During the Peli Association zenith in 1972 church members constantly sought reassurance from European missionaries that Peli propaganda was not true.

In villages all over the study area I asked the men I was using as informants for their definition of the ideal extension agent. Everywhere I received similar answers:

"A man who is prepared to sit and talk *with* us not *at* us, who will sit with small groups, who will talk about the things which we are worried about, who will not get angry when we do not understand, who will not tell us to go away when we try and talk with him in the evenings, but who will talk all night if necessary, who will stay in the area for a number of years so we can get to know him personally, and who will visit us frequently."

Formal, administration and mission, communication networks are not effectively transmitting information to the villages. The breakdown in these networks appears to occur at the lowest levels, between the rural outposts and mission stations and the villages. In contrast, informal, or indigenous, networks are moving large amounts of information very effectively. The Peli Association example proves this point. The small rural central places from which official and mission information is supposed to diffuse, but does not, do however act as places where people meet and exchange information which is passing through the informal networks. They act as nodes in these networks, instead of points of origin for information from central government, council and mission agencies. The remedy is to give

villagers what they say they want. An agent who acts as if he were a guerilla fighter, who lives with and talks with, the people, and the greater use by formal agencies, of informal networks.

Mass Media

Nor can the mass media compete with informal networks in the effective movement of information. Radio in particular is not hindered by the problems of physical access and should therefore be an important source of information, particularly in the most isolated villages. The results of a study of the reception of radio messages at Tumam, published elsewhere (Allen 1973), indicate this is not so.

This study found that although it is generally considered that one radio set can transmit a message to a relatively large number of people, this may be not so. In this study one set passed the message to an average of 2.75 people only. Although Moulik (1970) found in the Northern District that a message was passed on from level to level at a ratio of approximately 1:5 and the movement of information on the Peli Association was passed on at a rate of 1:4.4, radio messages may not be passed on at as high a rate. It is possible that radio messages are too impersonal to compel their receivers to tell another person. The location of radio sets in a village was found to influence the pattern of reception. Almost all Sepik foothill villages are of a similar linear form to Tumam, as are many villages elsewhere in New Guinea. In this study only three per cent of people living more than 100 meters from a set received the message, compared to 30 per cent within 100 meters of a set. Radio listeners in Tumam were predominantly male. Programmes directed at women may not be reaching the audience for which they are intended. The results also suggest that younger, formally educated people receive radio messages more frequently than older, people who have not attended schools, but younger people are less likely to pass on a message, particularly to an older person, a phenomenon discussed earlier in relation to the activities of Peli Association committeemen. Two radios out of ten in the village failed to transmit the message to any person. It is probable both radios were on during the broadcasts, but the message was not heard. In a culture where face-to-face conversation is so important, radio listening for the unaccustomed, is not easy. Personal observation of listening habits during political education broadcasts prior to the 1972 elections, showed that listeners find it difficult to concentrate for long on an impersonal source of information. Conversations start up and soon the radio is forgotten.

Message distortion remains a barrier to the passing of accurate information, from the radio to primary and subsequent receivers. Messages are either heard incorrectly or misinterpreted.

Reception of radio messages in villages is, in part, a function of the frequency of listening, the type of programme listened to, and the number of radios in the villages. Radio listening habits were also investigated in Tumam. Men were asked (before the message reception experiment) how often they listened to the radio.

Just over half of the village men said they listened to the radio at least once a week, but less than one-quarter did so daily (Table 4.10). Almost 45 per cent listened rarely or not at all. Of those men who said they listened to a radio sometimes, 29 per cent expressed no programme preferences. Among those who listen, programme preference is associated with frequency of listening. Those men who listen most frequently prefer news or extension programmes, while those who listen least frequently have either no preference or prefer traditional singing or stories. A Chi-square test on parts of Table 4.10 indicates a significant difference of programme preference between men who listen frequently and those who do not¹².

Although the message reception experiment results suggested younger men would be more likely to receive information from radio broadcasts, a test on data under discussion here finds no relationship between age and frequency of listening¹³, and by implication programme preference. This finding does not necessarily negate the earlier one. Younger men are more likely to have received some formal education which will probably have better equipped them for listening effectively to radio broadcasts, especially if their schooling involved the use of school broadcasts. Thus although younger and older men may listen to the radio in equal numbers, younger men may still have a better chance of hearing and correctly interpreting a specific item of information.

Rogers (1969,126) suggests that increasing literacy is associated with an increasing interest in news and extension broadcasts. In Tumam, frequency of listening was associated with the ability to read in Pidgin, (Table 4.11) but programme preference was

12. Chi-square = 13.37, p. = 0.05. See Table 7.10 for details.

13. r_s age/listening frequency is 0.096, p. = 0.30.

TABLE 4.10 RADIO LISTENING FREQUENCY AND PROGRAMME PREFERENCE, AMONG ADULT MALES, TUMAM VILLAGE, 1972

Frequency of listening	Programme Preference					Total
	No preference	Traditional stories and songs	Religious programmes	Country-Western modern music	News, extension spoken word	
At least once per day	1	2	-	4	12	19
3 to 5 times per week	1	3	-	1	1	6
Twice per week	1	2	-	2	1	6
Once per week	2	4	-	-	2	8
Once per month	1	1	-	1	1	4
Almost never	13	3	1	-	5	22
Never listen	-	-	-	-	-	13
Total	32	15	1	8	22	78

Notes: Chi-square = 13.7, p = 0.05, df = 5. Columns 1 and 2 combined, 3 and 4 and row 7 excluded.

Source: Fieldwork, 1972.

not (Table 7.12).

TABLE 4.11 ASSOCIATION BETWEEN FREQUENCY OF RADIO LISTENING AND LITERACY, TUMAM VILLAGE, 1972

	<u>Frequency of radio listening</u>		
	Once a week or more	Less than once a week or never	
Literate	18	8	26
Illiterate	19	35	54
	37	43	80

Chi-square = 8.25, $p = 0.01$.

Source: Fieldwork, 1972.

TABLE 4.12 ASSOCIATION BETWEEN LITERACY AND RADIO PROGRAMME PREFERENCE, TUMAM VILLAGE, 1972.

	<u>Programme preference</u>		
	News and extension	Music and stories	
Literate	14	10	24
Illiterate	9	13	22
	23	23	46

Chi-square = 2.39, $p = 0.20$

Source: Fieldwork, 1972.

The implications of the figures in Table 4.10 are, that in villages like Tumam, on any given date, only between one-quarter and one-half of the adult male population has the potential to receive an item of information from the radio. In other villages, less well endowed with radio sets, this potential is likely to be lower. Of the 25 per cent of adult males listening, only about 60 per cent will be primarily interested in news broadcasts and extension programmes. On any evening, therefore, news and extension broadcasts from Radio Wewak may find only about 10 to 15 per cent of the adult male population of the villages to whom the information is directed, actively interested in receiving it. If they receive it, whether or not they interpret it correctly and whether or not they pass it on undistorted, or pass it on at all, depend on local factors such as their location

TABLE 4.13 NUMBER OF RADIO SETS PER VILLAGE AND PER 100 ADULT MALES BY CENSUS DIVISION, DREIKIKIR LOCAL GOVERNMENT COUNCIL AREA, 1972

Census	Number of serviceable radio sets	Number of villages for which data are available	Mean number of radios per village	Number of villages with no radio sets	Mean number of radios per 100 adult males
Urat	82	17	4.8	0	6.2
Gawanga	87	15	5.8	0	4.1
Wam	30	8	3.8	0	3.2
Kombio	25	22	1.1	6	2.7
Urim ^[a]	4	4	1.0	1	1.4
Total	228	66	3.5	7	4.1

Notes: [a] Data from five of nine villages in census division inadvertently not collected.

Source: Fieldwork, 1972.

in their village, their relative position in the village social hierarchy, their age, formal education and experiences outside the village.

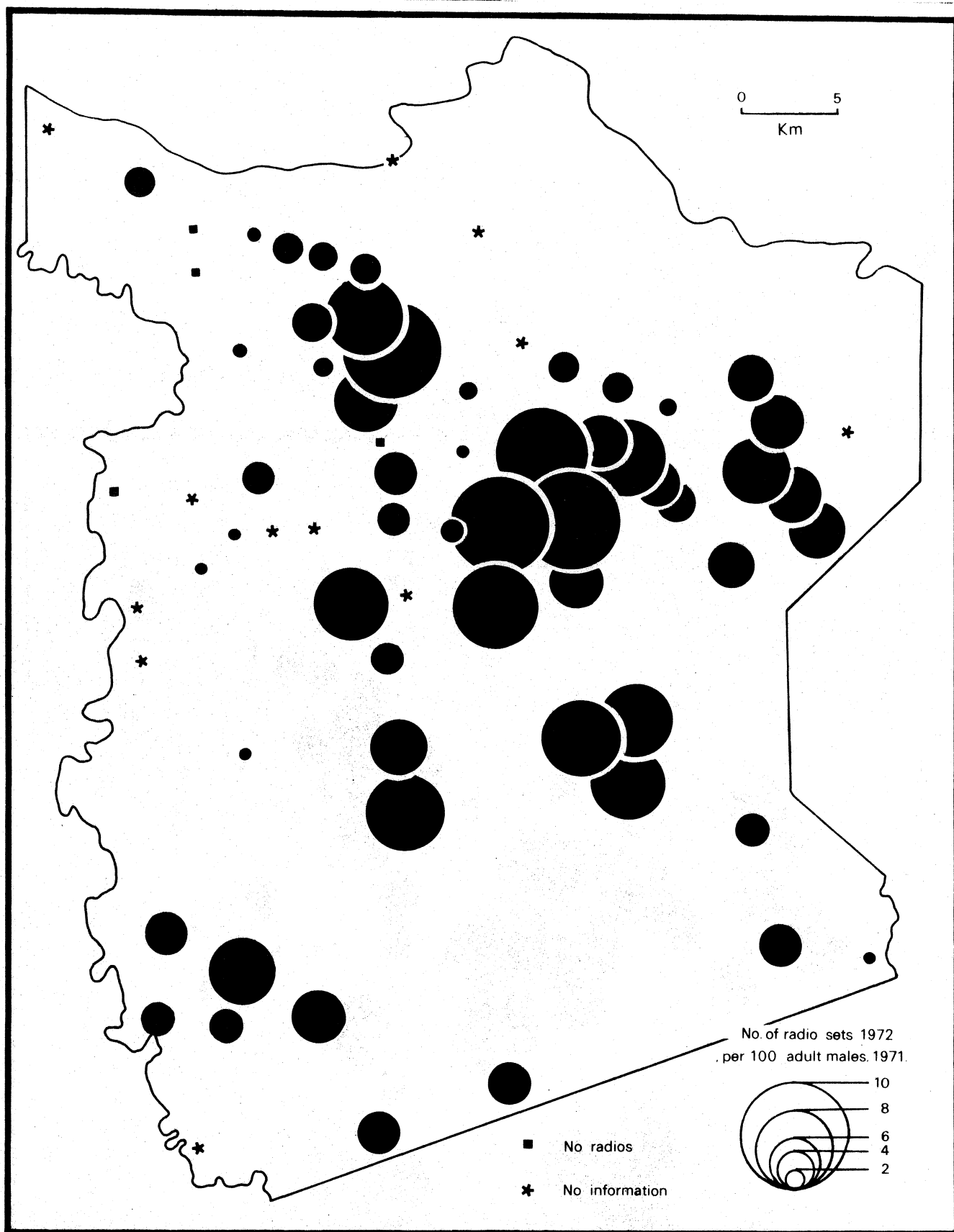
Despite somewhat negative findings in Tumam, radio is potentially, a highly effective method of transferring information directly from the main centres of the country to the rural periphery. It has a number of inherent advantages; one person can rapidly transfer a message to a large number of listeners, isolated from him, and from each other, by many hundreds of kilometres, and the listeners do not have to be literate to receive and comprehend the message. This potential can only be realised, however, if, among other things, radio receiving sets are operating in the rural areas in sufficient numbers to ensure that enough people in each village receive the messages broadcast. In an attempt to gauge the potential for the reception of radio messages in the study area, a count was made of the serviceable radio receivers in each village visited. The results are presented in Table 4.13 and Figure 4.14.

Urat villagers are more likely to receive information via the radio than people in other areas. Because of a lack of receiving sets, radio is probably least effective as a medium of information transmission in the Kombio and Urim areas. Radio's lack of effectiveness in these areas is increased by the characteristic settlement pattern of scattered hamlets; the existence of one radio in a village comprising a number of small hamlets isolated from one another is likely to be much less effective than one radio in a more nucleated village in which the majority of occupants dwell in one contiguous area. Furthermore, these are the only areas in which some villages have no radio set at all.

In almost every village unserviceable sets exist, and a number of sets, said to work but with flat batteries, were also encountered. The climate and cockroaches appear to be the two main factors limiting the average life of radio sets to about five years, if the Tumam case is typical.

It is difficult to assign any single cause to the pattern presented by the distribution of radio sets in Figure 4.14. It is to some extent a function of the earning ability of villagers. Other factors which appear to be involved are the proximity to a permanently manned government or mission station, for example the notably higher level of radio ownership near the Catholic Mission station at Yasip in the Kombio area, and the relative recency of the return of men

FIGURE 4.14 NUMBER OF RADIO RECEIVERS PER 100 ADULT MALES BY VILLAGE, DREIKIKIR, 1972



Source: Fieldwork, 1972 .

working outside the study area, as evidenced in the Gawanga. Many returning workers bring with them a radio which may continue to function for up to eight years. After that, unless other men are returning, villagers' ability to purchase a radio depends on their cash cropping performance and the frequency with which they come into contact with stores selling radios. In the past councillors have been issued with radios; but most of these sets are coming to the end of their lives and in many cases have not been replaced by their owners.

Printed Matter

The influence of printed matter is difficult to assess. In Tumam 36.5 per cent of all adult males over 20 years of age could read Pidgin and 29.7 per cent said they could write Pidgin. Only one adult male could read English. In Tumam almost all Pidgin reading material was from mission sources, much of it fundamentalist Christian in nature. No reason to believe that this situation is markedly different in other villages in the study area was encountered.

A survey of 67 Tumam households produced 175 separate pieces of printed matter, ranging from calenders to paperbacked novels. Nine houses contained no printed matter at all. Although posters and other pieces of paper pinned to house walls were not counted as printed matter many houses had coloured pictures cut from advertisements in glossy magazines pinned up on the wall. Many pictures showed Europeans enjoying the best of their material world.

Of the 175 documents, 134 or 76.5 per cent were of a religious nature. Of these, 124 were printed in Pidgin. Only nine of the remaining 41 publications were printed in Pidgin. The rest were used solely as a means of storing paper money, licences and other valuable documents from the ravages of cockroaches.

Little objective comment can be made about this situation, except to suggest that villagers exposed to such a narrow spectrum of printed matter must receive a distorted view of the world beyond the village. Just how much influence printed matter has I was not able to assess. Members of the Peli Association purchased the complete stock of *Nupela Testamen* from the village SSEM store, and read avidly in the Book of Revelations. Chapter and verse references were received from Marambanja, and people studied them, as well as the line drawings which accompany them. Literate people were very keen to read, and it was common to hear a semi-literate person

laboriously sounding out the syllables of words printed in a booklet of some sort. My own copies of *Wantok Niuspepa*, a weekly paper with local, national and some world news and photographs, printed in Pidgin by the Catholic administered Wirui Press were eagerly sought. Literate men stressed to their non-literate companions that they were not to use *Wantok* for rolling cigarettes, the fate of any other newspaper entering the village. That men do not look at the newspapers from which they roll cigarettes was evidenced by a fervent Peli member carefully rolling a smoke from a 1971 copy of the *Sydney Morning Herald* in which was printed a photograph of Matias Yaliwan, the Peli leader. When I asked the man to unroll his cigarette and showed him the photograph he was somewhat bemused, but took the picture to pin on the wall of his house.

During the national elections in February a sample of 15 men and 15 women were questioned on their sources of information about the candidates in the local electorate. For them, radio was not an important source of information, (Table 4.14). Most received information from posters and specimen ballot papers, which were pinned up on notice boards at the Patrol Post, but which did not reach Tumam until the day of the poll, and from the candidates themselves. No current information is regularly received from newspapers

TABLE 4.14 SOURCES OF INFORMATION ABOUT THE NATIONAL ELECTIONS, TUMAM VILLAGE, JANUARY, 1972

<u>Sources of information</u>	<u>Males</u>	<u>Females</u>	
Radio	2	0	2
Posters and specimen ballot papers	15	11	26
Candidates personally	14	8	22

Notes: The sample were asked, "Have you heard anything about the election on the radio?" "Have you seen anything pictures or writing about the elections?" and "Have you heard any of the candidates speaking?"

A chi-square test excluding row 1, shows there is no difference in the reception of information between men and women (Chi-square = 0.03, p = 0.95).

or other printed matter. The Bible remains the most read piece of printed matter, but whether because of its contents or because of the almost complete lack of alternative reading, is debatable.

CONCLUSION

In essence, what colonisation and the penetration of the Dreikikir area by vehicle roads has done to personal movements, and hence to the flow of information, is to increasingly channel them into narrower and more constricted corridors. As this process has gone on, villages which are physically distant from these corridors have experienced increasing difficulties of accessibility. The pre-contact information field was by no means isotropic, but the movement of information through it could be likened to the overused, but nevertheless functional analogy of the ink spreading on a blotter, in comparison to the modern movement of information, the nearest analogy to which is water racing down a flume. When the administration cut tracks across the study area it channelled the movement of people from the many overgrown bush pads, onto open tracks. When unsurfaced vehicle roads began penetrating the area, the process was intensified. The entry of the Sepik Highway has further intensified the trend.

Information today is still moved almost solely by people moving from point to point. Some information enters the area from letters, from outside administration and mission workers and from the mass media, but the great majority of items are carried by village people as they travel the tracks and roads which lead from the north and the south to the Sepik Highway. Surely the "intellectual revolution" which Rowley (1965,70) suggests occurred after the imposition of *Pax Australiana* lifted restrictions on personal movements, has been superseded by a second revolution, brought to the people, literally, on the back of Japanese four-wheel-drive vehicles.

Part II deals with the diffusion of selected innovations at different periods between 1900 and 1972. The spatial patterns formed by their diffusion are directly related to the changes in communications and information movement described here.

PART II

THE DIFFUSION AND ADOPTION

OF INNOVATIONS

CHAPTER 5

THREE PRE-WAR INNOVATIONS

Although the period between 1900 and the Second World War was one of great change in the villages, most of the changes not directly imposed, were insidious and therefore lack the distinctiveness necessary to render them of use to this study. Government control imposed many changes and others arose out of the establishment of government control. Although all pre-war records appear to have been lost from Aitape and Rabaul during the war, it would have been possible, for example, to map the spread of administration appointed village officials. But this pattern would be identical with the pattern of the establishment of government control presented earlier. What is required are distinctive, discrete items, which were diffused by village people themselves.

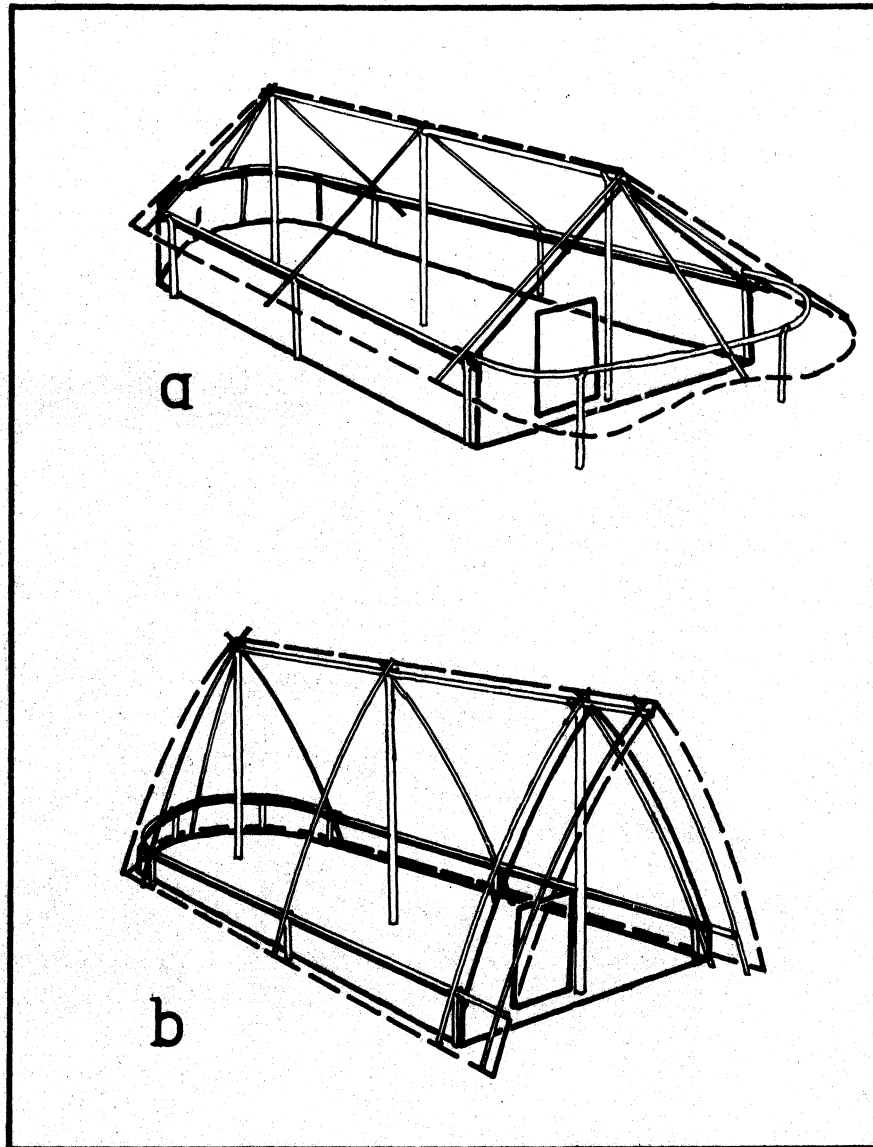
Three such items came to my attention during fieldwork, although two, I became aware of, only late in the fieldwork period. They are the southerly spread of a northern house-type, the movement of ideas associated with an early millenarian movement and the introduction of a new form of sorcery. The full diffusion patterns for the latter two items are not available, but even the fragmentary evidence allows an exploration of the question, did the imposition of government control, the establishment of Aitape as an administrative headquarters, and the cutting of kiap roads, influence the movements of items of information into and within the study area?

'Torricelli' type Houses

Two house types exist in the Dreikikir area. They are illustrated in Figure 5.1. The first, (a), I have called the 'Torricelli-type' and the second (b) the 'Sepik-type'.

The 'Torricelli' house differs from the 'Sepik' house in the construction of the roof and walls. The 'Torricelli' house has a true wall constructed from stakes and bark sheets or planks of softwood and the roof rests on a central gable and two parallel wall plates. The 'Sepik' house has no true walls. Rather the roof forms the walls, the rafters being driven into the ground, bowed over a low wall plate and fastened to a central ridge. This basic design is found east of Dreikikir in Arapesh and Abelam villages. The 'Torricelli' type is found to the west of Dreikikir.

FIGURE 5.1 BASIC CONSTRUCTION OF (A) 'TORRICELLI' TYPE, AND (B) 'SEPIK' TYPE, HOUSES



Source: Fieldwork 1972.

Before contact, Gawanga, Urat Wam and Arapesh speakers in the Dreikikir area built only the 'Sepik' house. Kombio, Urim and Lou speakers built the 'Torricelli' house. It is likely that the 'Sepik' house had previously diffused west, perhaps in association with tambaran and yam exchange rituals. When the Kombio village of Yaurang began preparations for a yam exchange ceremony in 1972, they constructed two 'Sepik' type houses in which to display the yams. Men insisted that this type of construction was only used for exchanges. All other buildings in the village were of the 'Torricelli' design.

The 'Torricelli' house has some advantages over the 'Sepik' house in the foothills environment. It is warmer because the true wall is of a more substantial construction than the roof-wall of the 'Sepik' house. An overhanging verandah provides a sheltered area for cooking and sitting outside the house proper, and the interior is roomier. The 'Sepik' house is easier to build however requires less materials and can be constructed in less time. When comparing the two house types people say the main advantage of the 'Torricelli' house is its warmth on cold, windy nights.

After 1900, some Urat, Wam and Gawanga villages in which the 'Sepik' house had been the only type of house, began to build the 'Torricelli' house. Figure 5.2a shows the area into which the 'Torricelli' house diffused. Informants from villages in this area consistently informed me that they had not begun to build the 'Torricelli' house type until after contact.

Mead (1970,65) describes how a house very similar to the 'Torricelli' type was adopted by the Mountain Arapesh in 1930 in association with a millenarian movement which had spread inland from Wewak. It is possible the initial spread south of 'Torricelli' houses in the Dreikikir area were also associated with a millenarian movement (see below), but nobody made this association freely, nor agreed that the two events were linked.

In villages which formerly built 'Sepik' type houses but have now adopted 'Torricelli' houses, 'Sepik' houses are still used for housing sacred objects, such as flutes and drums, and for yam stores.

Pre-war Millenarian Ideas

Around 1931 or 1932, and certainly before 1935¹, information about a millenarian movement entered the Urat area from the Kombio. As I did not become aware of this event until the last week of my time

1. The year of the Torricelli earthquake.

in the field, I was not able to trace the spread of information about it, beyond a restricted area.

Word was received in Urat villages from Kombio and according to one informant, Wam villages, that a period of darkness was going to occur. During the darkness the ancestors would return bearing with them gifts for the living. In Tumam, people said their parents were confused by the messages received. They expected to receive "*nim, selpan and korowor*" which in Urat language translates as stone knives and fish. It appears as if the message was referring to steel knives and tinned food, but Urat men, who were not very familiar with these items, misinterpreted it.

In preparation each village was to build a house large enough to hold all the inhabitants of a hamlet. Latrines were to be constructed nearby so that people would not become lost in the dark. Food, firewood and water were to be stored. Any bones of the possession of people were to be thrown away, lest the ancestors should take fright at seeing their own arm bones or skulls. These instructions were followed, but after a week of waiting, villagers gave up and returned to normal routines.

The most likely origin of these ideas is one, or both, of two millenarian movements which evolved on the coast between 1930 and 1931. One had its origins near the mouth of the Sepik River and spread west as far as Suain. In it, village leaders presented ritual carvings and paintings to priests of the SVD mission and burned ceremonial houses (Steinbauer 1971,101). Then in 1931, an Aitape villager announced he had been in communication with his dead mother who was living under the ground in a mountain behind Aitape, manufacturing vast quantities of material wealth for her people. This man was joined by three others who became known as the "four black kings". They prophesied the imminent arrival of a new order in which all illness and disease would disappear, New Guineans would become immortal, all Europeans would leave New Guinea, and villagers would inherit their wealth and redistribute it among themselves. These men urged villagers to destroy their traditional household goods. They would soon be replaced they said, with tinned food and kerosene which would appear from out of the ground. The leaders were arrested and gaoled in 1931 (Steinbauer 1971,103; Worsley 1970,110). In various forms, many of which included the concept of a black king, this movement spread east along the Sepik and Madang coasts (Worsley 1970, 111). Mead (1970,65) has a footnote reference to a "threatened

cataclysm which reached the Arapesh as a rumour from the Wewak Messiah cult of 1930", which suggests the same ideas were also penetrating the mountains of the Wewak hinterland at this time.

One can only speculate on the satisfactions the Dreikikir villages believed they could gain from the building of the houses and the stockpiling of food. My informants were aged only 12 to 14 years at the time, and can remember little of their parents' emotional reactions to the ideas. They say their parents were excited at the prospect of being reunited with the dead and that the material wealth had no attraction because their parents did not understand what was implied in the promises. But at this time there were returned labourers, some of whom had become tultuls, in the villages who had had wider experiences. Appointed for their knowledge of Pidgin and their experience with Europeans, tultuls were influential men in their own communities, and were some of the few men who could communicate across linguistic boundaries. The ideas are said not to have spread beyond those villages in which village officials had been appointed. It is thus probable that tultuls and returned labourers were instrumental in spreading the ideas and in organising their fellow villagers to prepare for the coming darkness. If this is so, they were establishing a pattern which was to be repeated many times, in which a few individuals have come into possession of a set of new ideas and have set about proselytising, interpreting and explaining ideas, persuading, and even forcing, people to accept them and act upon them.

These ideas spread from Nanaha the westernmost Urat village to other western Urat villages (Figure 5.2c). Although time was not available to check their information, people in the western villages said eastern Urat villagers also knew about these things and had been told by Wam men.

Sanguma sorcery

Another pre-war innovation, the spread of which was drawn to my attention late in the fieldwork period, is sanguma sorcery. Before contact, sorcery in the Dreikikir area was of a projective form, in which exuviae from an intended victim, (scraps of food, cigarette butts, hair, nail clippings or sexual secretions, for example) were sent to a sorcerer. The sorcerer held the exuviae and awaited further information about the victim and payment from the person wishing to make the victim ill, or kill him or her. Payment was made secretly, often through an intermediary and usually comprised pigs

and shell rings. If payment was received the sorcerer heated the excuviae together with special plants and herbs, in a fire, and smoke from the fire rose and travelled to the place where the victim was asleep, entered his or her body, and caused illness. If the magic was kept up for long enough the victim would die. The Urat called this form of sorcery *ngimbim*. When a person became ill and there were no obvious causes, sorcery was always suspected. Attempts were made to discover who was causing the illness, by divination and by closely questioning the victim about any possible reasons why other men should want him dead. Cuckolded husbands and jealous exchange partners were obvious suspects. Attempts were also made to discover the sorcerer and to offer him gifts, rings or food, to stop the magic².

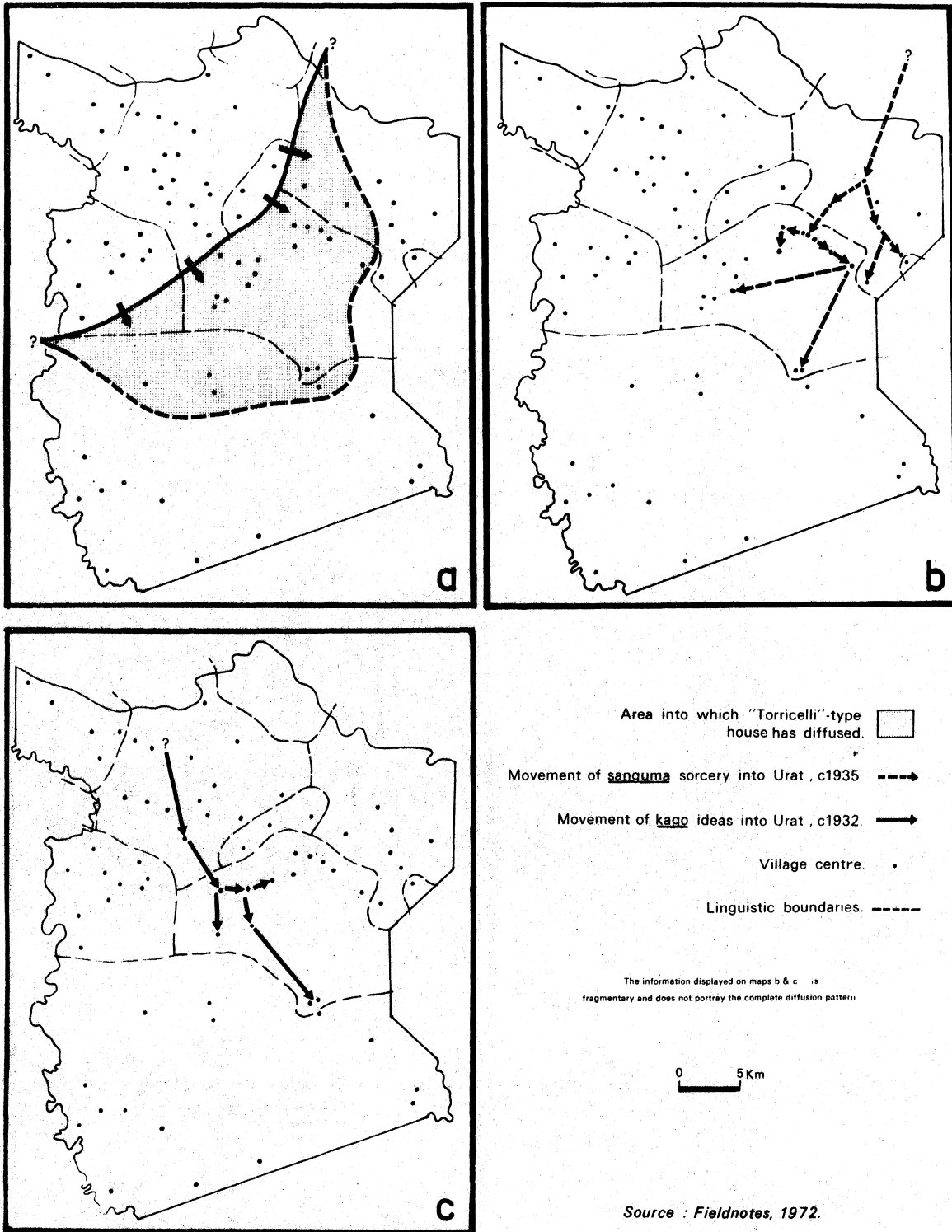
Following contact and the beginning of labour recruiting, a new form of sorcery entered the area. Known in Pidgin as sanguma (Urat = *yar*) this sorcery first appeared in the Wam area at Selnau. It is now known and feared throughout the area as the commonest cause of sudden death. Sanguma sorcerers kill their victims by a combined magical and physical assault. During their training, apprentice sorcerers learn how to manufacture a mixture of herbs, ginger, nettles and parts of the bodies of dead infants, which is allowed to putrefy and is then dried to a powder, known as "paint". The sorcerers ingest a similar concoction which gives them the power to become invisible. The victim is physically assaulted, often by more than one sorcerer, and is either killed or seriously injured with a weapon, the leg bone of a cassowary for example, which has the magical powder painted or plastered upon it in some way. If the victim is not immediately killed, the magic of his assailants is such that he cannot remember being assaulted, and returns home as if nothing has happened. Two or three days later he may suddenly die³.

2. On Forge's (1970b) description, Abelam sorcery is, in many respects, identical to *ngimbim*. *Ngimbim* still exists and is a common explanation of long illnesses which finally result in death, or of accidental deaths, such as a fall from a tree, or a road accident.

3. Deaths blamed upon sanguma which occurred while I was in the field, were all explicable in terms of Western medicine. The most common cause of sudden and dramatic death is a strain of malaria *Plasmodium falciparum*. The victims become ill and die within 36 hours, commonly after a hard days work in the gardens, all of which is taken as further evidence of a healthy person being struck down by unseen or unremembered assailants. Although the great power of sorcery is metaphysical, good evidence exists, that in the past, sanguma sorcerers have murdered their victims by physical assault.

In 1945, outbreaks of a disease thought by the reporting officer to be possibly meningitis, which was causing many sudden deaths in Urat, Kombio and Wam villages, are noted in a patrol report. *P. falciparum* may have been the culprit. Patrol Report No. 3/45/46 (Sepik), Papua New Guinea Archives.

FIGURE 5.2 DIFFUSION PATTERNS BEFORE 1942



Another form of sanguma involves the use of the powder described previously on a small sharpened bone. The sorcerer hides beside a path, and when his victim passes he gestures the bone towards him. The victim may feel a small jab, but is usually unaware of the assault. Death follows in two to three days.

Sanguma sorcery appears to have its origins on the Madang coast, but Dreikikir men most likely gained a knowledge of it while at the New Britain plantations. Wedgewood's (1934,66-70) description of "*nabwa*" a traditional sorcery of Manam Island is very similar to the sanguma which now exists in the Dreikikir area. Mead (1970,202-204) describes how the Mountain Arapesh and the Plains Arapesh, were both making efforts to obtain "*sagumeh*" sorcery from the coast in 1931. Previously, the Mountain Arapesh had feared the Plains Arapesh as master sorcerers. Mead thought the origin of "*sagumeh*" to be the Madang coast. In the same period, Manam Islanders were becoming increasingly concerned about an imported form of sorcery, "*dzere*", said to have been brought back from Rabaul where it originated from Aitape plantation labourers. "*Dzere*" is almost identical to the *ngimbim* sorcery traditional to the study area (Wedgewood 1934,70).

When Urat villagers became aware that Wam villages were in possession of a new form of sorcery, which was thought to be very dangerous, they began immediate attempts to gain some knowledge of it. Young men were selected by the community and sent to live in Wam villages and study as apprentices. Wam sorcerers were paid for teaching Urat men the techniques. The pattern of movement of sanguma from Wam to Urat villages is shown in Figure 5.2b.

Pre-War Diffusion

The material presented upon the latter two of these three items is, in one sense, a demonstration of the obvious. Items introduced at the coast moved inland. When compared to the pre-contact patterns of communications however, the movements south of the two items becomes more important. If the movement of the 'Torricelli' houses south, is added, the evidence of a reorientation of the communication networks resulting in a change in the direction of diffusion, although being far from conclusive, becomes more significant. Before contact, villages in which people lived in 'Torricelli' houses were located at the extremities of the existing communication networks. After contact, some of these same villages became points of first entry into the Dreikikir area, 'gateways' to the inland networks. The knowledge of the 'Torricelli' house and its advantages, moved

south, as people from the southern villages began to move through the northern villages, for the first time.

The spread inland of the millenarian movement illustrates a phenomena which has become commonly associated with the adoption of innovations in the postwar period. In 1932, Tumam people did not properly understand the information they received from the northern villages. They placed their own interpretations upon it. They followed the instructions closely however, and kept up the required behaviour for at least a week. The labour involved in building the houses capable of holding the whole population of the hamlet in a short time was considerable. The dimensions of the houses built at Tumam, as marked out on the ground by men who witnessed them, are quite impressive. People were prepared to carry out this work, in the hope that dead parents and grandparents would return. It seems likely also, that the leaders in this enterprise were tultuls. At Tumam, the tultul of the time led the activities there, and at Musingwik the same thing occurred. They received their information from tultuls in Yaurang and Yalangel villages, through the Nanaha tultul. Tultuls were men who had greater experience in the outside world, more intensive contacts with Europeans, and who could speak Pidgin. They received the message in Pidgin and translated it into the local language for their followers, probably embellishing it in the process. In the post war period a similar process has occurred. Men keener for change than most, have received, and, frequently, reinterpreted, messages for their followers who have, for a limited period of time, carried out their instructions without questioning them. When the promised end is not achieved at first a few, and then many, people, drop the new activity or behaviour and return to their normal day-to-day routine.

The spread of sanguma appears to have occurred rapidly. People were immediately afraid of other villagers having power over them. They quickly sought a share of that power, mainly, according to Tumam men, in self-defense. The rapidity of diffusion and adoption of innovations which people have believed would give power back to village communities, has been a feature of post-war diffusion patterns.

CHAPTER 6

BISNIS

Bisnis activities were first introduced into the study area immediately following the Second World War. The war was a climax to what had been a steady colonial encroachment into the precontact village societies, an event which devastated much of the Dreikikir area, and caused a few individuals to travel widely, to have outstanding and in some cases highly disturbing personal experiences, and to come into contact with people from many parts of the world. This, together with pre-war experiences, gave rise, in the minds of some men, to a set of premises about European society and economy. Upon these premises much postwar innovative activity was based. Concepts of bisnis and the actual bisnis activities which were introduced into the Dreikikir area, and their adoption and diffusion, are described in this chapter. An assessment is made of the participation in bisnis activities in 1972 in the final sections.

THE CONCEPT OF BISNIS

The commercial activities which spread after 1946, cash cropping, rural cooperatives, retail trading, cattle farming and passenger motor vehicle operations, were all manifestations of a single concept, bisnis. Village people perceived bisnis to be three main sorts of activity, and they viewed these activities in model form. The first model may be called the 'Cash Crop Model', the second the 'Investment Model' and the third the 'Cooperative Model'.

The 'Cash Crop Model' required the production of a special crop which was cultivated solely for the purposes of bisnis. The crop when harvested was to be given to Europeans, who would give villagers money in return. The ultimate source of this money was not explained by the model, but Europeans were thought to be giving money in exchange for the crop because they were grateful for the assistance Papua New Guineans had rendered to Allied troops during the war. The model did explain a matter which had formerly puzzled many indentured labourers, and that was that Europeans received money for the copra and other products from their plantations.

The 'Investment Model' explained bisnis in terms of the investment of small amounts of money into an enterprise and the receipt

of profits or dividends. It required large numbers of people to give small amounts of money to an individual, who, because he was in possession of special knowledge, would "make the money work". This increased the amount of money over that which was originally invested so that win mani or profits could be returned to the investors. How, and why, the money increased, was not explained by the model.

The 'Cooperative Model' was a combination of the two models described above. People should produce a special crop and invest small amounts of money. The cooperative, known initially as a sosaiti, (society) would give money in exchange for the crop and would also pay members dividends. The source of the money and the process by which invested capital generated more money, remained unexplained. The ordinary village man, and probably some of the bisnis leaders who emerged at this time, believed that the source of money, and its reproduction, were related to the magical properties of money, and that some bisnis leaders had been given secret knowledge of the processes by Europeans. Thus it was the technique, or perhaps it could be called the ritual, of "making money grow", which was known as bisnis.

Money and Power

Exchanges before contact were generally characterised by material equivalency; yams for yams, pigs for pigs, people for people; careful records were kept of debits and credits, as well as the quality and quantity of the goods exchanged. Only shell rings performed some of the functions of money. They were employed in the 'purchase' of salt, pigs, pots and adzes, and were in turn 'purchased' with similar items. However, shells, especially the large *Tridachma* rings, had functions other than that of storeable wealth. Large rings were valued for their aesthetic qualities and their intrinsic beauty, qualities enhanced by their supposed supernatural origins and their relationship to the tambaran and dead ancestors. Small rings were given an equivalence of value, largely independent of their quality. They were involved in 'purchases' of goods from coastal people shortly after contact. Two small shell rings could purchase a small steel blade manufactured out of the blade of a large machete, five, a small steel adze blade suitable for lashing directly onto a locally made haft, and ten, a small tomahawk. The small rings also possessed something of the supernatural. Children were decorated with one or two small rings during infancy and women almost always wore small rings and white cowries as body decoration, and as protection against malevolent spirits.

Money, in the form of silver coins with holes through the centre, was introduced on the coast and appeared in the study area. These coins, were roped together in the same way as small rings and they too became part of the body decoration of women and children. They were also used in 'purchases' of traditional items and appear to have quickly become equivalent to small rings in value. There was not a demand for coin however. Europeans continued to purchase food and labour with goods, salt, tobacco, cloth and steel. Shells were apparently never used as they were in the Highlands (Salisbury 1962; Howlett 1962; Finney 1969). So, by 1946 money was known in the study area, and in the case of silver coins, had been given a value equivalent to small shell rings. The origin of money was unknown, except that its immediate source was from Europeans. It was assumed that it had ultimately a supernatural origin, and that like shell rings, had magical and ritual utility. The knowledge of the origins and real functions of money was believed to be in the possession of Europeans. But despite more than two decades of involvement in the world economy, through the provision of labour, the village economies remained almost completely non-monetised. Very few people in 1946 had money in their possession.

Money was not the only commodity which villagers thought had a supernatural origin. Europeans possessed an apparently limitless supply of goods. They were never observed manufacturing them. Neither did they grow their own food. The relationship between money, goods and subsistence was poorly understood by the majority of villagers, although it was apparent that, in some way, the money in the possession of Europeans was related to the acquisition of the goods. It had been plainly demonstrated that possession of material goods gave Europeans power. Village people believed that Europeans possessed this power, not merely because they were Europeans, but because they possessed knowledge of the magic and rituals required to gain access to the source of the goods. After their initial misconception of Europeans as spirits had been removed, New Guineans viewed Europeans as men, and as such they were no more or less inherently powerful than any other men. It was their knowledge which made them powerful, in the same way as, to be a big-man, a villager had to possess knowledge of the magic and ritual associated with yam gardening, hunting, and fighting. So when ideas about bisnis first reached the Dreikikir villages, they were thought by many people to be associated with the

magic and ritual with which Europeans obtained their material wealth and hence their power.

Bisnis as a Ritual

Evidence exists that bisnis was, and still is, viewed as a ritual. If certain actions are carried out properly money will be created. The problem as it existed, was that only Europeans knew the correct rituals and they would not tell Papua New Guineans about them. Today, when a government of Papua New Guineans is exercising internal self-government many people believe that certain classes of Papua New Guinean have either found out, or have been told, the secret, and are behaving like Europeans and not telling village people. Some cases will illustrate how people perceive bisnis.

When in 1952, Akolasa (see Appendix C) the tultul of Kuyor village in the southwest Gawanga, heard about bisnis from Urat men, he recalled how, during the war, he had seen American and Australian soldiers paying New Guinean prostitutes in Lae, and believed he had unwittingly stumbled on to another form of bisnis. If Europeans paid for sexual intercourse, why should not New Guineans. He correctly assessed that in the isolated Gawanga villages there was not, as yet, enough money to support his enterprise, so he organised village women to accompany their husbands to the Urat, particularly to the bisnis headquarters at Brukham, and to prostitute themselves to the wealthier men living there. Later when more money came into the Gawanga, people there would also be able to participate. Everyone, including husbands and wives, should exchange money in return for sexual favours. Akolasa's bisnis flourished for a short time, but it came to the notice of the administration and he was gaoled for six months. Twenty years later, ill defined ideas of prostitution as bisnis are still to be found in the study area. Their origins are difficult to trace. Some probably relate to Akolasa's enterprise, while others are certainly related to experiences of Dreikikir men with the girls of the Hahalis Welfare Society on Buka. One outstanding example occurred in a Kombio village. After a normal interview with a number of men, I was taken aside by one man, who was also the village Peli Association committee member. He said he and his wife wished to tell me something in their house. They explained a detailed plan for generating large amounts of money. It was well known, they explained, that Europeans paid village women for sexual intercourse and that prostitution also occurred in Australia and America. This, they said, was one form of white man's bisnis. Their plan was for everyone in New Guinea to pay for sexual

acts. At first I thought I was being propositioned, but further discussion revealed the couple were genuinely interested in asking my opinion of their scheme. They believed that what caused money to increase was the number of transactions which occurred, and as sexual intercourse is a very common act, if money was exchanged each time, the wealth created would be considerable. When I asked them where this increased money was to come from, they at first looked puzzled, and then the man said knowingly, that I knew where it would come from. When I denied this, the conversation came to an end.

A number of instances of collection of money from villagers by individuals were encountered during fieldwork, but only two have any documentation associated with them. In 1949, Suwahe from Selnau village, collected money from Wam and Urat villages, with the support of luluais, with which he said he was going to purchase a ship, buy land on the coast and construct a wharf and a model village. The ship would bring goods from overseas to the new village. Villagers who had contributed could go and live there. People from one village, Wareli, did move down to the coast, but returned after only a short period. Administration officers who discovered the activities only after they had ceased, labelled them "cargo cult"¹, but villagers still refer to them as bisnis albeit unsuccessful bisnis. In 1956 a man from the West Sepik also collected small amounts of money in Urim, Kombio and Urat villages with which he was going to build a store in every village. Store goods were to be transported from Aitape. He built one store at Laningwap, but then claimed to have lost all the money when his house was destroyed by fire. This activity is also known as bisnis, but the entrepreneur, now dead, is viewed as a trickster.

In 1968, when the Pangu Pati was campaigning the national elections in the Dreikikir area, Pita Lus, now MHA for Maprik Open, persuaded many people to join the party. The subscription was two shillings and this many people interpreted as investment in a bisnis enterprise. In 1972 people no longer called the Pangu Pati bisnis, but they still believed they were tricked into parting with their money. One former party member said,

"I thought the Pangu Pati would become powerful and would help us and we would become like Europeans".

1. Patrol Report, Dreikikir WKD 6/52, November, 1952.

Another commented,

"We thought it was true and we joined. But it was a lie. They said if you join this movement, all things will arrive and they will be yours. The two shillings will be the means by which all the things, and money, will come".

When the chain letters described in Chapter 4 first entered the study area some confusion occurred over whether or not they were bisnis. Most people in Tumam village considered they were bisnis because they involved the investment of money, they originated in Australia, and they promised 12,000 dollars in return. No amount of explanation could convince people that there was a fundamental difference between this sort of investment, and business. People themselves recognised the difference between chain letters and raffles or resis, in which the winner took all the money invested. In the case of chain letters everyone was promised a return on their investments. Raffles therefore, were not bisnis, but chain letters were. Forty-two people from Tumam sent money to Australia, but only one received any money, 20 dollars. The Government finally passed legislation late in 1972 to prevent the uninterrupted flow of money from New Guinea to Australia by mail, which effectively stopped the movement of chain letters. Those village people who became aware of the intervention were only gently annoyed; they were used to restrictions being placed in their way. Most people were not aware of the Government's action.

During an interview with a Tumam man, I asked him to show me his rice and coffee sales receipts. While I was looking at them, he asked me where the money which he had received came from. Instead of answering, I asked him where he thought it came from. He answered,

"They just come and give it to us, that's all. Where it comes from I do not know. But I think you know. They do not tell us in a way in which we can understand them. The cooperative buyers just give it to us. That is bisnis. They just come and give us money. They said now you belong to the cooperative. It is just as if you had a contract. All the time we must come and give you money. They do this because of the war. When the war finished they asked us how they could reward us. So we said, you give us bisnis. So they did, but they did not tell us everything."

In further conversation he explained how the Europeans controlled the cooperatives and controlled the amount of money which was given to village people. He suggested it was European meanness, not market conditions, which influenced prices of primary products. This man was always friendly and showed no untoward antagonism towards Europeans in

general. Although I do not have a transcript of all such discussions, many village men hold beliefs similar to those expressed by this man.

These attitudes have been found to exist in other areas of Papua New Guinea. Among shareholders in Native Marketing and Supply Limited (NAMASU), a trading company with indigenous shareholders, founded in 1959 by the Lutheran Mission and based in Lae, with branches in the Highlands, Sankoff (1969,71) found a high level of ignorance of the meaning of bisnis and a great deal of general confusion over the concept. She observes, "the Neo-Melanesian word bisnis and the European word 'business', do not have identical meanings". To Sankoff's informants, bisnis meant among other things, commercial enterprise along European lines, something which would provide an enduring benefit, something which would benefit individuals rather than the community, something which involved substantial investment and something which was formerly and remained largely, solely a European preserve.

Ogan (1972,161-162), writing of the Nasioi of Bougainville notes,

"Ideas of "bisnis", that is of carrying out trade and cash crop production after a (dimly understood) European model seem to have become widespread...about 1960...The pattern for these new "bisnis" ventures was remarkably uniform: a man with some knowledge of European ways...solicited cash contributions from villagers in his own area and beyond. With this capital he would attempt to act as agent for copra sales and manage one or more tradestores. In each case, the goal of 'living like Europeans' proved unattainable with the limited resources available, at which time activities were noticed by Europeans which they identified as 'cargo cult'. The argument is that "bisnis" and "kago" (i.e. material and spiritual riches obtained by supernatural means) were never clearly differentiated in Nasioi minds..."

Ogan's view that bisnis and kago have never been clearly differentiated in the peoples' minds is the view that I too became aware of slowly, but with increasing certainty, as my field studies proceeded. I believe, although Part II of this study is divided into chapters which purport to describe first the adoption and diffusion of bisnis activities and second the adoption and diffusion of kago, that both chapters deal with basically the same phenomenon, the search for, on the part of village people, power and self determination. The two sorts of activities are separated for convenience and because I can find no other way to write about them. In my tidy, Western mind, I still cannot help but distinguish between the two sorts of activities, although I am certain the great majority of the

people with whom I lived, do not. Perhaps the distinction is justified in the following terms. Both activities seek material and spiritual riches by supernatural means, but bisnis is viewed as a search for the white mans' ritual, while kago is the black mans' ritual, the truly indigenous search for the source of all power.

Not all people involved in bisnis held such high expectations of it, but even those leaders who had very realistic appreciations of European business, believed that through village level commercial enterprise, Papua New Guineans could compete with Europeans, could gain their respect, and join with them as one people.

THE DIFFUSION OF BISNIS

Beginnings

The source of the original ideas about village commercial enterprises was Pita Simogun of Dagua, an Arapesh village located on the coast west of Wewak. Simogun was a policeman for much of his life. During the war he twice visited Australia, once for special guerilla training and once to observe smallholder farming in Queensland. In 1944 and 1945 he was engaged in a guerilla campaign against large numbers of Japanese troops on Bougainville (Wright 1965), and in 1946 was sergeant-major of police at Aitape, the highest rank to which a Papua New Guinean could rise at that time. Many men had served under Simogun and he had often discussed with them, the future of Papua New Guineans in Papua New Guinea after the war. Simogun believed that only through village based commercial activities which he called bisnis, could Papua New Guineans compete with and gain the respect of, Europeans. Accordingly he urged many young policemen to return home after the war to begin bisnis enterprises in their home areas. (See Appendices C and E.)

One man who had listened to Simogun's talks during the war was a Constable Augen, who in 1945, was posted to Dreikikir from Aitape. Augen was also an Arapesh speaker, from the tiny hamlet of Warengalif, located in the Torricelli Mountains above Woginara. Augen died in 1967 but brief details of his life were provided by his wife and men who knew him. He joined the police force during the war, but had previously worked as a plantation labourer and domestic servant in and about Rabaul. While in Rabaul he became involved in some undefined "trouble" and to escape arrest he took refuge with a man called Nalawas. Nalawas was from the Southern Arapesh village of Albinama, but had been in Rabaul since before 1914. As a child he had been forcibly taken from his village by a Chinese recruiter and sent to

Rabaul, but during the Australian takeover his papers were lost and as he did not know the official name of his village, he stayed in Rabaul. Later Southern Arapesh men identified him in Rabaul as one long thought to be dead. He did not return home however, but remained in Rabaul, becoming a 'father figure' to many young Arapesh men on labour contracts in the area. Nalawas was sent home after the war.

Salt at Supari

During the war, children running away from Japanese soldiers stumbled upon a salt spring in thick undergrowth on the flood plain of the Amuk River near Supari a Southern Arapesh village, east of Dreikikir. In 1945 the spring was described as being,

"in a swampy hollow and subject to flooding after rain. Following suggestions made by the ADO the natives have since drained the hollow and sunk a 44 gallon drum onto the bedrock around the spring. They then filled the hollow up with stone from the Amuk River and then built a house over the reservoir...A surprising number of people visit this spot to take the waters and carry home supplies in bamboo tubes².

Constable Augen was posted to a temporary police post at Supari in 1945 to "encourage and direct rehabilitation" after the war. Augen is described in this report as being,

"Unusually intelligent, steady and respected by the natives...Can read and write in 'Pidgin'"³.

Augen could also speak the local language. In 1947 he married Kalipo, a woman from Wareli, a Southern Arapesh village included in the study area, who was Nalawas' mother's sister's daughter. He also resigned from the police force. Together with Nalawas, Augen began evaporating the saline water and selling the salt residue in a store erected near the spring. This enterprise is known as the first bisnis in the area.

Supari was one of the Southern Arapesh villages which maintained ceremonial relationships with Dreikikir villages and the salt manufacturing site was on the main track between Maprik and Dreikikir. The operations became widely known in the Dreikikir area and many men from Dreikikir villages walked to Supari to have a look. Those who had money purchased salt. Salt from Supari was also sold in the first stores established in the Dreikikir area at Pelnandu, Emul, Moseng and Warengame. The site became a focal point. The

2. Patrol Report No. 11 of 45/46, Aitape, 'Muhiang Area of Dreikikir Sub-district', 15 November, 1945 to 22 November, 1945, Papua New Guinea Archives.

3. *Ibid.*

Southern Arapesh paramount luluai, Terepan, built a house there and administration officers used the location to assemble villagers from the surrounding hills. Supari became the most important primary diffusion centre for the spread of bisnis ideas into the Dreikikir area.

Rice at Supari

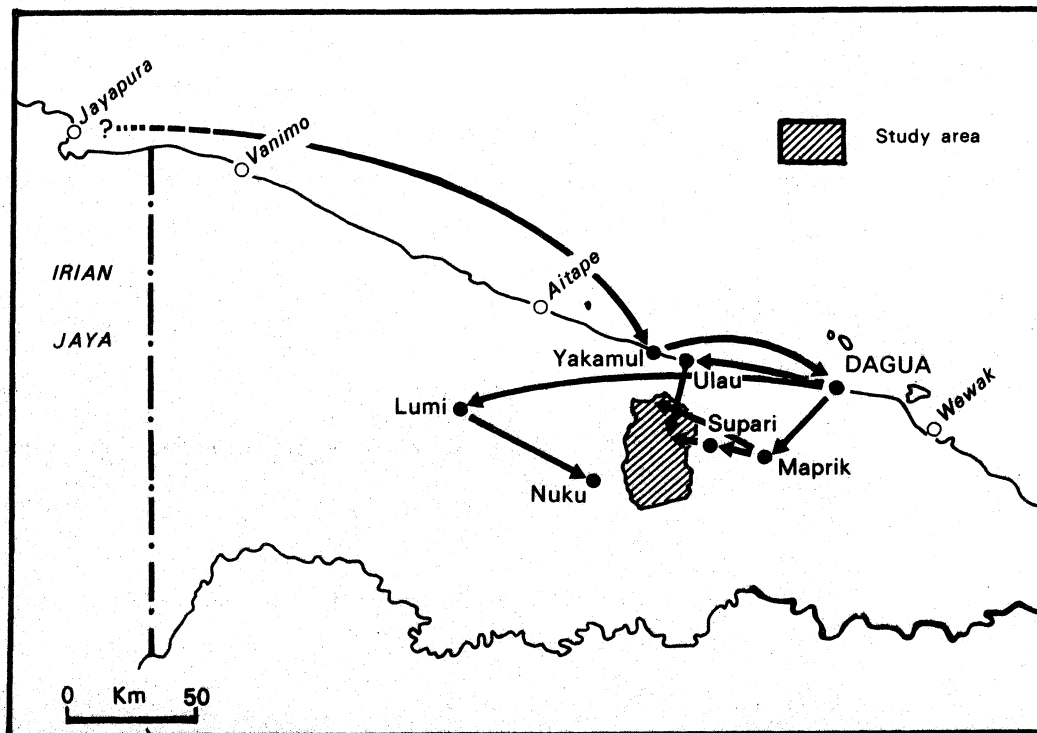
Meanwhile, at Dagua, Simogun had begun organising the cultivation of a number of crops for sale, rubber, coffee, cocoa, peanuts and rice. Rice proved to be the most successful.

The first rice planted at Dagua came from Yakamul where Simogun's brother Thomas had seen it growing. The seed, according to Simogun, came originally from Irian Jaya, from Dutch attempts to establish a rice industry near Jayapura. This was not the first rice to be cultivated in northwest New Guinea however. An SVD priest, van den Hemel, grew rice on the banks of the Rainu River near Aitape in 1909 and Teisler (1969, Plate 14) includes a photograph of rice growing near St. Joachim mission, now Pes, inland from Aitape in 1911. The Japanese also attempted to cultivate "mountain rice" (presumably hill rice), at Yarapos near Wewak and at other unspecified locations but failed to obtain satisfactory yields (Allied Forces Pacific Area Command 1946, 90-92). Seed rice from the Mekeo scheme in Papua was sent to Wewak in 1947 and some of this was planted at Bainyik near Maprik⁴. The bewildering range of varieties of rice which has confronted DASF millers at Bainyik in recent years, probably results from these multiple sources as well as from natural cross fertilisation of rice not harvested which seeds in the padi.

Simogun retired from the police at Aitape in 1949 and returned to Dagua to live. He sent word to Augen and other ex-policemen and they travelled to Dagua to view his project. No seed rice was available at this time. But previously, Terepan the paramount luluai, had visited Maprik, where the officer-in-charge had given him a packet of seeds which included tomato, cabbage, beans and rice. When Augen saw Simogun's rice he remembered the seeds from Maprik, which had not been planted. He returned to Supari and discussed Simogun's project with Nalowas. Nalowas, who had planted rice with the Japanese in New Britain sorted out the rice seed from the rest.

4. Monthly Report, District Agricultural Station, Wewak, December, 1947, File 25-E-1, DASF Records, Papua New Guinea Archives.

FIGURE 6.1 SOURCES OF RICE SEED, 1949-51



Source: Interview with Pita Simogun, Dagua, December 1972.

Augen swore Nalowas and Terepan to secrecy, and they agreed to each plant some of the rice seeds in separate locations. Nalowas planted his near his house, erected a fence around the tiny garden and pronounced a taboo on the area. Augen's rice failed to germinate, and Nalowas believes Terepan cooked and ate his. Nalowas's rice grew well and when it was mature, Augen directed him to replant all the seeds in a larger garden, again in secret. This time Nalowas chose a site near Albinama. His fellow villagers jibed him for allowing grass to grow in his yam garden, but Nalowas, believing he was involved in something very important, ignored them. When this rice was mature and the seed harvested, Augen called a meeting of Southern Arapesh villages immediately around the Supari salt spring site, told them about the rice and the money which could be obtained from it, and directed them to clear a communal garden on the river flats, near the spring. Nalowas acted as field director for this enterprise. So, in 1951, visitors to Supari were taken and shown Augen's rice garden, and were told of the potential of rice as

an instrument of change. The nature of the Supari site meant that this information spread over a wide area.

In 1951 all of the seed rice at Supari was planted again, leaving none for other men who were keen to begin planting their own. It is possible Augen was attempting to maintain a proprietary control over the seed, a motive which may also account for his earlier secrecy. But rice was becoming available from other sources, and men who had seen rice at Supari and were ambitious, sought seed from elsewhere.

Sources of the First Rice Planted at Dreikikir

The first man to plant rice within the Dreikikir area was Suwahe, whose ship purchasing enterprise is described earlier. He saw rice growing at Mihet village, in the mountains north of the study area, purchased seeds and planted some at Misim, an Urat village. The rest he gave to some men at the Wam villages of Selni (his mother's birthplace) and Luwaite.

Another initial rice planter was Kokomo Ulia, also an ex-policeman who had served under Simogun. He had visited Supari and seen Augen's rice when he heard that Suwahe had obtained seed from Mihet. Kokomo, from the Urat village of Emul, had joined the police at Wau in 1942 after a period of labour on the goldfields. After serving through the war he was discharged in 1947 and returned home. His narrative is found in Appendix C. Kokomo walked to Mihet, found no seed available there, and travelled onto the coast at Ulau where rice from Dagua was growing. He obtained some and returned home to plant at Emul and nearby Pelnandu, an Urat village with historical ties with Emul.

Another Urat man, one who had planted rice with the Japanese on New Ireland, had also seen Augen's rice garden at Supari. He was Anton Misiyaiyai (see Appendix C) of Moseng village. Anton claims he obtained his first rice seed from the patrol officer at Dreikikir, but Kokomo and others insist he first obtained rice seed from Emul. Wherever it came from, rice was planted at Moseng in 1951.

Rice was also planted further west in the Urat area, at Musingwik village in 1951. A Musingwik man, Worosopeli who had walked to Wewak to help his younger brother carry home his belongings at the end of a labour contract, passed through Dagua and remained there for three weeks. On his return to Musingwik he planted rice along the side of his yam garden.

Rice seed entered at a fifth point in 1952. Two men were responsible, Loa and Kesbuk (see Appendix C). Loa had been taken by a Chinese recruiter and had spent many years as a labourer and domestic servant on the Gazelle Peninsula. In 1936 he had been taken to Australia for six months by one of his employers. He had returned to his village, Sambu, in the northern Kombio in 1947. Kesbuk, from another Kombio village of Makupmanip returned home in 1946 after being away for 25 years. Loa was appointed luluai of Sambu in 1948 and Kesbuk became tultul of Makupmanip. They became firm friends. On a visit to Dreikikir in 1952 on official village business, they heard word of Augen's rice at Supari and were shown rice growing in Urat villages. They returned to the Kombio, and almost immediately Loa walked to Dagua to see what Simogun was doing at Dagua. He returned, and with Kesbuk walked to Maprik and obtained seed from Pita Tamende, another of Simogun's ex-police contacts. They planted a large garden near Makupmanip.

Thus rice first entered the Dreikikir area in 1951 at four points and at a fifth in 1952. Although the seed came from different sources, the original idea of growing rice as a specific bisnis enterprise can be traced to Augen's garden at Supari in all cases, and ultimately to Simogun's project at Dagua. From these five villages rice diffused to every village in the Dreikikir area except the northernmost Lou villages in the Kombio census division.

The Diffusion of Rice

The diffusion of rice is shown in Figure 6.2a and 6.2b. The data allow two perspectives; first the actual paths followed by rice moving from one village to another, and second, the diffusion of rice growing through time⁵.

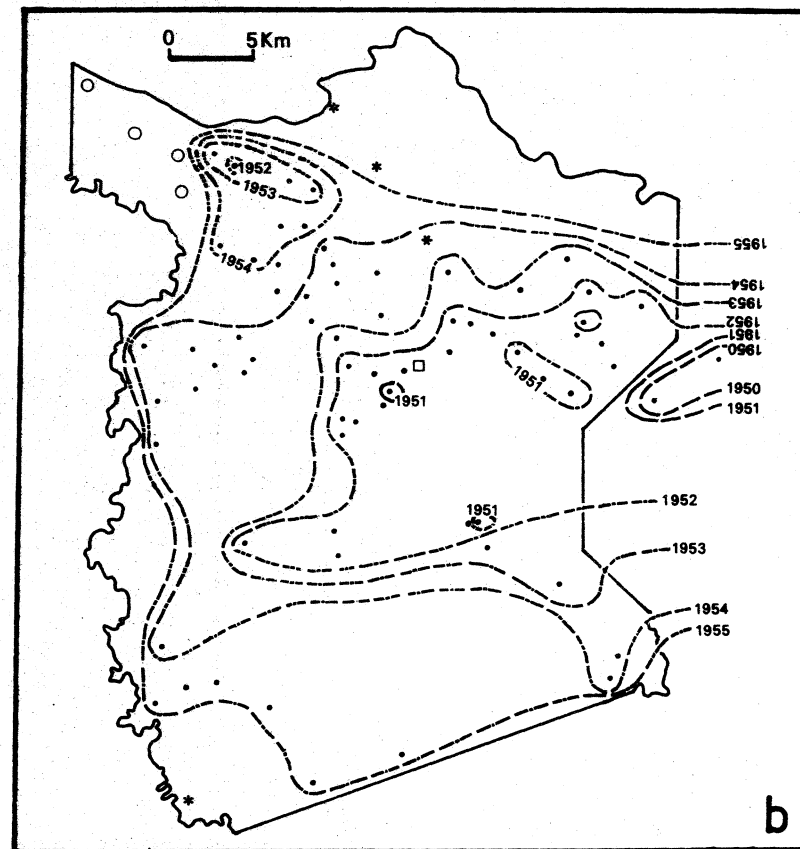
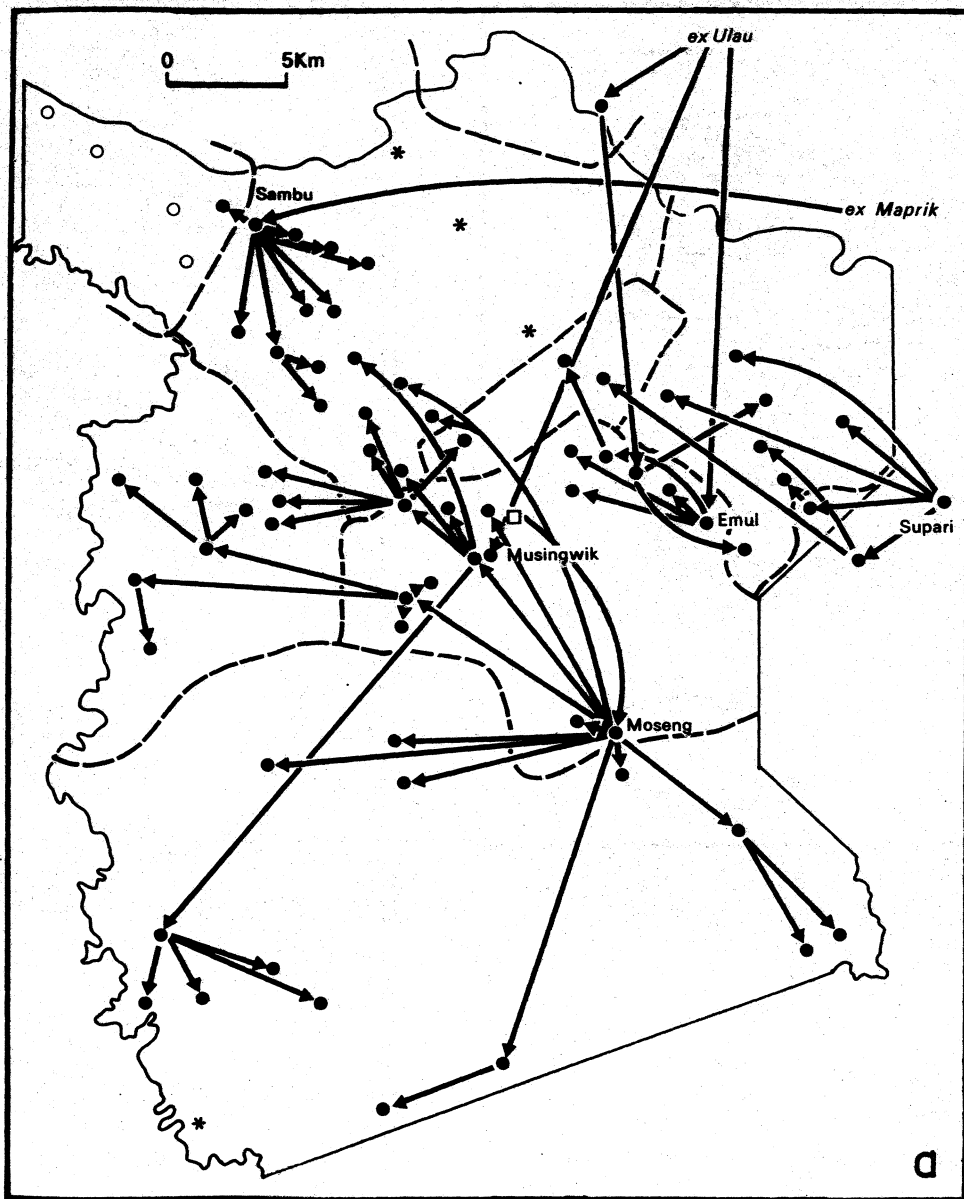
5. Figure 6.2b was constructed by working back and forwards in time from two fixed points, the establishment of engine driven rice mills at Supari in 1953 and Brukham, near Moseng in 1954 (File 25-E-1, DASF Records, Papua New Guinea Archives). By asking village rice leaders of the 1950s, to which location they carried their first marketable rice harvest and whether or not the mills were in place when they arrived, it was possible to determine the year in which they first planted. Another factor which was taken into account was the practice of many villages of not marketing their first harvest, but using it to replant a larger area. Information from villages was crossed checked with other villages, with information supplied by the bisnis leaders themselves, and with documentary sources.

The pattern formed by the actual movement of rice seed as presented in Figure 6.2a may be described as a cascade pattern. The first villages to plant became primary diffusion centres, from which rice was passed to other villages. Some of these became secondary centres by in turn spreading rice to other villages. Some of these villages became tertiary diffusion centres, but rice was not passed more than three steps from any centre. Figure 6.3 summarises this pattern.

The diffusion pattern is in part, explicable by the location of innovative and ambitious men. The initial entry of rice into the primary diffusion centres is closely related to this factor. At the one centre from which rice did not spread, Musingwik, rice seed first reached the village almost by accident. The first attempts to cultivate it there were an almost complete failure and no individual from Musingwik has ever made any real attempt to become a bisnis leader outside the village. In contrast, at Moseng, Emul, Sambu, Tumam, Moiwhak, Nanaha and Kuyor, men took rice to other villages, called together village men in meetings, and encouraged them to plant and participate in bisnis. Anton at Moseng and Kokomo at Emul agreed to restrict their own personal activities to the ridges upon which their respective villages are located, and this explains the sharp break between rice spread to western Urat villages from Moseng and to eastern Urat villages from Emul. Part of the pattern is explicable in terms of the personal decisions by these men. A number deliberately took rice to a village because they had relatives resident there. Anton, for example, took rice to Kubriwat because it was his mother's birthplace, and to the Tau villages because his mother's sisters were married there. Suwahe's gift of seed to his mother's relatives at Selni has already been mentioned. Tumam quickly gave rice to Nanaha because of kinship links. Rice moved into the Wam from Supari for similar reasons. Kokomo states that the links created by the marriages of Arapesh women to northern Wam men during the early 1900s as a result of recruiting raids, was the reason for the rapid movement of rice into those villages. Historical accident is also part of the explanation. Rice moved from Tumam to Kuyor because in 1954, a Tumam man Binghoiye, was resident in Kuyor as an aid post orderly.

But behind the conscious affairs of men and the accidents of history, a steady, if subtle influence was being exerted by the information fields in existence at the time. Dreikikir Patrol Post

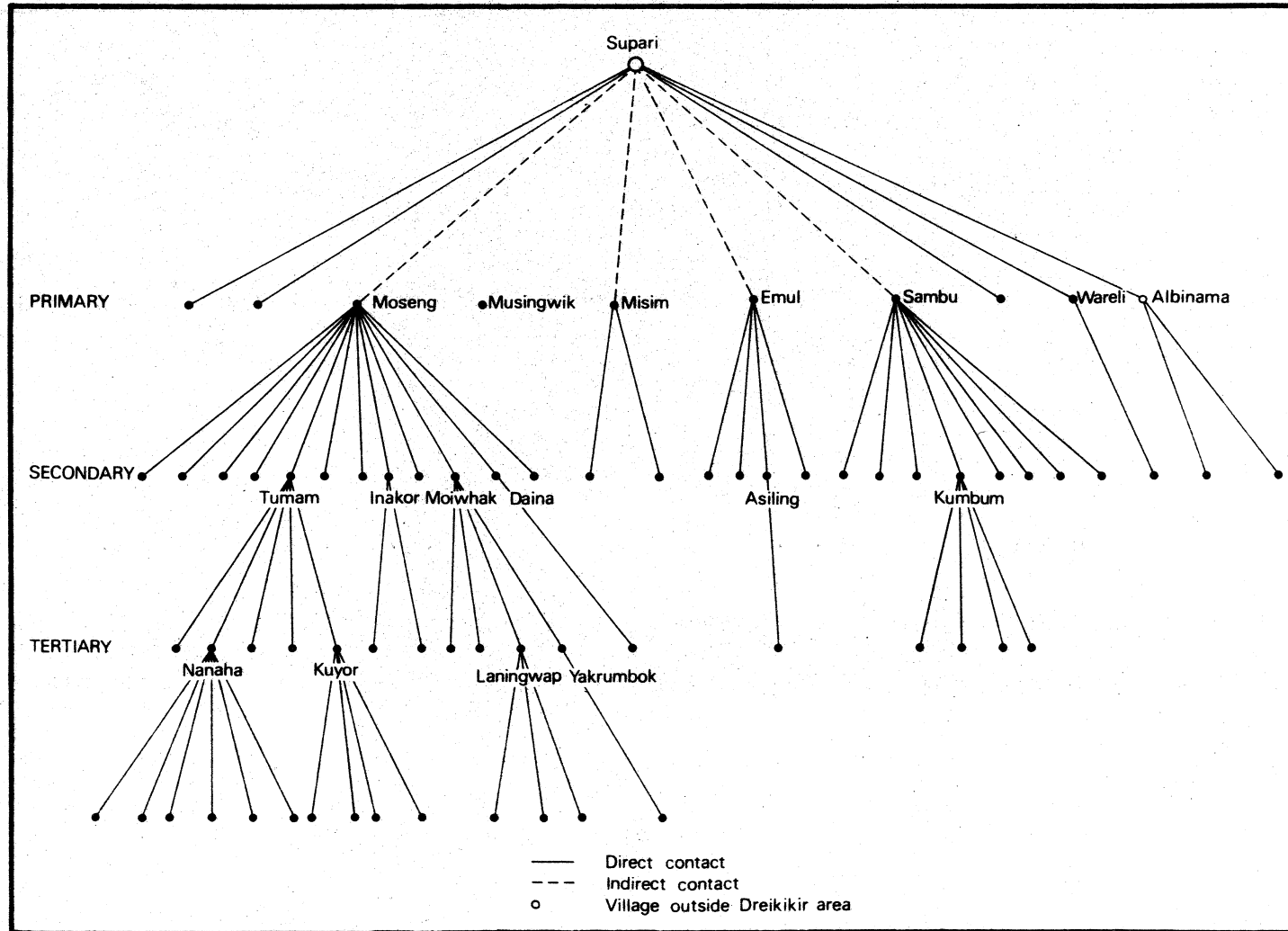
FIGURE 6.2 THE DIFFUSION OF RICE GROWING, 1951-1955



- Direction of movement of rice seed ➔
- Dreikikir Patrol Post □
- No information *
- Language Boundary - - -
- Non-adoptors ○

Source: Fieldnotes, 1972 ; File 25-E-1 D.A.S.F. Papua New Guinea Archives.

FIGURE 6.3 DIAGRAM OF RICE DIFFUSION



was already drawing people to it; rice moved from Supari to Yambes and from Moseng to Setnyam and Muyem, because men from these villages walked to Dreikikir to visit the Patrol Post, and when there, heard about the new "work". In this way too, Loa and Kesbuk first saw rice growing and later introduced it directly into the northern Kombio villages long before it reached other Kombio villages nearer the primary diffusion centres.

The introduction of rice into the northern Kombio villages allows a comparison to be made between rice diffusing from villages such as Emul and Moseng, (which were ranked 9th and 19th respectively, in accessibility to other villages through ceremonial exchange links), and from Sambu (which was ranked 70th on this measure) (Table 4.1). Evidence indicates Loa and Kesbuk were no less active than bisnis leaders in other villages, in their attempts to spread rice growing. But they were on the edges of the networks operating at that time, for the old pre-contact network was, in 1950, influenced by the road link to the new subdistrict headquarters at Maprik which restored an east-west orientation to information flow. Kesbuk and Loa were attempting to spread information down the network, against the predominant flow, and they were not very successful. Diffusion of rice from Sambu was far more restricted in both space and time than that diffused from Moseng or Emul, as a glance at Figure 6.2 shows clearly. The eastern Urat villages, which had all begun growing rice by 1952, possessed in the old network, the greatest access to all other villages in the Dreikikir area. It is not surprising that they were more successful as secondary and tertiary diffusion centres, than were the northern Kombio villages, which had the worst access.

A comparison between the isotims on Figure 6.2b and the isolines on Figure 4.3 also supports this contention. Rice diffused on a broad front, except for the Kombio introduction. The information field in Figure 4.3 also is one of broad open contours compared to fields which developed after the intrusion of roads.

The Adoption of Rice

Rice was spread without any assistance from DASF agricultural extension officers. In 1952, the officer-in-charge at Bainyik near Maprik wrote to his senior,

"Reports from Patrol Officers at Lumi and Dreikikir indicate that large areas of rice are being grown in both places and they are requesting assistance...I have pointed out that at present we cannot possibly send an officer to their district, nor to my knowledge can we provide machinery" (Monthly Reports, Wewak, DASF File 25-E-1, January/February, 1952, Papua New Guinea Archives).

So all that village people learned about rice before they actively began planting it, they learned from men who had become bisnis leaders, such as Kokomo, Anton, Augen or Loa and Kesbuk, or men who were appointed by them as bosbois, the Pidgin term for a foreman. Together with the general beliefs about bisnis described earlier, what these men, in their enthusiasm for bisnis, told villagers, created extremely high expectations of rice growing in the people.

What the bisnis leaders say they told their followers is included in their narratives, appended to this study, and there is no point in presenting that material again here. Villagers came to believe that the act of planting and cultivating rice would bring large amounts of money to them, and that with this money they would achieve the same living conditions they had seen Europeans enjoying. Europeans would then stop treating them disrespectfully.

Bisnis leaders today recognise that people had inflated expectations about what rice growing would do for them, but they believe that they were justified in the 1950s in raising peoples' enthusiasm as much as possible, because, to paraphrase comments from a number of them, "if only people had been stronger and worked a little harder, perhaps..."

The patrol officer at Dreikikir seems to have first become aware that villagers believed that rice growing would bring about dramatic changes in their living conditions in 1952. Reporting on a patrol in the Wam area he noted,

"A certain amount of rice is being grown throughout the area and I must make special mention of this. Without being unduly pessimistic, I am disturbed by the feverish attitude of some of the villagers towards this rice growing." (Patrol Report, Dreikikir WKD 6/52, November, 1952 Papua New Guinea Archives.)

In 1956 another officer described how, in the Urat,

"...a wave of enthusaism followed the introduction of rice into the area" (Patrol Report, Dreikikir 1/56/57).

A third officer gave his interpretation of what occurred in the Gawanga villages in 1955.

"A number of Gawanga natives, particularly in the Bongos area, joined the Rural Progress Society, two years ago, having been enthused by Society leaders into believing that large amounts of money could be made with comparatively little work" (Patrol Report, Dreikikir WKD 3/57/58, November, 1957, Papua New Guinea Archives).

One reason why people were convinced that rice growing would bring changes to their lives was because some administration officers opposed the spread of bisnis and attempted to prevent bisnis leaders from organising villages to plant rice. Anton in his narrative describes how he was consistently confronted with negative attitudes on the part of young patrol officers and Simogun confirms that some young officers were antagonistic towards village men who were trying to bring about change. Bisnis leaders and their bosbois were a challenge to appointed village officials, especially luluais, many of whom also opposed rice growing and reported the activities of the bisnis leaders to patrol officers. When they began to collect money for the formation of a rural cooperative it was interpreted as "cargo cult" by at least one officer, and others accused the bisnis leaders of being confidence tricksters. In 1952 the officer at Dreikikir wrote,

"...their activities are being fairly closely watched by me...I do not think that the cargo cult mentality is far from the surface of the native mind. Caution is the watchword when dealing with these rice schemes. I have tried to lecture the natives concerning rice growing, pointing out that there are many pitfalls involved, that it is easy to plant rice, that it is not easy to get it into bags, hull it, to get it to market, and market it...I can only repeat that a close watch will be kept on these few natives who seem to be running this scheme. In the event of any further steps, such as the collection of money etcetera, some steps may have to be taken" (Patrol Report, Dreikikir WKD 6/52, November, 1952).

But the bisnis leaders had support from the upper levels of the administration. The way in which young officers were trying to stop change was recognized in a report to the Government Secretary by the Sepik District Commissioner, Elliot-Smith in 1953. Regarding an agricultural officer who had claimed that bisnis leaders were interested only in self-agrandisement, he commented,

"...this is typical of the attitude of so many officers who deal with these things. You find the tendency coming up everywhere. The tendency to condemn without a fair trial. The tendency to see in such people...traits which in fact do not exist" (File CAL/8/1/213 'Economic Development of the Sepik District, July 1953, Papua New Guinea Archives).

In 1954, in response to allegations by a patrol officer at Dreikikir an enquiry was conducted. The findings were that the allegations were "alarmist in nature" and that,

"KOKOMO, WANGU⁶ and ANTON are active in encouraging the people to grow rice and from our point of view this is desirable, but in their enthusiasm they have been overstepping themselves and threatening people with gaol if they do not plant rice. Some of their supporters have been telling village officials they are of no importance and endeavouring to assume authority over village natives" (Patrol Report, Maprik 12-23/7/54, 'Report of a Visit to Dreikikir Area' 23 July, 1954, Dreikikir Patrol Post).

Bisnis leaders were challenging the established authority, and were competing with village officials for leadership in the community. Village people at first interpreted the antagonism of young patrol officers as attempts by Europeans to prevent Papua New Guineans gaining access to their sources of wealth and power. Bisnis leaders, knowing they had support from officers at sub-district and district level, pushed their followers to plant and to continue planting, even after the first rush of enthusiasm had passed.

Opposition to the adoption of rice also came from another quarter. Clan and dual division leaders in many villages saw rice, and the rise of the younger bisnis leaders, as a direct threat to their authority. In many cases, appointed officials and clan and dual division leaders were the same men. Mwalhiyer, a clan leader who decided that he should embrace bisnis explained why bisnis and the tambaran were not compatible. He said,

"You cannot celebrate the tambaran and also develop bisnis. No. Everyones' mind becomes fixed on the tambaran. Food must be prepared and given to whoever visits the village. All the men and women must prepare food and collect firewood and look after the initiates. I told them, hurry and finish the tambaran, so we can develop bisnis" (Fieldnotes, 1972).

Bisnis leaders argued that Europeans did not have the

6. Wangu Wangu, from the Wam village of Warengame joined the bisnis movement at the request of Augen and Nalowas. Wangu had spent over 15 years in Rabaul and was for some years the senior foreman for Burns Philp in Rabaul. He had a licence to recruit labour and was working in the West Sepik between 1950 and 1953 when he was asked to come and help at Supari. Wangu is a relative of Nalowas by marriage. He later became the Chairman of Directors of the Sepik Producers' Cooperative Association. In 1972 he had all but retired to Sevenaka, an area he and Nalowas bought from local villages, so that they could plant coffee, live outside of the village, and not be so open to the threat of sorcery.

tambaran, that the tambaran produced no money, that they, who had been away from their villages for many years and had never been initiated could grow yams as well as initiated men, and therefore the tambaran was a waste of time and effort. All it produced were arguments and squabbles within and between villages. People must stop competing and work together. Most of the bisnis leaders had no formal status in their villages and had not been initiated, except in some cases, as children. But they had their experiences outside of the village, their experience of handling groups of men in the army, police and on plantations, and their fierce determination to wok bisnis. Bitter standup arguments between old leaders and the new bisnis men were common and physical fights also occurred. The older men appealed to help from the administration and at first received it, but later although bisnis leaders were told in public not to force anyone to participate against their will, they knew they had the tacit support of the officers concerned.

Rice required land only for one season, and in the Dreikikir area, pressure on land was not so great as to cause villagers to seriously consider whether or not they had enough land on which to grow rice. As with yams, the whole clan, family or neighbourhood group participated in assisting one another to clear land, prepare it for planting, and later in harvesting. Instructions on how to produce rice were provided in detail by bisnis leaders through their appointed bosbois. Rice is planted at the same time of the year as yams, September to December, in order to receive the benefit of January to March rains⁷. The forest is cleared in the same way, except that the larger trees are felled and allowed to lie in the garden. The rice seed is planted in holes made with a dibble. After germination, grass and other weeds are removed two or three times before the crop is mature. The rice is harvested by cutting the stalk near the ground with a sharp bush knife and the padi is stacked on limbum (*Kentiopsis* sp.) bark carriers for transport to the village. There the grain is threshed on a specially built platform on which is placed an open weave mat. The rice falls through the mat onto sheets of limbum bark, and is winnowed to remove dirt, dust and other material. The straw

7. I was unable to directly observe rice planting during my period in the field. Descriptions of planting techniques are from interviews with growers, agricultural extension officers, reports, and personal observations of rice fallows.

is thrown away, and the rice placed in sacks. The first rice produced was not bagged but carried to bisnis leaders in bark carriers. No supernatural or traditional sanctions relate to rice growing. Men and women clear the forest, and plant and harvest rice whereas only men may plant and harvest yams; women weed and do most of the carrying associated with rice planting and harvesting, and both sexes assist in threshing and winnowing. Rice is not considered to have spirits, as are yams. But to prevent possibly antagonising yam spirits, and because yams do not grow as well on fallows as they do in a new garden, rice fallows are not used for food gardens.

No details of early yields are available but it is likely they were very low. Gardens were between 0.5 ha and 2.5 ha in area but were commonly cultivated by 20 or 30 people⁸. Most villagers were completely unfamiliar with rice in any form but as a finished product ready for cooking. They thought rice they saw growing was grass and the seed rice was identified as black palm seeds by a number of men. The first rice gardens planted in the study area were village communal gardens. Individuals who wished to participate in bisnis assisted bisnis leaders in planting and harvesting a single garden, usually located on land belonging to the bisnis leader himself. When individual gardens began to be planted, access to land was (and is) acquired in the same way as access is acquired to yam gardening land. The costs of land and labour associated with rice growing were initially perceived as being very low. The problems of marketing were the responsibility of bisnis leaders, and they also bore the risk of failure. Informants explain that in such an enterprise the shame for failing belongs to the leader and entrepreneur, not his followers. It was "samting bilong em".

Rice and Rural Progress Societies

One of Simogun's basic objectives was to begin rural progress societies in the villages to promote commercial activities. The crops themselves were but a means to that end. Together with his instructions on how to cultivate rice, he sent forth a constant stream of advice on the formation of cooperatives. Bisnis leaders were told to select able men in every village as committee members (kamiti), who were to lead

8. File 25-E-1, 'Monthly Reports, Wewak', August, 1952, DASF records, Papua New Guinea Archives.

bisnis activity in their own village. These men invariably became known as bosbois or bisnisbois. The next stage was to collect money. Bisnis leaders toured their local areas, collecting money which had been paid to villages for war damages, explaining that the contributions were shares (sia) in a bisnis enterprise which would, in time, pay profits or dividends (win mani) to all its members. The diffusion of rice growing and the diffusion of the membership in the cooperative cannot be separated from one another for they moved together and were adopted as one concept, although the collections of money did not begin properly until 1952.

European administration officers were immediately concerned when bisnis leaders began collecting money. Collections of money and promises of great wealth were in their minds, related to millenarian activities. The collections of money however were taken to Supari and word was sent to Maprik that the people wished to start a co-operative society.

No accurate record of the total amount of money collected exists. At first officers were reluctant to allow the Supari bisnis leaders to begin a society and their money was banked⁹. No proper record of who had subscribed existed at this time. By January 1954, the Supari 'society' had 500¹⁰ pounds in the bank, but still no official list of shareholders existed. Much of the money was used in the purchase of two engine driven rice mills, one which was placed at Supari and the other at Brukham near Moseng. Villagers were asked to contribute twenty shillings for membership in the Society which was formed late in 1954 but not registered until 1958¹¹. Many men could not pay the full twenty shillings, but still wanted to have an investment in this bisnis, so they clubbed together, a number of men buying one share, under one man's name. While they believed they were all members of the society, their names were not officially recorded.

Rice Discontinued

Enthusiasm for rice growing did not last more than five years in most parts of the Dreikikir area, and faded more quickly, the further from the primary diffusion centres, people were living. The costs and

9. File 25-E-1, 'Monthly Reports, Wewak', January/February, 1952, DASF, Papua New Guinea Archives.

10. *Ibid.*, August 1954.

11. File BTM21-15-11, Part I, 'Supari Rural Progress Society', Department of Business Development, Division of Cooperatives Extension, Wewak.

benefits of rice growing had been wrongly perceived. A patrol officer observed in 1956,

"It would appear that the peoples' enthusiasm for rice is now at an all time low but perhaps this is natural - the surprising thing is that some people are still enthusiastic" (Patrol Report, Maprik 1/56/57, Dreikikir Patrol Post).

People believed the mere growing of rice was enough. Their expectations were very high, and when no radical changes occurred in their villages after one or two years they were disappointed. The returns from rice growing, per family were very low. Areas planted were small, and large groups of people cultivated one garden. When their rice was sold and the money distributed to all who had participated in the garden, each family received only a few shillings, when they had been expecting much larger amounts of money. Nor had they taken into consideration the costs of carrying rice harvested to the mills at Supari and Brukham. From the Urat villages it was a two day return journey to Supari and from further away, the journey took up to four days there and back. In some cases, it was the women, who were expected to do most of the carrying, who refused to go. In most villages, the last harvest before rice growing was discontinued was not marketed, but was allowed to rot in the village.

Lack of working capital meant that sometimes when rice was brought to Supari or Brukham, growers could not be paid. Many people complain that they were never paid for some harvests and for this reason they decided to discontinue growing. Many accused the bisnis men of embezzlement, but this almost certainly did not happen. Lack of technical skill in managing and running the mills resulted in increasing mechanical breakdowns. Rice was stockpiled in inadequate storage, and the weather, rats, poultry and people caused a deterioration in the stockpile and much rice purchased was never milled¹².

On top of all this, the old village leaders counter-attacked, with sorcery. Sorcery is said to have been used against Augen, Kokomo and Wangu. Wangu left Supari and took refuge with Nalawas at Albinama. Augen complained to administration officers that Terepan, the paramount luluai and formerly his ally, was paying a sorcerer to

12. File BTM21-15-11, Part I, 'Supari Rural Progress Society', 1 October, 1955, 21 December, 1956, Dept. of Business Development, Wewak.

frighten people away from Supari¹³. Kokomo asked Wahute, who was to become a leader in the 1956 millenarian movement, to divine sorcerers at Supari. (See Appendix C.) In a number of Dreikikir villages people discontinued growing rice, following the sudden death of a person who had visited Supari a week or so earlier.

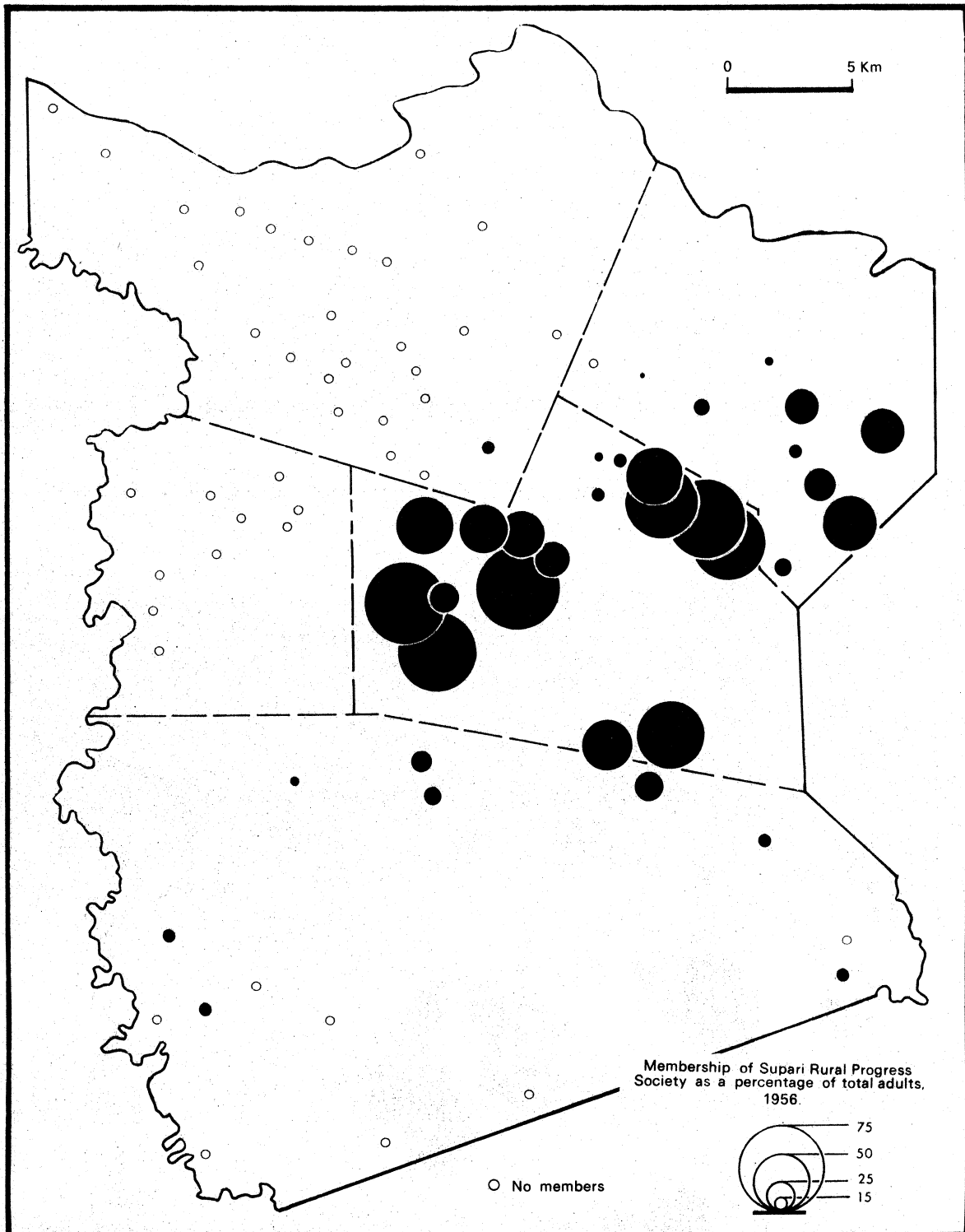
The bisnis men struggled on, but their enterprise was finally brought to an end by official action by DASF and cooperative officers, who removed the rice mill from Brukham and attempted to consolidate the Supari Rural Progress Society by excluding many of the Dreikikir villages. In 1960 members in the Dreikikir villages were repaid 18 shillings of the twenty they had invested in 1954, the only return on their money they had received. In addition, many men who had contributed money received nothing back, because their names were not officially on the share registers. Officers paying back the reduced share money were forced to give money only to men whose names were written in the registers and the result was widespread bitterness and a feeling of being cheated in many men.

So in most villages all rice growing ceased. Only in a few Urat and Wam villages, did a minority of men continue planting. They were villages in the eastern Urat, which Kokomo had persuaded officers to include in the reformed Supari Rural Progress Society. Many of the former bosbois ceased their activities and some became involved, again as village leaders, in the millenarian movement which spread through the area in 1956. But men like Anton and Mwalhiyer held onto their vision of bisnis as *the* road to a new way of life. Although no longer officially members of the cooperative movement, they continued to attend meetings at Supari and constantly nagged officers to come to Dreikikir and reform the cooperative.

The spatial dimensions of membership in the first Supari Rural Progress Society are shown in Figure 6.4. Membership was restricted almost totally to the Wam and Urat villages, where, in some villages, up to 75 per cent of all adults became members. Outside of these areas, people became disenchanted with rice growing very much more quickly and, when the opportunity to join the society was given them, they were no longer interested. Official intervention

13. A constant struggle for leadership of the rice growing at Supari, between Terepan and Augen was thought by extension and administration officers, to have handicapped progress there. Disputes also flared at times between Augen and Kokomo and Kokomo and Anton. (Patrol Report Maprik 4/55/56, 13 January, 1956.)

FIGURE 6.4 MEMBERSHIP IN THE SUPARI RURAL PROGRESS SOCIETY, 1956



Source: File BTM 21-15-11 Part 1, Supari Rural Progress Society, Division of Co-operatives Extension Wewak.

prevented people from any Kombio villages except Yambes from becoming members. Loa tried to give money he had collected to officers at Supari, but they refused to accept it. Men from the Gawanga villages became members only because officers were not sure where their villages were located. In many Kombio and Urim villages men gave small amounts of money to bosbois to join the new movement, but what happened to it is not known. Loa bought a hand-powered mill to hull the rice people carried to Sambu, but he could not persuade people to walk to Supari to sell it more than once. Perhaps it has not been stressed enough that nowhere, were people interested in eating rice. They wished only to sell it in exchange for money, and when this was not possible, or the costs of transporting it to a buying point became too great, they left it to rot.

This point was frequently not properly understood by officials, particularly cooperatives officers. DASF officers were, through the mid and late 1950s, assisting villages with rice as a cash crop, but in correspondence, cooperatives officers continually criticised them for this approach, arguing that the small milling operations were uneconomic, that the societies were all making losses, and rice should be promoted only as a subsistence crop¹⁴. Nowhere in the Dreikikir area is there any evidence which suggests villagers were, or would have been, interested in rice as a subsistence supplement. Rice was one form of bisnis, and was to be sold to get money.

In all but the eastern Urat and nearby Wam villages, bisnis was swept from most peoples' minds in 1956 by the rapid diffusion of the millenarian movement which is described in the next chapter. Rice did not appear again in many villages until the early 1960s, when it was reintroduced by DASF officers to provide a source of cash income, while people who had planted coffee, which was the main aim of the new extension programme, waited for their trees to mature and produce a first crop. So in 1960 a new and more important form of bisnis, coffee growing, entered the Dreikikir area.

14. For example see G. Morris, Registrar of Cooperatives to Director of Native Affairs, 'Registrars Inspection - Sepik District' 25 May, 1957, (File 23-3-9/1, Rural Progress Societies, DASF, Wewak); and Morris to District Agricultural Officer, Wewak, 14 February, 1957, in which Morris claims the share capital of 16,299 pounds would have been better invested in gilt edged securities than in the Societies. The Director of Agriculture, R.E.P. Dwyer replied, defending the field officers by pointing out that rice was important socially, and that the initiatives had all come from village people, not from DASF officers (BTM21-15-5, 'Supari Rural Progress Society', Department of Business Development, Division of Cooperatives Extension, Wewak).

The Diffusion of Coffee

In contrast to rice, coffee planting was introduced to most villages in the study area through a DASF extension programme. Coffee was planted at Dagua in 1948, but did not grow well and failed to attract interest, relative to rice, during the diffusion of bisnis ideas in the 1950s. In 1952 coffee was planted at Bainyik agricultural station where, after trials, *Robusta* varieties were selected as most suitable for the conditions prevailing in the Maprik Sub-district. Two villages near Maprik township were the first to adopt coffee in the Sub-district. They began planting in 1957. Although widespread planting did not begin at Dreikikir until 1962-63 (Shand and Straatmans) some trees were planted at Emul, Pelnandu, Misim and Arisili villages during 1959. This occurred largely at Kokomo's initiative, but Augen and Nalowas had already planted at Supari and Bulamita, and two gardens were being cultivated at Albinama and Balif, to the immediate east of the Dreikikir area¹⁵. Kokomo established a coffee nursery at Bonahoi village on the eastern boundary of the Dreikikir area in 1959, and distributed seeds to mainly Wam growers. Seeds also entered the area in other ways; an employee at Bainyik 'stole' some seeds and planted them at Daihungai village near Dreikikir in 1960, and a policeman on leave from Goroka in the Eastern Highlands District planted some *Arabica* seeds at Yambes in 1961. Most villages excluding Wam villages, which had already begun planting during 1960 and 1961, obtained seed from a DASF nursery established at Dreikikir Patrol Post in 1962. The nursery was cared for by a Nanaha villager, Joseph Lambore who had received 12 months training at Bainyik and who proved an extremely effective agent in the spread of coffee growing. The diffusion of coffee seeds formed quite a different pattern to that formed by rice. The time which elapses between the planting of rice and the production of the next generation of seeds is only about five months, whereas with coffee it is three to four years. Thus early adoptors of coffee did not have any seed to pass on to other would-be adoptors, and most seed radiated out to villages from two points, Kokomo's nursery at Bonahoi, and the DASF nursery at Dreikikir.

During 1960 and 1961 seed from Bonahoi was distributed to Wam villages. Although there is some disagreement, it seems that Kokomo was selling them in one shilling lots of about 100 seeds. In

15. Patrol Report 4/58/59, DASF 'Supari RPS Area', May, 1959, DASF, Wewak.

1962 three more Urat villages, Porombil, Tumam and Nanaha planted coffee using Bonahoi seed. But in 1962, Kokomo was forced to leave Bonahoi after a dispute over women, and this source of seed disappeared¹⁶. The Dreikikir nursery was not yet producing seed and the shortage created continued into 1963. Many Urat villages had sites prepared but could not plant.

Following the full establishment of the Dreikikir nursery, visiting village officials were taken and shown the coffee trees at the nursery and told about coffee growing. If interested, they could ask Joseph Lambore to visit their village to talk with men there. He assisted villagers to select land for gardens, laid out blocks and gave instructions on the methods of planting shade and digging holes. Later seeds were planted in a village nursery, and assistance given in transplanting.

By 1962 all Urat villages except Namaiasang, Moiwhak, Musilo, Yerhmain and Musendai had planted coffee. During 1962, southwestern Gawanga villages, which had been involved in a series of local millenarian movements were forced to plant coffee. The patrol officer at Dreikikir sent Joseph Lambore and a policeman to the area and coffee was planted at Bongowaukia, Kuyor, Kwatengisi and Mahamsi villages. By 1964 all Urat villages had planted and seven Kombio villages were also planting, despite attempts by DASF officers to prevent them¹⁷.

DASF officers had hoped for an orderly programme of planting, with each adult male planting a minimum of 500 trees. It was also intended that only villages served by roads capable of transporting the beans to Bainyik would plant coffee. Lack of coordination between DASF and DDA officers, and enthusiasm on the part of some villagers resulted in villagers around Bongos, and in the then roadless Kombio planting coffee, much earlier than was planned.

By 1965 all Kombio villages, except Mup in the far northwest, had planted some trees, although often only a handful. In 1966 Urim villages and the Gawanga villages of Tauhundor, Tauhimbiet and Wosambu began planting, followed in 1967 by Masalaga and Daina. Mup villagers first planted coffee in 1968. No information is available on southeastern Gawanga villages, but it is likely they began planting coffee as early as 1964.

16. Patrol Report, Dreikikir, 5/61/62, Dreikikir Patrol Post.

17. Patrol Report, Dreikikir 3/62/63, Dreikikir Patrol Post.

In 1972 there were about 726,400 trees under cultivation in the Dreikikir area. Their distribution by village is shown in Figure 6.5. Table 6.1 shows the distribution by census division. Data by village are contained in Appendix B.

Of the 726,400 recorded trees, 25,580 or slightly over 3.5 per cent are communally owned. Communal, or kampani gardens, were created when coffee was first spreading without the direct assistance of DASF officers in Wam and Urat villages, and one or two men from a village sought information about coffee from bisnis leaders such as Kokomo, or from the DASF at Bainyik. After obtaining seed they organised the whole village to plant a communal block. Very often, communal blocks were used as a source of seed for individual gardens. Administration officers attempted to prevent the planting of communal gardens because they claimed "trouble usually arises over the distribution of profits"¹⁸, but in many villages communal coffee was the first planted. In 1972 some of these gardens had reverted to the ownership of the man who first organised their planting and upon whose land they are located, but many remain a source of money for communal projects. At Nanaha village for example, Joseph Lambore saved 400 dollars from communal coffee which was used to buy steers for a group cattle project. In many villages however, communal coffee gardens are under utilised and are frequently overgrown. Individuals who need money for taxes but who have no coffee of their own, sometimes are allowed to pick from the communal garden if it is not being used by the community.

The Adoption of Coffee

Data on the adoption of coffee in the Dreikikir area is presented in Table 6.2 and Figures 6.6, 6.7, 6.8 and 6.9.

The early adoption of coffee in Wam and Urat villages is brought out clearly in Table 6.2. Before 1962, no trees were planted outside of these two areas, between 1962 and 1964, 78 per cent of all trees planted in the Dreikikir area were planted in the Wam and Urat, and between 1964 and 1966, 65 per cent. Although Wam and Urat villages began planting in 1959, the rate of planting remained low until 1962 (Figure 6.7). The rate of planting in the Wam and Urat between 1959 and 1962 was much lower than it was in other areas for

18. Patrol Report, Dreikikir 1/62/63, Dreikikir Patrol Post.

TABLE 6.1

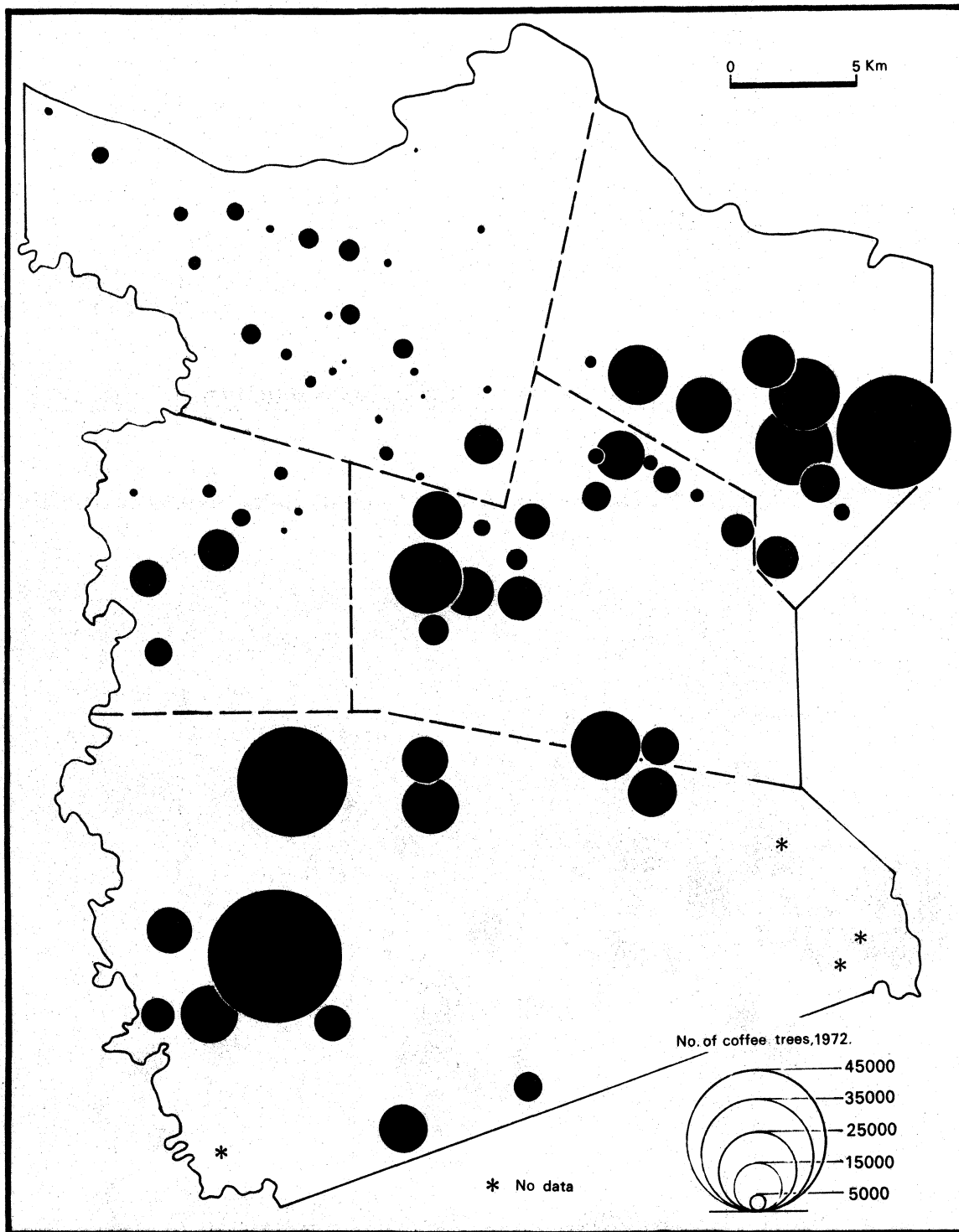
COFFEE TREE PLANTINGS AND YIELDS, 1970-71

Census division	Number of adult males	Number of coffee trees 1972	Number of communal trees	Number of growers	Mean number of trees per grower	Growers as a % age of adult males	Mean number of trees per adult male	Number of growers with more than one coffee garden	Number of mature trees 1972	Production 1970-71 (kg)	Yield (kg/mature tree)	Number of villages
Urat	1390	185769	7365	934	191.0	67	133.6	46	154438	67874	0.44	17
Wam	1130	170895	4989	714	232.4	63	151.8	72	145777	57366	0.41*	10
Kombio	1004	103387	8014	683	139.6	68	95.3	24	41290	7231*	0.24*	26
Urim	618	55232	1678	317	168.9	51	89.4	2	26265	3710	0.14	9
Gawanga	2090	211158	3534	996	208.5	56	117.3	38	128101	16253*	0.17*	12
Dreikikir L.G.C. area	6232	726441	25580	3644	192.5	61	115.0	172	495871	152434	0.35	74
Urat	22.3	25.6	28.7	25.6					31.1	44.5		
Wam	18.1	23.5	19.4	19.6					29.4	37.6		
Kombio	16.1	14.2	31.6	18.7					8.3	4.7		
Urim	9.9	7.6	6.5	8.7					5.3	2.4		
Gawanga	33.6	29.1	13.8	27.4					25.9	10.8		
Dreikikir L.G.C. area	100.0	100.0	100.0	100.0					100.0	100.0		

* Production figures are not available for all mature trees. Yields are calculated only on mature trees for which production data are available.

Source: DASF Coffee census, individual grower's sheets, Dreikikir Patrol Post 1972; Sepik Producers' Cooperative Association coffee receipt books, 1970-71; DDA census, Dreikikir, 1972.

FIGURE 6.5 DISTRIBUTION OF COFFEE TREES BY VILLAGE, 1972



Source. D.A.S.F. Coffee censuses, Dreikikir Patrol Post.

TABLE 6.2. COFFEE TREES PLANTED, 1962 TO 1972, BY CENSUS DIVISION

	Urat	Wam	Kombio	Urim	Gawanga	Dreikikir LGC area
Number of trees planted in or before 1962	335 (20.7)	1284 (79.3)	*	*	*	1619 (100.0)
Number of trees planted between 1962 and 1964	60004 (34.9)	66321 (43.5)	1645 (1.1)	3605 (2.4)	20709 (13.6)	152284 (100.0)
Number of trees planted between 1964 and 1966	47907 (64.8)	6121 (8.2)	4716 (6.3)	7005 (1.4)	14436 (19.5)	74085 (100.0)
Number of trees planted between 1966 and 1967	13886 (12.6)	32750 (29.8)	10648 (9.7)	10750 (9.8)	41776 (38.1)	109810 (100.0)
Number of trees planted between 1967 and 1968	24003 (17.5)	34639 (25.4)	18732 (13.7)	10904 (8.0)	48544 (35.4)	136822 (100.0)
Number of trees planted between 1968 and 1969	14599 (12.2)	16722 (14.0)	31402 (26.3)	12336 (10.3)	44539 (37.2)	119598 (100.0)
Number of trees planted between 1969 and 1972	17670 (16.5)	8069 (7.5)	28230 (26.6)	14954 (7.6)	37720 (35.4)	106643 (100.0)
Total trees excluding communal trees	178404 (25.5)	165906 (23.6)	95373 (13.6)	53554 (7.6)	207624 (29.7)	700861 (100.0)

Notes: * No data available.

Sources: 1962-64 figures, Shand and Straatmans (in press); other figures, DASF coffee censuses, Dreikikir Patrol Post.

the first three years after coffee was first adopted. But in 1962, coffee planting 'took off' in the Wam and Urat. The rate of planting after 1962 in these two divisions exceeds the rates in any of the other divisions. Only the Gawanga approaches these rates, and there villagers were forced to plant by the administration. Furthermore, Wam and Urat villages have clearly more trees per adult male than the other three divisions (Figure 6.8).

Figure 6.9 shows that the pattern of adoption in the Wam and Urat was also different from other areas. There, as elsewhere, a bimodal distribution of planting through time occurred, but the majority of trees were planted in the first wave of planting, whereas in the Gawanga and Urim there occurred an early, but limited adoption, followed by a later, slower and less intense period of planting. The Kombio area has experienced a steady increase in planting followed by a sudden

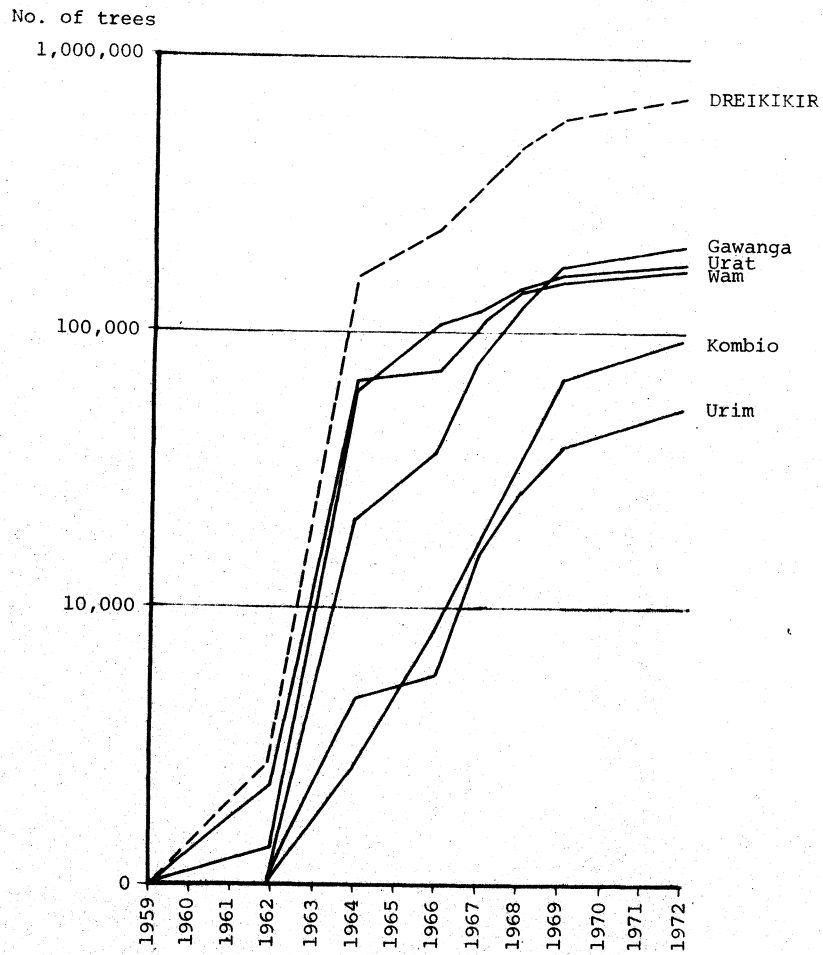
falling off in 1969, with no evidence yet, of a further period of planting. But on the performance of the other divisions, and the knowledge that in many of the most isolated Kombio villages only two or three men in each village have planted coffee, a second period of increased planting may be expected. When the patterns from the five divisions are combined as they are on the Dreikikir diagram on Figure 6.9, an almost symmetrical bi-modal distribution is formed, with the first period of planting from 1962 to 1965 and the second from 1967 to 1969.

On Figures 6.6, 6.7 and 6.8, the S-shape of the curves is obvious. Use of the logistic function to approximate adoption curves, and models of adoption behaviour based upon the normal curve, are a feature of the diffusion literature, but no real agreement on the appropriateness of the logistic has been reached¹⁹. Given the shortcomings of the data (and the models), no attempt has been made to fit a logistic function to any of the adoption curves derived from the coffee tree data. For solely comparative purposes, however, a normal ogive has been plotted on Figure 6.8 for the two periods, 1959-72 and 1962-72, and a normal curve plotted onto the diagrams in Figure 6.9.

The S-shape of the curves suggests firstly, that the adoption of coffee has taken a generally similar form to the adoption of innovations elsewhere in the world. Comparison between the normal curve and the curves derived from the study area data show that in the Dreikikir case, in the early period of coffee adoption in the Wam and Urat, adoption fell below that predicted by the normal curve, particularly in 1961 and 1962. After that however, planting increased above that predicted by the normal curve, and remained above for five years. In both divisions planting slumped for four years between 1964 and 1968 and then increased again to decline slowly at a rate comparable to that predicted. In the other divisions, a different pattern occurred. In the Gawanga and Urim, planting rates rose at the predicted normal rate from the first year of planting, but quickly fell well below it after three years and remained there for four years. The Kombio census division presents yet another pattern. Planting began well below that predicted by the normal curve, and remained below it for the whole period. Once again the Urat and Wam divisions adopted

19. See for example Pemberton 1936, Griliches 1957, 1962; Rogers 1958; Rogers and Havens 1962; Babcock 1962; Mansfield 1961.

FIGURE 6.6. COFFEE TREE PLANTINGS, 1959-72 BY CENSUS DIVISIONS



Source: DASF File 32-1-12, Agricultural Patrol Reports, 1958-1964, Papua New Guinea Archives, Port Moresby; DASF coffee tree censuses, 1966-1972, Dreikikir Patrol Post.

FIGURE 6.7: NUMBER OF COFFEE TREES PLANTED, 1959-1972, AS A PERCENTAGE OF TOTAL TREES PLANTED UP TO 1972

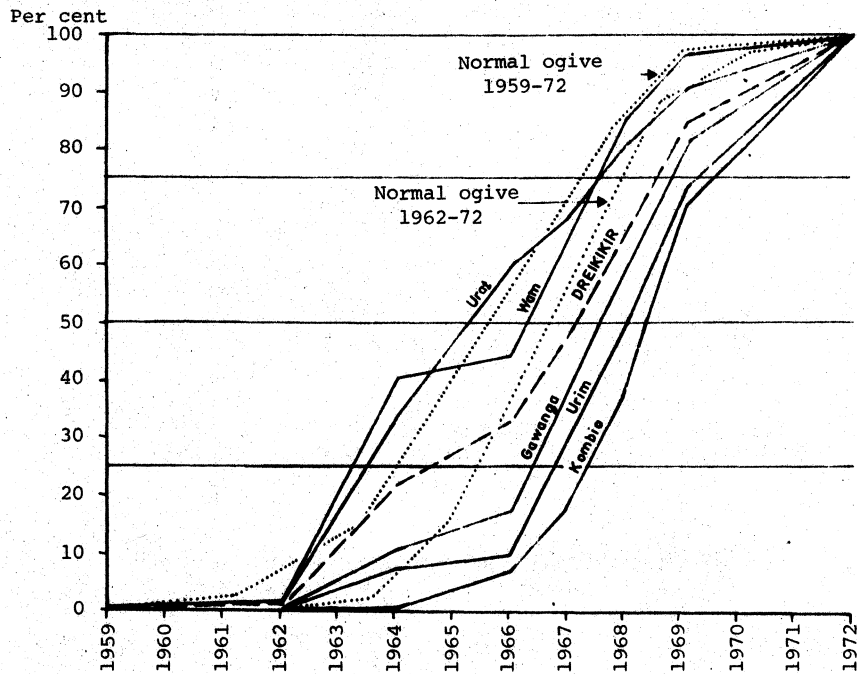
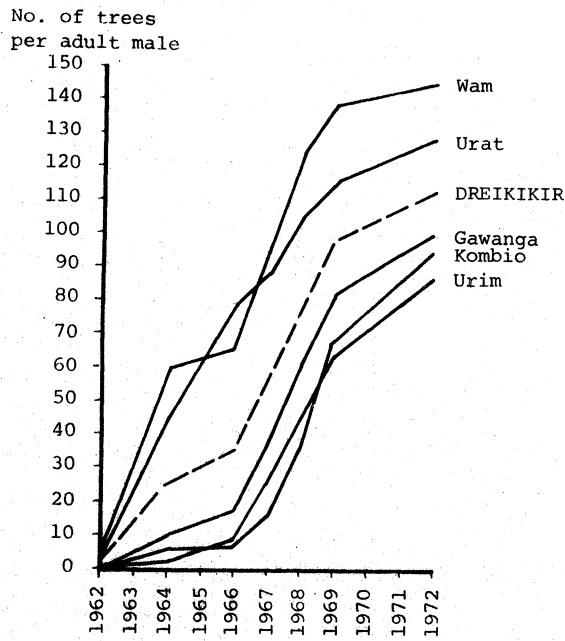
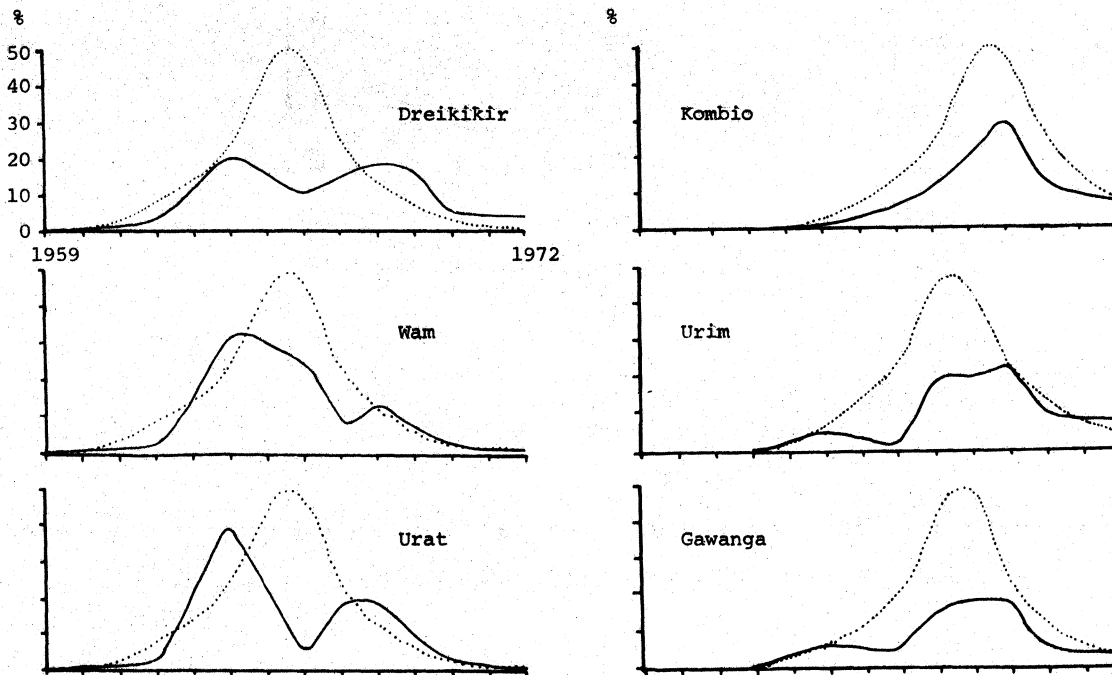


FIGURE 6.8 : COFFEE TREES PER ADULT MALE, 1962-1972.



Source: DASF File 32-1-12, Agricultural Patrol Reports, 1958-1964, Papua New Guinea Archives, Port Moresby; DASF coffee tree censuses, 1966-1972, Dreikikir Patrol Post.

FIGURE 6.9 : ADOPTION OF COFFEE, 1959-1972, BY CENSUS DIVISION



Source: DASF File 32-1-12, Agricultural Patrol Reports, 1958-1964, Papua New Guinea Archives, Port Moresby; DASF coffee tree censuses, 1966-1972, Dreikikir Patrol Post.

TABLE 6.3 MEAN NUMBER OF COFFEE TREES PER GROWER PER VILLAGE, BY CENSUS DIVISION, 1972

Mean No. of coffee trees per grower	CENSUS DIVISION											
	KOMBIO		WAM		URIM		URAT		GAWANGA		TOTAL	
	No. of villages	%	No. of villages	%	No. of villages	%	No. of villages	%	No. of villages	%	No. of villages	%
50-99	4	15.4	1	9.1	0	-	0	-	0	-	5	6.8
100-149	13	50.0	2	18.2	3	33.3	3	17.6	2	18.2	23	31.1
150-199	8	30.8	2	18.2	4	44.5	9	52.9	2	18.2	25	33.7
200-249	1	3.8	3	27.2	2	22.2	3	17.6	6	54.5	15	20.2
250-299	0	-	2	18.2	0	-	0	-	1	9.1	3	4.1
300-349	0	-	1	9.1	0	-	2	11.9	0	-	3	4.1
Total	26	100.0	11	100.0	9	100.0	17	100.0	11	100.0	74	100.0
Mean number of trees per grower ^a	139.6		232.4		169.4		191.5		208.5		192.5	

$\chi^2 = 22.790, df = 8^b$

a Means calculated from original data.

b Rows 1-2 and 4-6 combined to satisfy requirements of Chi-square test.

Source: Department of Agriculture, Stock and Fisheries, individual grower coffee census sheets, Dreikikir Patrol Post, 1972.

coffee as measured by the number of trees planted over time, at a faster rate than the other census divisions, and at a rate slightly above, or equal to, that predicted by a normal curve. The other census divisions adopted at a rate well below that predicted by a normal curve.

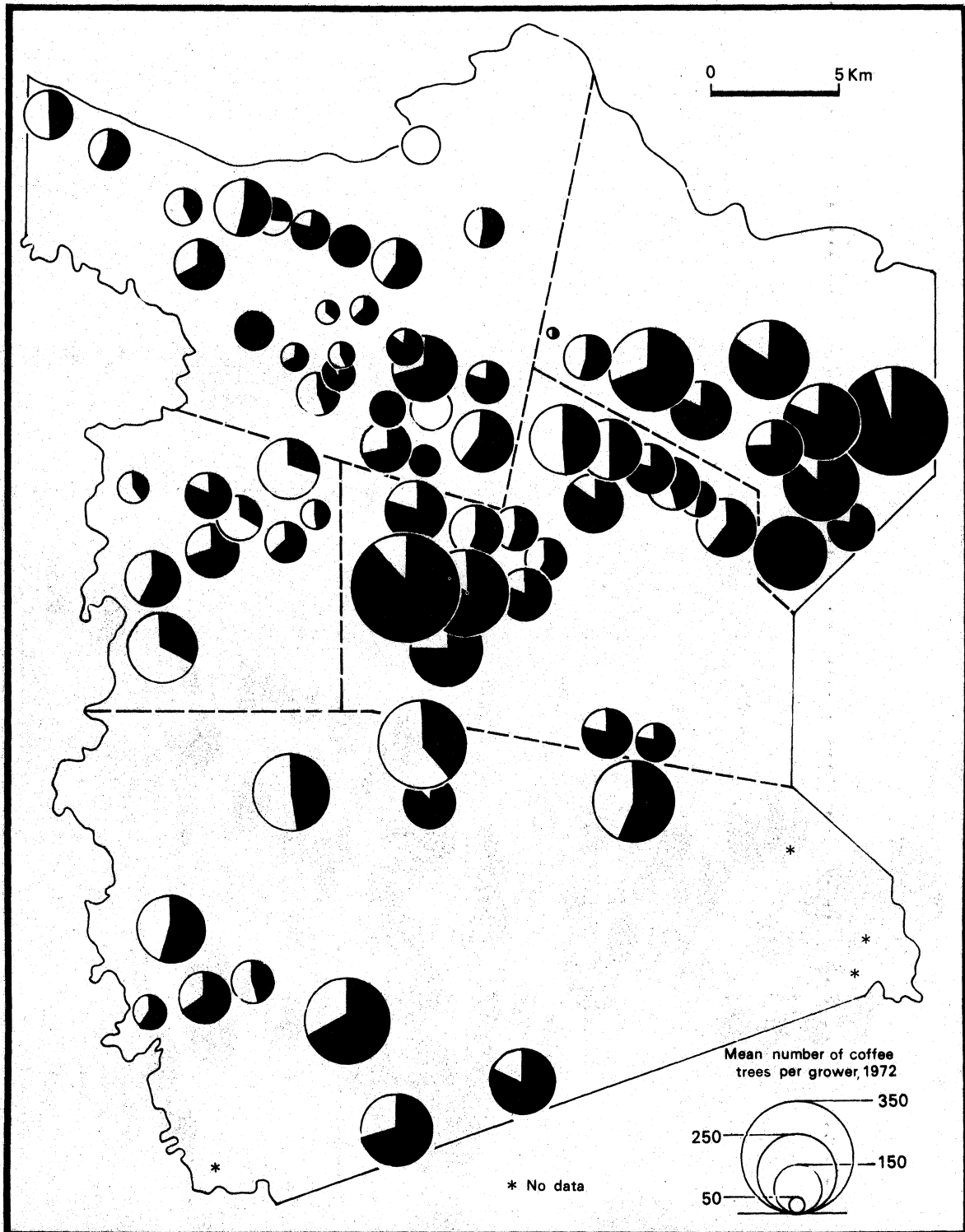
Another measure of the adoption of coffee is the number of trees planted by individual growers. In Table 6.3 the mean number of trees per grower by village are arranged in a frequency distribution by census divisions, and on Figure 6.10, the mean village figures are plotted on a map. For the study area as a whole, the average grower had 193 trees in 1972 excluding communal trees. The highest mean occurs in the Wam division, where growers have planted an average of 232 trees each. Gawanga growers average 209 trees each, while Kombio growers have the lowest mean figure of 140 trees per grower. A Chi-square test of the distribution indicates these differences do not occur randomly ($\chi^2=22.8$, $df=8$, $d=.01$), but the necessity to combine cells to perform the test, reduces its power. It is probable however, that the number of trees planted by individual adoptors is related to their location in the study area.

One factor which influenced the size of coffee gardens was the degree of control over planting, exercised by extension workers. In the Wam for example, more extension work was carried out and greater pressure applied to growers to persuade them to plant 500 trees each, than elsewhere, while in the Kombio, many growers planted without any formal assistance from extension workers. Individual bisnis leaders also forced up the number of trees planted in Wam villages. And in some cases, one grower who has many more trees than anyone else in the village causes the average to be inflated. Two men at Moiwhak for example, have 1,000 and 700 trees respectively.

Compared to coffee growers elsewhere in the Maprik Sub-district, Dreikikir villagers have on average, planted more trees. In the Maprik census division the mean number of trees per grower in 1969 was 105, the highest individual village mean, 170 and the lowest 62. In the Wosera area means ranged between 100 and 143 trees per grower. In the Dreikikir area, only Kombio villages fall within these ranges (Shand and Straatmans, in press).

Surprisingly however, a greater proportion of adult males in Kombio villages participate in coffee growing than in other Dreikikir census divisions (Table 6.1). Sixty-one per cent of all adult males were growing coffee in 1972 in the Dreikikir area, but in the Kombio,

FIGURE 6.10 MEAN NUMBER OF COFFEE TREES PER GROWER AND THE NUMBER OF COFFEE GROWERS AS A PROPORTION OF TOTAL ADULT MALES, BY VILLAGE, 1972.



Source: D.A.S.F. Coffee censuses, Dreikikir Patrol Post.

68 per cent had adopted, compared to 51 per cent and 56 per cent in the Urim and Gawanga areas respectively. In Wam and Urat villages, 63 and 67 per cent respectively, were growing coffee. This level of participation is again higher than in the Maprik or Wosera areas to the east, where in 1969, only 51 per cent of adult males in the Maprik Sub-district and an average of 44 per cent in Wosera villages, were growing coffee (Shand and Straatmans, in press). The hypothesis that land availability is associated with the number of trees planted within the Dreikikir area is examined in Chapter 8 and found not to be significant, but it is possible that if the relationship were examined over the whole of the Maprik Sub-district, land shortages, particularly in the Wosera area, would be found to be associated with low tree numbers per grower and low participation. However, Maprik villages are notable for the manner in which they have maintained their ceremonial and artistic traditions, and the lack of interest they have shown in millenarian activities. It is likely that during the 1960s, they were not interested in rapid change and therefore saw no utility in adopting cargo cults or cash crops.

The measure used in Chapter 8 is one of gross land available to a village and it may not be suitable as a true measure of the land available to an individual. As one DASF officer observed in 1964 in the Wam,

"A truly restricting factor in the size of coffee gardens is land tenure. The land is extremely fragmented and individual blocks near the villages and roads restrict block sizes to about 250 trees. Either a separate garden has to be made, or a large piece of land found further from the village and the road."²⁰

An almost identical observation was made of Urat land tenure in 1965. Other reports note however, that growers

"...are in some cases, planting coffee because we say so and not for its rewards in the future. Some are obviously planting small gardens of 50 to 100 trees as a trial and will not commit themselves further."²¹

Evidence from Tumam suggests both factors were responsible for the size of gardens planted.

Coffee is a permanent tree crop, and it effectively removes the land upon which it is planted from other uses for at least one generation. Bisnis leaders say extension officers told them, the

20. Patrol Report, DASF, 'Patrol of Wam Area Villages 1964'. File 32-1-12, Agriculture Patrol Reports, Division of Extension and Marketing, DASF, Port Moresby.

21. OIC Bainyik to District Agriculture Officer, Wewak, October, 1959, File 19-8-10/59, DASF, Wewak.

best land upon which to plant coffee, was that which had proven itself the best for yam growing. Thus individuals had to decide whether or not they could spare part of their best yam gardening land to plant coffee. Growers were encouraged to plant coffee near a road or track, closer, rather than farther, from the village. This further increased the cost of allocating the best land to coffee. As Table 6.4 demonstrates, only just over half of growers in Tumam Village had direct access to suitable land. Thirty-five men had to seek rights to land through other individuals. Almost a third were given rights to land by clansmen, and a further 14 per cent planted on land claimed through their wives. Bisnis leaders in Tumam in 1962 attempted to ensure that land was made available to would-be adopters whose land was inadequate, or was too distant from the village. In almost all these cases however, the land has not been 'given' in perpetuity, but will revert to the descendants of the original rightholder when they become adults, if they wish to press their claims. During my stay in Tumam, an adultery allegation quickly flared into an argument over land planted in coffee. Observations during this dispute, and in one other, indicate that only the coffee trees belong to the grower who is planting on land under a usufructuary arrangement, and that unless rights to the land have been specifically transferred and the transfer legitimised by other exchanges, the customary rightholder may request the coffee grower to vacate the land at any time.

In the first case, two young married men, one the son of an immigrant from Misim village and adopted into the *samsuwor* clan and the other, who had inherited his *samsuwor* affiliation from his father, became involved in adultery accusations. The latter accused the former of adultery with his wife and threatened to force him from land on which he was growing coffee and which he had inherited from his immigrant father. The adultery case was settled 'out of court' (a village meeting found both parties guilty for seducing each other and ordered compensation of one dollar to be exchanged), and the land matter was not followed up. But later the son of the immigrant told me that he knew he had no security of tenure to the land in question and had two years previously, planted coffee on his wife's father's land, so that his children could inherit it. In the second case, a woman who was not from Tumam, planted coffee on her husband's land, but after matrimonial problems he left for Rabaul, and his clansmen evicted her from the land. They then picked coffee from the trees on

TABLE 6.4 THE SOURCE OF RIGHTS TO THE OCCUPANCY OF 74 PIECES OF LAND PLANTED IN COFFEE, TUMAM VILLAGE, 1972

	<u>Number</u>	<u>Per Cent</u>
Personal rights [a]	39	53.0
Father's brother [b]	1	1.3
Father's classificatory brother [c]	1	1.3
Adoptive father	1	1.3
Brother	2	2.7
Adoptive father's son	1	1.3
Classificatory brother [d]	11	14.9
Mother	2	2.7
Mother's sister's husband	1	1.3
Wife's father [e]	5	6.8
Wife's brother	1	1.3
Wife's mother's brother	1	1.3
Aged, childless, classificatory father [f]	3	4.1
Classificatory daughter [g]	1	1.3
Gift from one clan to another [h]	2	2.7
Exchange of pieces of land [i]	<u>2</u>	<u>2.7</u>
Total	<u>74</u>	<u>100.0</u>

Notes:

- [a] Inherited directly from father.
- [b] Given to the right holder by his father's brother at his request.
- [c] The right holder was given to another clan in exchange for his mother. After his father's death, he approached one of his father's clansmen, for access to land to plant coffee.
- [d] Man of the same clan.
- [e] See [g] below.
- [f] Childless old men commonly give children of their clan pieces of land on the understanding that the child will take their name after their death. In these two cases, the fathers of the children are gardening the coffee, but it is recognised by the community that the coffee will revert to the children, when they are mature.
- [g] The woman in this case is the only surviving child in her family. Her husband, the tultul at the time coffee was being adopted, was prominent in promoting the crop. The land to which his wife had access, was also involved in the two transactions in [i] and in one case in [e].
- [h] The *samsiwor* clan gave land to the immigrant clan *samwukau* whose land was considered to be too distant for planting coffee on.
- [i] See [g] above.

Source: Fieldnotes, 1972.

the land. She took the matter to a village meeting, which decided the trees were hers, but the land belonged to her husband's clan. She could take her trees elsewhere. Everyone thought this was a joke, until she took an axe and chopped down 150 mature coffee trees. She later took the case to an administration court and won compensation for the coffee picked after she had been evicted.

It is also believed that if the holder of usufructuary rights does not leave the land when requested to by its rightful owner, spirits of the customary owner's ancestors will cause growing plants to become diseased, or will cause a landslide or some other natural event, to show their displeasure. Some slumping, which is not uncommon in many coffee gardens, was explained in these terms. Sorcery is also a potent threat in such circumstances, because it is justified, and therefore more likely to succeed. So a man will avoid, if possible, planting a permanent tree crop on land which is not his own. Although men may not have been short of land in general, they may not have had access to blocks of a suitable size, or location, to plant a large number of trees.

In 1960 however, potential coffee adopters were not nearly as naive about the potential of bisnis as they had been in 1950. Bisnis leaders claimed that the benefits of coffee would be great, and the money considerably more, than that received for rice, but many men remained sceptical. Coffee trees take up to three years to produce the first marketable crop of cherry and before that, labour inputs are considerable. The block must first be cleared of all timber, and shade trees planted. Holes must be dug for every seedling, and a nursery must be cared for. Continual clearing of undergrowth is necessary before and after the trees are planted. Most men at Tumam stated without prompting, they had planted their first coffee on a trial basis, with the intention of planting more later, if they found the benefits outweighed the costs. Few have done so. This attitude is a better explanation than any other, of the high participation-low tree numbers per grower situation in many Kombio villages and elsewhere. In the coffee census books, in some cases, the number of trees growers said they were going to plant is listed. The record is too patchy to do anything with, except to note that almost all growers predicted they would plant more trees than they are now cultivating.

When the first coffee was ready for marketing, growers were able to assess the labour costs involved. They generally found them greater than anticipated. Picking, carrying, fermenting and pulping, drying, bagging and carrying to a buying point were added costs which people could not have assessed properly before they experienced them. Most men decided not to plant anymore coffee, although many did this by default, for when they were asked in 1972, many said yes, they would someday, plant some more, but they did not know when.

Coffee Discontinued

Coffee planted in the Dreikikir area is under utilised, a situation recognised by growers and extension workers alike. A report in 1971 noted that much coffee was not being picked and that production could be raised substantially²². Furthermore, simple husbandry, such as pruning of coffee trees and cutting back of shade, is rarely carried out. Coffee production as a measure of participation in cash cropping in 1972 is examined later in this chapter, but the permanent abandonment of coffee gardens, deserves a mention at this point.

In the southwest Gawanga, where planting was forced by an administration officer, many coffee gardens were never exploited. In 1972 their remains could be observed in what is now secondary forest, completely overgrown and all but beyond redemption. Recently, some men have cleared gardens planted during this period and have pruned back the tall spindly coffee trees, but it is unlikely they will bear satisfactorily. In most other villages, abandoned coffee gardens can be observed. Individuals say they just became tired of growing coffee. In a number of cases the land selected for the garden has proved unsatisfactory and the trees have either died, or become yellow and stunted. In the Wam area, army worm damaged a number of gardens in the late 1960s. Many communal gardens are now in an abandoned state (see Plate 6.1). In 1972 coffee was, however, for most people, their most important source of monetary income.

Trade Stores and Other Bisnis Enterprises

Trade stores, cattle projects and passenger motor vehicles, are the other forms of bisnis which have appeared in the Dreikikir area. None of them will be treated in any detail.

22. File 23-1-3, Coffee Part II, 'Inspection of Coffee, East Sepik', 27 July 1971, DASF, Wewak.

PLATE 6.1 COFFEE AND RICE, TUMAM VILLAGE, 1972.



Overgrown and unkempt coffee. Planted as a communal garden in 1963. Never pruned. Note young coffee plants beneath older trees.



A two year old fallow rice garden. Regrowth of tall cane grass and low shrubs. Typical garden survey conditions.



A 1970/71 rice garden photographed in 1972. The larger trees are left standing but the main branches are removed. Rice gardens are not used for subsistence gardening after the rice harvest. Note sago in the background.

Six cattle projects²³ were established at Dreikikir in 1972. Not a great deal of time was spent studying them specifically and only general impressions are offered. Cattle projects are viewed by village people as a very specialised form of bisnis, which only wealthy men, or groups, can attempt. Of 75 men at Tumam village, 41 per cent said cattle projects were quite beyond their personal capabilities, a further 24 per cent thought they were beyond the resources of the community, and 17 per cent said specifically, that not enough money existed in the village. Discussions with small groups of men in other villages gave the impression that they were afraid of the bureaucratic entanglements of acquiring a loan, as well as being frightened of the cattle themselves. Certainly, men who assisted on existing projects were afraid of their cattle, which tended to further increase the difficulty in handling them. My impression was that none of the projects at Dreikikir were successful, socially or financially, and that they placed gross demands on DASF staff, who spent much of their time working on cattle to the disadvantage of other forms of commercial and subsistence agriculture.

Passenger motor vehicles (PMVs) are vehicles, light trucks and utilities, in 1972 usually of Japanese manufacture, which are registered to carry fare paying passengers. Records are most likely available somewhere, which show the early registrations of these vehicles, but police offices in Maprik and Wewak contained only registrations for the preceding two years. In view of the difficulty encountered later, of collecting information about vehicles from villagers, this item was not studied in depth.

PMVs are also adopted by a group under the leadership of an individual. The entrepreneur organises the collection of enough money to purchase the vehicle, and usually provides a relatively large amount of money himself. The PMV is known as 'his' vehicle, but everyone knows that many people have contributed towards buying it. In Tumam

23. Cattle projects are, officially, individual enterprises, supported by loans from the Papua New Guinea Development Bank. The individual must have title to 12 hectares of land, must clear it and cut between 400 and 700 fence posts. Fencing materials and grass seed are provided by DASF with loan funds. When the enclosure is completed cattle are provided. The total cost in 1972 was 1,754 dollars. DASF literature implied a correctly managed project would return one man 800 dollars per year. Because few individuals can meet these requirements, cattle projects are usually *de facto* communal projects. This was the case at Dreikikir, but each project was under the leadership of one key man.

for example one man provided 500 dollars, two others 100 dollars and many other men and women from Tumam and nearby villages contributed 10 dollars each. When the first PMVs were purchased, people were very keen to put money into them, and people from some of the most isolated Gawanga and Kombio villages approached men collecting money for PMVs in Urat and Wam villages, and gave money to them. Although the evidence is by no means as strong, there does appear to have been something of the earlier mystique of investing money in bisnis about this activity. The PMVs themselves were at first known as bisniskas. Many of the first PMVs were purchased second-hand from Europeans or from the administration, and they did not travel far before breaking down. The road from Maprik to Wewak contains innumerable hulks, now largely hidden by the undergrowth. As people invested their money and never saw it again, nor, in many cases, ever saw the car they had helped to purchase because they lived too far from a road, enthusiasm declined. People did expect to receive win mani from PMVs, but in no village of the Dreikikir area could I find one person who had ever received a dividend. At Tumam a second vehicle was purchased with earnings from the first, but when both broke down together in 1973, people demanded back their investment and received what they had originally contributed, leaving both vehicles without funds to cover their repair.

In 1972 villagers were becoming aware that a vehicle was a service, not an investment, a service which had a continued cost, but which if shared among many people was low enough to be borne by the average villager. The benefits of a vehicle are appreciated widely. The 'revolution' in personal movements which they have brought about, has been described previously.

Trade stores were the first manifestation of bisnis to appear. Three locally owned stores were opened between 1948 and 1950. Returning from the war or from periods in the police, army, or as indentured labourers, a number of men brought with them a small amount of savings with which to begin stores. All of the bisnis leaders have had, at some time, operated a trade store, and a number describe their efforts in their narratives (Appendix C). Stores are also the only form of bisnis which Europeans have been involved in, in the study area. Three European owned stores opened at Dreikikir Patrol Post between 1946 and 1949. Two closed within two years and the third closed in the early 1960s. Missionaries have operated stores wherever they have

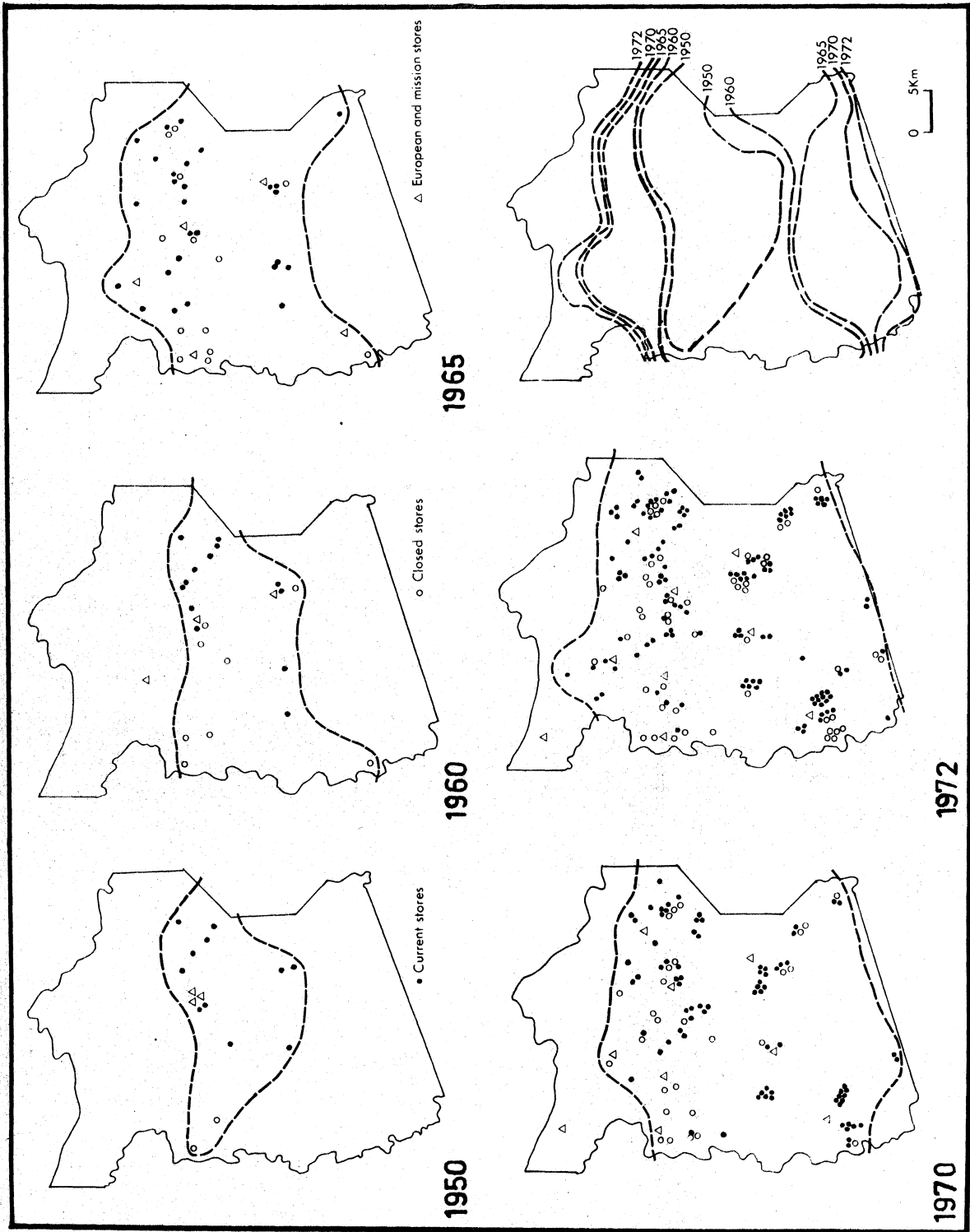
built mission stations.

The first stores were usually part of the residence of the storeowner. Stock was restricted to salt from the coast (later from Supari), cloth, beads and bush knives. Money was scarce and it took many months before stocks were low enough to require another walking trip to Aitape or Wewak, where purchases were made from Chinese stores.

Store operations were not communal enterprises. Individuals who thought they had sufficient knowledge started up. Individuals who wanted to try but had insufficient knowledge had to persuade a store owner who appeared to be successful, to tell them how to do it. Store owners did not go around telling other people about stores, as the bisnis leaders did with rice. Almost certainly, the average villager misunderstood the operation of stores, but perceived them as a major point of access to European goods. The collections of money in return for promises to put a store in every village, or to buy a ship to bring goods to sell in stores, which have been described earlier, suggest this was the view held at the time. Many store owners in 1972 did not understand clearly how their enterprise made money. They purchased goods from Chinese merchants in Wewak and sold them at the prices they suggested. If the money in their tin increased they were pleased, if it decreased they were confused. Three store owners in Tuman who were slowly losing money asked me to explain where it was going. They were careful never to take stock without paying for it, and they did not allow credit. Most of their losses were incurred in transport costs. They were, without any question, following established precedents with little understanding of the processes involved. On the other hand, a small minority of stores in the area owned by local men were very successful. These men had a good understanding of their activities.

The first stores were located in three Urat villages, Emul, Moseng and Misim. By 1950 eleven stores had been started, but two had already closed (Figure 6.11). Between 1950 and 1970 stores spread to almost all villages in the Dreikikir area from a strip across the centre, but compared with other innovations which have diffused in the area, stores moved slowly. Another feature of the diffusion of stores was the high rate of discontinuation. New stores opened in a village while simultaneously, others were closing. Closures were caused by loss of capital, and loss of interest, caused by the long walk involved in buying new stock, or by the death or illness of an owner. When a

FIGURE 6.11 THE DIFFUSION OF RETAIL TRADE STORES, DREIKIKIR 1946-1972



Source: Fieldnotes, 1972

store owner dies it is usual for his store goods to be eaten and distributed at his funeral. Many stores in 1972 were closed 'temporarily' and had been 'temporarily' closed for a number of years. Others had a bare minimum of stock, some of it very old and cockroach ravaged.

The pattern of diffusion generally, was one of a slow spread from areas with the greatest access to roads, to those with least access. Because a successful store turns over its stock quickly, the owner must have good access to a road to make frequent stock purchases. Some small store owners overcome this problem by purchasing from mission stores, or from large local stores. Two stores near Dreikikir were increasingly selling 'wholesale' to small local stores, thereby inflating the price of goods from the small stores. Some small store buyers, no longer able to afford the fare to Wewak or Maprik, purchased from these stores but resold at the purchase price and made no profit, thereby demonstrating another facet of store owning. It is a status occupation and for some men, operating the store is enough. The profits are secondary and their object is to keep the store going and to not lose their capital.

POST-ADOPTION BEHAVIOUR AND BISNIS

One of the arguments put forward in Chapter 1 is that diffusion studies too often fail to follow up a study of the actual spread of an innovation, to see what happens after adoption. Adoption is frequently modelled as a learning process, but too often the assumption seems to be that the learning ceases once a person decides to adopt. My argument is, that in situations like that at Dreikikir, more learning occurs after adoption than before it. The adopter begins to get a much more accurate assessment of the utility to him, of the innovation, after he has adopted than before. In earlier sections of this chapter the over enthusiastic adoption of rice growing, followed by the collapse of the enterprise, suggests that the 'awareness-adoption-trial-crisis' model of adoption discussed in Chapter 1, has been the predominant pattern of adoption of bisnis at Dreikikir. Thus it is critically important to investigate what happens after adoption. Furthermore, the information fields which influenced and channelled the movement of the innovation as it was diffusing do not cease to function as soon as an innovation has moved through them. Rather they continue to influence the flow of information across the space involved. It has been argued earlier that continued access to communication channels

is an important determinant of post-adoptive behaviour. The final sections of this chapter examine bisnis activities at Dreikikir in 1971 and 1972. The material presented is used in Chapter 8 where an investigation is conducted into the relationship between accessibility and rural development.

Rice Growing 1970-1972

In the Dreikikir area between 1970 and 1972, less than one-quarter of resident adult males, as censused in 1972, were participating in rice growing. In 1970-71, the period for which the most reliable data are available, 19.9 per cent of total adult males grew rice. Table 6.5 shows the distribution of participation by census division. Urat villages were the most involved in rice growing, but within the census division, there was a wide range of participation, and no apparent orderly spatial pattern. Moseng village demonstrated the highest level of participation; where 79 per cent of adult males were growers in 1970-71. But at Musendai village, less than a kilometer from Moseng only 30 per cent were and in the villages of Porombil and Pelnandu, on the Sepik Highway, north of Moseng, rice growers were 11 per cent and 12 per cent respectively, of adult males resident in the villages.

TABLE 6.5 PARTICIPATION IN RICE GROWING, 1970-72: NUMBER OF GROWERS 1970-71 AND 1971-72 AS A PERCENTAGE OF TOTAL ADULT MALES, 1971, BY CENSUS DIVISION

Census Division	Total Adult Males	Number of Growers			
		1970-71	%	1971-72	%
Urat	1390	557	40.1	417	30.0
Kombio	1004	294	29.3	32	3.1
Wam	1130	144	12.7	116	10.2
Gawanga	2090	199	9.5	205	9.8
Urim	618	47	7.6	82	13.2
Dreikikir	6232	1241	19.9	852	13.7

Notes: The 1971-72 figures exclude non-members of the Sepik Producers' Cooperative.

Source: SPCA rice receipt books, 1970-71; share registers 1971-72. Department of District Administration census, Dreikikir Patrol Post, 1972.

A similar pattern occurred in the Kombio census division. At Makupmanip the number of rice growers was 83 per cent of adult males in the village, but at nearby Serepmel and Sambu villages, rice growers comprised only 13 and 12 per cent of adult males, respectively. Further south, at Yasile, participation was 90 per cent, but at adjacent Yakulm, it was only 45 per cent.

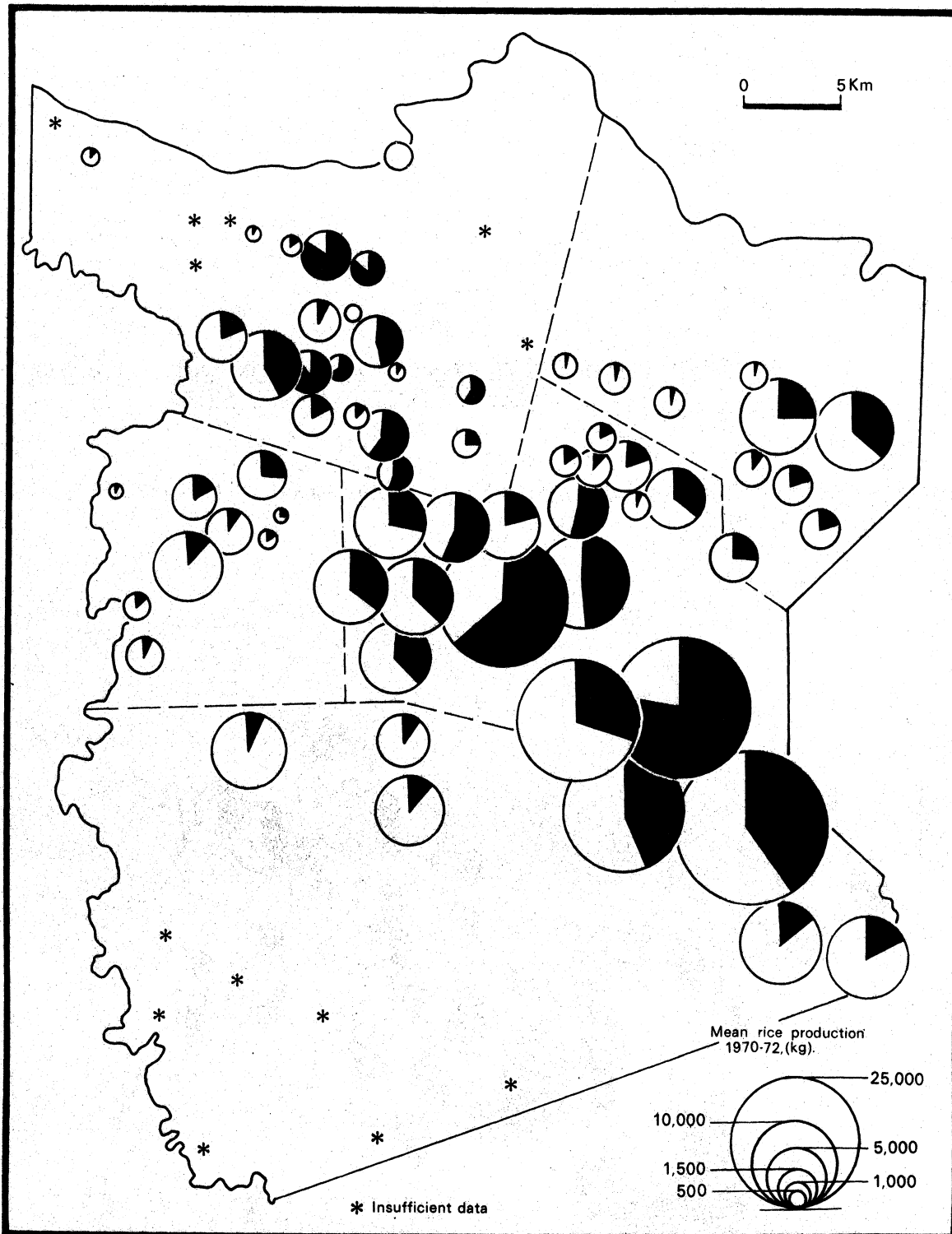
There was greater consistency in the Wam and Urim census divisions, where overall participation was lower. Only two Wam villages, Hambini and Luwaite, and one Urim village, Albalung, demonstrated a participation rate greater than 25 per cent. In the eastern Gawanga villages of Apos and Inakor rice growers totalled over 45 per cent of adult males, but in other Gawanga villages, participation was less than 25 per cent. There are no data for the southwestern Gawanga villages. The distribution of participation in 1970-71, is shown on Figure 6.12.

The distribution of rice production within the study area for the period 1970-72 is presented in Figure 6.12. In 1970-71 and 1971-72 respectively, 285,870 kg and 256,346 kg of rice were produced. The latter figure is likely to be conservative, and actual production may have been about eight per cent higher (see Appendix B). There is again no clearly discernable spatial pattern to this production. Most rice was produced from villages in the southeast of the study area and from western Urat villages.

Rice production per grower in 1970-71 is shown in Table 6.6. This figure allows a direct comparison of grower performance between villages in different census divisions. Mean production per grower for the area as a whole was 218.5 kg, but in those Gawanga villages for which data are available, production per grower averaged 367.1 kg, and for Kombio villages 142.6 kg. The greatest range of production per grower occurred among Kombio villages and the least among Urim villages. The hypothesis that location, as measured by census division membership, and production per grower, are independent, was tested by Chi-square and rejected. The use of broad areas such as census divisions, makes this test fairly crude, but it does support the observation, that significant differences occurred in production per grower between census divisions.

An attempt was also made to measure the area cultivated by individuals, and the yields received per unit area. Fifty-four 1970-71 rice fallows at Tumam village were measured by tape-and-compass

FIGURE 6.12 MEAN VILLAGE RICE PRODUCTION AND PROPORTION OF ADULT MALES GROWING RICE, 1970-72



Source: Sepik Producers Cooperative Association, rice receipts, 1970-71, share registers 1971-72.

TABLE 6.6

RICE: MEAN PRODUCTION PER GROWER
BY CENSUS DIVISION, 1970.

Mean production per grower (kg).	CENSUS DIVISION									
	KOMBIO		WAM		URIM		URAT		GAWANGA	
	No. of villages	%	No. of villages	%	No. of villages	%	No. of villages	%	No. of villages	%
0- 50	1	4.7	1	10.0	0	-	0	-	0	-
51-100	5	24.0	1	10.0	2	25.0	2	11.7	0	-
101-150	9	42.9	4	40.0	2	25.0	2	11.7	1	14.3
151-200	2	9.6	3	30.0	2	25.0	2	11.7	0	-
201-250	1	4.7	1	10.0	2	25.0	5	29.4	1	14.3
251-300	1	4.7	0	-	0	-	4	23.9	1	14.3
301-350	1	4.7	0	-	0	-	1	5.8	1	14.3
351-400	0	-	0	-	0	-	0	-	2	28.5
401-450	1	4.7	0	-	0	-	0	-	0	-
451-500	0	-	0	-	0	-	1	5.8	1	14.3
Total Villages	21	100.0	10	100.0	8	100.0	17	100.0	7	100.0
Mean production ^a per grower	142.55		147.7		169.55		254.46		367.07	

$$\chi^2 = 15.97 \quad df = 4$$

Notes: a. Means calculated from original data.

Source: Calculated from data presented in Appendix B.

survey. The results are presented in Table 6.7. (See also Plate 6.1). The mean size of rice gardens in Tumam village in that period was 0.25 ha. The largest garden was 0.52 ha and the smallest 0.09 ha. Yields from these gardens averaged 1479.26 kg/ha. The highest yield was 2780 kg/ha and the lowest 436 kg/ha²⁴. Comparative information on the area of rice planted per grower in the Maprik area to the east is scarce. Shand and Straatmans (in press) have brought together available data, but the accuracy of some of their figures are in doubt. The most reliable figure they present is a 1961 figure based on the field measurement of 24 rice gardens, at an undisclosed location, in which the mean size of gardens was 0.20 ha, with a range of 0.04 ha to 0.48 ha. Emmery and Leentjes (1970) state "the average size of rice gardens in the Maprik area is one acre" (0.41 ha) but give no source for this figure. Shand and Straatmans (in press) also present a table showing, supposedly, the results of the field measurement of 1033 rice gardens, totalling 424 ha, based on "records of the Sepik Producers' Cooperative Association". I could find no evidence that surveyed measurements had been made. The actual source of the figures presented is not cited. The average size of gardens is 0.41 ha, except for one census division in which the average size rises to 0.82 ha.

Comparative yield figures for the Maprik area are also difficult to obtain. Shand and Straatmans (in press) quote "estimates made by extension officers" of a yield of around 1000 kg/ha in 1962-63, but note that that year was one of low rainfall. Emmery and Leentjes (1970) use a yield figure of one ton per acre of 2510 kg/ha, in their calculations, but again give no source, nor any arguments as to why this figure should be used.

Comparative figures from overseas areas in which rice is produced by shifting cultivators are available, although they are often based on very small samples, and sometimes on estimates. Kundstadtler and Chapman (pers. comm.) cite 10 cases from Borneo, Thailand and Laos. Yields in these areas range between 806 kg/ha for the Iban, to 1849 kg/ha for the Yao of Northern Thailand. Grist (1955,150) states that "under good conditions in Malaya" yields range from 1680 kg/ha to 2240 kg/ha of padi from "virgin land free of pests" falling to 1345

24. Yields are calculated on padi sold, as recorded on SPCA crop purchase receipts in the possession of growers.

TABLE 6.7 RICE: AREA PLANTED (Ha) AND YEILD (kg/Ha), TUMAM VILLAGE, 1971.

Area planted (Ha).	No. of growers	%	Yield (Kg/ha).	No. of growers	%
0.00-0.15	7	12.9	0 - 400	1	1.9
0.16-0.20	10	18.5	401 - 600	3	5.5
0.21-0.25	16	29.7	601 - 800	5	9.3
0.26-0.30	8	14.8	801 -1000	4	7.3
0.31-0.35	6	11.1	1001-1200	8	14.3
0.36-0.40	4	7.4	1201-1400	5	9.3
0.41-0.45	0	-	1401-1600	5	9.3
0.46-0.50	2	3.7	1601-1800	5	9.3
0.51-0.55	1	1.9	1801-2000	4	7.3
			2001-2200	5	9.3
			2201-2400	5	9.3
			2401-2600	1	1.9
			2601-2800	3	5.5
TOTAL	54	100.0		54	100.0

Notes: Mean area planted per grower, 0.25 ha; mean yield per grower, 1479.26 kg/ha.

Source: Tape and compass survey of 54 rice fallows, Tumam village, May-June, 1972.
Sepik Producers' Cooperative Association rice purchase receipts in the possession of growers, Tumam village, 1972.

kg/ha to 900 kg/ha for a subsequent crop from the same area. In west Kalimantan, a Government survey of hill rice yields between 1967 and 1971, which comprised an estimated 0.0025 per cent sample, produced mean figures which range between 847 kg/ha and 939 kg/ha²⁵. Leach found that under the best conditions in North Borneo, shifting cultivators produced 1910 kg/ha (Clark and Haswell 1967,36).

On these figures, Tumam village growers are producing relatively high yields from their rice gardens. This is not altogether unexpected. The gardens are small and are always cultivated on fallows of up to 25 years. Shand and Straatmans (in press) make exactly the same point. Given the overseas figures and those for Tumam however, their assumed yield of 2510 kg/ha based on Emmery and Leentjes (1970) seems too high. Shand and Straatmans observe that in the Maprik area, rice appears to respond to rainfall, and that the Dreikikir area receives, in general, more rain than areas to the east. Observation of fallow vegetation suggests less pressure on land in the Dreikikir area, than in the Maprik area and certainly less than in the Wosera area. These factors support the contention that mean yields in the Maprik Sub-district for rice are likely to be nearer 1500 kg/ha than 2500 kg/ha. It is recognized that crude yield figures are not of great use to planners and economists unless labour input figures also exist. I was prevented from collecting these however by the lack of rice planting during the period I was in the field. No proper attempt has been made to collect labour input figures by DASF officers.

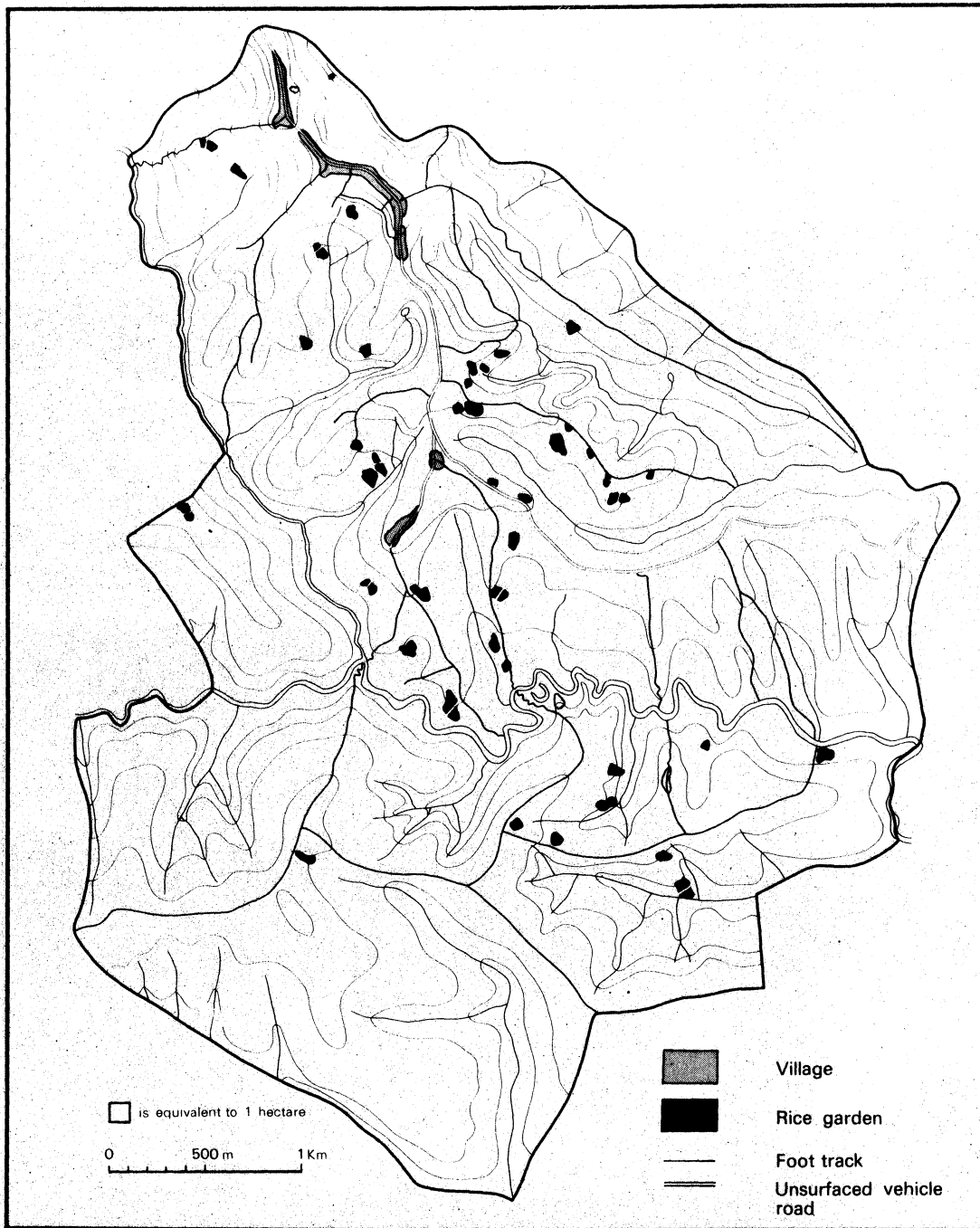
The location of the 54 gardens surveyed, within the boundaries of Tumam village land are shown on Figure 6.13. The relationship between the location of gardens expressed as distance from the gardeners residence and the yield of a garden was tested with Spearman's rho. No significant association was found to exist ($r_s = 0.015$).

Coffee Production 1970-1971

Wam and Urat villages also dominate gross coffee production in the study area while Kombio and Urim villages produce relatively little. Wam and Urat growers produce well above the Dreikikir mean of 62.8 kg per grower, while the means for the other three divisions are all less than 40 kg per grower (Table 6.8 and Figure 6.14).

25. Personal communication, G.J. McDonell and Company Pty. Ltd., May, 1974.

FIGURE 6.13 LOCATION OF RICE GARDENS, TUMAM VILLAGE, 1970-71



Source: TPNG 1:100,00, sheet 7490 (Edition 1), Series T683 ; Field Survey, 1972.

TABLE 6.8 COFFEE PRODUCTION PER GROWER, 1970-71

Census Division	Coffee Produced (kg)	No. of Growers with Mature Trees	Production per Grower (kg)
Urat	67,875	896	75.7
Wam	57,366	673	85.2
Kombio	7,231	262	27.6
Urim	3,710	103	36.0
Gawanga	16,253	494	32.9
Dreikikir	152,434	2,428	62.8

Note: Kombio figures calculated on 1970-71 figures only.

Source: SPCA coffee receipts, 1970-71; DASF coffee tree censuses, Dreikikir Patrol Post.

These figures are slightly misleading as they assume all growers with mature trees are selling coffee and this is not true in all census divisions. In 1971, 2428 growers possessed mature trees but only 1997 persons sold coffee (Table 6.9). It appears as if about 18 per cent of coffee growers in the study area did not sell

TABLE 6.9 PROPORTION OF COFFEE GROWERS SELLING COFFEE 1970-71

	Number of growers with mature trees	Number of individuals selling coffee	Sellers as a percentage of growers with mature trees	Number of villages for which data are available
Urat	896	929	103.6	17
Wam	673	616	91.5	11
Kombio	262	174	66.4	21
Urim	103	56	54.4	8
Gawanga	494	222	44.9	7
Total	2,428	1,997	82.2	64

Source: SPCA coffee receipts, 1970-71; DASF coffee census, Dreikikir Patrol Post.

coffee in 1970-71. The majority of nonproducers were located in the Gawanga, Urim and Kombio census divisions. In the Urat census division, more individuals sold coffee than possess coffee gardens. Nongrowers pick other peoples' coffee or communal coffee when they need cash, and some women who are members of the SPCA sell coffee from their husband's gardens using their own membership card and number. It is apparent that either a lot of coffee is not picked from producing trees in the Kombio, Urim and Gawanga census divisions, or the trees

TABLE 6.10 COFFEE: MEAN PRODUCTION PER PRODUCER PER VILLAGE BY CENSUS DIVISION, 1970-71.

Mean production per producer (kg)	CENSUS DIVISIONS											
	KOMBIO		WAM		URIM		URAT		GAWANGA		TOTAL	
	No. of villages		No. of villages		No. of villages		No. of villages		No. of villages		No. of villages	
0- 20	6	28.5	0	-	0	-	0	-	0	-	6	9.0
21- 40	9	42.9	0	-	3	37.5	2	11.8	1	10.0	15	22.4
41- 60	3	14.3	1	9.1	2	25.0	5	29.4	4	40.0	15	22.4
61- 80	1	4.8	2	18.2	2	25.0	6	35.3	2	20.0	13	19.3
81-100	2	9.5	6	54.5	0	-	4	23.5	3	30.0	15	22.4
101-120	0	-	2	18.2	0	-	0	-	0	-	2	3.0
121-140	0	-	0	-	0	-	0	-	0	-	0	-
141-160	0	-	0	-	0	-	0	-	0	-	0	-
161-180	0	-	0	-	1	12.5	0	-	0	-	1	1.5
Total Villages	21	100.0	11	100.0	7	100.0	17	100.0	10	100.0	66	100.0

Mean production per producer (kg).

41.5

93.1

56.3

73.1

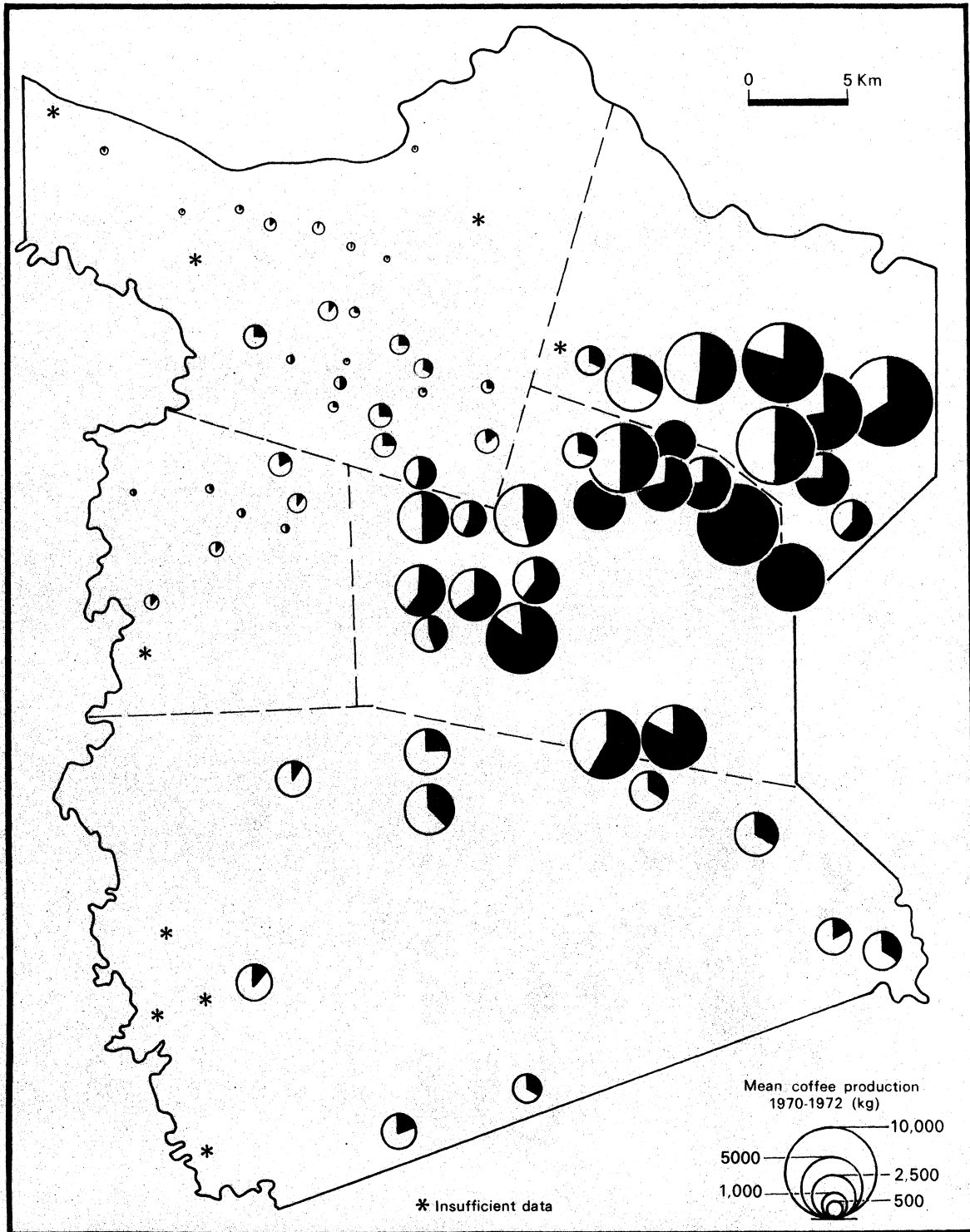
62.2

76.3

Notes: $\chi^2 = 19.47$, $df = 4$. Rows 1-3 and 4-8 combined to satisfy requirements of test. Case in row 9 omitted. Means calculated from original data.

Source: SPCA coffee purchases receipts, 1970-71.

FIGURE 6.14 MEAN COFFEE PRODUCTION BY VILLAGE, AND COFFEE SELLERS AS A PROPORTION OF ADULT MALES, 1970-71.



Source: Sepik Producers Cooperative Association coffee receipts, 1970-71, share registers 1971-72.

there are not bearing as well as trees owned by Urat and Wam growers. Overgrown and unpruned gardens in the Gawanga have been mentioned previously and patrol reports from local extension workers state that coffee gardens in the Kombio and Urim areas are not as well cared for as Urat and Wam gardens.²⁶ A similar pattern is created if the number of persons selling coffee as a proportion of total adult males is considered (Figure 6.14).

Less of a contrast exists between the five areas when coffee production per seller is examined. The mean production per seller in 1970-71 was 76.3 kg (Table 6.10). Although Wam and Urat sellers were still the highest producers, 93 kg and 73 kg respectively, Gawanga and Urim producers were not far behind with 66 kg and 62 kg per seller. Kombio sellers however, produced significantly less coffee each, only 42 kg. A Chi-square test of the frequencies in Table 6.10, (excluding the very high production from the one Urim village, which is most likely an error in the original data), suggests the differences in production are significant, and are related to the locations of the villages within the Dreikikir area.

Another measure is the amount of coffee produced per trees of bearing age. The highest mean production per tree in 1970-71 occurred in Urat villages, while the lowest production was registered in Urim and Gawanga villages (Table 6.11 and Figure 6.15). Empty cells in Table 6.11 make it difficult to test for differences in distribution of production per tree. Kombio villages located on the road demonstrated levels of production per tree which are unexpected, when the performance of Kombio coffee growers on other measures is considered.

An example of the variation in the production per tree within villages is provided by figures from Tumam village for 1971-72 (Table 6.12). Production per tree ranged from less than 0.09 kg to 1.26 kg with the mean, median and mode all between 0.40 and 0.49 kg per tree, or approximately one pound per tree. The probable negative relationship between numbers per grower and production per tree (Table 6.12) suggests that many growers are handling the maximum number of trees under existing conditions of labour inputs in coffee, rice and food production and that any attempts to increase coffee

26. File 32-1-4DK, Patrol Reports, Dreikikir, DASF, Wewak.

TABLE 6.11 MEAN COFFEE PRODUCTION PER TREE^a PER VILLAGE, BY CENSUS DIVISION, 1970-71.

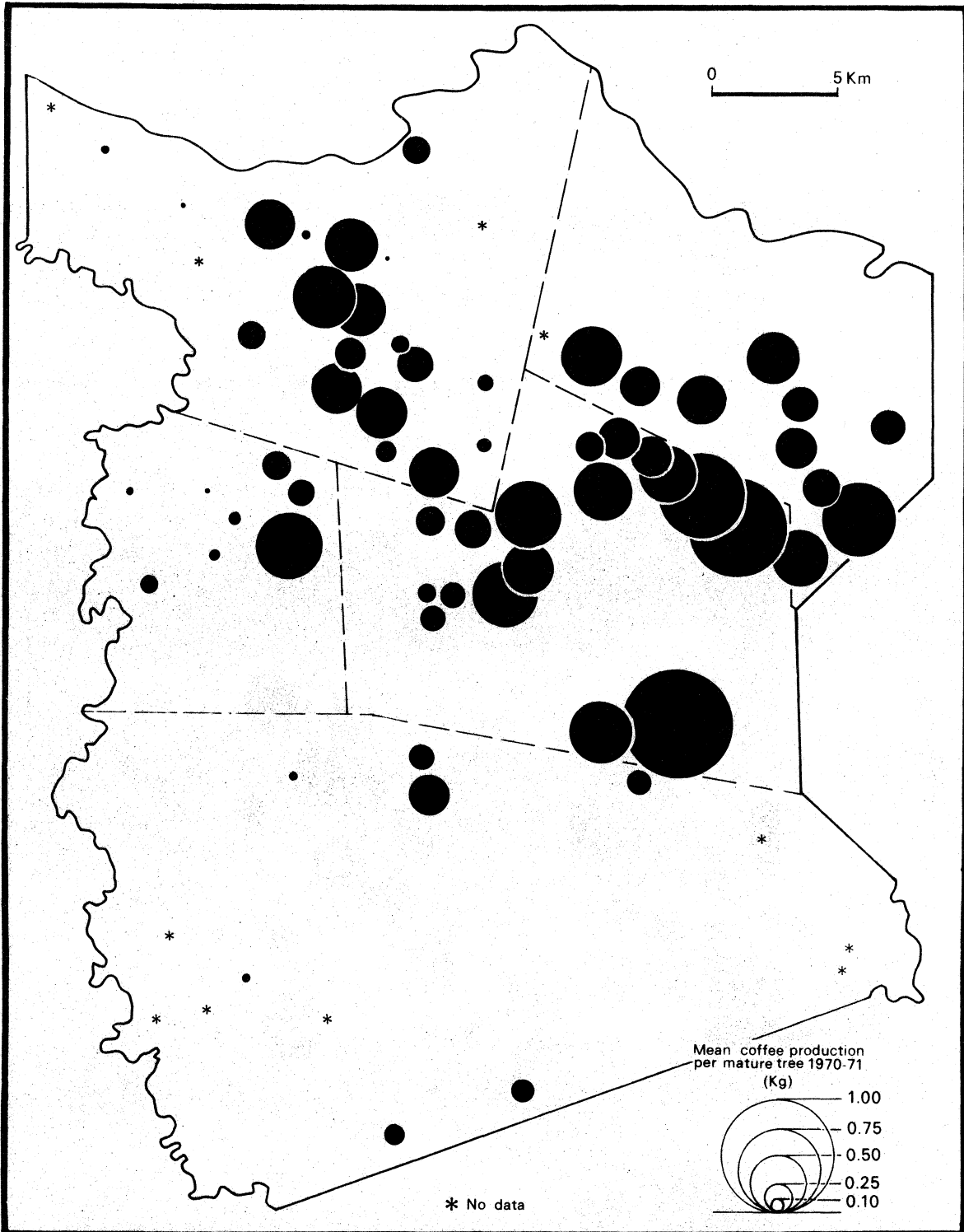
Production per tree ^a (kg)	KOMBIO		WAM		URIM		URAT		GAWANGA		TOTAL
	No. of villages	%	No. of villages	%	No. of villages	%	No. of villages	%	No. of villages	%	
0 - 0.09	5	23.8	0	-	2	22.2	0	-	2	28.5	9 14.1
0.1 - 0.19	4	19.0	0	-	4	44.5	1	5.9	1	14.3	10 15.6
0.2 - 0.29	4	19.0	0	-	2	22.2	4	23.5	3	42.9	13 20.2
0.3 - 0.39	1	4.8	5	50	0	-	3	17.6	1	14.3	10 15.6
0.4 - 0.49	6	28.6	1	10	0	-	1	5.9	0	-	8 12.5
0.5 - 0.59	1	4.8	3	30	0	-	5	29.4	0	-	9 14.1
0.6 - 0.69	0	-	1	10	1	11.1	0	-	0	-	2 3.1
0.7 - 0.79	0	-	0	-	0	-	1	5.9	0	-	1 1.6
0.8 - 0.89	0	-	0	-	0	-	1	5.9	0	-	1 1.6
0.9 - 0.99	0	-	0	-	0	-	1	5.9	0	-	1 1.6
Total	21	100.0	10	100.0	9	100.0	17	100.0	7	100.0	64 100.0
Mean production per tree (kg) ^b	0.24		0.41		0.15		0.46		0.17		0.35

a Calculated only on trees planted in or before 1967 (1 lb = 0.45 kg).

b Means calculated from original data.

Source: Department of Agriculture Stock and Fisheries, individual grower coffee census sheets, Dreikikir Patrol Post, 1972; Sepik Producers Cooperative Association coffee receipts, 1970-71.

FIGURE 6.15 MEAN COFFEE PRODUCTION PER MATURE TREE BY VILLAGE,
1970-71.



Source: D.A.S.F. Coffee censuses, S.P.C.A. coffee receipt books, 1970-71.

TABLE 6.12 COFFEE: PRODUCTION PER MATURE TREE, 1971-72, TUMAM VILLAGE (Kg).

Coffee production per mature tree (kg).	Number of Individuals	Per Cent
0.0 - 0.09	2	3.5
0.1 - 0.19	7	12.3
0.2 - 0.29	7	12.3
0.3 - 0.39	6	10.5
0.4 - 0.49	16	28.1
0.5 - 0.59	5	8.7
0.6 - 0.69	4	7.0
0.7 - 0.79	3	5.3
0.8 - 0.89	2	3.5
0.9 - 0.99	0	-
1.0 - 1.09	2	3.5
1.1 - 1.19	0	-
1.2 - 1.29	3	5.3
Total	57	100.0

Mean production per mature tree is 0.45 kg/tree.

Notes: The following cases of low tree numbers and high per tree production have been excluded: 37 trees, 2.75 kg/tree; 27, 1.67; 16, 1.80; 36, 1.61; 88, 2.0; 71, 2.2. Individuals with few trees commonly pick coffee in gardens other than their own, thereby inflating their own per tree production figures. When they are included the village mean rises to 0.59 kg/tree. It is probable however, that individuals with few trees do produce more per tree than the average. There is a negative correlation of -0.30 (significant at 0.001) between the number of mature trees and production per tree, (r_s).

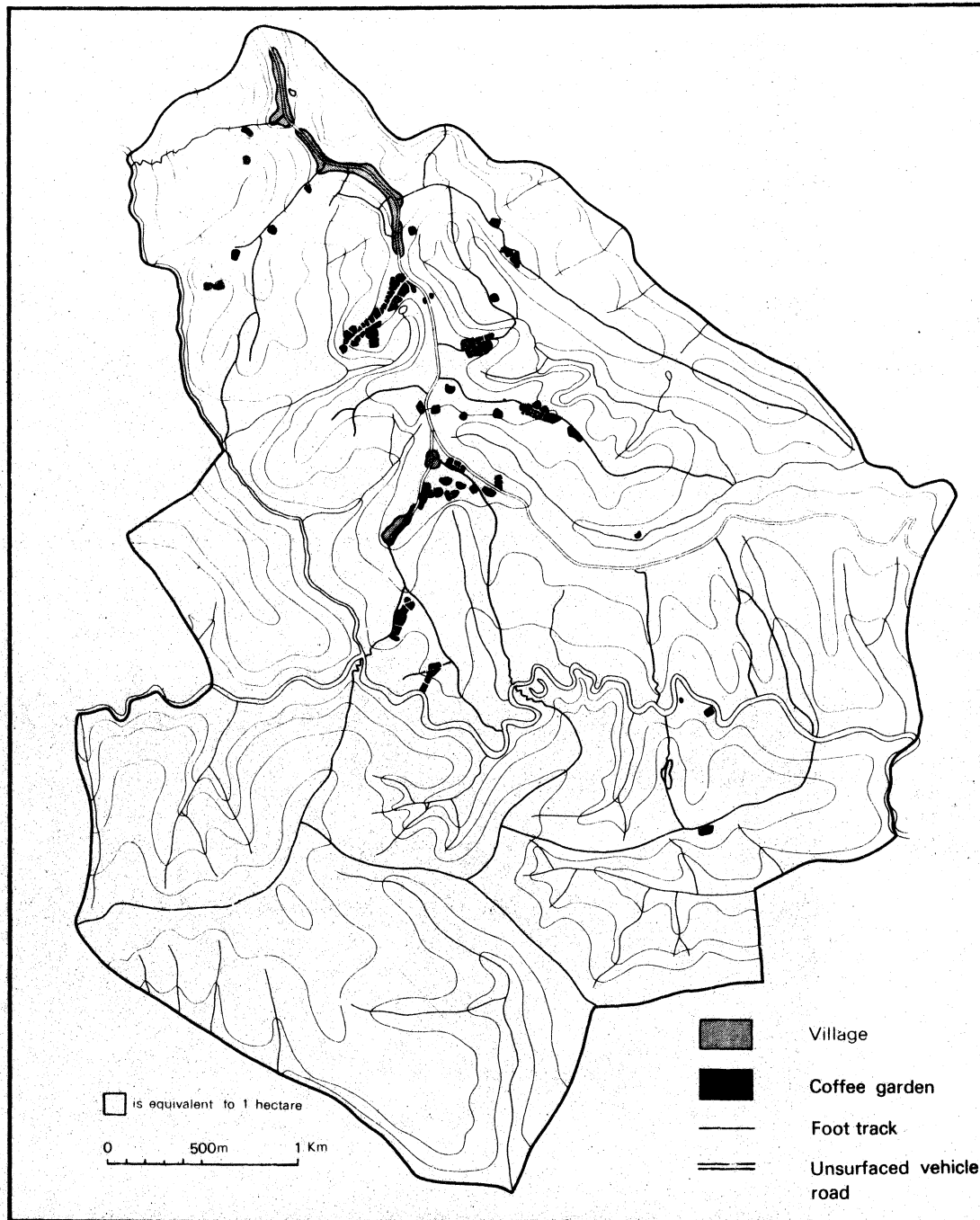
Source: Sepik Producers' Cooperative Association coffee receipts in the possession of villagers, Tumam village, 1972; Department of Agriculture, Stock and Fisheries coffee census, individual sheets, Dreikikir Patrol Post, 1972.

tree numbers without changing other factors would not be successful. The locations of coffee gardens (Figure 6.16) were noticeably closer to the village than were rice gardens (Figure 6.13).

Income from Rice and Coffee as a Measure of Participation in Bisnis, 1970-71.

The Sepik Producers' Cooperative Association purchased rice and coffee worth 71,310 dollars in 1970-71. Seventy-three per cent of that money was paid in the Wam and Urat census divisions, although only 40.4 per cent of the area's adult males live in those divisions.

FIGURE 6.16 LOCATION OF COFFEE GARDENS, TUMAM VILLAGE 1972



Source: TPNG 1:100,000, sheet 7490 (Edition 1), Series T683; Field Survey, 1972.

TABLE 6.13 INCOME FROM CASH CROPPING, 1970-71, BY CENSUS DIVISION

Census division	Income from rice (\$)	%	Income from coffee (\$)	%	Total income (\$)	%	Income per adult male (\$)	Adult males	%
Urat	7,167	43.7	23,436	42.6	30,612	42.9	22.02	1,390	22.3
Wam	1,481	9.1	19,951	36.3	21,432	30.1	18.97	1,130	18.1
Kombio	2,368	14.5	2,417	4.4	4,785	6.7	5.50	970 ^[a]	16.1
Urim	516	3.2	1,583	2.9	2,099	2.9	3.40	618	9.9
Gawanga	4,823	29.5	7,559	13.8	12,382	17.4	11.27	1,098 ^[a]	33.6
Dreikikir	16,364	100.0	54,946	100.0	71,310	100.0	11.44	6,232	100.0

Notes: SPCA rice and coffee receipts 1970-71; DDA village censuses, Dreikikir Patrol Post.

Source: Number of adult males for which income data are available.

The 618 men who live in the Urim area and comprise 10 per cent of the total adult male population, received only 3.0 per cent of the money (Table 6.13 and Figure 6.16). Monetary income from cash crops in Urat villages was double that in any of the other divisions and over six times that of the lowest income area, the Urim.

Sixty-five per cent of the total income from cash cropping in the Urat census division was derived from coffee sales (Table 6.14 and Figure 6.17), and in the Wam villages in 1970-71, rice sales provided only 7 per cent of the money received. In the Kombio area however, rice sales accounted for almost 50 per cent of total cash received. Similarly, Gawanga growers received almost 40 per cent of their total income from rice sales. In the Dreikikir area as a whole, of the 71,310 dollars received in 1970-71, 54,946 dollars were for coffee and 16,364 dollars for rice.

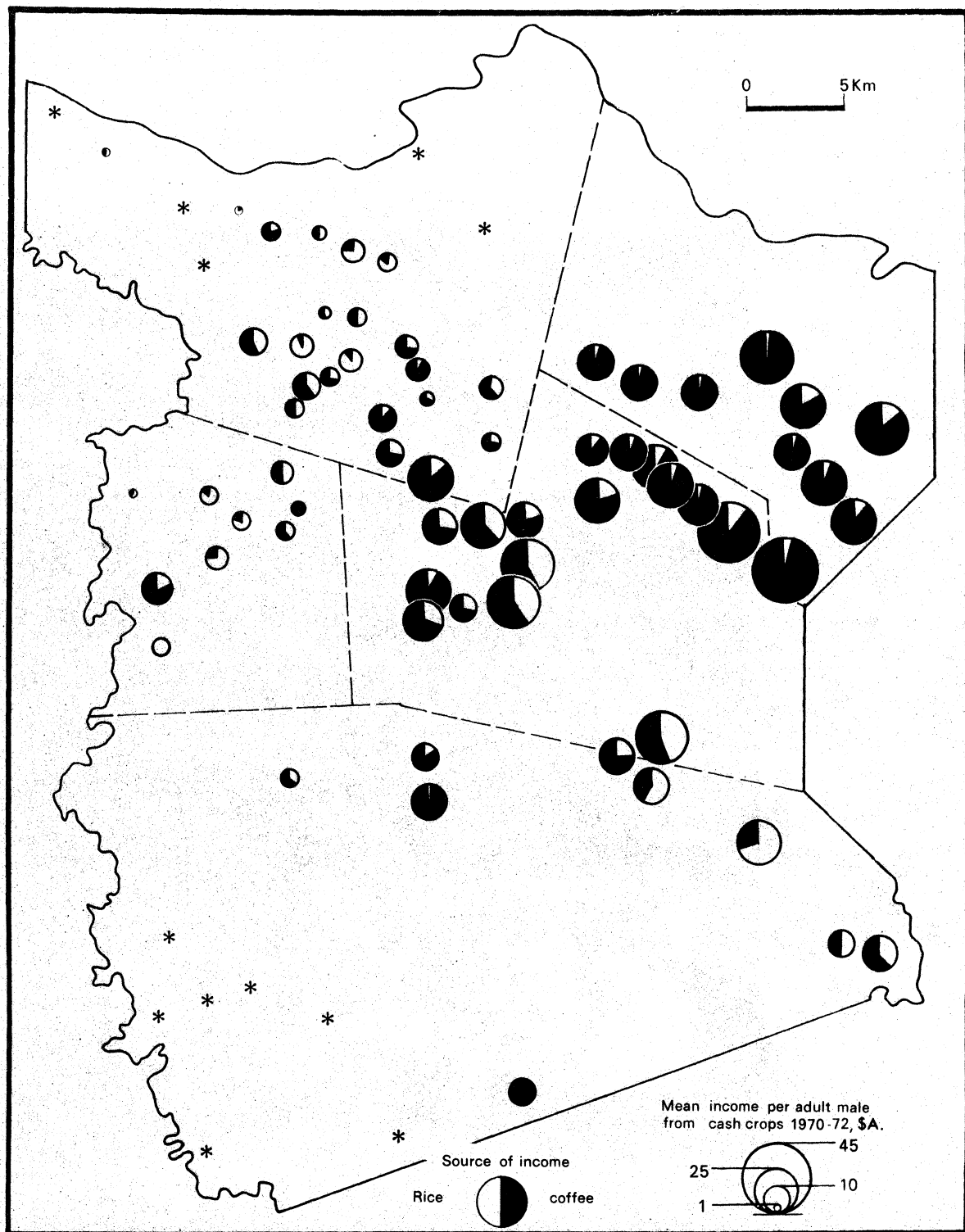
TABLE 6.14 PROPORTION OF MONEY INCOME FROM RICE AND COFFEE, DREIKIKIR, 1970-71

Census division	Income from rice (\$)	%	Income from coffee (\$)	%	Total income (\$)	%
Urat	7,167	23.4	23,436	65.2	30,612	100.0
Wam	1,481	6.9	19,951	93.1	21,432	100.0
Kombio	2,368	49.5	2,417	50.5	4,785	100.0
Urim	516	24.6	1,583	75.4	2,099	100.0
Gawanga	4,823	39.0	7,559	61.0	12,382	100.0
	16,364	22.9	54,946	77.1	71,310	100.0

Source: SPCA rice and coffee receipts, 1970-71.

Two points arise from this data. First, incomes from cash cropping fall rapidly, away from those areas which have the best access to the highway and the patrol post. As no other outstanding or regular sources of monetary income are available to people living in these more isolated villages, it is safe to assume that personal incomes that are about equal to those represented in the tables above. This pattern is of course, directly related to the production of the two crops concerned, as detailed in previous sections, but it provides a good overview of participation in bisnis in 1971. Second it is apparent that people in the more isolated villages grow more rice than coffee. This was against their interests, because the weight-to-value ratio of coffee was some five times higher than for rice, and these

FIGURE 6.17 MEAN INCOME FROM CASH CROPS 1970-72, AND PROPORTION OF INCOME FROM RICE AND COFFEE, 1970-71



Source: Sepik Producers Cooperative Association rice and coffee purchases receipt books 1970-71; share register 1971-72. Department of District Administration Census Books, Dreikikir Patrol Post, 1972.

are the villages most affected by human portorage. Although growers are rarely aware of prices in terms of cents per kilogram they are all very aware that a full sack of coffee is worth much more than a full sack of rice. It is not possible to neatly account for this behaviour. However I believe it to be associated with the perceived costs of adopting coffee and the generally lower levels of interest in bisnis in these villages. Rice growing is the sort of activity which can be practised one year and not the next, whereas coffee involves a relatively high and long term investment of labour, which many of these men are not yet convinced is the answer to their problems. This matter is taken up again in Chapter 8, where it is argued that interest in bisnis is related to access to information moving into the area from outside, access to new goods in stores, and raised perceived needs.

The establishment of a second cooperative society in the Dreikikir area followed the introduction of coffee. Bisnis leaders had remained in contact with leaders of the Supari Rural Progress Society, and through them, with DASF officers. The coffee planting project had been promoted through them, and extension officers then suggested that they should begin thinking about a new cooperative. In 1964 committeemen were appointed in each village and meetings were held.

The driving force behind the establishment of the new cooperative was Mwalhiyer at Tumam village. Anton's fortunes had suffered considerably as a result of the failure of the Brukham mill and the Dreikikir section of the Supari RPS. He had been gaoled on an adultery charge, and was also accused of stealing the share capital subscribed to the Supari RPS. He was cleared of this by DASF officers, but many people believed the accusation was true (see Appendix C). At first there was resistance to the establishment of another cooperative. Mwalhiyer describes how people at village meetings accused him of being responsible for the loss of money in 1958, but by 15 November, 1967 when the Dreikikir Rural Progress Cooperative was registered, 607 people, 57 of them females, had paid 10 dollars each, in share capital and become members²⁷.

27. File 23-3-9/1, 'Rural Progress Societies', DASF, Wewak.

Of these 464 were from Urat villages, 71 from Gawanga, 30 from Kombio and 28 from Urim. All but one of the 57 women were from the Urat. Fourteen men from Sahik and Whaleng two Yambes speaking villages in the Wam census division also joined at this time. Other Wam and eastern Urat villagers had maintained their membership in the Supari RPS. The 1967 membership lists of the Supari Society are not available. In its first year of trading, 54 per cent of rice sold to the new Dreikikir cooperative came from non-members, compared to 22 per cent in the Supari RPS. By 1968, members totalled 796 and non-member sales had fallen to 44 per cent. By 1971, a total of 2,383 people had joined the cooperative (Table 6.15 and Figure 6.18). The majority of members were Wam and Urat villagers, where, in some cases, membership was over 100 per cent of the adult males in the village. No record is available of the sex of members, but many Urat women are members and it is likely this has also happened in the Wam.

In 1971, 17 per cent of members did not make sales to the cooperative. The greatest level of non-participation occurred in Kombio and Urim villages, but it was surprisingly high in the Wam as well. It is possible, considering too the 141 non-participants in the Urat, that in the Wam and Urat, non-participants are women²⁸. Figure 6.17 shows however, that the highest levels of non-participation in the Wam occurred in Selnau and Hambini, the most isolated villages. In general however, the pattern of membership and participation in the cooperative is similar to that for cash cropping presented in preceding sections. As a form of bisnis, cooperatives remain closely identified with cash crops.

CONCLUSION

The foregoing material allows a number of general statements to be made about the diffusion and adoption of bisnis in the Dreikikir area.

Bisnis must not be equated with Western concepts of business. Bisnis is a broad concept manifested in a number of ways, which include producing crops for sale, and investing money in enterprises which it is believed will cause large amounts of money to accrue to the individual. The processes by which the money is generated are poorly

28. Observations at Tumam support this argument. Many who hold membership cards do not use them, but sell in their husband's name. They bought membership because, as occurred earlier, people believed wiri mani would be paid to all members. But to maintain working capital, bonus share issues have been more common than cash dividend payments.

TABLE 6.15

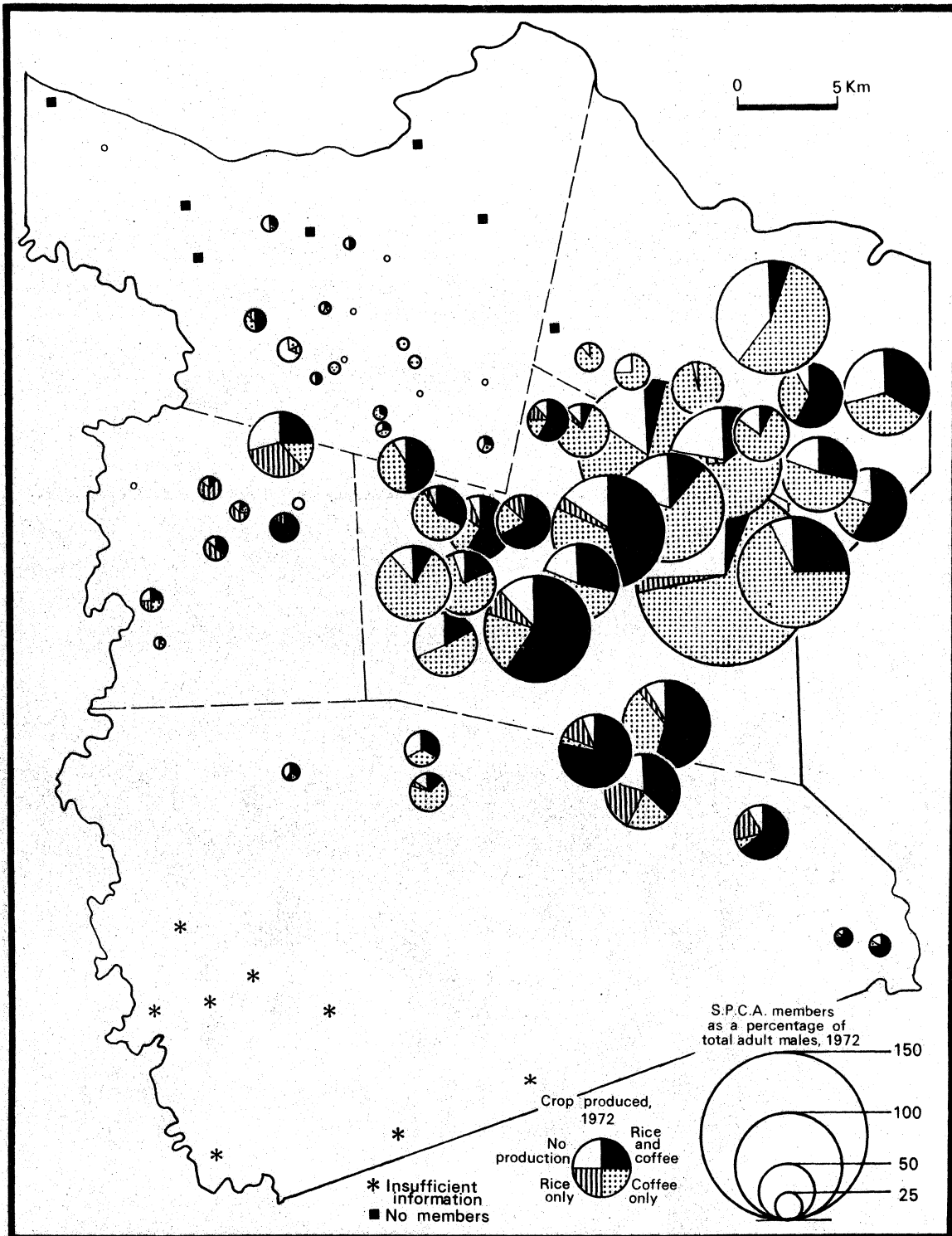
PARTICIPATION IN CASH CROPPING, 1971^a

CROPS SOLD	CENSUS DIVISION									
	KOMBIO		WAM		URIM		URAT		GAWANGA	
	No. of growers	%	No. of growers	%	No. of growers	%	No. of growers	%	No. of growers	%
Rice and Coffee	28	24.1	115	21.0	30	25.2	374	35.6	222	40.4
Rice only	4	3.4	1	0.2	52	43.7	43	46.9	56	10.2
Coffee only	48	41.4	327	59.8	12	10.1	493	4.1	169	30.7
Nil	36	31.1	104	19.0	25	21.0	141	13.4	103	18.7
TOTAL MEMBERS	116	100.0	547	100.0	119	100.0	1051	100.0	550	100.0
Total Members as a percentage of adult males	11.5		48.4		21.9		75.6		26.3	

NOTES: a. Table excludes production of rice and coffee by non-members of the Sepik Producers' Cooperative Society.

SOURCE: Calculated from data included in Appendix B.

FIGURE 6.1 MEMBERSHIP OF THE SPCA, 1971 AND CROPS PRODUCED BY MEMBERS 1971-72



Source: Sepik Producers Cooperative Association share registers, 1972.
Department of District Administration Census Books, Dreikikir Patrol Post, 1972.

understood, if understood at all, by many people. When bisnis was first introduced people believed it was the form of behaviour which Europeans used to gain access to wealth and power, and because of this they adopted rice growing enthusiastically. Their activities were described by a number of European witnesses as being akin to 'cargo cult' or millenarianism. The people who led the bisnis movements recognise that many people misjudged the benefits which bisnis would bring. When people found rice growing was not bringing about the changes they believed it would, they ceased planting. In attempting various bisnis enterprises, people have learned to have more realistic expectations about the potential of bisnis, and as a consequence they are no longer as enthusiastic about bisnis as they once were.

Information flow through the information fields described in Chapter 4 has influenced the diffusion of bisnis. In the case of rice, an ideal site for a primary diffusion centre was determined by the chance location of the Supari salt spring. A better site could hardly have been deliberately selected from which to diffuse bisnis ideas. The location of Supari advantaged Urat and Wam villages and they were the first to plant rice, and have continued to grow more rice for a longer period, than villages elsewhere. Coffee was diffused from two main points, Dreikikir Patrol Post and the first Bumbita-Muhiang village east of the Dreikikir area, Bonahoi. Dreikikir Patrol Post is identified in Chapter 4 as an important information exchange and pole of attraction and Bonahoi is on the Maprik to Dreikikir road. Although coffee diffused in a different pattern, the spread through time was similar to rice, Wam and Urat villages planting first and other areas later.

Bisnis was introduced and promoted by a small group of innovative and enterprising men. Most of them had in common a background of many years away from their villages, working as labourers, foremen, domestics, policemen and soldiers. They saw more clearly than their less experienced fellows, the inferior and subjugated position of Papua New Guineans in the colonial society and economy, and they frequently presented their enterprises, their "wok" (work), in these terms. That they were ambitious and sought personal power and prestige there is no doubt. They challenged the established authority in the villages, luluais and traditional big-men, but they challenged them within the terms of what they presented as a larger struggle. They were able to persuade many men to their cause by

referring to the struggle which they maintained, blackmen must initiate with white men, a struggle to gain the respect of white men so that they, in turn, would view Papua New Guineans as their equals and as worthy of receiving the knowledge of the secrets of power, wealth and the good life. The struggle was not to drive white men from the country, nor was it overtly anti-European. Rather it was a struggle to win respect. The struggle continues today, although the objects and the means are viewed in subtly different ways. Urban dwelling, salaried Papua New Guineans are now an emerging class and in many cases, village people find their relationships with them are little different to those which they had with Europeans. It is no longer certain whether the struggle is one to gain the respect of this class of people, or to find a source of wealth and power which will enable villagers to become independent of them. Villagers are becoming increasingly aware that the establishment of a central bureaucracy has meant less, not more, independence for them. Nor is bisnis now viewed as the most promising road to the source of power. Generally, people believe other methods must be found. Some of their attempts to find them are described in the next chapter.

So bisnis activities in the Dreikikir area in 1972 continue because village people now need money and until a better way of obtaining it is found, they have only coffee, or migration to a town, as a means of obtaining it. They have council taxes to pay, and they are now subject to many more needs, imported foods, clothes, household utensils, and luxury items such as radios, and liquor and tobacco. The spatial distribution of bisnis, as described in last sections of this chapter, are a function of access to a main centre, which determines the quantity and channels the flows, of goods, and information about new goods, through the area in a non-uniform manner. Those villages with best access to these flows are also those which first became involved in bisnis. Whether or not it is truly an advantage to them to have good access to such flows I cannot answer. If change is inevitable, and if the pattern is to be one of increasing dependence, then the answer is probably, yes, it is an advantage. There is little doubt that villages with the best access are thought by people in general, to be advantaged. But, as the next chapter demonstrates, they are the very villages which are struggling the hardest to find the "true road" to the sources of power which would free them from their links with the centre which they are now presumed to 'enjoy'.

CHAPTER 7KAGOINTRODUCTION

The activities described in this chapter are commonly called 'cargo cult'. To the layman in many industrialised countries, 'cargo cult' has come to mean the irrational, pitiful, stupid, futile and sometimes funny, behaviour which 'natives' in far away places indulge in, in an attempt to obtain some of the material goods they see in the possession of outsiders. This term is inadequate to describe the type of behaviour in which I am interested. Instead I have used the Pidgin word 'kago', which is defined as a Melanesian form of millenarianism.

Kago and Millenarianism

Millenarianism is not easy to define. Cohn (1970) suggests millenarianism is simply a "convenient label for a particular type of salvationism". He establishes that millenarianism is a form of human behaviour which has manifested itself at many times and places in the past. There is, Cohn (1970,13-14) says,

"room for infinite variety: there are countless possible ways of imagining the Millenium and the route to it. Millenarian sects and movements have varied in attitude from the most violently aggressive to the mildest pacificsm and from the most ethereal spirituality to the most earth-bound materialism".

In Melanesia, millenarian activities have been called 'cargo cults' because material wealth is often the overt ends of the behaviour indulged in. As Burridge (1971, 48), describes them,

"The prophet (either explicitly or implicitly) promises an end to work and the advent of the millenium in terms of the arrival of quantities of European goods conditional on carrying out a variety of rites and activities. Usually the goods do not arrive. At other times however, they do arrive. Thus when, as an act of faith the community has destroyed its crops and means of livelihood, a desperate administration often comes to the rescue...In either event the movements recur and have been occurring in much the same way for nearly a century."

Burridge observes that any group of people would like free access to material goods, but because Melanesians know better than most, that wealth and status come from physical labour and personal skills, their apparent obsession with obtaining them without labour should cause observers to query whether this behaviour has a deeper

and symbolic meaning to the participants. Such questions invariably lead one to enquire what are the causes of Melanesian millenarianism?

At least one student of millenarism, La Barre (1971), believes that "no particularist explanation - whether political, military, economic, physiological or anthropological - can exclusively and exhaustively "save the data" of any single crisis cult". La Barre (1971, 11), in calling these movements "crisis cults" offers, what is in fact a general explanation; he defines "crisis cult" as,

"any group reaction to crisis, chronic or acute, that is cultic. "Crisis" is a deeply felt frustration or basic problem, with which routine methods, secular or sacred, cannot cope. Any massive helplessness at a critical juncture may be a crisis. The "cultic" is the indisposition to accept either disruptive feedback or the ego-critique of experience, but instead, supported by wish need of fellow communicants, to indulge the appetite to believe."

That the "crisis" in Melanesia, and in particular in Papua New Guinea, has been contact with Europeans, is generally accepted as the cause of most Papua New Guinean cults (Belshaw 1950, 1954; Guiart 1951, 1952; Berndt 1952, 1954; Burr ridge 1960, 1969; Lawrence 1954). The crisis is precipitated by the refusal of Europeans to accord Papua New Guineans the "prestige and integrity of being human, moral and aspiring to fulfil the quality of one's humanity" (Burr ridge 1969, 171). Burr ridge believes millenarian movements offer people "a new situation and status which, providing the basis of a new integrity, will enable life to be lived more abundantly". Some men recognise before others, the loss of integrity and respect, and other men have visions of a situation in which these problems will not exist.

"...in every age, sensitive, aberrant, creative individuals, in their personal anguish with life, and defrauded somehow of the comforts to be expected from the old beliefs, come close to awareness of the dire contingency of all symbols. And then they imagine their own, which being nearer to the contemporary need, may spread like an epidemic of the mind..." (La Barre 1971, 27).

The impacts described in Chapter 3, labour raids, government control, missionaries, plantations managers, towns and the war, all served to impress upon Papua New Guineans their inferior positions relative to the newcomers. Resistance with force was quickly put down, often with needless bloodshed, and any form of passive resistance was punished with gaolings. In 1972, many Dreikikir people remained very sensitive to, what Burr ridge terms, their loss of integrity. They could not understand why Europeans would not take them seriously or respond to them as humans. Some Tumam men suggested in conversation

that it was their living conditions which were at fault, and if only they had better houses, furniture and food, Europeans would come and live with them.

These attitudes made parts of my fieldwork easier. An effective way of obtaining cooperation in villages in which I was not well known, was to stay with the councillor or with some other villager, rather than in the official rest house, or haus kiap. A European who behaved in this way was worth talking to. Numerous stories were told to me about Europeans chasing people out of the rest house when they wished to eat and sleep. At Tumam, one older man who was formerly a luluai remained aloof, or was overly polite, even after I had been in the village for three months. In order to bring the problem out into the open, I invited him into my house for tea one morning when he was alone in the village. (Most people did not need a specific invitation but wandered in and out at will.) He hesitated, but came. After his second cup, he suddenly burst out that this was the first time he had ever drunk tea with a white man. He then spoke angrily about his treatment by administration officers, who required him to stand to attention outside the haus kiap, and to help with censuses and courts, but who never shared their food or their companionship in the ten years he was luluai. Other cases of men who had been gaoled, beaten or abused by Europeans and who had never forgotten it, were often brought to my notice. The depth of bitterness which lies beneath the surface in Papua New Guinea is probably considerable.

At least one psychiatrist has described the results of what he defines as "tensions generated by the contact situation" (Sinclair 1957,18). He interprets the "compliant" and "apathetic" attitudes ascribed to many Papua New Guineans as symptoms of withdrawal and the suppression of aggression, among other things. He describes a number of cases in which doctors have been placing Papua New Guinean patients under anesthesia, and the patients, while unconscious but not fully anesthetised, have begun shouting angrily about Europeans with whom they have contacts. Policemen with impeccable records aimed their abuse at their European officers; employees who were normally friendly and cooperative, directed their remarks at their European employers.

The tensions of the contact situation may have also highlighted older problems. The problem of death for example, which may never previously have built up to a crisis point, became more important after contact. Europeans belittled customary ceremonial and ritual

much of which played a mediating role between the living and the dead. Few Europeans who are aged and infirm are seen by villagers. Tumam men asked me in all seriousness whether Europeans became old or whether they remained perpetually young until they proceeded to life on another plane. When the 70 year old mother of a European woman at the patrol post visited from England, many men and women went to see her, the first old European they had experienced. Furthermore, Tumam men also believe they have become physically smaller since contact. They insist, in the face of all reason, that their ancestors were bigger in stature than they are. The coming of Europeans has made them grow smaller. Some jokingly suggested one day they would grow no bigger than children.

All kago movements within the Dreikikir area have been seeking the sources of power. The earlier movements sought the supernatural sources of material goods, because people believed that if they possessed these goods Europeans would respect them, but if they then still refused to treat them as humans, they would have rifles and other weapons with which to either force Europeans to respect them, or drive them out of the area. Later movements sought the sources of money and political power, evidence of a changing awareness of the location of power in modern Papua New Guinea.

KIRAPKIRAP, 1956.

The first overt manifestation of kago activities after the war appeared in 1956. The 1956 movement is known locally as kirap-kirap, a Pidgin word derived from kirap, to get up, or be aroused, which is said to describe the dancing in which people participated. Between 1950 and 1956, bisnis had occupied most people's minds, but by 1956, it was apparent that bisnis was not going to bring about the changes that bisnis leaders promised, nor satisfy the expectations that many villagers had created within themselves. It was into this environment that a few men injected ideas of the millenium which spread rapidly and widely.

Sources

The 1956 movement originated with two Dreikikir men, Wahute of Selni village and Mahanung of Tumam (Figure 4.1). Together they developed a "myth dream", drawing on Torricelli myths and legends, bible stories, and their own interpretations of the racial relations in Papua New Guinea. Briefly, the "myth dream" identifies the north-west New Guinea area as the place where God created the earth. He did this at a location which Mahanung has long searched for, somewhere in

the Torricelli Mountains between Aitape and Dreikikir. He first created a man and a woman. They had four children, three males and a female. The eldest male committed sin, although the act is not identified. The other two brothers sailed with Noah to Australia and England (and, after my arrival, to New Zealand). The sister married a fourth male of unknown origin, and sailed to America. There, their skins became white, they ceased to have to work in the gardens and sit on the ground in huts, the women no longer suffered the pains of childbirth, sickness was unknown and death was no longer something to be feared, because the dead were raised again and reunited with the living. Europeans were thus, the brothers by direct descent, of Papua New Guineans, but they did not know this. In their ignorance, they treated what were in fact their elder brothers, as dirt. If they could be shown the genealogical connection, they would realise their obligations to their brothers. The man and woman and their children were identified with local ancestor's heroes, including one called Noa, who according to the myth dream, transported the younger brothers to Australia and America in his ark. When Papua New Guineans died they were reunited with their white skinned relatives and enjoyed an existence characterised by peace, goodwill, and a bountifulness of all the needs and pleasures of life. The overt object of the movement was to contact these dead ancestors.

Both Mahanung and Wahute¹ had travelled widely before and during the war (see Appendix C). Wahute worked with surveyors and geologists prospecting for oil in the Sepik District before the war and visited many areas known as centres of millenarian activity. He was also convinced that his European employers were searching for an underworld, using magical instruments. In his view, they were "glassing" the ground, that is looking through the surface by magical means. Mahanung had been taken to Jayapura by the Japanese and had also worked in Rabaul. Both had contacts with the missions, Wahute with the Catholics before the war, and Mahanung with the South Seas Evangelical Mission at Dreikikir where he attended an adult literacy

1. My first meeting with Wahute occurred after I began a tape-and-compass survey of Tumam village. Mahanung immediately asked if he could help, and seemed fascinated by the compass, a new Swedish Suunto with a shiny case. Two days later Wahute arrived from the Wam, a days walk away and Mahanung introduced us. He had sent for him from Selni. They both spent some time peering through the compass at the surrounding forest and nodding knowingly to each other.

and bible study class. He was judged by missionaries at Dreikikir in the early 1950s, to be their most promising local contact. Wahute and Mahanung had not met before Wahute gained recognition in the area as a glasman, a diviner of sorcery.

In 1955 Wahute was working for the bisnis leaders at Supari, protecting them from sorcery being worked on them by jealous rivals. He worked in villages in the Urat, Wam and Bumbita Muhiang areas, identifying sorcerers and men who had in their possession black magic. During this period his young daughter died and in his grief he suffered a fit. (Earlier in his life he experienced an illness which also appeared to be associated with fitting.) During this fit he thought he left his body as a spirit, and travelled to the land of the dead, where he spoke with his daughter. He then made a number of unsuccessful attempts to revive her. At his daughter's funeral Wahute's hysteria spread to other men, who began shaking and fainting. When word of Wahute's attempts to bring his daughter back from the dead spread, he was asked to visit a 'dead' woman at a small hamlet of Musingwik, near Dreikikir. There he claims to have brought the woman to life for a few minutes. Witnesses believe they saw a shining light which they interpreted as the dead woman's spirit returning.

Meanwhile, Mahanung was at Musendai (his wife's birthplace) working on an airstrip the bisnis leaders were trying to build. Word of Wahute's actions at Dreikikir reached him through the Moiwhak luluai, Jenar. Together with Jenar, Mahanung walked to Selni to talk with Wahute. Mahanung took with him to Selni much of the "myth dream", which was the outcome of his attempts to relate his SSEM bible lessons to the local area. These early mission teachings were

"...very basic. God made everything, how sin came about through Adam and Eve, the birth of the Lord, the redemption of sin by the Lord, some of His miracles and works, and the death and resurrection of Jesus, and the application of these ideas to the world today".²

Mahanung was also given for his own use, a small set of comic strip bible stories and writing copy cards, manufactured from old United Nations posters. In photographs of world leaders he found on the backs of the cards and in pictures in the comic strips, Mahanung identified a number of his own dead ancestors. He was also convinced

2. Interview with Mr John Pearce, SSEM, Balif, 1972.

that sin, represented by almost all aspects of customary life, ceremony, exchanges and magic, was the greatest obstacle preventing Papua New Guineans from achieving the good life which the ancestors were living.

The movement which Mahanung and Wahute spread was characterised by a number of activities. Cemeteries were cleaned and decorated and watch houses were built nearby, so that any signs of the dead returning to life could be observed immediately. All customary ritual and magical objects, including body decorations, shell rings, bones, weapons, and plants and herbs, were destroyed. In a number of villages haus tambarans were burned. Followers of the movement danced, jumping on the spot and shaking their heads violently up-and-down. During dancing sessions many people became hysterical and after frenzied jumping, fell shaking to the ground where they passed into unconsciousness for short periods. People claimed they had seen and spoken with dead ancestors while unconscious. Mahanung, Wahute and other men who became local leaders, were capable of inducing hysteria and unconsciousness by jumping with people, blowing on their faces, waving leaves before their eyes, and persuading them to hyperventilate. Followers also marched and drilled as soldiers, carrying sticks as rifles. The leaders barked out commands while stamping their feet and violently whipping their heads backwards and forwards. Deep bowing, in the fashion of Japanese soldiers was also carried out. Religious services were conducted in cemeteries, including prayers, hymns and traditional chants.³

3. The origins of most of these activities are not difficult to explain. Cemeteries were an innovation enforced by the colonial power, and people understandably believed they were more than just a place to dispose hygienically of the dead. The destruction of all ritual and magic objects was justified because the dead, who had ceased to participate in such sinful customary activities, would be frightened by their presence in the villages. SSEM missionaries continually stressed the sinful aspects of the old culture. Marching and drilling were common activities in Papua New Guinea during the war years, but frequently their point escaped Papua New Guinean observers who concluded that they must be ritual activities.

The hysteria and unconsciousness induced by the dancing are best explained biologically. Dancing, singing, deep breathing, head nodding, and the waving of objects before the eyes are worldwide methods of inducing trance states in humans. Some humans are more susceptible to this sort of stimulation than others, and the factors which determine who is susceptible are thought to be genetically controlled (Gray 1971). Groups who have experienced chronic stress and anxiety or societies in which rapid change, or social and economic instability are rife, are frequently associated with outbreaks of mass hysteria
(cont'd)

Diffusion of the 1956 Movement

The pattern of diffusion of the 1956 kago movement was determined largely by the movements of Wahute and Mahanung, and the locations of other men who grasped opportunities offered by the new movement (Figure 7.1A). From Selni, the movement first spread to Albalung village in the Urim census divisions. Jenar, who accompanied Mahanung to Selni to visit Wahute, had heard of a woman at Albalung who was dancing and singing, and was said to be possessed by the Holy Spirit. The two men walked to Albalung. There they found the woman was mentally unstable, but another woman had 'died' and Wahute brought her back to life. During this ceremony some men from Kilmanglen village to the west became hysterical and rapidly many other people in the village began jumping and singing, including Mahanung, who was affected for the first time.

While Wahute and Mahanung were returning to their homes, their ideas and activities were spreading rapidly in the Urim villages. The men who had visited Albalung returned home and began dancing, attracting men from all surrounding Urim villages. Minilam, a man from Laningwap, (see Appendix C) became involved and quickly took over the leadership of the movement, organising the Urim villagers, who massed at Laningwap.

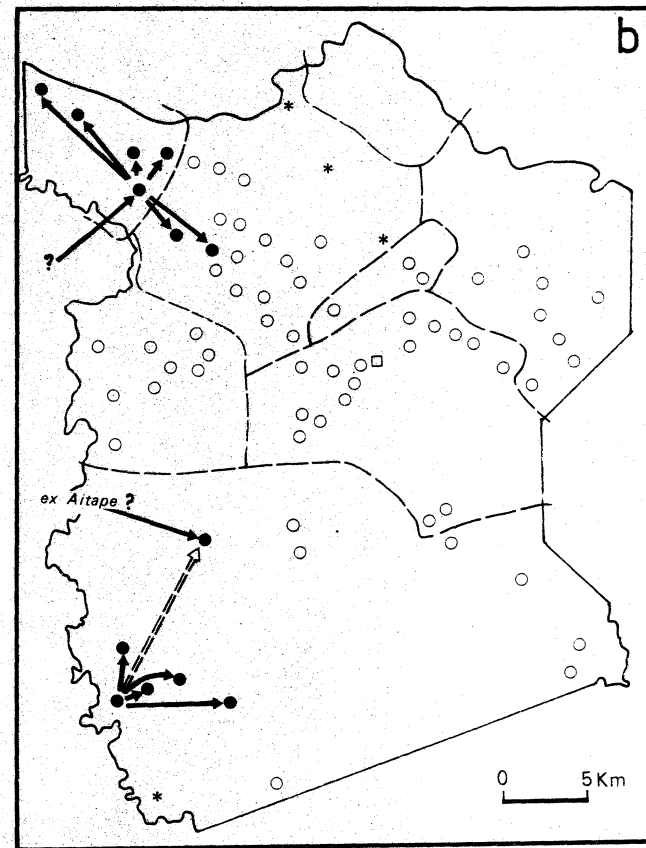
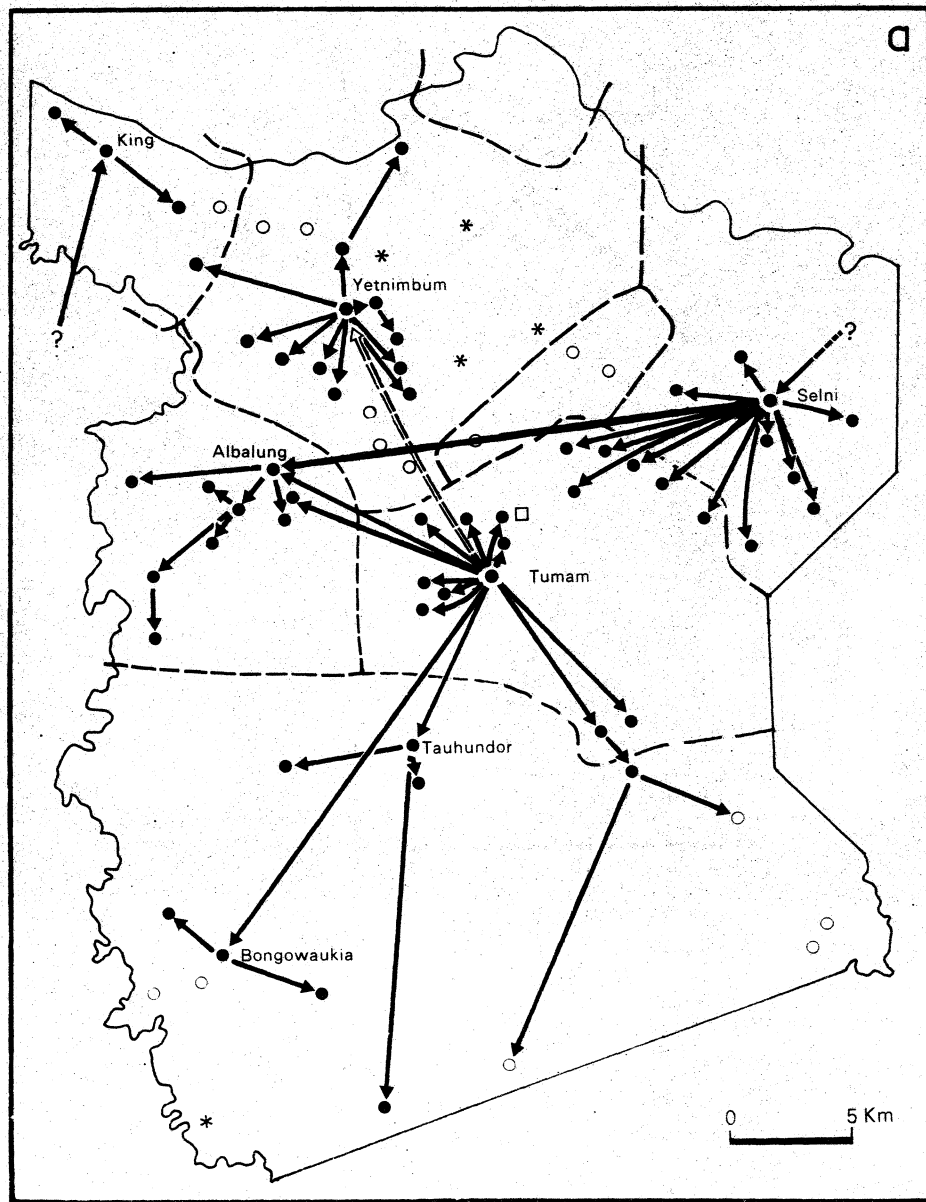
Wahute returned to Selni and took the movement from there to most Wam and eastern Urat villages. Mahanung spread the ideas from Tumam to the balance of the Urat villages, and to the Tau villages, where an ex-policeman, Akorika became a local leader. The movement spread to the Gawanga villages from Apos, Tau and Tumam. It was adopted most enthusiastically in the southwestern villages where an aid post orderly Komalako, had introduced the ideas to Bongowaukia from Tumam. He met Mahanung at Tumam while going to Dreikikir Patrol

3. (cont'd)

in which some people become frenzied, shake violently and pass into unconsciousness. (Lewis 1971; Sargant 1957, 1973, Gray 1971.) The behaviour exhibited at Dreikikir, as described by village and European observers, is similar to that manifested at Vailala in 1919 (Williams 1923). It is probable that Wahute and Mahanung stumbled onto these activities by accident, for it is unlikely that either of them ever observed this behaviour elsewhere in other groups of people. Both deny this, and state God's spirit entered them and other people, causing the symptoms, which are commonly associated with spirit possession elsewhere. The Dreikikir people had since contact, experienced a series of traumatic events, climaxed by the war. In 1956, bisnis, upon which they had placed so much hope, had collapsed. They needed only a gentle nudge to send them into the behaviour which characterised this movement.

FIGURE 7.1 A. DIFFUSION OF THE 1956 MOVEMENT

B. DIFFUSION OF THE RED BOX MOVEMENT



- Direction of movement of information
- Adopting village
- Non-adopting village
- No information
- Unconfirmed link
- Dreikikir Patrol Post
- Linguistic boundary

Source: Fieldnotes, 1972

Post to replenish his medical supplies.

The movement did not spread to Kombio villages in 1956. In 1958, however, activities and ideas almost identical to those manifested in the 1956 movement appeared first at Yetnumbum village and spread in a star-shaped pattern to 11 other villages. The leader of this movement claims God spoke to him in his sleep and told him what to do. But in 1958, while walking north through the Kombio in search of the grave of a mythical hero and the entrance to the underworld 'heven', Mahanung told people in many villages about his ideas.

Also, in 1958, the villages of King and Mup, to the north west, experienced an outbreak of hysteria and dancing, which originated in the Wapei villages to their immediate south. Men at King village claim the ideas spread into the Wapei villages from the Dreikikir area, possibly from Urim or Kombio villages.

Adoption of the 1956 Movement

The 1956 movement was adopted with greater enthusiasm and persisted longer, in some areas than others. In the eastern Urat and Wam villages, people followed Wahute's instructions to destroy decorations and magic, and began dancing. But they were interrupted by the intervention of the bisnis leader Kokomo, who forcefully stopped any further participation. Kokomo was still engaged in the rice project at Supari, and was attempting, with only partial success, to maintain the peoples' interest in it. Wahute had once had his cooperation, but when Wahute's "work" appeared as if it was going to distract Kokomo's followers from bisnis, Kokomo reacted and forbade Wahute from interfering in the villages under his influence.

However many other bisnis bosbois saw the movement as more promising than bisnis as it gave them an opportunity to regain pride and position lost by the collapse of the rice growing venture. Minilam was one such man. He organised the Urim villages into building a special house at Laningwap, in which the new wealth would be stored, and he showed them a crucifix and vestments⁴, which he said God had sent to him as a sign that they would soon receive everything they desired. He also claimed to have received a rifle and ammunition, but

4. Minilam was gaoled for the theft of these items from a priest's house.

he did not show these items to anyone. He promised to supply arms to all village men, and told his followers that they would soon receive "power". The phrase "kisim pawa", that is, "to obtain power", was heard frequently at Dreikikir in 1972, both in relation to the 1956 movement, and, to the activities of the Peli Association described below. Few men could provide an adequate explanation in Pidgin of what they meant by power, but it is an indication that they were seeking more than mere 'cargo'. Minilam, who served in the Pacific Islands Regiment during the war, told me "power" was "bombs and guns and that sort of thing". He was one of the only men who expressed clearly, the situation in which the villagers had so often found themselves in the past; on the wrong end of a gun.

In the Gawanga villages, the movement was also received enthusiastically, with the exception of Daina village and the easternmost villages of Yubanakor and Apangai. Daina men saw people at Apos dancing and fainting and were so afraid they immediately went home. At Bongowaukia, however, Komalako, together with Akolasa, involved people from all the villages. They set up cane telephone lines to the cemetery, and maintained all-night, silent vigils. As frustration increased Komalako attempted to kill the resident European priest who was believed to be interfering with the ritual. He was arrested, but the movement continued, until in May 1956, a patrol from Maprik arrived and arrested all the leaders. At Tau, Akorika claimed sexual rights to all village women, in contrast to Mahanung at Tumam, who separated the men and women to prevent sexual activities. Thus in different local areas, different leaders placed their own interpretations upon the ideas they received.

Most people who participated were convinced that Mahanung had found a source of supernatural power and would be successful in bringing about the millenium. The actions of some men who, rather than destroying shell rings and magic plants, hid them in the forest and retrieved them after the movement had ceased, suggests that not all adopters were totally convinced. Resistance to the activities occurred, from bisnis men, and from naturally conservative men who were afraid of allowing themselves to be swept away in the hysteria. Some men were held by the arms and forced to submit to the trance inducing treatment, successfully, in some cases. Others say, that although they participated, they were "just trying it out".

Discontinuation

Kirapkirap ceased in May 1956 when an administration patrol arrived from Maprik and arrested the leaders and about 100 followers. The latter were released without facing a court, but the leaders were gaoled for terms ranging between six months and five years. In the villages, people stopped all overt activities but the ideas were not forgotten, and numerous small kago movements have appeared since 1956. Some have been too small to attract the attention of the administration, and others have resulted in the arrest of the leaders. Mahanung continued his work when released from gaol. Late in 1956, while returning to his home from Maprik, he passed through the Ilahita villages east of the Dreikikir area. A week later, a patrol was sent there to investigate kirapkirap behaviour and hysteria. He has since been arrested four times for kago activities. He has lost most of his followers because they are no longer convinced he has the ability, or the knowledge, required to bring about the millenium.

THE RED BOX MOVEMENT, 1963

In 1963, a new form of kago, the Red Box movement, appeared in the Dreikikir area. It is of interest because it first appeared in villages on the periphery of the communication networks, and it offers an opportunity to compare movement of information from the periphery to the centre, with information moving from the centre to the periphery.

The red box movement involved activities which have become common in many parts of Papua New Guinea, the filling of red wooden trunks with certain kinds of sticks, stones and dirt and the carrying out of rituals over them in the belief that when opened the contents of the boxes will have been transformed into goods or money.

At Dreikikir, these activities first appeared at Mahamsi, a Gawanga village in the far southwest. Waiengorome, an indentured labourer from Mahamsi returned home with information which he says was revealed to him as he was walking along a road near Kavieng. He had fainted and God had told him in a dream of the Red Box movement. He said that if men gave him their boxes, together with small amounts of money, he would fill them with money in a secret ritual. At a secluded site in the forest the bodies of a dead woman and an infant were buried. A special house was constructed over the graves and the suitcases placed in the house, and walled into a room without doors or windows. At the front of the house, in a small room, was placed a table, on which was a white cloth, flowers in a vase, and part of

the dead infant's intestine, in a tin. During the waiting period, Waiengorome's followers had to feed him and his assistants. Several attempts were made to fill the cases with money, but each was interrupted by a visit from an administration officer.

The activities at Mahamsi drew people from all the nearby villages, who brought cases and money to Waiengorome. The activities also appeared at Kubriwat. Informants there say it came from Aitape, but they were also aware of what was happening at Mahamsi. Informants at Mahamsi say they think it came from Aitape with a man whose name is not known, and who disappeared again after the activities finished. It appears more likely that the technique spread from Mahamsi, north to Kubriwat.

A brief period of red box activity also occurred in the northernmost Kombio villages. A man from Yakumbum returned from a visit to the Wapei area to the south with the ideas, which he says were brought to the area by a labourer returning from New Ireland, the same source as Waiengorome's ideas. The activities spread from Yakumbum to Mup, King, Koupem and Komala villages to the north, and Soaiyaip and Kumbum in the south. No administration intervention occurred, and the activities continued for some months. People then waited for a year before demanding the Yakumbum man reveal the money. When the cases were opened and were found to contain only stones and dirt, the leader was abused and escaped a beating only by promising to pay back the money given to him. This he has not been able to do, and in 1972, he was living in isolation, just outside the village, a broken man.

The red box idea entered the Dreikikir area at two, possibly three places, and aroused a good deal of enthusiasm in those places where it was adopted. The outstanding feature of the diffusion of this activity, compared with the diffusion of other kago and bisnis ideas, is the limited area into which it spread. Of the explanations available, the most satisfying is that the villages first adopting the activity were some of the least accessible in the Dreikikir area. The 1956 kago movement spread throughout the area within two months, but it was introduced at villages which were central in the area and which had the highest levels of access to other villages. These villages were also located to the east of a communications network which was moving information predominantly to the west. The first red box villages were at the extremities of this network, and as Loa and Kesbuk found with rice at Sambu in 1952, moving information against

the predominant flow is difficult. Information about red boxes also seems to have been introduced into the Palei villages to the west, but it did not diffuse east into the Dreikikir area.

Other factors which may have influenced the pattern of diffusion are the spread of coffee into the Urat and Wam villages in the early 1960s, and the movement of the Gawanga participants to Dreikikir after their arrests, late in 1964. After that, few Urat men would have been willing to adopt an activity they knew would result in their arrests. But in the year which passed between the introduction of the activity and the arrest of the Gawanga men, its spread was very limited. In the Kombio no arrests were made, yet, the spread was also limited. Waiengorome is a quiet person, but Akolasa who quickly became involved in the ceremonies, is a dynamic and ambitious man, very aware of his position in the community at large. It was he who organised villages around Mahamsi to participate. His relative isolation seems to be the only explanation for the ideas not spreading further. The northernmost Kombio villages received the red box ideas from the Palei in 1964, as they had received the 1956 movement earlier. Yet they did not adopt rice from Sambu. This suggests these villages are linked more intensely to Palei villages than to Dreikikir villages a possibility which was not investigated in the field.

THE PELI ASSOCIATION

The Peli Association is a kago movement which developed under the leadership of two men Danial Hawina and Matias Yaliwan near the Yangoru Patrol Post. In 1962 a series of concrete survey markers were placed on the summit of Hurun (Mt. Turu), a prominent peak north of Yangoru, by an American survey team. In 1969 they became the focus of a kago movement which spread from Yangoru to all parts of the East Sepik District and beyond.

Although Yangoru is 176 kilometres from the Dreikikir Patrol Post by road, information about the movement and its leaders began reaching the study area in 1969. In 1970, with the completion of the Sepik Highway and the provision of an all-weather route from Dreikikir to Wewak, the amount of information increased and villagers from Dreikikir began to travel to Marambanja village near Yangoru Patrol Post, where the leaders were living, to investigate various rumours reaching Dreikikir. The Peli Association is the only item in the study which has been diffused since the completion of the Sepik Highway, and its case provides clear evidence of the influence of the road

on the rapid diffusion of information.

Early rumours reaching Dreikikir from Yangoru were extremely vague and were limited to a general idea that something big was going to happen at Marambanja. One of the leaders, Danial Hawina walked through the study area in 1969, *en route* from Lumi, where he had been to investigate a rumour that a mountain had broken in half⁵. He spoke to one or two people. One was the councillor of Yakrumbok village. Hawina told him he was searching for the entrance to a subterranean "heven", but that the search was almost over, and that he would soon hear from him again.

In 1971 the movement gained momentum. Yaliwan announced that on the seventh day of the seventh month he would remove the survey markers. Hawina had been gaoled for four months in late 1969 for attempting to remove one. Whether it was the possibility of a confrontation with the administration or some other factor is not clear, but something sparked the imaginations of hundreds of people and fixed their attention on the movement and its leaders. People began contributing \$12 to the movement, (at this point it was not known as Peli) in the belief that Yaliwan had the ability to make money increase. Information about what people must do and not do on the 7th of July was received all over the study area, and is identical to the conditions listed in Hwekmarin *et al.*, (1971;13). People were not to smoke, chew betel nut, have sexual intercourse, swear, sound garamuts, hold weapons in their hands, or go to work. In addition a plague of insects, a long period of darkness and a great flood caused by the ocean inundating the land were predicted. All over the study area all but the most convinced skeptics stayed indoors all day. Some Dreikikir men travelled to Yangoru and were at the summit of Hurun when the markers were removed and carried to the Patrol Post.

After July 7th it became possible to join a movement known as the Peli Association for a 70 cent subscription. Village men, elected and self-appointed, began to act as kamiti (committee) or village representatives, and they collected money from new members, and travelled back and forth to Marambanja, carrying the subscriptions and bringing back information about the movement. The payment of these dues, \$12 and 70 cents, is what distinguishes a Peli member from a non-member. During 1972, the movement instructed its members to send youths and girls to Marambanja to work in a building known as haus paua (power house). About the same time a large artificial

5. A landslide near Flobum village, Lumi in 1969, left a scar visible for many miles. Pers. communication, Dr. W. Mitchell, University of

cemetery known as the Iden Memorial Gaten was constructed at Marambanja. Each village represented by a kamiti had a grave shaped plot on a hillside, lined with stones and sprinkled with white quartzite pebbles. Decorative plants were cultivated on each plot, and a cross, with a label naming the village and the kamiti, was erected at the head. On the top of the hill a large circle was encribed on the ground with stones and a flagpole erected in the middle. (The Gaten was said to be modelled on the war cemetery at Rabaul.) When I visited Marambanja for the second time in July 1972, kamiti from Tumam demonstrated how they carried out rituals at night and how they had received money from beneath the gravel laid on the top of their plots. They believed this money had come from beneath the ground. Surrounding the Gaten people from all over the East Sepik, and some West Sepik men, had built temporary houses out of local materials.

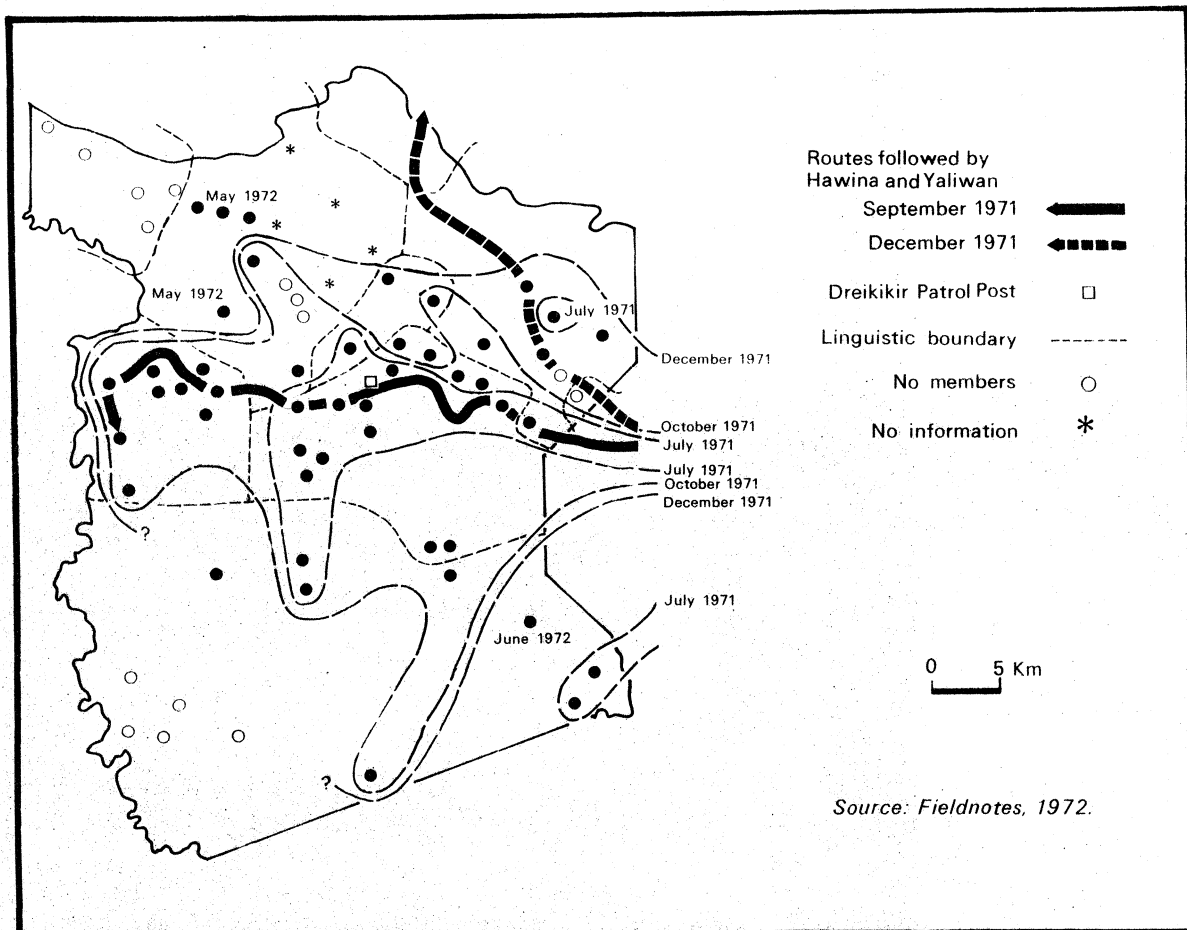
As the pressure on resources at Marimbanja increased, local villagers began to revolt and demand that Peli leaders get people to return to their homes. To do this the leaders issued kamiti men with suitcases which had a single shilling or 10 cent coin in them. The men were told to carry the cases home carefully and place them in their houses and wait. At a time to be appointed they would fill with coins. When this did not eventuate, a decentralisation of the haus pauas occurred. In these buildings, nocturnal rituals were performed by unmarried girls (flowers) and youths (workers), which mainly consisted of tipping money back and forwards between "dishes", or metal containers. Ten cent and shilling coins were used and they created a lot of noise, and did produce some money. At the beginning of each nightly session the coins were counted into the dishes and at the end of the session they were counted out again. The wokas (workers) and plauas (flowers) were under pressure to have more coins in their dishes at the end of a session than at the beginning, and some of them probably surreptitiously slipped extra coins into the dishes. The 'work' was carried out in darkness. Some men complained that their children were always asking for money, and it is likely they wanted it to put in their dishes. It was also possible for supervisors to slip coins into a dish in the darkness, with the object of increasing the faith and confidence of the young people, thereby bringing about the real creation of money. For Peli leaders emphasised that if everyone joined and if everyone believed, their objectives would be achieved.

Diffusion

Although many people heard vague things about events at Maramabanja in May and June 1971, the decision to adopt has been related to the payment of money to the movement. Two forms of payment occurred, those before the 7th July 1971 of 12 dollars and those after the 7th of 70 cents. Few people made the larger early payments, and they were made by individuals, rather than communities. The 70 cents payments was commonly made by all the people in a village together, once they had decided to join. Kamiti men in each village knew in what month their village had joined. Many are semi-literate and had written down when payments were made and how much, and from this information I was able to plot the diffusion of membership (Figure 7.2).

The first villages to join the Peli Association were those along the Sepik Highway west as far as Nanaha, Yambes village to the north, and the nearby Urat villages to the south. The movement of information about Peli into Tumam village is described in Chapter 4 and a similar pattern occurred elsewhere on the road. Villages off the road which joined before October 1971 often received information in an unusual manner. At Yambes, for example, a man from Samark walking home from a visit to Wewak told men about the Maramabanja activities and one man took a truck to Yangoru, remained for the 7th July events, came home and immediately began collecting money. At the Tau villages, which are two hours walk south of the road, the first information came from Tau men working at Muschu Island. A man from Tau was visiting them and when he heard the news he rushed home to Tau via Wewak to tell people. Other Tau people first heard about the events predicted for the 7th from a Tumam man who is the aid post orderly at Tau. At Yubanakor, a man from the nearby Gawanga speaking village of Sunuhu is married to a woman from Maramabanja village and he received information from her relatives and passed it on to Yubanakor, his mother's birthplace. At Selni a man visiting Hayfield SPCA headquarters spoke to a coffee buyer who had been working near Yangoru and brought home the news. The Urat and Wam villages on and near the road, received the information from PMVs travelling along the Sepik Highway. Most of those villages which joined between July and October 1971, sent men to investigate the validity of the information they were receiving, and many returned for the removal of the markers on the 7th July, when they heard about the formation of the new Association.

FIGURE 7.2 DIFFUSION OF MEMBERSHIP IN THE PELI ASSOCIATION



Between October and December 1971, the information spread further along the road and down a number of the side roads. Urim villages all joined in this period but their mass adoption is complicated by a visit from the Pelileaders, in September 1971. Danial Hawina and Matias Yaliwan travelled by truck to Yakrumbok school, spoke to a large crowd of men and then returned to the main road. In the week following that visit, all Urim villages joined the movement. On the Kombio road however, the spread of membership moved as far north as Yasip by December. The Urat villages of Musendai and Moseng also joined during this period, as did those Wam villages in which people joined. At Bana and Wareli a strong minded bisnis oriented councillor persuaded people against joining.

Only northern Kombio villages and Inakor in the Gawanga joined after December 1971. The Kombio villagers say they did not

hear about the formation of the Association, although they had heard the rumours circulating before the 7th July. When none of the predictions came true, they assumed nothing was happening. Inakor men heard of the Association from Yubanakor in May 1972 and had joined by June. They expressed concern that they were the last to join, because they thought they may also be the last to receive the rewards promised. Why they took so long to receive concrete information about the formation of the Association is difficult to say, but the slowness of information moving back towards the Sepik Highway from Yubanakor is interesting.

Membership in the Association was not adopted in a number of areas, in particular the southwest Gawanga and northwest Kombio. In the Gawanga, information about membership did not reach villagers until early 1972. The Gawanga candidate for the House of Assembly in the 1972 elections, Toromble Kabai, who was elected MHA, found that three men from Bongowaukia had paid 70 cents to the movement and were encouraging others to join, although there was not a great deal of interest. Toromble called a meeting of all villages and forced the three men who had joined to stand together on the mission airstrip. In front of the eyes of hundreds of other villagers Toromble addressed the meeting, called the three men fools, made them promise to return their membership "receipts", and asked everyone to stare at them for about four hours. Nobody else joined. Toromble had heard at Dreikikir that Peli was directing members to boycott the elections and he was quick to see an advantage in this move for himself, because he knew many Urat men were Peli supporters, and his nearest rival was an Urat man. Thus he wanted to ensure that all Gawanga adults voted, because he felt many would support him as a local leader.

In the Kombio villages in which there were no members, men were not interested. They had heard the rumours, but little else, and no one was stimulated enough to walk for two days and go on a PMV to Yangoru to find out. Most of my queries were answered with a smile and a shrug, as if my informants, who were helpful on other subjects, could not understand why anyone should be interested in such an ephemeral event. It was fairly obvious they were not receiving the quantity or quality of information received by villages nearer the main road.

The overall spatial pattern of the diffusion of membership is shown on Figure 7.2. The major difference between this figure and

those depicting the spread of rice is the early narrow tongue of adoptions which protruded along the road, in contrast to the broader, and slower, movement of rice. The visit of the leaders to the Urim, pushed this tongue further west earlier than it may have proceeded without their visit. They also visited the Wam on 25th December 1971, but Wam villages had already joined by this time. They accompanied Mahanung and Wahute in a search for the "throne of God". A hilltop in the mountains was cleared of undergrowth, a spring cleaned and the site positively identified from a line drawing in *Nupela Testaman*, *Revelesen* 22:1, page 850⁶.

6. The sources of the Peli Association have not been discussed at length because they are outside the scope of this study. They are obviously related to the wealth of millenarian ideas which abound on the northwest New Guinea coast. The idea of a subterranean "heaven" has long been a theme in Sepik kago movements, and was first described in the Aitape movement of 1930. Prophecies of disasters, locusts, fire and flood have also been common for some time, and probably can be traced to the Bible or mission teaching, although earthquakes and *tsunamis* are known on the coast. Peli members drew a lot of inspiration from the Pidgin version of the New Testament however, in particular, the Book of Revelations.

The *Nupela Testamen* translation of the Book of Revelations begins by stating that all that follows was once hidden and Jesus revealed it to man, a point frequently made to me by members. The figure 'seven' is mentioned throughout the Book, beginning on the first page with the "7-pela kongrigesen". The search in the forest at Mihet for God's throne was set off by references to the "sia bilong king". A red stone at Bengil was identified at the "retpela ston" mentioned on page 808. The white, black and brown horses described on pages 812-813 were identified as references to the races to be found in Papua New Guinea. On page 813 is a passage which discusses the occurrence of an earthquake, a darkness, a meteorite shower, landslides and the refuge of all men living during these cataclysms underneath a mountain. Chapter 7 begins with a passage containing the numbers of the faithful who had attained the qualities required to be saved from destruction. Peli leaders were constantly sending requests to kamiti to count their members, and they seemed to be concerned with membership numbers. On page 818 is a line drawing of an eagle. It was common knowledge to Peli members that "Peli" is a local Yangoru word for eagle, and many men showed me this picture. Grasshoppers, darkness during the daytime, and plagues of scorpions, all of which were prophecied before the 7th July are dealt with on page 818 also. Chapter 11 is entitled "Tupela Man i Autim Tok", and in the first paragraph states, "Na bai mi gipim pawa long dispela tupela man i autim tok bilong mi" (And I will give power to these two men who are spreading my word). Chapter 13, verse 3 speaks of "bikpela pawa" and in verses 9-11 tells the faithful to hold strong to their beliefs even in the face of death by the bayonet, a passage which some men quoted in their more emotional moments. On page 831, the line drawing of an angel reaping wheat was identified as a man in a bamboo grove near Mihet, in the mountains. Chapter 16 refers to seven "dis", (or dishes), which the metal containers used for tipping money back and forth in were called. Chapter 16 verse 17

(cont'd)

Adoption

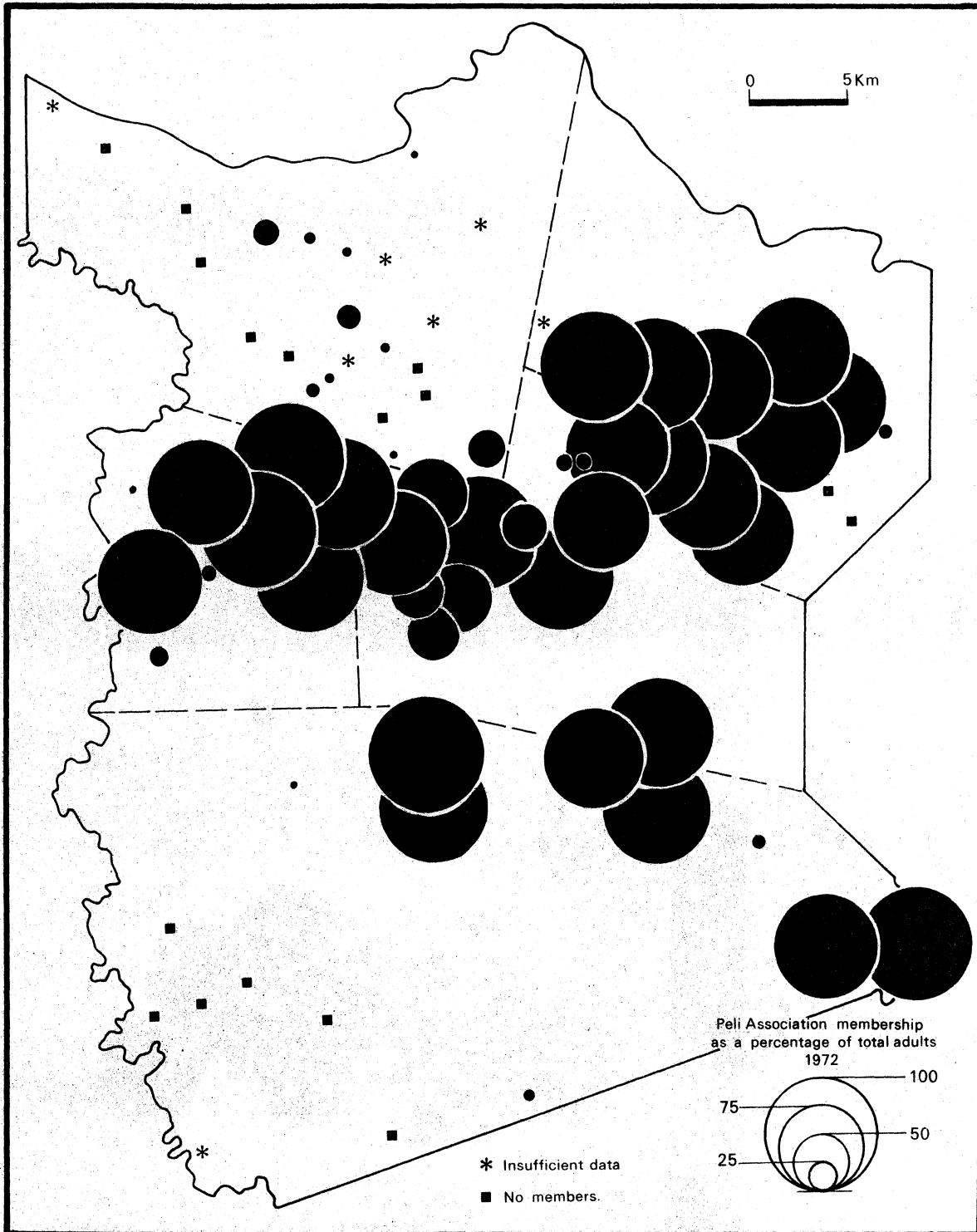
By the second half of 1972 approximately 4560 persons had joined the Peli Association. Most members were adults of both sexes, although a small minority of men also bought membership for their children. The distribution of membership was biased heavily towards Urat, Wam and Urim villages, where membership averaged 65 per cent of total adults resident in the village in 1971 (Table 7.1, Figure 7.3).

Twenty-seven per cent of Gawanga adults joined, but the pattern, was one of almost everyone in a village joining, or almost no one. In the Tau villages membership levels reached 98 per cent of the adult population and at Apangai and Yubanakor, 77 and 90 per cent respectively. At Inakor and Asanakor, where men did not join until June 1972 only 22 people had joined out of a total of 302 adults. Others said they were going to join, but whether or not they did is not known. But in the southwest as is described above, only three men from Bongowankia joined out of the 1560 adults in the area. Only eight per cent of total Kombio villagers had joined by late 1972, but kamiti men were still involved in collecting subscriptions. The

11. (cont'd)

describes the seventh angel capsizing the dish and the consequences which followed, which include a thunderstorm, and a large earthquake. Chapter 18 verse 3 criticises men who are involved in "bisnis" and suggests they are engaged in "hambak" or humbug. Villagers have no concept of 'big business', and they were puzzled by this reference. However, some men who were in conflict with bisnis leaders referred to this passage as support for their arguments. The line drawing on page 844 was completely misperceived and was thought to be a customary decoration held in the mouth by initiates decorated in the final stages of a tambaran ceremony. Finally, the last page of the New Testament, which many men believe has been deliberately removed from Bibles in the past, held the attention of the majority of men who pored through the Book of Revelations. Chapter 22, verse 12 reads, "Jisas i tok, 'Harim! Bai mi kamap kwiktam. Na bai mi bringim pe bilong givim long olgeta man. Na bai mi bekim pe long ologeta man wan wan, inap long pasin ol i bin mekim". (Jesus said, "Listen! I will return soon. And I will bring pay to give to every man. I will pay each man separately according to the way he has been living his life.") I realise this is not a translation that a theologian could agree with, but it represents the interpretation most men took from the passage when they read it, or heard it read by their literate fellows.

FIGURE 7.3 MEMBERSHIP IN THE PELI ASSOCIATION, DREIKIKIR, 1972



Source : Fieldnotes, 1972; Census books, Dreikikir Patrol Post, 1972.

Kombio people, as in the past, were well behind the Urat and Wam in receiving and acting upon information reaching the Dreikikir area from the outside. The only Kombio village in which members totalled more than half the adults was Yalengel, on the Sepik Highway, west of Nanaha. The clustering of high adopting villages along the highway is shown clearly in Figure 7.3. Adoption rates in the Urim are higher than those which would be predicted by the previous adoption of innovations in those villages, and it is probable the visit by the Peli leaders in September inspired many people to join.

TABLE 7.1 MEMBERSHIP IN THE PELI ASSOCIATION BY CENSUS DIVISION, 1972

Census Division	Number of Members	%	Number of Non-Members	%	Total Popn	%
Urat	1,511	63.5	869	36.5	2,380	100.0
Wam	1,204	66.7	600	33.3	1,804	100.0
Urim	700	65.2	373	34.8	1,073	100.0
Gawanga	984	26.6	2,713	73.4	3,697	100.0
Kombio	167	8.2	1,866	91.8	2,033	100.0
Total Dreikikir	4,566	41.6	6,421	58.4	10,987	100.0

Source: Appendix F.

About half of the men in Tumam who gave money to the movement believed they were giving money to the two leaders, who were going to cause it to increase, and return to them many times their original contribution. Some believed that the money would appear from the ground at Marambanja, while others thought it would appear in their own village, or house. But at least 20 per cent had little idea at all, of what the movement was trying to do. By the time I interviewed the Tumam informants, I knew each person fairly well, some very well, and they knew I knew whether or not they were members of the movement. I had accompanied the kamiti men to Marambanja twice, and assisted them in constructing their "power house". There was no reason for them to pretend they did not know what Peli was about, or to hide from me, their real opinions. Their lack of knowledge is reflected by comments from two local kamiti, Hundihi of Tumam village and Worosopeli of Musingwik. Hundihi explained how Yaliwan and Hawina had never explained fully, the meaning of the movement,

"...when we go, we want to know, what is the true source of the work which we are involved in. The two do not reveal it. They say, 'It is nothing to do with you. It is ours. You follow us, that is all.' So, we do as they wish us to."

TABLE 7.2 RESPONSES TO THE QUESTION, 'WHAT DID YOU THINK PELI WOULD DO FOR YOU WHEN YOU FIRST JOINED?' TUMAM VILLAGE, 1972

		%
They would take our money and increase it and it would come back to us many fold	27	50.0
I did not know - they said it was good work - so I am trying it, that is all	12	22.1
They would give us the same living conditions as Europeans and we would not have to work anymore	9	16.5
The same as what we were trying to get in 1956, but this time it was the correct method	2	3.8
Something good would happen, but unsure what	2	3.8
No response	2	3.8
	<hr/> 54	<hr/> 100.0
Non-members	<hr/> 21	
Total	<hr/> 75	

Notes: "They" refers to Danial Hawina and Matias Yaliwan. The most common reaction to the question by non-members was, "It is not true", or "I just do not like it".

Source: Village interviews, Tumam village, 1972.

Worosopeli, kamiti of Musingwik commented similarly,

"They told us the name that is all. We heard it only. I did not understand what sort of work this really was. They called out this name and we heard it. Now, we follow this work. They do not speak about it and [so] we do not understand it. They speak in a hidden language (tok bokis). The true work remains in their hearts (bel=minds?) and we cannot hear it. The meaning remains in their hearts/minds. Later they will tell us."

Both of these men denied strongly that Peli was a kago movement, and said that that was merely propaganda put about by Peli's enemies. Nor was the Association thought to be a political movement in the narrow sense of the term. The Peli Association became involved in the 1972 national elections and one of its leaders, Matias Yaliwan was elected as MHA for the seat of Yangoru-Saussia Open, but these events occurred after the majority of Dreikikir members had joined. Some were confused when they heard that Peli was to participate in the elections, but a number thought Peli was akin to another organisation which they had joined in 1968, the Pangu Pati. The Pangu Pati is a national political party and in 1972 formed a

national government in coalition with other parties. In 1968, before the national elections, Pita Lus, the present member for Maprik Open, had visited the Dreikikir area and persuaded people to join the Pangu Pati and pay a subscription of 20 cents.

It is of interest to compare the reasons why Tumam men say they joined the Peli Association with the reasons why they say they joined the Pangu Pati in 1968 (Table 7.3).

TABLE 7.3 RESPONSES TO THE QUESTION, 'WHAT DID YOU THINK THE PANGU PATI WOULD DO FOR YOU WHEN YOU JOINED?' TUMAM VILLAGE, 1972

They said we would gain the same living conditions as you Europeans	16	26.6
I did not know - I heard them speak that is all - they said join so I did	16	26.6
They promised all sorts of good things, clothes, houses; they promised to make good work for us	15	25.0
They said we would get a lot of money if we joined	5	8.2
Pangu Pati would help the country become strong	2	3.4
They would allow us to govern ourselves without Europeans to tell us what to do	2	3.4
Because we would be able to go to Australia and other countries	1	1.7
So I could get a share in the House of Assembly	1	1.7
They promised to look after us	1	1.7
Promised to raise Public Service pay levels	1	1.7
	<u>60</u>	<u>100.0</u>
Non-members	15	
Total	<u>75</u>	

Source: Village interviews, Tumam village, 1972.

In Tumam village over 50 per cent of the men questioned who had joined the Pangu Pati, joined because they believed it would give them the same living conditions as Europeans, or would provide millenarian type benefits. A further 26 per cent joined, although they did not understand what the Pangu Pati was; they either heard Pita Lus speak and believed he was capable of doing what he promised whatever it was, or because other men said it was good, and they should join, they did so. They did not want to be the only one not to be a member. Twelve per cent of adults resident in the Dreikikir area in

1968 joined the Pangu Pati⁷. Fifty-five per cent of them were Urats and 37 per cent from the eastern Gawanga. Yet most villages in which a high proportion of people joined the Pangu Pati in 1968, also demonstrated a high level of Peli Association membership in 1972. Conversely, villages in which there was a low or nil Pangu Pati membership in 1968, also showed little or no interest in Peli in 1972. Nobody joined the Pangu Pati in the western Gawanga, and one Kombio man joined at Yambes village. During the 1972 elections, Peli members in the Urat and Wam areas boycotted polling. People complained that they had given money in good faith to the Pangu Pati, but never had returned anything to them, nor had changes occurred in the villages. Peli propaganda was often anti-Pangu Pati and the Pangu Pati was identified as a protagonist in the minds of many men who had, only four years previously, joined the party enthusiastically.

The subscriptions to Pangu and Peli were made under the same misconceptions of the nature of money which were described at the beginning of Chapter 6. People believed that Pita Lus had access to knowledge which they did not, and that he was prepared to share his knowledge with them. If they gave him their money he would, in return, bring many benefits *to the village*. Matias Yaliwan, many people said frequently, also promised to bring benefits *to the village*. Village people care only about local improvements. They cannot, except in rare cases, conceive of "the nation". They want changes in *their* living conditions, in *their* villages. If an individual says he has the knowledge with which to bring about these changes, ill-defined as they may be, people will support him, be he a politician, a kago leader or a bisnis man.

There were few costs involved in adopting the Peli movement. At first the \$12 demanded deterred all but a handful of people, but the 70 cents required following the 7th July was no real problem. One impediment was the reaction of the evangelical mission, which informed their members that they could belong to either Peli or the mission, but not both. Peli was the work of Satan, they preached, and there were many sermons about "false prophets". This choice did

7. Membership numbers in Pangu Pati supplied by Aisimboro Ston, Public Health Department, Dreikikir, the Secretary of the local area branch of the party. Allen (in press), describes in more detail the swing away from Pangu to the Peli Association between 1968 and 1972, and the way in which this movement influenced the outcome of the 1972 elections.

not deter most people from joining Peli, and many became openly critical of the mission, claiming it too had promised the return of Jesus and the millenium, but that this had not eventuated and it was time to try another way. Administration policy towards Peli was to outwardly ignore it, but European officers took every chance they could get to speak against the movement, and it was obvious that most Europeans did not approve. Local Government Councils were also officially opposed to Peli, but many councillors quietly joined and provided no opposition to their constituents joining. Thus, as previously, people were offered the chance of immense rewards at very low costs. To the majority there was no reason why they should not try. As 1972 progressed there was greater communal pressure upon people to join than not to join, and those who resisted, often did so at the cost of constant nagging and sometimes abuse from members. Generally however, people who did not join when the majority of their village joined, did not join at all. Some older men, who were known for their conservatism, had their subscriptions paid for them by relatives, as it was felt they did not understand enough about the movement, and others should ensure their names were included in the list of members held at Marambanja. In some villages, where a sizeable minority refused to join, splits occurred and the two groups had little to do with each other. This occurred in Tumam and made the last months of fieldwork fairly difficult.

When I left the field in December 1972, Peli Association activities were becoming less intense, but interest was still high. Most members were still prepared to support the leaders, although individual cases of men quietly withdrawing from public activities and meetings became more common.

CONCLUSION

Three kago movements have been described in this chapter. In 1956 a movement, which became known as kirapkirap, was developed by two local men and embraced local myths and legends, Christian dogma and their own interpretations of history. They succeeded in spreading their ideas and the associated activities to almost every village in the Dreikikir area, because the development of their movement coincided with the collapse of the first bisnis initiatives. People were becoming disenchanted with bisnis, but the links between the bisnis leaders at their 'headquarters' and their village representatives, the bosbois, remained in existence, and served to spread the new ideas rapidly.

The kirapkirap leaders themselves walked from village to village spreading their work, but many bisnis bosbois saw in the new movement, the opportunity to regain the standing they enjoyed before the collapse of bisnis, and became local leaders in their own areas. They grafted their own ideas onto the basic themes expounded by the originators, and these deviations were found to be as acceptable as the original ideas. The movement was prevented by developing further by the arrests of the leaders and some followers.

The second distinctive kago movement, the red box movement, occurred in 1963, and continued into 1964. It first appeared in two of the least accessible villages in the Dreikikir area and its spread was extremely limited, despite an enthusiastic pattern of adoption in the southeast Gawanga villages. Reception there was so enthusiastic and persistent, that people were finally forced to plant coffee by an officer who believed this would cure them of their 'irrational' behaviour. The restricted diffusion of the red box movement was related to the location of the primary diffusion centres on the extremities of the existing communication networks and the difficulties of moving information against the predominant flow, a flow which was, in the 1960s, increased in energy by the introduction of coffee in villages in the east and a renewed interest in bisnis there.

But, by 1971, bisnis, coffee and cooperatives, was obviously proving unsatisfactory to many villagers at Dreikikir. In 1971 the vigorous Peli Association intensified its activities at Yangoru, and over 4500 people from the Dreikikir area subscribed money to it in the hope that it would bring about changes in their social, economic and political situation, which they desire so urgently. The Peli Association spread rapidly into the area along the new highway, where it was possible by 1971, to travel in all weather in a motor vehicle. Visits by the movements leaders complicate the pattern, but the intrusion of a narrow tongue of adopters along the road is in clear contrast to the pattern of earlier diffusions. The adoption of Peli Association membership demonstrates clearly an established trend. People joined the movement, although frequently they did not understand what it was trying to achieve, or how it was going to achieve it. They heard other men say it was good, and they projected their own desires into it, as they had done earlier with rice, kirapkirap, the Pangu Pati, and to a lesser extent, with the missions. Their adoption of the Pangu Pati in

1968 and their rejection of it four years later, in 1972, is another demonstration of this pattern of over-enthusiastic adoption, trial, crisis and discontinuation, which has been followed by the majority of the people, who have consistently based their judgements of the innovations on highly inflated expectations of the changes which would follow their adoption.

PART III

INFORMATION FLOW AND INNOVATION DIFFUSION

CHAPTER 8INFORMATION FLOW AND INNOVATION DIFFUSIONINTRODUCTION

Two interrelated themes are basic to this study. The first is concerned with the influence of the movement of information on the patterns of diffusion and adoption of and continued participation in, innovative activities in the Dreikikir area of Papua New Guinea. The second is concerned with the manner in which the two main types of innovative activity found in this area, cash cropping and millenarianism, which to most Westerners, appear totally disparate activities, have been perceived by the village people as only slightly different means to the same end, the acquisition of the 'good life', and all that entails.

In the preceding chapters it has been demonstrated that the diffusion of innovations has been associated with information networks dominant at any particular time: before contact, the cultural influences of the people to the east were felt more strongly in the Dreikikir area, than those of the people to the west, a pattern influenced by the existence of an information field based on ceremonial exchanges between villages. Following the establishment of colonial outposts on the coast the the cutting and forming of foot tracks, innovations which included not only those introduced by the colonialists but also indigenous items such as houses, millenarian ideas and sorcery, can be traced moving inland from the coast, across the predominant east-west pattern of the pre-contact network. After 1946, when an administrative centre was established at Maprik to the east, and the first vehicle road into Dreikikir was completed, the pre-contact orientation of the dominant information field, was re-established and innovations can again be traced moving from the east.

In most cases, innovations have been adopted faster and more completely, in villages which have experienced the best access to the sources of information about the innovation. This has resulted in villages in the east of the area being the first to adopt most of the innovations studied, and to have demonstrated a higher proportion of adopters to the total population, than villages elsewhere. When innovations were introduced into villages on the peripheries of the existing information fields, they diffused more slowly and did not

spread as widely as innovations diffusing from villages nearer the centre.

This pattern has been shown to hold true for both bisnis and kago activities. Evidence has been offered that many village people view cultivation of introduced crops for sale as an activity closely akin to a ritual, and that, although they no longer believe that cash cropping will result in large amounts of money flowing into the villages, they are still largely ignorant about the sources of money, the process by which it is manufactured and the methods by which enterprises earn profits. They are therefore, willing to quickly adopt new movements which promise to provide the material and spiritual means to a new life. However, in the meantime, money is needed to buy clothes, imported foods and to pay taxes, and to give to the leaders of the new movement, so coffee is picked and processed and rice harvested. But few people now, believe that bisnis is the 'true road', as it was once believed to be. Greatest interest in these promises of dramatic change is shown in the very villages in which participation in cash cropping is highest.

CAPITAL, LAND AVAILABILITY AND VILLAGE SIZE

Although access to information is frequently noted in economic studies of the commercialisation of subsistence economies, as a factor influencing change, other factors such as the availability of capital, land and labour, marketing and returns to the farmer, are commonly treated as being more important. However in Papua New Guinea accessibility to information is as an important a determinant of change as these other factors, and at Dreikikir, can be shown to be more important than some. Participation in bisnis activities is measured by mean income from cash crops per adult male in 1971, mean coffee and rice production per adult male in 1971, the number of coffee trees per adult male in 1972, and the number of cooperative members per adult male in 1972.

Data on cattle projects and stores is unsuitable for detailed analysis.

Participation in kago activities is measured by the number of members of the Peli Association per adult, in 1972.

Capital

Almost no capital was required to adopt rice or coffee, nor is capital equipment required to process the crops for the market today. Rice was cultivated using the same gardening tools as subsistence

gardens, bush knives, axes and digging sticks. At first, coffee was pulped in old slit gongs, but later, when hand powered coffee pulpers became available, clan groups purchased them through the cooperatives. Although the highest producing villages own the greatest number of coffee pulpers, the lack of pulpers cannot be viewed as a factor restricting production, but rather as symptomatic of a lack of interest in coffee production. Pulpers were priced within the reach of all villages in 1972.

Lack of capital does appear to have restricted some villages from adopting cattle and passenger motor vehicles, but it is probable that lack of village leadership is at least as important a factor. Relatively large amounts of money can be produced in a village, when organisation and enthusiasm are adequate.

Land Availability

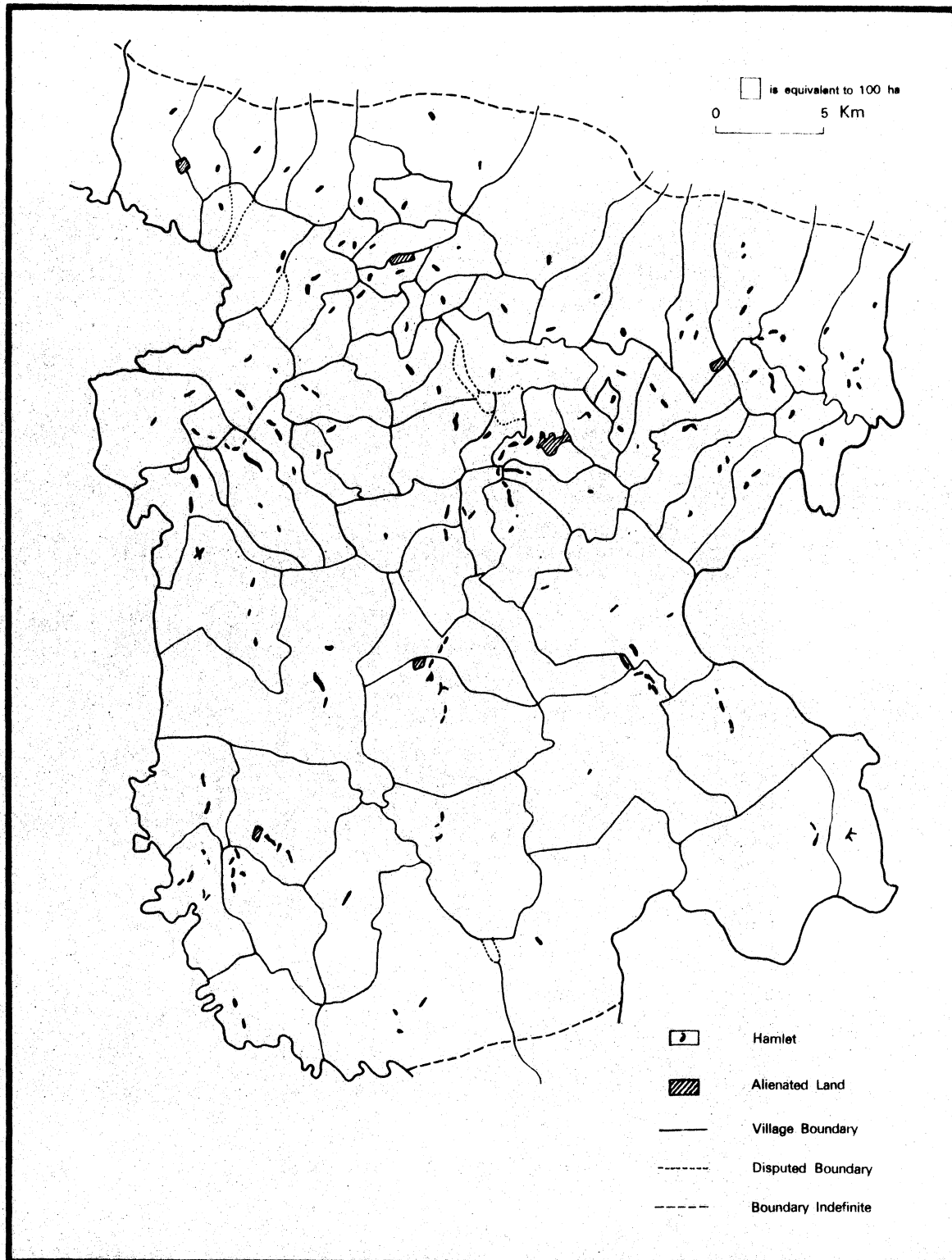
The availability of land of adequate quality and quantity is a factor which may influence participation in cash cropping. Lack of land could restrict the number of coffee trees planted, or the number of men planting coffee, as well as influencing the production of rice. Land available to each village was measured from a map (Figure 8.1) constructed from air photographs on which the boundaries of each village's land were drawn¹. Land under dispute and alienated land was not included.

This is a gross measure of land available and does not take into account spatial variations in soils, slopes or altitude, nor differences in tenure, such as fragmentation of holdings. DASF reports do not favour any particular parts of the Dreikikir area for the growing of coffee or rice. CSIRO reports show that soils and land capability in the area are generally uniform. Small areas of land classified as being of the highest capability, occur in all census divisions, as do some areas of land classified as being poor. The small scale of CSIRO maps of land capability and soils prevent a village by village assessment of land quality.

Reports which suggest that the amount of land available to individuals was restricting the size of coffee gardens being planted in the Wam and Urat, were noted in Chapter 6. Preliminary investigations

1. The measurements were made with a compensating polar planimeter at a scale of 1:100,000. The air photographs, CAJ-193, 'Nanu', runs 1-4, CAJ-194, 'Suain', run 5 and CAJ-204, 'Suain', run 5, were flown in 1964 at a scale of 1:25,000.

FIGURE 8.1 VILLAGE LAND, DREIKIKIR, 1972



Source: Fieldwork, 1972.

of individual holdings at Tumam revealed that some men did not have land of a suitable quality, quantity or location upon which to plant coffee and were forced to plant smaller gardens or to obtain land through exchanges or usufructuary arrangements. But it is probable that similar conditions exist all over the Dreikikir area.

Only in the Kombio area, did villagers report a shortage of land. Men in the southwestern Kombio villages said they had adequate land for subsistence and cash cropping, but that they were encroaching onto land which in the past had not been used for gardening. They were worried that if they increased their coffee plantings, this land, which they classified as "graun bilong lilimbo", which can be translated as "land for recreational uses", would gradually be eroded away.

Land availability, measured as hectares per adult male, was not statistically associated with the number of coffee trees per adult male in 1972, nor with rice and coffee production in 1971 (Table 8.1, Figure 8.2)².

TABLE 8.1 ASSOCIATION BETWEEN LAND AVAILABILITY AND PARTICIPATION IN BISNIS

	r_s	t	n	significance level %
No. of coffee trees per adult male, 1972	+0.11	0.90	70	not significant
Coffee production per adult male, 1971	-0.12	0.96	65	not significant
Rice production per adult male, 1971	+0.05	0.31	63	not significant

Source: Tables B.1 and B.2, Appendix B and DDA village censuses, Dreikikir Patrol Post.

Elsewhere in Papua New Guinea, land availability also has been found to be unrelated to the degree of participation in cash cropping. In the Sina Sina area of the Chimbu District, Hughes (1966) found land availability "failed to explain" the number of coffee trees planted by clan groups. On Kar Kar Island in the Madang District, Shand and Straatmans (in press), could establish "no direct link"

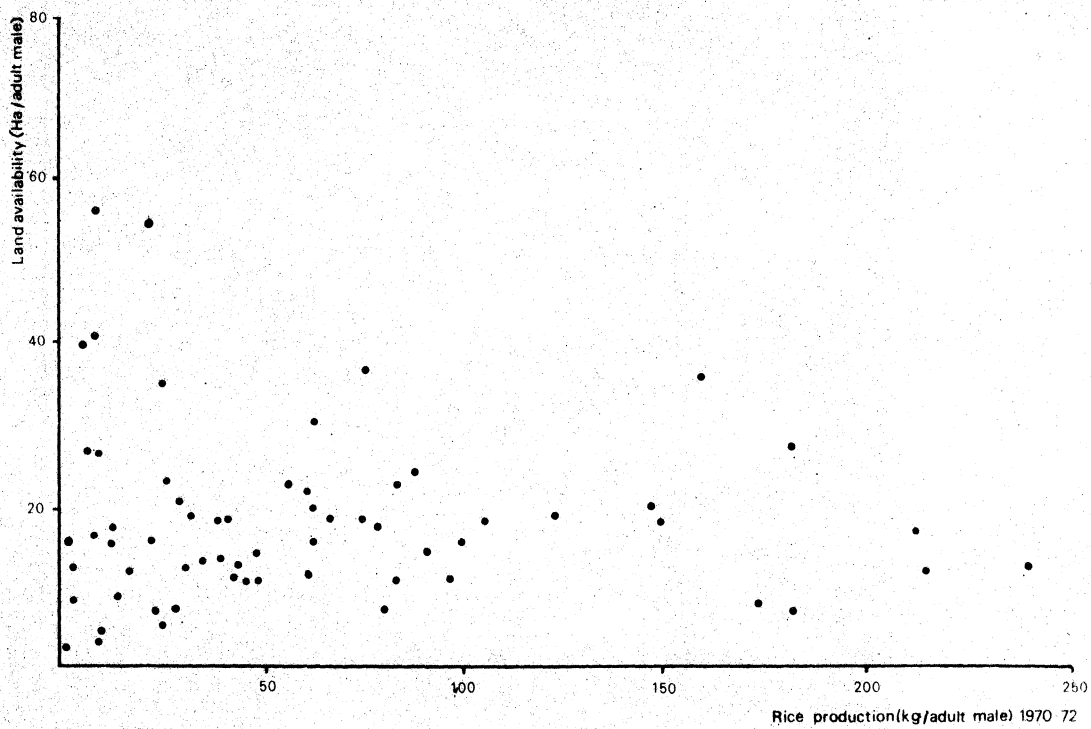
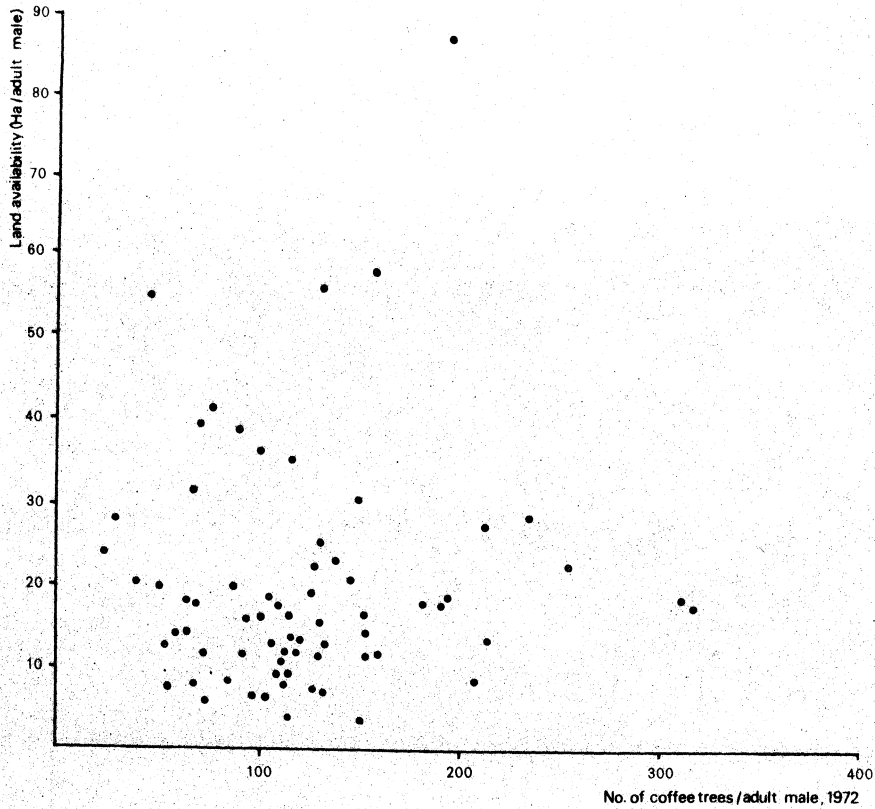
2. All rank correlations in this chapter have been calculated from the formula,

$$r_s = \frac{x^2 + y^2 - d^2}{2\sqrt{x^2 \cdot y^2}}$$

where $x^2 = \frac{N^3 - N}{12} - T_x$, and $y^2 = \frac{N^3 - N}{12} - T_y$

(Siegel 1956,204).

FIGURE 8.2 ASSOCIATION BETWEEN LAND AVAILABILITY AND PARTICIPATION IN BISNIS



Source: Tables B1 and B.2, Appendix B; Fieldwork, 1972.

between the two factors. Only in the Wosera area, east of Dreikikir, was a weak association found to exist in a minority of villages by the latter authors.

No association existed between membership in the Peli Association and land availability. ($r_s = +0.02$, $t = 0.025$).

Village Size

The size of villages may influence the adoption of innovations, and participation in the innovative activity after adoption, in a number of ways. A larger village is more likely to contain at least one innovative person, than a smaller village, and men who are ambitious and strive for leadership will find greater opportunity and be more stimulated in a larger village. Also, it is easier for individuals to deviate from established norms in larger villages.

In larger villages, more communal labour is available, and bisnis began in many villages as a communal enterprise. Kago movements, by their nature are communal. Although rice and coffee growing are now basically individual enterprises, they rely on an adequate supply of communal labour at various times, for example, during the clearing of new rice padis or the pulping of coffee.

The demonstration effect will be greater in a larger village, because it will reach more people.

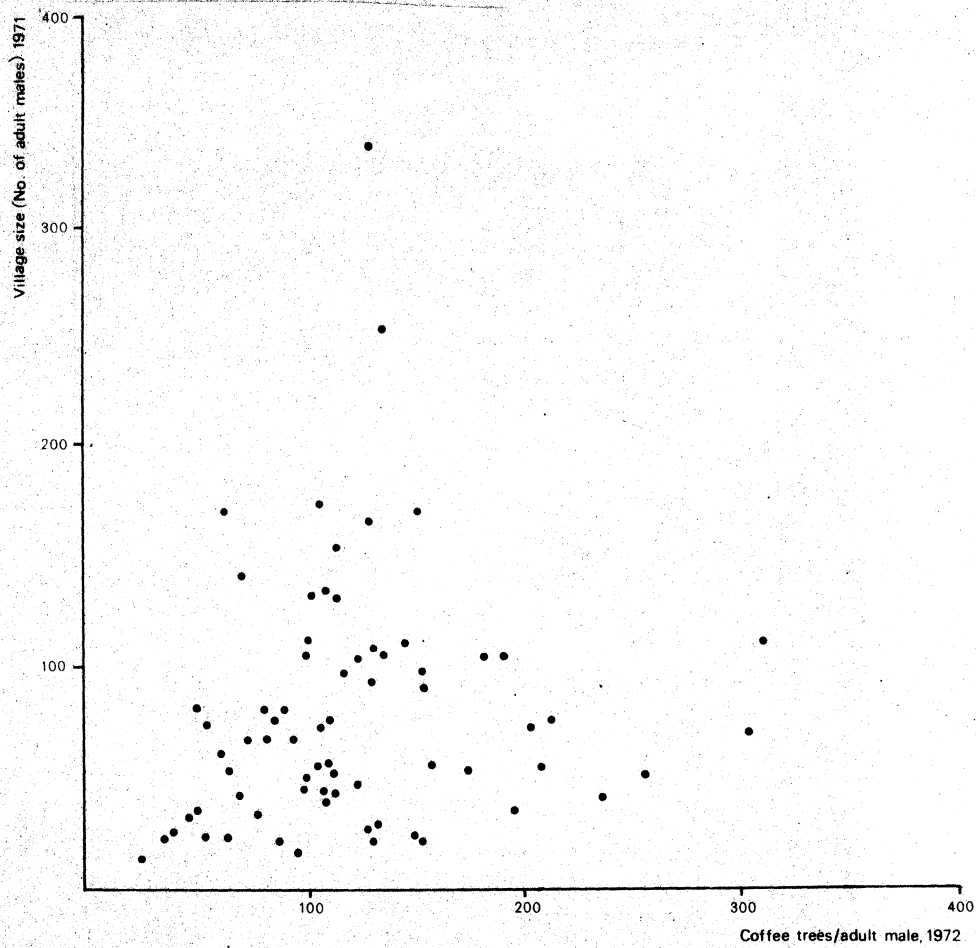
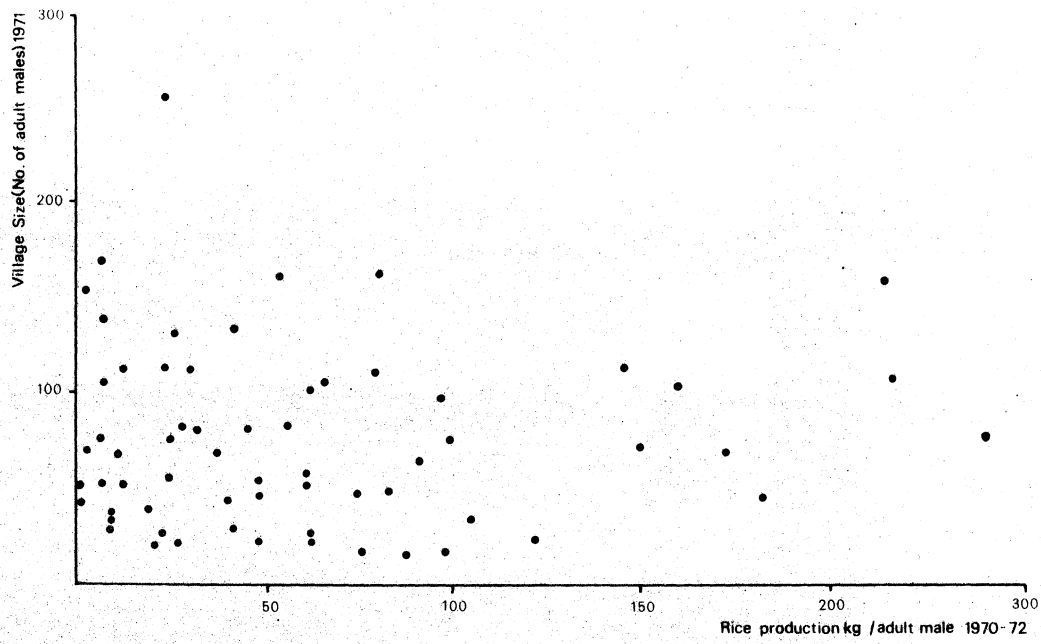
TABLE 8.2 ASSOCIATION BETWEEN VILLAGE SIZE AND PARTICIPATION IN BISNIS AND KAGO ACTIVITIES

	r_s	t	n	significance level %
No. of coffee trees per adult male, 1972	+0.29	2.52	70	1.0
Coffee production per adult male, 1971	+0.09	0.72	65	not significant
Rice production per adult male, 1971	-0.03	0.20	63	not significant
No. of SPCA members per adult male, 1972	+0.13	1.04	65	not significant
No. of Peli Association members per adult, 1972	+0.18	1.47	67	5.0

Source: Tables B.1, B.2 and B.3, Appendix B.

In 1971 and 1972 however, village size was not an important determinant of participation in bisnis or kago activities (Table 8.2, Figure 8.3). Rice and coffee production was independent of village size and only low, and insignificant associations existed between village size and membership in the SPCA and the Peli Association. A

FIGURE 8.3 ASSOCIATION BETWEEN VILLAGE SIZE (NO. OF ADULT MALE RESIDENT) AND PARTICIPATION IN BISNIS



slightly higher association existed between village size and the number of coffee trees per adult male. However, the r_s score of +0.29 is too low to attach any importance to, but the direction of this association, significant at one per cent, suggests that some of the factors discussed above, have influenced people in larger villages to plant more coffee than people in smaller villages.

MARKETING

Prices

The prices paid to members of the cooperative for rice and coffee are the same all over the Dreikikir area. Non-members are paid slightly lower prices. Members also received dividends on their shares, usually in the form of bonus share issues, but sometimes in cash. Dividends rarely amount to more than five dollars for an individual grower and are commonly much less.

Membership in the cooperative is not distributed evenly over the area (Figure 6.17). Income from cash cropping is highly correlated with cooperative membership ($r_s = +0.88$, $t = 14.70$), but the relationship cannot be said to be caused by members being paid higher prices for their crops and thereby being stimulated to produce more. Rather low producers do not see any point in joining the cooperative, which requires a share purchase of 10 dollars. A number of men were encountered in various parts of the area, who had young coffee trees but who were not cooperative members. They all said when their coffee began producing they would join, but at present it was not worth it. Rice production demonstrates a much lower association with cooperative membership ($r_s = +0.37$, $t = 3.30$) which suggests that growers believe that only when the higher returns of coffee are being received, is investment in the cooperative worthwhile.

The price of rice is set by the administration and does not fluctuate, although during 1972, a price rise was announced from 8.8 cents per kilogram to about 16 cents per kilogram. Two months after the announcement, none of the men in Tumam knew of the change in price, and could not therefore have been influenced by it, in their decision whether or not to plant in 1972-73 season. No rice was grown in the Dreikikir area in 1971-72 and the reasons given for the lack of planting varied widely. Some men said they were told the rice stores at Bainyik were full and they should not plant and others said that everyone decided not to plant because the price was too low. European officers blamed Peli activities. Rice was not planted in 1972-73 season despite the price rise.

Coffee prices do fluctuate with the international coffee market, but again growers did not know what the price was. They only knew that they were receiving slightly more or less for a sack than they did at the last sale. When they received less they frequently believed the clerks had 'short-changed' them. An annual question at the general meeting of the cooperative concerns why the clerks do not pay out to the growers, all the money in their cash box. People think that if the buyers return to Maprik with money in the cash box, they must be stealing it. Growers do react to higher prices, however, and because most coffee is not fully utilised, it is easy for a grower to pick a little more, after receiving a good price.

Access to a Buying Point

All rice, and almost all coffee, produced at Dreikikir are purchased by the Sepik Producers' Cooperative Association. Purchases are made at buying points, known locally as haus padis, a carry-over from the early days of rice growing. Haus padis are located on all vehicle roads (Figure 4.6). Villagers carry their produce to the nearest haus padi and receive cash for it from cooperative buyers who drive in from the Sepik Highway.

The distance and terrain over which a man and his wife must carry their rice and coffee to sell it, is predictably, a factor which will influence their degree of participation in bisnis activities. Although early rice growers planted enthusiastically, they rapidly became aware of the costs of carrying. Muttered remarks about the injustices of geographical location by sweating, exhausted men and women, who had carried 30 to 40 kilograms of coffee into the Musingwik haus padi, near Tumam, after a four kilometer walk and a 240 metre ascent and descent, were convincing evidence that villagers feel keenly, the costs of distance and terrain.

People who sell from haus padis which are distant from the highway suffer further disadvantages. Buyers regularly cannot reach distant buying points because of road and weather conditions, leaving growers with the choice of leaving their produce in the store house, with the possibility of theft or damage by rats, or carrying it home again, to bring it back another day. Purchases from buying points near and on the highway occur more frequently than purchases elsewhere. Villagers near the highway can send information that produce is ready for sale to the cooperative headquarters more easily, either on a PMV, or on a cooperative vehicle.

Money received for cash crops in these villages is spread more evenly over the year, and this continuity of purchases stimulates production. People were observed frequently to produce coffee, and then to wait until they were able to sell, before again picking and processing more.

In order to investigate to what extent distance and terrain between villages and buying points was associated with participation in bisnis in 1971, an accessibility score was calculated for each village, in a similar manner to those calculated in Chapter 4. The distance by the most common route was weighted with the number of 40 metre contours which occur on the route. To this figure was added the distance between the buying point and the highway (Table 8.3). The accessibility surface formed by this measure is shown in Figure 8.4.

TABLE 8.3 ACCESSIBILITY TO A BUYING POINT, 1971

<u>Village</u>	<u>Census Division</u>	<u>Score</u>	<u>Rank</u>
Daihungai	Urat	0.25	1=
Luwaite	Wam	0.25	1=
Musengwa	Urat	0.25	1=
Emul	Urat	0.50	4
Misim	Urat	0.75	5
Musilo	Urat	1.50	6
Nanaha	Urat	1.75	7
Musingwik	Urat	2.00	8
Wareli	Wam	3.25	9
Pelnandu	Urat	4.00	10
Asiling	Urat	4.25	11
Tumam	Urat	4.50	12
Yaurang	Kombio	5.25	13=
Warengame	Wam	5.25	13=
Bana	Wam	6.25	15
Yalangel	Kombio	6.50	16=
Porombil	Urat	6.50	16=
Moseng	Urat	7.00	18
Yauatong	Urim	11.00	19=
Ben	Kombio	11.00	19=
Asanakor	Gawanga	11.25	21=
Musenau	Urat	11.25	21=
Musendai	Urat	12.50	23
Apos	Gawanga	13.00	24
Moiwhak	Urat	13.50	25
Albalung	Urim	14.00	26
Yerhmain	Urat	15.00	27
Winyamon	Urim	15.50	28=
Muyem	Kombio	15.50	28=
Makupmanip	Kombio	16.00	30
Nyumatil	Kombio	17.00	31=
Tong	Kombio	17.00	31=
Yakio	Kombio	17.00	31=
Yasumboret	Kombio	18.00	34=
Selni	Wam	18.00	34=
Yasile	Kombio	18.00	34=

Table 8.3 (continued)

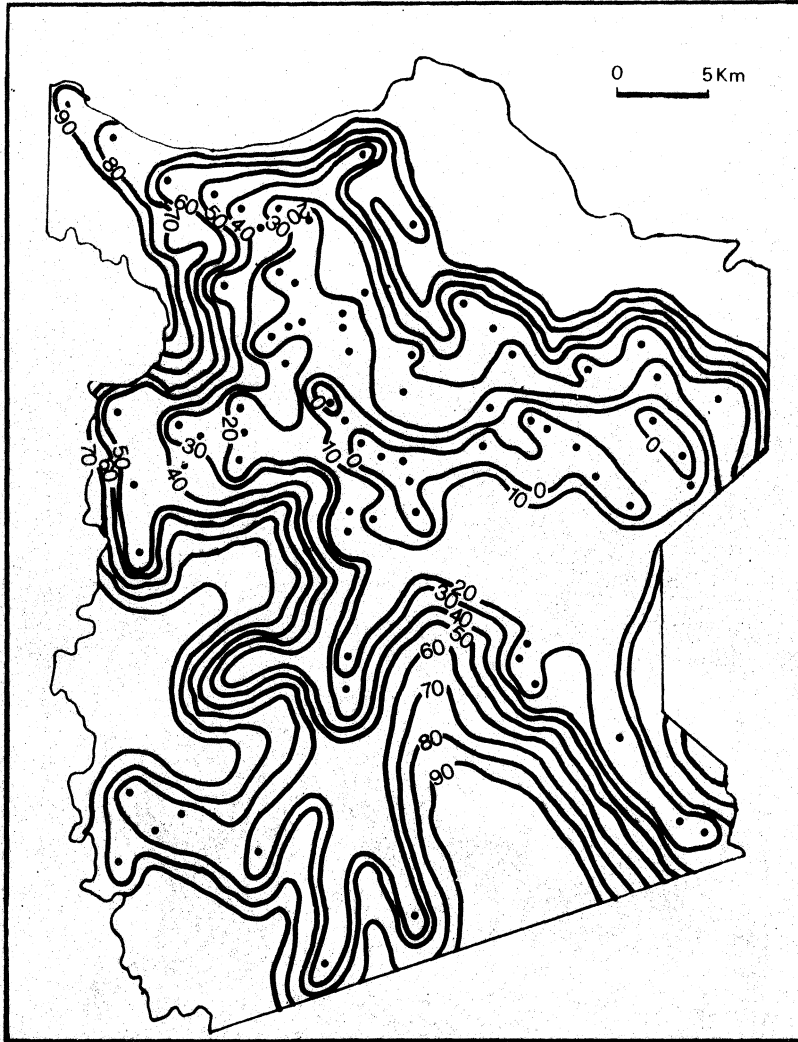
<u>Village</u>	<u>Census Division</u>	<u>Score</u>	<u>Rank</u>
Tauhundor	Gawanga	19.50	37
Setnyam	Kombio	20.00	38
Yakulm (Yase)	Kombio	21.00	39
Hambini	Wam	22.00	40
Samark	Kombio	23.00	41
Selnau	Wam	24.00	42
Arisili	Wam	24.50	43
Yambes	Kombio	25.00	44
Tauhimbiet	Gawanga	25.50	45
Meringe	Kombio	26.00	46=
Komala	Kombio	26.00	46=
Whaleng	Wam	27.00	48
Kilmanglen	Urim	27.50	49
Krungungam	Urim	28.00	50
Serepmel	Kombio	30.00	51
Sambu	Kombio	31.00	52=
Laningwap	Urim	31.00	52=
Sahik	Wam	32.00	54
Soaiyaip, Waim	Kombio	34.00	55
Kubriwat	Gawanga	40.00	56
Yakrumbok	Urim	44.00	57=
Mimbiok	Urim	44.00	57=
Kumbang	Kombio	48.00	59
Pagilo	Urim	49.00	60
Wosambu	Gawanga	52.50	61
Koupem	Kombio	55.00	62
Masalaga	Gawanga	55.50	63
Daina	Gawanga	56.50	64
Bongowaukia	Gawanga	61.50	65
Kwatengisi	Gawanga	64.50	66
Kuyor, Wesor	Gawanga	68.50	67
King	Kombio	76.00	68
Mahamsi	Gawanga	76.50	69
Mup	Kombio	86.00	70

Accessibility to a haus padi is significantly associated with participation in bisnis as measured by average income per adult male from cash crops, mean coffee production per adult male, and membership in the cooperative. Rice production was influenced less by the location of buying points and the number of coffee trees per adult male was not significantly associated with this measure (Table 8.4, Figure 8.5).

No significant association existed between access to a buying point and membership in the Peli Association.

The importance of good access to a buying point located near the highway is clearly established. Of interest is lack of association between this factor and coffee plantings, a finding which supports those presented earlier on the under utilisation of coffee

FIGURE 8.4 ACCESSIBILITY TO A BUYING POINT, 1971



Source: Fieldwork, 1972

FIGURE 8.5 ASSOCIATION BETWEEN ACCESSIBILITY TO A BUYING POINT AND PARTICIPATION IN BISNIS ACTIVITIES

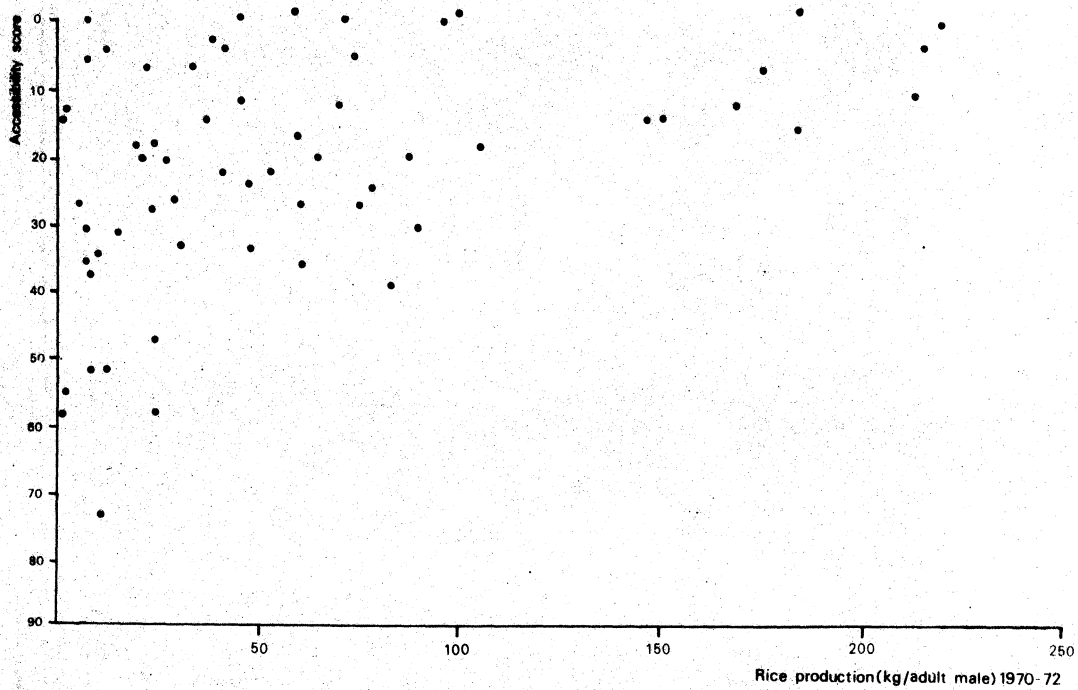
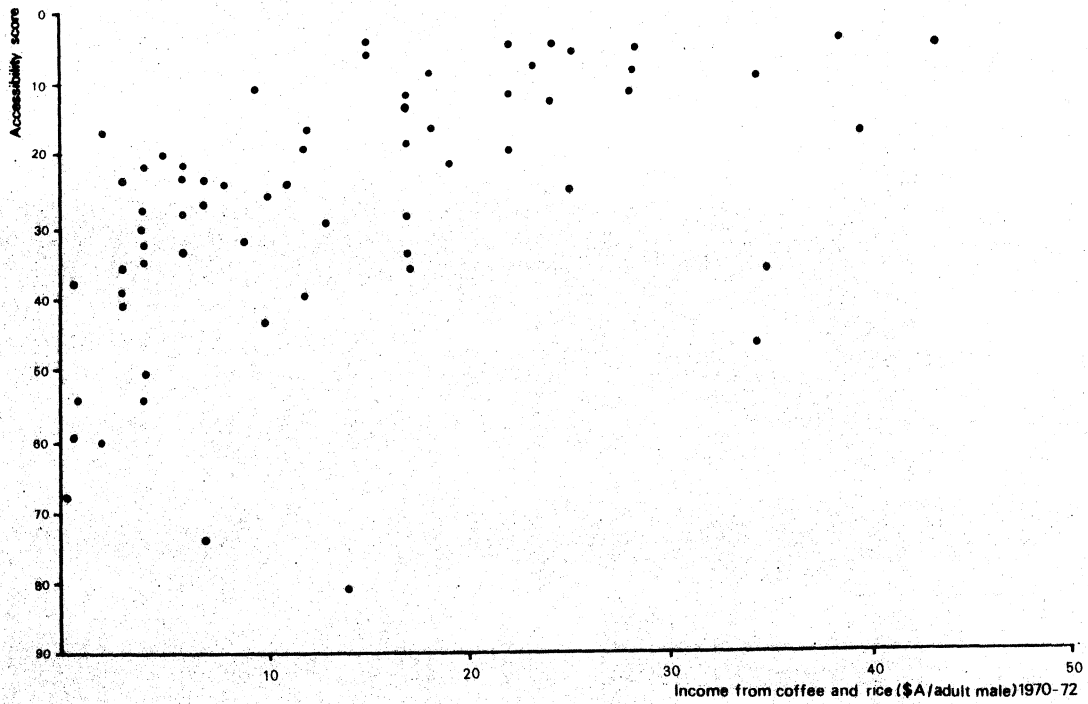


FIGURE 8.5 (continued)

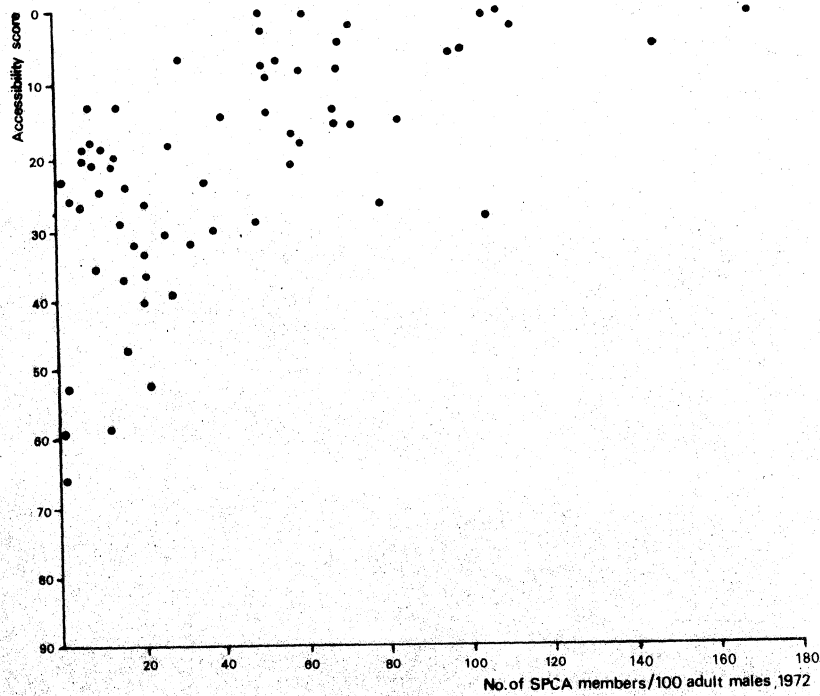


TABLE 8.4 ASSOCIATION BETWEEN ACCESSIBILITY TO A BUYING POINT AND PARTICIPATION IN BISNIS AND KAGO ACTIVITIES

	r_s	t	n	significance level %
Income per adult male, 1971	+0.71	8.31	65	0.1
No. of SPCA members per adult male, 1972	+0.66	6.99	65	0.1
Coffee production per adult male, 1971	+0.60	5.94	65	0.1
Rice production per adult male, 1971	+0.39	3.31	63	1.0
No. of coffee trees per adult male, 1972	+0.11	0.90	70	not significant
No. of Peli Association members per adult, 1972	+0.18	1.47	67	not significant

in many villages³. The potential exists for significant increases in production.

INFORMATION FLOW

The important influence of the patrol post and the Sepik Highway in the movement of information was established in Chapter 4. The patrol post was seen to function as a pole of attraction and an information exchange. The highway was shown to be the most important information channel, moving people rapidly to-and-from the Dreikikir area, to points to the east, including Maprik and the District headquarters at Wewak. In the following sections, the scores calculated for each village for accessibility to Dreikikir Patrol Post and the Sepik Highway are correlated with the measures of participation used above.

Accessibility to Dreikikir Patrol Post

The accessibility scores and surface used in this calculation are presented in Table 4.4 and Figure 4.8, Chapter 4.

Although significant associations are proved between accessibility to Dreikikir Patrol Post and income from cash crops, coffee and rice production and to a lesser extent, membership in the cooperative, (Table 8.5, Figure 8.6) they are lower than those between accessibility to a buying point and similar measures of participation in bisnis (Table 8.4). The ease of carrying crops to a buying point is a more important determinant of cash crop production, than ease of access to the patrol post. The r_s score of +0.30 between SPCA membership and accessibility to the patrol post is less than half that shown between membership and accessibility to a buying point (Table 8.4). A major point of contact between the cooperative and villagers is the haus padi, where people can speak with the buyers and drivers. New members most commonly join by paying their subscription to a cooperatives officer during the annual calculation and payment of dividends, which also takes place at the buying points.

A statistically significant association occurred between accessibility to the patrol post and membership in the Peli Association.

3. Bouchard (1972, 1973) in a study in the Okapa and Gumine areas of the Eastern Highlands and Chimbu Districts, found a positive relationship between coffee trees planted and distance from a buying centre, which he could not explain. The Dreikikir finding suggests that coffee may not be being fully utilised in the Highlands, and that if coffee production had been used as a measure of participation in the cash economy, a more explicable result may have been produced.

TABLE 8.5 ASSOCIATION BETWEEN ACCESSIBILITY TO DREIKIKIR PATROL POST AND PARTICIPATION IN BISNIS AND KAGO ACTIVITIES

	r_s	t	n	significance level %
Mean income per adult male from cash crops, 1971	+0.42	3.70	65	0.1
Mean coffee production per adult male, 1971	+0.39	3.33	65	0.1
Mean rice production per adult male, 1972	+0.44	3.83	63	0.1
No. of coffee trees per adult male, 1972	+0.12	0.90	70	not significant
No. of SPCA members per adult male, 1972	+0.30	2.49	65	1.0
No. of Peli Association members per adult, 1972	+0.33	2.82	67	1.0

The factors investigated so far, land availability, village size, prices and accessibility to a cash crop buying point could all reasonably be expected to influence participation in bisnis. If any association was predicted between them and kago activities, it would be a negative relationship, for kago is frequently said to result from the inability of groups to engage successfully in bisnis. Morauta (1972) for example, found that villages near Madang with the poorest access to a main centre, to wage labour in the towns and to educational facilities, were most involved in kago activities. But at Dreikikir the relationships, although very weak have been all positive. The relationship with access to the patrol post is significantly positive. Participation in kago activities at Dreikikir is higher in villages with the best access to the patrol post, and lower in villages with poorer access.

Accessibility to the Sepik Highway

Of all the factors tested, accessibility to the Sepik Highway proves to be most important explanation of income from cash crops, coffee production and SPCA membership (Table 8.6, Figure 8.7). Rice production is also positively correlated with access to the highway, but the association is lower than that for access to the patrol post and to a buying point.

Peli Association membership also proves to be more highly associated with access to the Sepik Highway than to other factors.

FIGURE 8.6 ASSOCIATION BETWEEN ACCESSIBILITY TO DREIKIKIR PATROL POST AND PARTICIPATION IN BISNIS AND KAGO

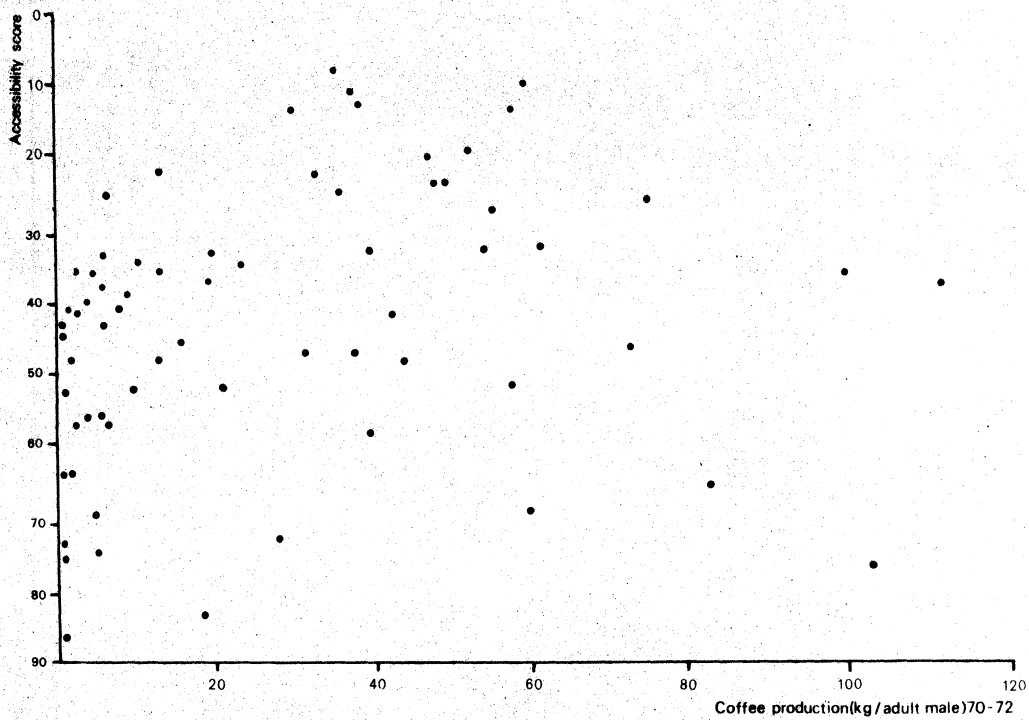
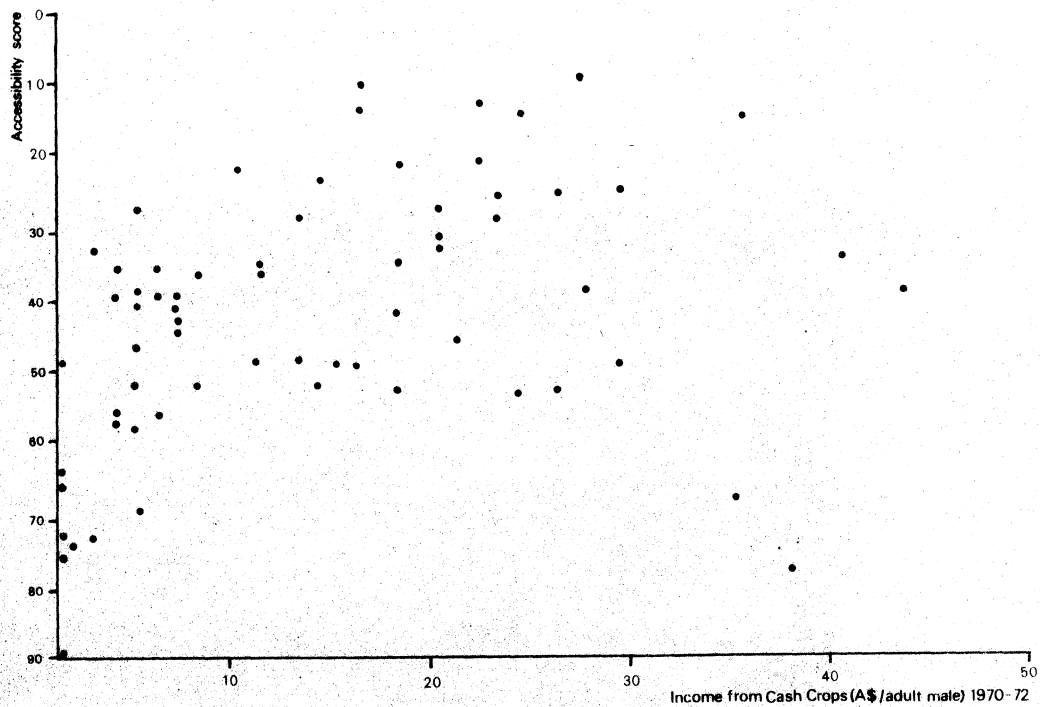


FIGURE 8.6 (continued)

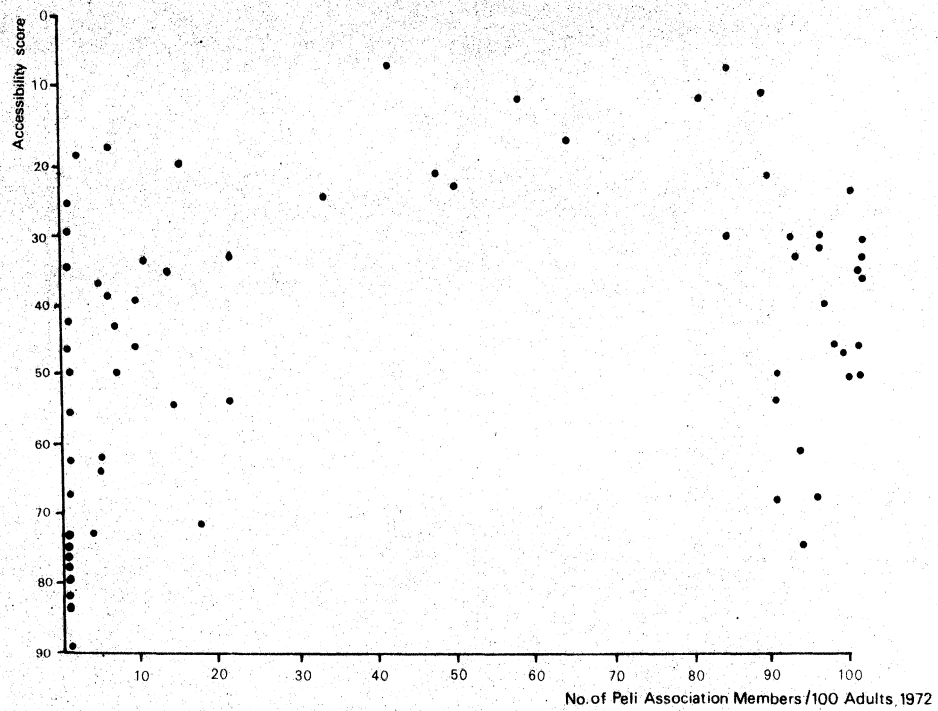
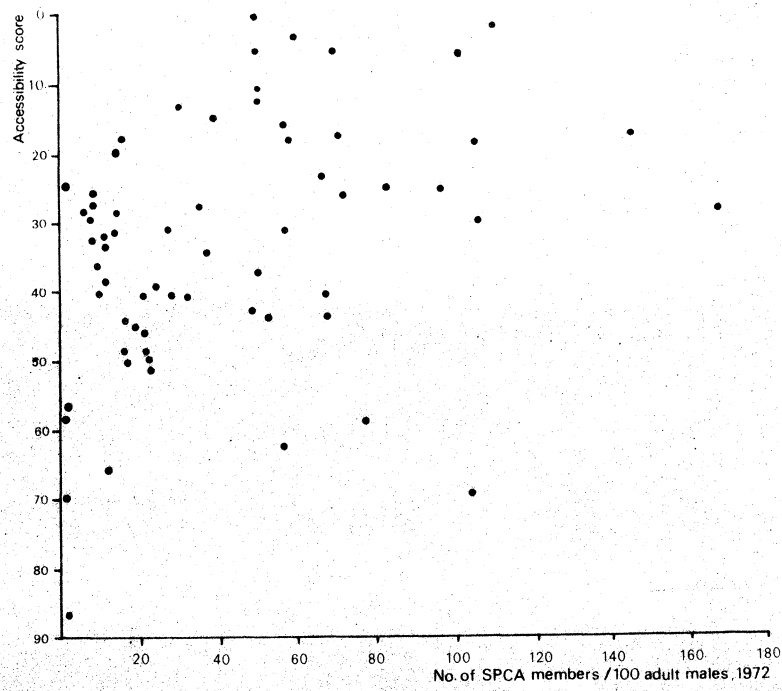


TABLE 8.6 ASSOCIATION BETWEEN ACCESSIBILITY TO THE SEPIK HIGHWAY AND PARTICIPATION IN BISNIS AND KAGO

	r_s	t	n	significance level %
Mean income per adult male from cash crops, 1971	+0.80	10.79	65	0.1
Mean coffee production per adult male, 1971	+0.81	10.96	65	0.1
Mean rice production per adult male, 1971	+0.36	3.30	63	1.0
Mean No. of coffee trees per adult male, 1972	+0.22	1.80	70	not significant
No. of SPCA members per adult male, 1972	+0.77	9.58	65	0.1
No. of Peli Association members per adult, 1972	+0.41	3.60	67	0.1
No. of Peli Association members excluding Urim villages, 1972	+0.56	5.07	58	0.1

However, membership levels in some villages in the Dreikikir area, in particular Urim villages near Yakrumbok, were influenced by the September 1971 visit of the Peli leaders.

On the scattergram dealing with the Peli Association, (Figure 8.7) the Urim villages are identified by an asterisk. They prove in six cases of the nine to be villages which have poor access, but high Peli membership. The other three are Winyamon, Albalung and Yauatong, villages which were not visited by the Peli leaders. The personal contact between the leaders and the villagers boosted membership levels above those which would have been experienced if that visit had not been made. If these nine villages are excluded correlation coefficient rises to +0.56.

NATIONAL DEVELOPMENT AND INNOVATION DIFFUSION

Accessibility: Advantage or Disadvantage?

The degree of participation in bisnis and kago activities has been demonstrated to be more highly associated with accessibility to the Sepik Highway, than with any other factors (Table 8.7). Accessibility to a buying point is the next most important factor influencing participation in bisnis activities. Because this measure is weighted by the distance of buying points from the highway, the two factors are related.

FIGURE 8.7 ASSOCIATION BETWEEN ACCESSIBILITY TO THE SEPIK HIGHWAY
AND PARTICIPATION IN BISNIS AND KAGO ACTIVITIES

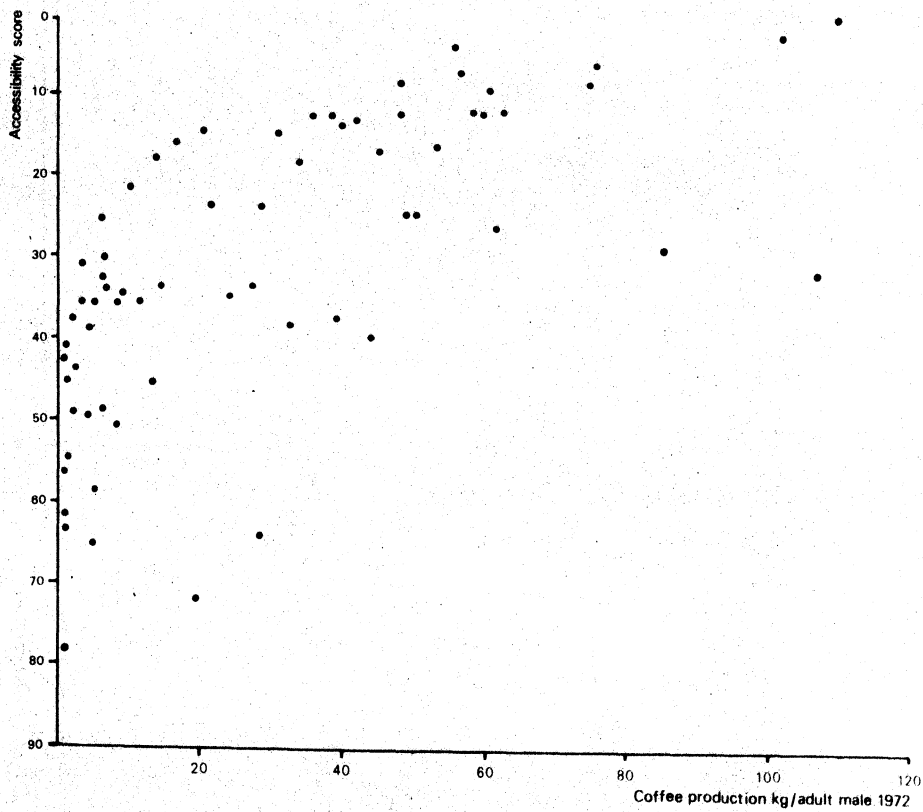
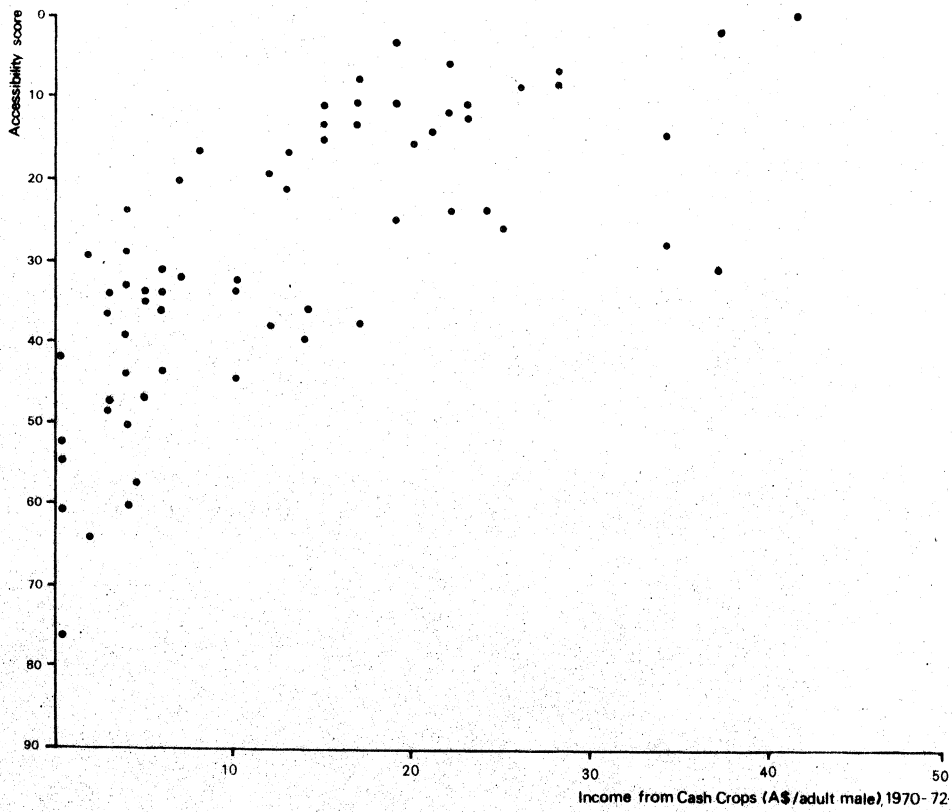


FIGURE 8.7 (continued)

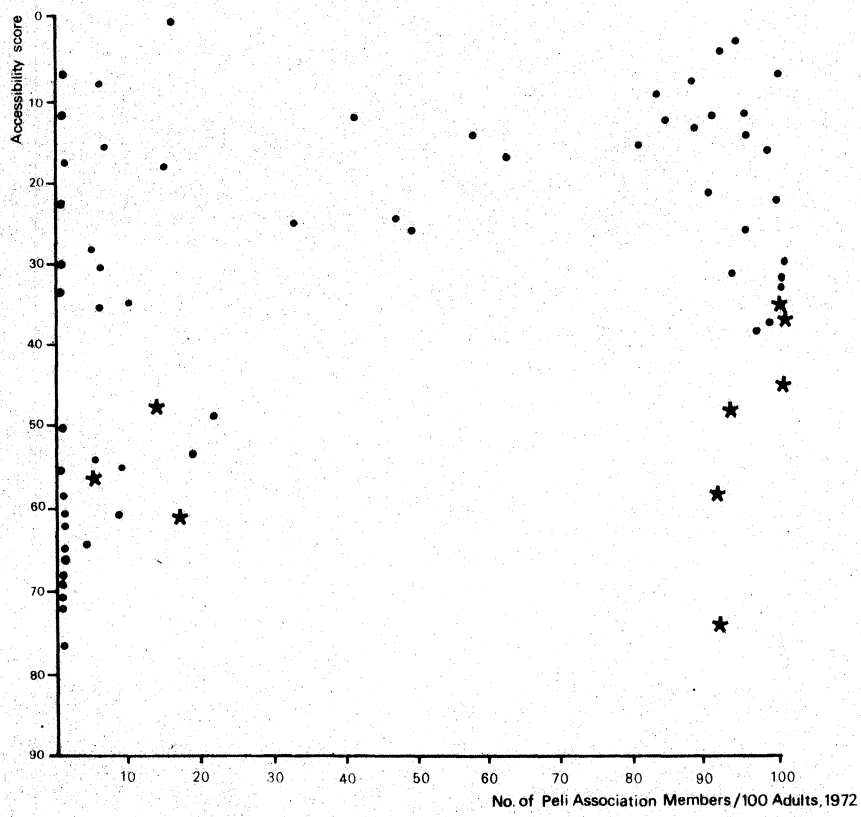
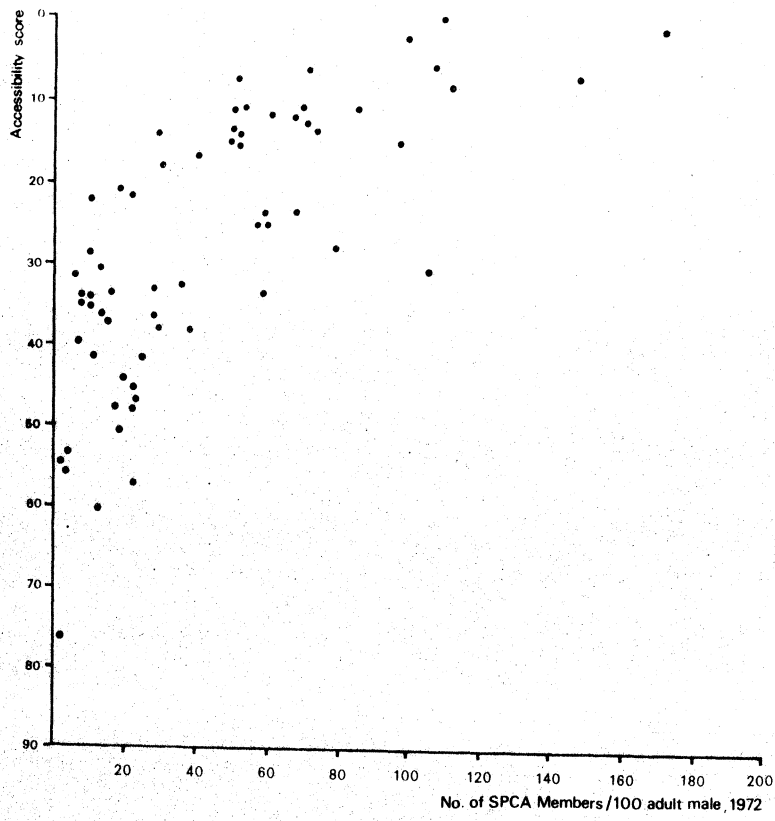


TABLE 8.7 SUMMARY OF FACTORS INFLUENCING PARTICIPATION IN BISNIS AND KAGO

	Access to Sepik H'way	Access to Dreikikir	Access to Buying Point	Land Avail- ability	Village Size
	r_s	r_s	r_s	r_s	r_s
Income from cash crops, 1971	<u>+0.80</u>	+0.42	+0.71	-	-
Coffee production 1971	<u>+0.81</u>	+0.39	<u>+0.60</u>	-0.12	+0.09
Rice production, 1971	+0.36	+0.44	+0.39	+0.05	-0.03
Number of coffee trees, 1972	+0.22	+0.12	+0.11	+0.11	+0.29
SPCA membership, 1972	<u>+0.77</u>	+0.30	<u>+0.66</u>	-	+0.13
Peli Association membership, 1972	+0.41 <u>[+0.56]</u>	+0.33	+0.18	-	+0.18

The highway is the only vehicle road into the area which can be traversed in all weather, with a low risk of a journey being prevented by road conditions. The access afforded by it, improves the outflow of cash crops from villages located on or near to it, and increases the flow of information into the same villages. Some information is concerned with new consumer goods, and creates new needs in these villages, which further increases the need for cash and stimulates cash crop production. Stores near the road have a greater range and better quality of goods, than stores in isolated areas. Other information ranges from news about national political changes to mundane, everyday gossip and rumour. Information is channelled down the highway, the side roads and foot tracks. As movement for people becomes increasingly difficult, so the flow of information is more restricted and the peoples' reactions to it more muted.

The Sepik Highway is constructed on the general route of the original Maprik to Dreikikir vehicle track, an axis which has been channelling information and innovative ideas into the Dreikikir area since 1950. Villages near to this track have been the first to adopt innovations and have demonstrated consistently higher levels of

participation in most innovative activities. The completion of the highway has further increased the capacity of this established information channel. It has directed increased amounts of information into villages, which were already the most innovative in the area.

Increased accessibility to the outside world is clearly associated with a higher rate of change in villages at Dreikikir. It is not uncommon to see the word 'advantaged' being used in reference to villages which have good accessibility to markets and central places. They have better access to consumer goods, and to services such as health and educational facilities, all of which should improve their living conditions. Closer links with the outside world however, can mean greater reliance on imported goods, raised expectations which cannot be easily satisfied, and more frequent entanglements with the bureaucracy. These are experiences which reinforce existing feelings of inadequacy and helplessness in the face of outside forces.

Papua New Guinea has inherited from the Australian colonial administration, a highly centralised, departmentalised system of administration. Villagers are denied proper access to goods and services in the central places because they do not know how to manipulate the bureaucracy. When they cannot make clerks or shop assistants understand their needs, they are turned away, frequently smarting from implied slights on their character and intellect. Their licences for this-and-that are delayed or lost, their savings bank books disappear, they are arrested and taken before courts for petty misdemeanours without knowing their rights or being represented. They observe in the town, people of their own race who are better fed, better dressed, who drive private vehicles and who receive regular cash incomes. They contrast their lot with these urban Papua New Guineans who appear to live so much easier lives. It would be wrong to create the impression that an organised campaign is conducted against village people by urban dwelling public servants and shop keepers. That is not the case. The influences are far more subtle. But they are deeply felt for all that, and the people who are the most affected, are those who have the best access to the outside world.

Their response has been to seek the means of regaining the independence and autonomy once experienced, together with the secret of material wealth. They have attempted this through bisnis and kago activities.

Bisnis and Kago

The sequence of bisnis and kago movements in the Dreikikir area has resulted from a struggle at two levels. At an upper level, village people as a whole have been struggling to gain equality with and independence of, outsiders who have been exercising power over them. At a lower level, individual men have been struggling for the prestige and status that is derived from leading their local communities. They have been competing with one another, to lead the larger struggle.

The old society selected its leaders on their performance in key areas, gardening, hunting, oratory and organisational ability. When an established leader began to fail, he was challenged and replaced, if he did not have the good sense to retire and let a younger man take his place. To some extent, the system of tambaran initiation grades performed this function, for once men had passed through all the initiations, they were denied the opportunity to participate in any more. The appointment of village officials was the first change in the leadership situation. It is probable that at this time younger men put themselves forward to be chosen as luluais. Once they were appointed, they could not be removed without the authorisation of an administration officer. Although there were almost certainly ways of removing obnoxious luluais from office, there existed always, the knowledge that the luluai had direct access to the administration. Younger men who returned from labour contracts and found village life was not to their liking could do little to bring about change before 1942. However, after the turmoil of the war, many changes became possible. At Dreikikir, bisnis gave young, gifted and ambitious men the opportunity to challenge the established authority and they grasped it vigorously. They did it by expressing to the village people, their belief that bisnis was the means with which to bring about dramatic change. They found that people responded to this vision overwhelmingly, and for a short time they rode on a wave of enthusiasm. Bisnis became their "work". The rice seed which they distributed became associated with their names, thus it was, for example, "rais bilong Kokomo" or "bilong Anton".

Rice was not the vehicle of rapid change however, and its failure opened further opportunities for other men. The leaders of the kago movement presented people with another vision, which was again enthusiastically accepted, and as the prestige and power of the

kago men rose, that of the bisnis men fell. The kago vision was, as interpreted by the people, not vastly different from their early interpretations of the bisnis vision. Thus, both groups of leaders were using the same struggle against outsiders, to rally followers to their causes.

Coffee and the re-establishment of the cooperative, did regain some of the status lost by bisnis leaders. The establishment of a Local Government Council also opened other leadership opportunities, and both kago and bisnis leaders became councillors. With the advent of the Peli Association, other men found local leadership niches for themselves. The leaders of the 1956 movement were generally excluded from leadership roles in Peli, ostensibly because they had tried and failed and this was "new work", but some of them were, in 1971, too old for vigorous leadership of a new movement. Thus, each man has "his work" and if he has shown himself to be a strong worker for the good of his followers, he is not challenged for leadership, in that enterprise. He may lose followers to a more promising movement, but the enterprise will remain his. So in 1972, aging bisnis leaders still held the directorships in the cooperative, which was badly in need of new ideas and younger leaders.

The people who follow one movement after another, are neither irrational nor stupid. First, they are quietly desperate, and feel they cannot let any chance go to change their present situation. Second, they live in a world which is so different from that inhabited by men who have received a Western upbringing or education, as to almost defy description. They believe that no human enterprise can succeed unless assistance is gained from supernatural agencies of all kinds, the spirits of dead men, natural spirits and God. Men who claim special knowledge, "ol save man", are thought to have found out how to gain the cooperation of the supernatural, required to successfully carry out the enterprise. To the villager, it is perfectly reasonable that a man should claim to have left his body and spoken with someone many miles away, that someone's grandfather should speak to him in a dream, or that God's spirit should enter a man. Dreams may be given as much credence as first hand experiences, if they are vivid and meaningful enough. Thus, it is just as reasonable for a save man to claim that his knowledge was told to him by his dead uncle in a dream, than it is for a man to say he learned about his enterprise from a European who once employed him.

Perhaps the best explanation of how villagers view innovative activities, was given to me by one who had planted rice in 1950, participated in the 1956 kago movement, planted coffee in 1964, joined the South Seas Evangelical Mission, the Pangu Pati, the Sepik Producers' Cooperative Association, and the Peli Association. He said,

"You know, us black men, we are deeply impressed by all types of 'work'. We do not think this sort of 'work' is good, and this sort is bad. We think all types of 'work' are good. We remain in the middle. We are just middle men, that is all."

The Adoption of Innovations

The pattern of adoption under these conditions has been different from the models proposed by students of adoption in North America and Europe. Adopters accepted innovations on the information received from the leaders of an enterprise. Frequently this was misinterpreted on reception or was distorted as it passed through the information networks. In 1948 when information about bisnis was placed in the network at Port Moresby and Wewak it concerned small scale, village level, commercial enterprises. After passing through Simogun, his ex-police followers and their bosbois, it was received by the village people as the means to the wealth and power in the possession of Europeans. Information about kago was also distorted in transmission. The different interpretations of message from Marambanja by the Peli kamiti men at Tumam and Musingwik described in Chapter 4 is one example. Part of the distortion has occurred through a feed-back mechanism. Leaders in both types of activities tend to reinforce the aspirations of their followers, even if all they have done, has been not to deny some of their followers wilder hopes. When people suggested in 1950, that the changes which would result from bisnis would be great, bisnis leaders did not deny this. Peli leaders have also responded to their followers hopes by incorporating some of their ideas into the main themes of the movement.

Because innovations have been adopted on information which has been misinterpreted or distorted the pattern of adoption has been one of awareness-trial-adoption-crisis-discontinuation or reduced participation, rather than the usually accepted model of awareness-interest-evaluation-trial-adoption. People have become aware of an innovation. Information about it has suggested that it will bring about great changes. Its utility has therefore been high. It has been adopted. Only after adoption have people made an evaluation of its real costs and benefits. Their earlier misinterpretation of

information, their inflated expectations and their ignorance of the real properties of the innovation has meant that frequently, practical problems have arisen and disappointment has been rife. In the 1950s, the costs of carrying rice were not taken into account by adopters, their expectations of returns were grossly inflated and the managerial and technical abilities of the bisnis leaders proved inadequate to the demands of the enterprise. A crisis developed and many people decided to discontinue rice growing. A similar pattern has occurred in the adoption of other innovations, in a less dramatic form.

This interpretation of events at Dreikikir may be over simplistic however. Village people have learned something from their experiences over the last 25 years. In 1972, from the numerous men whom I asked why they had joined the Peli Association, I received the same answer. "Mipela traim tasol", we are just trying it. A number continued to point out the similarities between all types of "work", as the man quoted earlier. Innovations adopted today are probably accepted on a long term trial. People are willing to discontinue an activity if another, which presents apparently better chances of assisting them in the attainment of their ends, is introduced. None of the existing activities, are necessarily permanent.

National Development and Innovation Diffusion

The "middle men" of Dreikikir, who have proved themselves so willing to adopt the innovations which have spread into their villages since the war, live on the 'periphery' of the national political and economic space which is Papua New Guinea. Since contact, much Government effort has been expended linking their villages administratively with the 'centre', so that their labour, the one resource which was useful to the 'centre', could be efficiently exploited. Considering their isolation they have been subjected to a remarkably close administration, formerly known officially as "government control". My interpretation of the bursts of innovative bisnis and kago activity in this area, and in other parts of coastal Papua New Guinea, is that they are reactions to the "authority" and "dependency" imposed by the 'centre', in the terms outlined by Friedmann (1972) discussed in Chapter 1.

Friedmann predicts the flow of information from the centre to the periphery will eventually stimulate demands for autonomy. In the Dreikikir case, the adoption of the innovations described in this study took place because village people believed they were the means to autonomy. They had no national voice, nor the organisational

ability to form regional political pressure groups, and make their case heard in explicit terms, as for example, have the highly educated Bougainvillian elite. Nor have they themselves conceptualised concretely, their struggle as one of political and economic autonomy. Rather, this aim is symbolised in their desire for the wealth and power which would enable their autonomy to be realised. In 1972, however, Peli leaders were moving closer to an explicit recognition of their position on the periphery. At a meeting at Marambanja, Danial Hawina told over 1,000 people,

"You cannot worry about them [urban dwellers]. Don't worry about their education. Hear me! Don't worry about the man who puts on shoes and socks and says he is educated. He is making special money for himself. This money is only for him, not for all of us. Is this true or not?"
(Transcript from a tape recording, 10 July, 1972.)

Information from the 'centre' has flowed into the Dreikikir area through two networks, an official network and an informal, or indigenous network. The official network is directly related to the hierarchical administrative structure, in which information, thought to be desirable and change inducing, is transmitted from the national capital in Port Moresby, to District and Sub-district headquarters, and from there to the patrol posts. It is supposed to be passed from the patrol posts to the villages, which are the lowest order in the hierarchy. As this study shows, information is not effectively reaching the villages through this network; nor is it reaching them through the mass media.

The informal network is formed by the movements of the village people themselves, and the passing of information from villagers living in the towns to those at home. This network has been shown to be more effective at moving information into the villages from outside, than the official network.

Inherent difficulties exist in the passing of information from the official network to the villages. The Dreikikir villagers recognise, in common with Friedmann, that to be in possession of information grants a person or an institution, a certain level of authority and power, depending on the importance of the information. The role of the "save man" in the form of tambaran leaders, or bisnis and kago leaders, is one of giving information to the community which will allow it to succeed in a chosen enterprise. The person in possession of the knowledge or information can choose to withhold all or part of it, thereby depriving others of its benefit. So knowledge

is proffered from a position of power. When it is suspected that the person who is dispensing the information is not wholly trustworthy, is an outsider for example, the transmission of the information is likely to be restricted.

This is the case when information is passed from an administration officer to village people. He is already in an established position of power and is an outsider. The problem is increased by the type of information which is spread through official channels. It is conceived and presented from a "Western" frame-of-reference. It is diffused, not to provide the means of achieving autonomy, but to stimulate changes in living conditions in the villages, within the existing power structure. The villagers on the other hand, are, albeit unconsciously, seeking freedom from their position in the lowest level of the hierarchy. Their frame of reference is quite different from the "Western" frame. Therefore they either reject much information received through official channels or misinterpret it to varying degrees. Much information issued through the local government council was rejected in 1972. Information about the national elections in that year was also rejected. When newly elected MHA's spoke to the council in May 1972, they explained that the Peli Association leaders were not the leaders of Papua New Guinea, but that a coalition government led by Michael Somare had assumed power. After the meeting a Peli supporter said to me,

"They are not our members. We did not vote for them.
We are not Government men. We cannot listen to them.
We cannot believe them."

Similar reasons were given for the general lack of interest in the Sepik Producers' Cooperative Association. As Kokomo Ulia, the bisins leader, formerly the local government council chairman, the local Member of the House of Assembly and a director of the cooperative explained, the cooperative is "European work", that is, it is controlled by Europeans. In contrast Peli, is "New Guinea work" developed by Papua New Guineans and controlled by Papua New Guineans. Other men also made this distinction between "their work" and activities controlled from the outside.

Information which does reach the villages is frequently misinterpreted. Misunderstandings about the role of the House of Assembly, the purpose of the elections, the function of an MHA and the meaning of self-government and independence were everyday occurrences at Dreikikir during 1972. An interesting view of this situation was

provided by a student at the University of Papua New Guinea, who while involved in a vacation political education programme had met with similar misunderstandings. He felt that people were deliberately changing whatever he told them to suit their own purposes, and this to him, represented a rejection of his information. Aware that to accept information from outside sources deepens their dependency and strengthens the authority of the outside source the apparent misinterpretation of messages by villagers, may be merely another form of rejection. However, given the great disparity between the frames-of-reference of the sources of information directed at village people, and the frames-of-reference of the villagers themselves, misunderstandings are highly probable.

The implications of this situation for satisfactory national development are twofold. Firstly, outsiders who view the establishment of coffee gardens, cooperatives, local government councils and other apparently 'rational' forms of behaviour as satisfactory indications of economic growth, may themselves be misinterpreting the true situation. If bisnis is to many people, an unsatisfactory means of attaining the ends to which they strive, then in time, coffee gardens may become overgrown and disappear back into the forest, as the Iden Memorial Gaten is doing at present. For it is possible, that in the long term, coffee may be viewed as only a slightly more efficacious means to the desired end than was the ritual Gaten at Marambanja. Secondly, if present bisnis development is viewed by outsiders as an indication of satisfactory progress, and no attempts are made to solve the problems which the villagers perceive in their existing relationships with the 'centre', the likely outcome is a steady increase in rural discontent. Movements similar to the Peli Association are likely to become more common, more politically oriented and more militant.

A number of possible partial solutions exist. The training of field officers should make them aware of past events in the areas to which they are posted, for without a clear historical perspective they will be handicapped in any sympathetic approach to villagers' problems. The conditions of employment of officers should be restructured so that the greatest rewards go to those who choose rural rather than urban areas as places of employment and the present excessive office work should be eliminated by simplifying administrative procedures. The appointment of well motivated men and women as

"liaison officers", to live and work away from urban areas and government posts and to act as links between villagers and the bureaucracy as local level ombudsmen, to ensure villagers can get access to the services which the government and private organisation provide, should also be investigated. Greater attempts to decentralise the provision of goods and services in rural areas after the fashion of the market raun⁴ in the Eastern Highlands and genuine decentralisation of decision making from the centre are other partial solutions. But possibly the greatest hope for a solution lies in the willingness of all concerned, to search for innovative and imaginative means of politically and economically integrating the rural villages on the periphery of the national space, with the centre.

If this study assists in any way, to give outsiders a better and more sympathetic understanding of the problems facing the Dreikikir people, and other rural Papua New Guineans, provides insights into the processes which have created their present conditions, and stimulates a search for new practical and theoretical solutions, which will assist them to take their rightful place in their new nation, it will have fulfilled its purpose.

4. Ward *et al.*, (1974). "A system of periodic markets coordinated by visits with mobile government services" has been established with the object of offering higher order goods and services in a familiar context and increasing the flow of information to villages.

APPENDICES

APPENDIX A

VILLAGE SURVEY CHECKLIST, 1972

1. What is the history of the people of this village?
2. On what other sites has this village been established?
3. What other groups of people have occupied this site?
4. How did this group of people come to occupy this site?
5. From where did the progenitors (rop diwai) of this group come?
6. Why were these moves necessary?
7. What is the everyday language of this village?
8. What other languages can these people speak/understand?
9. Does this village demonstrate a dual organisation?
10. What tambaran ceremonies did this village celebrate?
11. What villages were involved in reciprocal tambaran ceremonies with this village?
12. When was the last ceremony (a) held in this village?
(b) attended by people from this village?
13. Which villages were allies of this village?
14. Which villages were enemies?
15. Which were the major sources of the following items:

(a) salt	(c) stone adzes
(b) clay pots	(d) shell rings
16. Are the common housetypes in this village traditional?
If not, where did this housetype come from?
17. From which villages did this village draw most of its wives?
18. To which villages did this village send its women as wives?
19. What are the major food combinations in this village?
20. What are the basic gardening techniques?
21. Where are the boundaries of this village's land? [Sketch onto air photos].
22. In the opinion of the informants, is this village short of land?
If so, what type of land, or what particular shortages?
23. Is this village involved in a land dispute at present?
24. When was the last land dispute that caused serious trouble and with whom?
25. What sort of land is the best land for: (a) garden crops
(b) rice
(c) coffee
26. What was the name of the first outsider to enter this village?
27. Who was he accompanied by?
28. From which village did he come, and to which village did he go?

29. Was this village entered by non-local indigenes prior to European contact?
30. What happened during these initial contacts?
31. Who were the first people from this village to go to the coast, or to be taken by labour recruiters?
32. How many of those who were taken first returned?
33. Did people know of the existence of (a) the ocean; (b) the Sepik River before contact?
34. How were the first labourers recruited [i.e. other than those taken by force]?
35. How many men in this village have never been away on labour contracts?
36. During the 1935 earthquake, was this village seriously damaged?
37. During the Second World War, did the Japanese enter this village?
38. On how many occasions and for what purposes?
39. Did they kill anyone in this village?
40. Were men from this village involved in carrying for the Japanese or working for them outside the village? If so where and under what conditions?
41. When the Japanese first entered this village, how did they behave?
42. Did Australian or American soldiers, or ANGAU enter this village during the war? If so, details.
43. Were men from this village involved in carrying or fighting with the Australians during the war? If so where?
44. Was this village bombed from the air, or otherwise involved in hostilities? Were villagers killed during these actions? Where did they hide?
45. Where did people in this village first hear about (a) the Japanese (b) the fighting?
46. How many 'cargo cults' has this village been involved in?
47. Where did the idea of cargo cults first come from?
48. Did Mahanung, Wahute or Minilam ever come to this village and hold meetings with people about their 1956 cult? If so, who were the leaders within the village? [Note briefly their background and present activities.]
49. What sort of things happened during these cult activities?
50. Did people from this village go to other villages and tell them about the activities and what to do? If so, which villages and who was contacted?
51. Were people from this village arrested in 1956? How many?
52. Who was the first person to bring rice to this village? Who gave him this rice?
53. How did this person first come to hear about rice plantings?
54. Did Anton, Kokomo, Mwalhier, Winyeng, Kumwha or other RPS leaders come to this village and hold meetings? If so, who and when.

55. Did this village plant rice at some other place, outside their own village land?
56. Were people in this village members of the 1st RPS's?
57. Did men from this village carry rice and give it to men in other villages? If so, who?
58. Was there ever any local rice processing in this village?
59. Did this village ever sell rice to Dreikikir? To any other market other than DASF or RPS?
60. Why did you not plant rice this year?
61. Collect background of those early RPS and rice innovators?
62. Where did this village get its coffee seedlings from? (a) When did they first plant coffee (b) sell coffee (c) buy a coffee pulper?
63. Who came and showed them how to plant and process coffee?
64. How many men from this village have undertaken farmer training?
65. How often do these men hold meetings or assist village people?
66. Does this village have a cattle project?
67. If so, details on its financial basis.
68. If not, why has this village not considered beginning a project?
69. Has this village ever possessed a PMV? Where is it now?
70. How was it financed? Where was it purchased?
71. If not, why has this village not thought about buying a PMV?
72. How many radios are there in this village: (a) S (b) U/S.
73. How many trade stores in this village? [If possible inspect and note details.]
74. When was the first trade store built in the village, and by whom?
75. Collect details of hamlet names etcetera.
76. Do children from this village attend schools in other areas?
77. Note distances to nearest:
 - (a) mission station
 - (b) school
 - (c) aid post
 - (d) government post
 - (e) airstrip
78. Note major walking routes to central places and other villages.
79. Did this village ever plant peanuts? If so, who gave them the first seeds, who brought them to the village and did they give them to any other villages?
80. How many people in this village are members of the Peli Assn.?
81. Who was the first person to bring news about the Peli Assn. into this village?
82. Did people from this village go to Yangoru on 7 July, 1971?
83. How did the committee man from this village first hear about the work? How did he come to be appointed committee?
84. Does this village have a power house?
85. Collect details on committee's background.
86. Collect details on mission activities past and present.

APPENDIX BCASH CROP PRODUCTION, 1971. 1972; NUMBER OF COFFEE TREES, 1972;
NUMBER OF SEPIK PRODUCERS' COOPERATIVE ASSOCIATION MEMBERS, 1972;
BY VILLAGE

Rice and coffee production figures come from figures come from two sources. Those for 1971 are derived from carbon copies of receipts issued to growers by SPCA buyers. Receipts are issued to members and non-members, and membership is noted on each receipt. Mean production per grower figures were derived by coding the details from each receipt and using a computer to calculate and tabulate village by village figures. This required 150 man hours of coding.

Subsequently a faster method of obtaining 1972 data was investigated. The share registers of the SPCA record total production for each year for all members, calculated at the time of the annual dividend payment. Share register figures were coded and grower means for each village again calculated by computer. The disadvantage of this source is that non-member production is not recorded.

In 1971, a comparison between member and non-member production indicated that non-member produced only 2.5 per cent of all coffee sold to the cooperative. However, Kombio non-members produced 30 per cent of all the coffee purchased in that area. Thus in any averaging of production over the period 1970-1972, only 1971 Kombio coffee production figures have been used. Non-member production elsewhere was less than one per cent of total production.

Some southwestern Gawanga growers sell coffee and rice to the Department of Agriculture, Stock and Fisheries at Nuku. A buyer comes to Klafle on the western side of the Ipunda River and Gawanga growers ford the river and carry their produce to that village. In 1971, 13 per cent of all rice grown in the Gawanga census division and four per cent of all coffee, was sold through the DASF at Nuku (pers. comm. DASF, Nuku).

A private coffee buyer was operating in the Dreikikir area in 1971 and 1972. It is estimated he purchased about five per cent of the total Sepik coffee harvest in those years, the balance going to the SPCA (pers. comm. Mr R. Bassingthwaite, Department of Business Development, Division of Cooperatives, Wewak). The private buyer would not release his figures to me. His buyers purchased most of their coffee on the highway where production was highest. They had no commitment to villagers off the road, as did SPCA buyers.

Data problems such as these are unavoidable in the Papua New Guinea situation. The data for the Maprik Sub-district are much better than in many other areas where village by village production figures can not be derived. Figures for the whole of the Sub-district produced by Weinand, Young and Lea (1972) were not used because they do not contain mean production per grower by village.

Data for SPCA membership was derived from the share registers of the cooperative society.

Data for coffee trees per grower by village was derived from individual grower census sheets held at Dreikikir Patrol Post DASF office. Each grower's trees were recorded by age. This data was transferred to cards and a computer used to provide village figures.

The invaluable assistance of Norlie Miskaram, Alois Parris, Bernard Annol, Paul Mango, Gerry Sigulogo, and John Alman, students at the University of Papua New Guinea, and at Dreikikir, of Linda Allen made the extraction of this data possible. Professor D.A.M. Lea made available, receipt books which he had on loan from the SPCA at Hayfield, and in the field, officers of the DASF and the cooperative society were extremely helpful.

TABLE B.1 RICE AND COFFEE PRODUCTION BY VILLAGE, DREIKIKIR LOCAL GOVERNMENT COUNCIL AREA, 1970 AND 1971.

CENSUS DIVISION	VILLAGE	RICE								COFFEE								
		TOTAL PRODUCTION (Kg)		INCOME (A\$)		NO. OF GROWERS		MEAN PRODUCTION PER GROWER (Kg)		TOTAL PRODUCTION (Kg)		INCOME (A\$)		NO. OF GROWERS		MEAN PRODUCTION PER GROWER (Kg)		
		1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	
WAM	Arisili	647	231	43	16	5	1	129	231	7330	6093	2529	2165	87	68	43	90	
	Bana	1605	2034	102	136	12	10	133	203	3797	4109	1324	1461	49	29	77	141	
	Hambini	8740	8661	583	577	51	30	171	288	9363	8967	3300	3188	86	60	109	149	
	Luwaite	2476	3601	165	241	14	14	177	258	5093	6215	1737	2209	52	51	98	121	
	Sahik	625	*	39	*	6	*	104	*	1587	709	555	252	16	9	99	78	
	Selnau	480	537	32	36	2	3	239	179	7419	8424	2562	2992	75	46	99	183	
	Selni	3259	10468	216	698	20	34	163	138	6185	6539	2147	2324	75	54	82	121	
	Sumul-Whaleng	1730	0	109	0	14	0	124	0	5459	2683	1912	936	46	25	118	107	
	Wareli	9	3420	1	228	1	17	9	244	2667	2372	927	849	30	23	89	103	
	Warengame	1644	1164	191	78	19	7	88	166	7926	7886	2770	2804	92	76	86	103	
	Yasum	*	*	*	*	*	*	*	*	540	*	188	*	8	*	67	*	
	TOTAL WAM		21235	30116	1481	2010	144	116	147	260	57336	53997	19951	19183	616	442	93	122
KOMBIO	Ben	935	18	50	1	5	1	187	18	698	430	247	153	7	3	100	143	
	King	426	*	28	*	1	1	28	*	28	55	10	20	1	1	28	55	
	Koupem	0	*	0	*	0	*	0	*	22	*	8	*	2	*	11	*	
	Kuamala	22	*	2	*	1	-	22	*	*	*	*	*	*	*	*	*	
	Kumbum	5668	23	332	2	28	2	202	11	*	60	*	21	*	3	*	20	
	Makupmanip	3802	33	187	2	30	2	126	15	111	48	39	17	3	2	37	24	
	Meringe-Wum	3429	2	166	*	27	1	127	166	580	326	187	116	24	5	24	65	
	Muyem	447	*	30	*	3	*	149	*	418	199	142	71	11	3	38	66	
	Nialu	2647	*	152	*	23	*	115	*	65	*	23	*	2	*	33	*	
	Nyumatil	1278	*	57	*	14	*	91	*	3	23	1	8	1	1	3	23	
	Samark	1334	*	67	*	14	*	95	*	217	50	57	18	13	1	17	50	
	Sambu	251	343	13	23	4	1	63	343	287	108	90	38	4	2	72	54	
	Serepmel	723	*	35	*	9	*	35	*	166	*	45	*	3	*	55	*	
	Setnyam	*	*	*	*	*	*	*	*	147	22	52	6	5	1	29	22	
	Soayaip-Waim	3989	1140	263	76	12	5	332	228	748	477	266	170	14	9	34	53	
	Tong	1047	151	63	10	6	1	174	151	216	53	59	19	12	2	18	27	
	Yakio	1224	*	66	*	9	*	136	*	37	*	10	*	2	*	19	*	
	Yakulm (Yase)	2607	*	146	*	10	*	261	*	38	269	14	96	2	3	19	90	
	Yakumbum	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
	Yalangal	1480	680	93	45	14	6	106	113	1334	1164	450	414	15	11	89	106	
	Yambes	2148	938	135	63	24	6	90	156	865	581	294	206	22	8	39	73	
	Yasile	2690	*	142	*	20	*	136	*	307	178	104	63	5	2	61	89	
	Yawereng	3424	240	211	16	24	5	142	48	506	657	175	233	12	11	42	59	
	Yetnibum	2313	194	130	13	16	1	144	194	438	205	144	73	14	8	31	27	
TOTAL KOMBIO		41884	3762	2368	251	294	32	142	118	7231	4905	2417	1742	174	76	42	66	
URIM	Albalung	1560	3586	104	239	12	23	130	156	743	502	165	178	10	15	74	33	
	Kilmanglen	1285	3274	85	218	9	8	142	409	120	9	43	3	1	40	9		
	Krungunam	399	4514	27	301	2	13	199	347	252	28	90	10	7	2	36	14	
	Laningwap	2455	10100	149	637	10	20	246	505	845	48	301	17	14	8	60	6	
	Mimboik	0	585	0	39	0	1	0	585	45	0	16	0	0	0	45	0	
	Pagilo	81	3719	5	248	1	6	81	619	0	*	0	*	0	*	0	*	
	Winyamon	626	548	42	37	3	5	208	110	117	134	42	48	4	6	29	22	
	Yakrumbok	1282	1688	85	113	7	4	183	422	841	289	660	103	5	4	168	72	
	Yauatong	281	234	19	16	3	2	93	117	747	137	266	49	12	4	62	34	
	TOTAL URIM		9969	28248	516	1848	47	82	170	344	3710	1147	1583	408	56	40	66	29

URAT	Asiling	1166	610	78	41	9	1	129	610	1404	2812	489	1000	25	34	56	82
	Daihungai	1223	12317	82	821	5	53	244	232	5315	4543	1794	1617	75	60	71	75
	Emul	7466	1821	498	121	46	10	162	182	6781	8057	2266	2865	71	91	95	88
	Moiwhak	10450	519	670	35	48	4	217	130	3352	3465	1164	1232	41	41	81	86
	Misim	3711	2955	247	197	17	16	218	184	3924	4994	1367	1775	53	64	74	78
	Musenau	4616	4206	308	280	29	30	159	140	3883	2727	1314	969	67	50	26	55
	Musendai	13110	9167	874	611	50	48	262	190	6188	7107	2205	2527	112	76	55	93
	Museng	16269	38191	1085	2546	63	100	258	382	8092	4472	2872	1590	85	87	95	51
	Musilo	12669	1512	845	101	44	8	288	189	3170	3978	1106	1414	55	40	58	99
	Musengwa	8372	2697	558	180	34	18	246	150	1469	1904	520	677	27	23	25	82
	Musingwik	18635	3944	1242	263	61	16	305	246	2727	3154	920	1121	48	44	57	72
	Namaisung	83	1519	6	101	1	12	83	127	1370	1452	463	516	13	13	105	112
	Nanaha	9567	2131	635	142	43	17	222	125	3022	2968	1067	1055	56	45	52	66
	Pelnandu	701	605	47	40	7	6	100	101	2601	3358	886	1208	39	44	67	77
	Porombil	3239	690	216	46	23	5	141	138	5984	6372	1964	2266	75	58	80	110
	Tumam	23493	23863	1545	1594	51	69	454	223	7041	5084	2507	1638	66	78	69	65
	Yerhmain	7266	718	482	48	26	4	279	179	1551	1318	532	468	21	16	74	82
	TOTAL URAT	141736	107465	9418	7167	557	417	254	258	67874	67805	23436	23938	929	864	73	78
GAWANGA	Apangai	6368	11513	425	768	22	19	289	606	2919	1750	998	622	59	20	49	88
	Apos	21107	12585	1407	839	53	49	398	257	1956	2719	697	966	33	47	59	57
	Asanakor	28480	3856	1898	2571	61	69	466	558	1605	3578	542	1336	51	57	31	66
	Bongowaukia	*	*	*	*	*	*	*	*	1762	*	483	*	37	*	48	*
	Daina	*	*	*	*	*	*	*	*	1407	*	474	*	19	*	74	*
	Kubriwat	2701	9946	177	663	18	25	150	397	1374	1925	490	684	21	19	65	101
	Tauhundur	4535	1067	277	71	12	6	377	178	3234	3272	1124	1163	38	31	85	105
	Tauhimbiet	1670	3754	93	250	8	16	208	235	4716	5176	1611	1840	55	34	86	152
	Masalaga	*	*	*	*	*	*	*	*	1804	*	572	*	19	*	95	*
	Kuyor-Wesor	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Mahmsi	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Kwatengisi	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	Wosambu	*	*	*	*	*	*	*	*	407	*	107	*	*	*	*	*
	Yubanakor	8186	9330	546	622	25	21	327	444	1393	1924	471	684	31	26	45	74
	TOTAL GAWANGA	73047	86755	4823	5784	199	205	367	423	22577	20344	7559	7295	363	234	62	87
TOTAL DREIKIKIR		285871	256346	18606	17060	1241	852	230	301	158728	148198	54956	52566	2138	1656	74	89

Notes:

* An explanation of the different sources of the 1970 and 1971 figures is given below. In cases in which there is no information on production from a village, but it is likely that some production by non-members occurred, an asterisk is used in preference to a zero. A zero indicates no production of a given crop.

Some western Gawanga villages sell rice and coffee in small amounts to the Department of Agriculture, Stock and Fisheries at Nuku in the West Sepik District. Private buying also occurs in the area, but is likely to be less than 5 percent of total production. No details of these sales are available.

Growers do not consume their own rice. Rice for local consumption is purchased through local trade stores.

Source:

1970 figures — Sepik Producers' Cooperative Association rice and coffee purchases receipt books. 31 March 1970 to 1 April 1971. The receipt books contain details of individual purchases of rice and coffee, including the name of the grower, and if he is a member, an identifying membership number, the date, the grower's village, the amount of rice or coffee purchased (in lbs. wt.) and the amount of money paid to the grower in A\$. This information was transferred to punched cards and a computer used to calculate the above figures. This source allowed a distinction to be made between rice and coffee production by members and non-members of rural cooperatives.

1971 figures — Sepik Producers' Cooperative Association share registers, Dreikikir Rural Progress Society and Supari Rural Society, 31 March 1971 to 1 April 1972. At regular intervals, usually once per year, members of the Sepik Producers' Cooperative Association present their coffee and rice receipts to officers of the Association for the calculation of the annual dividend. Officers tour villages, collect receipts, calculate each members total production and enter it into a share register. These figures are used to calculate the dividend payable to each member. The share registers used during these collections were made available, and the figures in them, transferred to punched cards and a computer used to calculate the above figures. These figures include production by members only. An indication of the proportion of rice and coffee produced by non-members is given in Table 4. in Chapter 4.

Acknowledgement: The ready assistance of officers of the Sepik Producers' Cooperative Association is acknowledged. Messers Norlie Miskorar, Alois Parris, Bernard Annol, Paul Mango, Gerry Sigulogo and John Alman, students at the University of Papua New Guinea assisted in coding the data.

TABLE B.2 COFFEE TREES BY VILLAGE, DREIKIKIR, 1972

VILLAGE	NO. OF COMMUNAL TREES	NO. OF MATURE TREES	TOTAL NUMBER OF TREES	MEAN NO. OF TREES PER GROWER	MEAN NO. OF TREES PER ADULT MALE
Asiling	870	3,174	4,475	163.8	128.8
Daihungai	605	8,711	10,759	151.6	72.5
Emul	1,731	6,048	10,319	186.7	114.5
Moiwhak	254	20,394	21,772	347.1	307.4
Misim	808	7,040	8,183	179.9	91.0
Musenau	-	7,341	8,956	186.6	159.9
Musendai	-	10,774	21,326	167.9	130.8
Museng	-	8,272	10,737	134.2	100.7
Musilo	540	13,135	15,407	247.8	203.8
Musengwa	462	3,610	5,025	175.5	99.1
Musingwik	577	5,410	6,545	142.1	76.5
Nanaisung	-	4,880	4,880	232.4	113.5
Nanaha	-	11,783	15,186	199.8	153.3
Pelnandu	-	3,448	3,656	121.9	65.3
Porombil	1,518	13,748	15,066	196.35	102.6
Tuman	-	12,196	13,953	162.3	134.9
Yerhmain	-	7,109	9,524	317.4	238.1
Total Urat	7,365	147,073	185,679	191.5	128.7
Arisili	-	16,961	17,585	183.2	114.2
Bana	1,104	10,496	12,329	238.8	207.8
Hambini	-	30,183	35,003	330.2	315.3
Luwaite	374	9,557	13,430	229.1	256.0
Sahik	-	2,777	2,831	149.0	78.6
Selnau	911	13,997	17,363	257.1	216.5
Selni	1,631	17,170	21,817	234.7	190.4
Whaleng	-	15,030	19,239	263.5	181.5
Wareli	629	3,473	5,485	147.2	112.9
Warengame	249	21,144	25,265	197.0	148.0
Total Wam	4,989	140,788	170,895	232.4	146.8

Albalung	288	2,345	4,571	207.7	63.0
Kilmanglen	135	3,671	4,392	151.4	123.0
Krungunam	208	2,077	5,864	153.1	51.7
Laningwap	-	7,508	12,844	175.9	124.7
Mimbiok	136	419	1,676	110.0	45.3
Pagilo	-	2,417	8,857	227.1	116.5
Winymon	70	1,887	1,973	135.9	86.5
Yakrumbok	334	4,165	11,617	182.0	100.7
Yavatong	396	2,515	3,333	104.8	57.5
Total Urim	1,678	24,587	55,222	169.4	86.9
Ben		1,485	3,027	116.4	151.3
Serepmel	110	3,563	6,560	126.6	94.9
King	310	325	5,319	135.3	72.5
Koupem	616	299	3,528	161.7	69.3
Komala	1,385	(1,188)	6,430	194.0	100.9
Kumbang	110	(698)	3,983	96.8	61.5
Meringe	124	3,676	6,418	131.1	110.4
Muyem	105	1,262	3,266	210.7	150.5
Nyumatil	115	152	1,756	164.1	96.5
Makupmanip	400	1,883	7,404	137.3	194.5
Samark	-	1,599	2,754	144.5	125.2
Sambu	(513)	634	1,714	133.4	37.5
Soaiyaip	99	2,810	6,149	131.5	126.0
Tong	153	295	1,706	97.1	57.5
Yetnimum	487	318	2,861	79.1	28.6
Yakio	-	136	564	94.0	40.3
Yalangel	528	2,587	3,400	110.4	119.6
Yambes	1,177	5,091	12,411	197.1	115.8
Yakulm	569	1,231	3,976	141.9	63.1
Yasile	174	521	2,539	118.3	107.5
Yawereng	255	2,479	5,313	158.1	109.9
Setnyam	(305)	(1,132)	1,995	140.8	*
Yakumbang	333	(942)	4,581	169.9	106.2
Sangaien	-	(245)	1,218	135.3	71.6
Nialu	-	270	1,517	126.4	*
Mup	146	(768)	2,993	158.2	81.3
Total Kombio	8,014	35,589	103,387	139.6	95.3

Apos	-	9,168	16,452	253.1	143.1
Asanakor	*	*	*	*	*
Bongowaukia	798	24,703	44,159	141.8	129.4
Daina	-	6,408	8,924	212.5	174.9
Kubriwat	-	17,938	34,669	248.2	137.4
Tauhundur	-	13,532	14,739	283.4	110.0
Tauhimbiet	-	12,537	17,715	180.8	132.2
Masalaga-Abegu	458	8,902	15,252	224.2	159.1
Kuyor-Wesor	698	7,981	15,920	217.5	116.2
Manamsi	667	7,941	11,447	107.8	64.1
Kwatengisi	-	9,446	18,944	166.2	109.5
Wosambu	913	6,809	12,937	273.3	130.7
Yubanakor	*	*	*	*	*
Total Gawanga	3,534	125,365	211,158	208.5	117.3
TOTAL DREIKIKIR	25,580	495,871	726,431	192.5	115.0

Notes: * No data available. Records missing.

Source: D.A.S.F. Coffee Census, individual grower's sheets, Dreikikir Patrol Post, 1972.
D.D.A. Village Census, Dreikikir Patrol Post, 1972.

APPENDIX C

Binghoiye Tomi

Kokomo Ulia

Anton Misiyaiyai

Mwalhiyer

Loa

Kesbuk

Akolasa

Wahute

Mahanung

Minilam

BINGHOIYE'S NARRATIVE

Binghoiye is better known by his assumed name Tomi, in the Dreikikir area. Although he maintains houses and gardens at Ngahmbole hamlet, Tumam village, he spends most of his time at Musendai village, two hours east of Tumam, where he is the aid post orderly.

It is difficult to summarise Binghoiye's position in the Tumam community and in the surrounding area. In Tumam he has great influence. He is respected for his quiet manner, but slightly feared for his odd outbursts of intense anger. He has two wives, and as well as his own children, they look after a collection of strays and motherless children from Tumam and other nearby villages. He has invested over \$500 in the village motor vehicle, and is always ready to encourage individuals in bisnis enterprise, although he does not view himself as a bisnisman. Probably because of his long absences, he appears to be above inter-village rivalry, and when disputes break out, he is often called upon to adjudicate.

In the Dreikikir area he is well known because of his leadership at the Kumusi River near Kokoda in 1943, when hundreds of New Guinean carriers were deserted by Japanese troops. Dreikikir men who were present, remember his actions clearly. His other wartime exploits and his personal tally of Japanese are known well beyond Tumam village. He has also lived in many villages in the area, establishing aid posts and working in them.

Binghoiye found parts of his narration fairly trying. He frequently had pause to regain his composure, and in particularly disturbing parts, such as his description of the meeting with his brother's spirit, he wept openly. Although he did not participate in the 1956 movement, which was led by his cousin Mahanung, he believes that some force outside of Mahanung was responsible for what happened. Whether it was the Christian God, or some other form of spirit, he is unsure. He did not join the Peli Association in 1971, but he made no attempt to stop people joining. It is perhaps, his ability to maintain a neutral position when all about him are taking sides, that distinguishes him from his fellows.

Although Binghoiye's narrative does not refer specifically to the subject matter of this study, it is included and presented first, because of the width of experience described within it. Binghoiye was initiated before European contact with his village, was taken by force by recruiters, worked on plantations in East New Britain, experienced the war as a carrier and a combatant, and returned home to participate in post-war changes in the study area.

When my mother gave birth to me she was living here. She was pregnant. She got up and went to her birthplace, Musembelem. Now at this time...my name. This is how I got it. She annoyed her husband's family. Her husband's brother said, "If you have a boy, yes, I will look after you in this village. But all the time you have girls. Now I won't look after you here. You go to your own village." My mother heard this and my father heard this. They both heard this. I was inside my mother's womb. They went and came back to my mother's village, Musembelem. My mother walked along this road that goes to Dreikikir. She went to where the Rural Progress Society has its shed. Here she went down, and went to one small hamlet which our ancestors had built. They call this place Taiporckoneke. It was in the bush.

At this time my mother and father stayed here with my mother's father and my mother's younger sister, Yaingulume. It's like this. My father, Retehi, married Boiyurume. Another father married a younger sister of Yaingulume, Lapinip. Lapinip's father was Bulsa, this is the name I have put on my youngest child here. So he took them, and they went to this place. Now my grandfather, my mother's father, Wonase, and his younger brothers, my other grandfathers, took them, and they stayed here. Mejiwor and Romiya they stayed together in the bush. They all said, "He would not help you. So you can come and stay with us and have your child." So my mother gave birth to me in the bush.

She had no food in the bush. So my grandfather pulled a yam, a long yam. Mejiwor, a grandfather of mine, he got a yam, a mami that they call *hau wimbe*. He came and made soup for my mother. She ate.

They went and carried the news to my mother's husband's family. They said "You made her leave this village. Now she has had this baby. So it is ours. We will put our name on it." So my mother's family put this name, Binipbilbil. I stayed there until my mother was strong. She washed and cleaned herself. Then my grandfather, who has the same name as me, Mahapa or Binghoiye, my name. You see my grandfather had two names, Mahapa and Binghoiye. Alright, he sent word. "I want my son's wife to come back. I have heard she has given birth to a male child. I would like her to take this child and bring it here so I can see it." So, mother and father, they took me, and came back to Musembelem.

But all my mother's family, my grandparents, they all said, "We will not send her back." So we stayed on top. We stayed with my mother's sister. Yaingulume and Lapinip stayed on top too, at Musembelem. We stayed and stayed and stayed. We came and stayed here. We went back and stayed there. Stayed with their parents. I stayed and stayed, until I was big. When they celebrated *yerengai* the annual harvest ceremony, my father did so at Musembelem. When they worked the tambaran, *lahial*, his own father made it and he stayed on top. They made *dohiai* too. My father stayed on top. *Misian* too. My father helped his brother. They worked together at Musembelem. He did not celebrate them here. Why? All his brothers lived here, Sepiare and Moipakai, they lived here and made the tambaran here. And he went and stayed at the village of my mother.

So I stayed there. They took me and I stayed on top. They came back. And this grandfather of mine he said...he heard this name they had put on me, Binipbilbil. Alright he said to them all here, all my mother's fathers. He said that my name must be Binghoiye. So he made my name the same as his. That was that.

When I was still a child, my father took me and came here. I stayed here. It was like this. I stayed here and my mother went on top. Time passed. Then my father died. My father died. It was about the time we had a fight here. It was like this, Tumam...it was not Nghambole's fight, no. It was between Tumam and Musilo. But half of us, our grandparents, went and broke into two. Half, this half, the parents of Ketehe, they went in with Tumam. Now all the parents of Bowongei went together to help Musilo. They fought just here. When the fight was over they began to make a tambaran, *ngambo*, the flying fox. They made it for us. I was a boy, the same age as Mahinga. They made *ngambo*, the flying fox now. They made it for us. First we stayed in the bush. Then

we came out and washed and waited. Now on top at the village of my grandparents, the parents of my mother, they washed now, they came out with the decorations, they danced now.

Then we all ran away. They sang and danced, they hit the hand drums, they came out with the decorations on. Then they came. All the men who came to chase them, they came from...some came from...ah...they shot a European above Yambes on this side, on top there¹. So they came. Kiap Melrose, he was a young man then, the father of Mr. Niall. He brought them.² They came now. They fought up there. Alright, he chased them and now...ah...this group of men, they came now and chased us now. Now all our fathers and all our mothers they all ran away. We all ran away. This European wanted to get some workmen. So they speared him. Then the kiap's patrol came inside and chased them. Then later they came and chased us. The patrol officer himself came. They burned that village. They chased them all. So we too, we were afraid. So we ran away into the bush. Everywhere, they ran away. They said, "If they find some of these men who killed the European in our village it will be no good." So we ran away. We went and hid in the bush. All of us. Went and hid at Hultuwam. Now we all ran away. Then we hurried back, and hurried to wash.

Then the white man came. They all said "Tambaran!" They said that this man had died and now he had come back. This man, Thompson³. My father had died. I had left this place and gone on top to stay with another father. They came. They came to take our names, they came to give the hat and all the things of the government. I was the same age as Mahinga.⁴ I stayed on top. Alright, they called out now. They wanted us to line up. I wanted to give my name on top, but Hautart, from Whaleng, he spoke. He said, "I think, child, you cannot stop here with your brother and mother. You must go back to your father's village." Hautart, he had been to work at the Station. Now he came with the patrol officer. They came and lined us up now. They chased me out. So I came back here. I came and stayed. When they came here, we lined up on top here at Wersuhe. We lined up. All fathers, mothers, and us too, we had nothing on. All mothers and fathers, all their genitals were not covered.

Alright, the patrol officer sat down on this side. He worked at getting our names. Hautart, he understood the language of the eastern Urat. So he changed it slightly and spoke our language. Well, we stayed and stayed and

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1. The two Germans, Stendel and Kommling who were killed in 1918 by Kombio people. See chapter 3.
 2. This is not correct. The first punitive expedition was led by Capt. A.J. Hunter and the second by Lieut. V.B. Pennefather.
 3. Oliver Giles Thompson, District Officer, Aitape District, 1923.
 4. About 15 years of age.

stayed. We finished lining up. I gave my name with my mother as my father was dead. Mahanung's father, he looked after my mother. Mahanung's father, Ngahmbole, the same name as I have given my child. I stood up with Ngahmbole, my mother and with Mahanung and gave my name. We were afraid. We thought, why is he white? Now mother and father said, "He is a man who has died. Now he has come back." We had not seen these clothes before. So we thought this. We stayed there. They finished lining us up. They got up. They went to Moiwhak. They lined them up. Finished. They lined them all up. Gave the hat. They went and went, round here (broad sweep of the arm) they went and came back. They went to Tau. We sat down and talked now. They gave them all a hat. There was no man here who could speak Pidgin then.

My father's younger brothers, Taihiwor and Borandai. They came and took them. At this time, no white men had come here. This group worked for the Chinese on the coast. They came in here, grabbed them, took them. They pulled them. They tied their hands. They held them and went. My father Taihiwor, they held him on top. At Moitebange, the small part of Ngahmbole. Mwalhier lives on this side. Mekelieme on this side. Okay, Taihiwor sat down in the middle. This was his living area, before. Alright, they held him. Held him tight. Now my father's younger brother, Borandai he was living at this little place here, Hultuwam, ah no, Natalohe. At this time they were making the houses at Hultuwam. They had cut the bush and were building, that's all, down below. You go down and you go this way to Moiseumbehe, and look in this direction. There are some coconuts there. Alright, he got up and walked up here. And they came and held him down below here at Sahuwa. They chased them all. He came now. They met. All the other people had run away. And they held him. They got him. He was held fast.

They called out. They gave away one large knife and one axe, a big one. It used to be around here. I don't know where they have put it now. The knife was lost during the war. They held them first. Then they called to their fathers. They gave them the knife and the axe. They said this was for them. Then they took them and went. They took some from Tumam too and Musingwik, and Hundihika from Musilo. They didn't take me at this time. I was too small. I was on top with my mother. We were afraid of them. They had laplaps around them and they carried things we had not seen before. We were afraid to fight them. They grabbed the old people. They hit our fathers and mothers. They chased women and raped them and took some women too. They stole rings and took with them. They stole yams and mami from houses and cooked them. If men ran away, they chased them and hit them when they caught them.

So I stayed on top. Where Dreikikir is now, where the school is. My mother and I used to cut gardens there all the time. We had a bush house there and made gardens there. We were there. They came. They came to the eastern Urat. To Namaisung. In the morning they got up. They walked and came. I, I wanted to come and visit Lundindol. He had come married to Daihunge. I wanted to help him to plant his food garden. They came. They met us. They held me and Buiai. All the rest ran away. And one man from Musimbelem, this man who is always being burned by the fire.¹ They held us. We went to Nanaha. We came

1. An epileptic who is frequently burned by falling into fires.

back to my village. My father came up. My father came. He wanted to spear his older brother. His father was from Namaisung but he had come and stayed at Musimbelem. One ancestor gave rise to both of them and they called each other brother. Now when my father wanted to make a tambaran or a feast, he came and helped him. Alright, father was angry now. He took his spear and wanted to shoot him. "Brother," he said, "Your cannot shoot me. If you shoot me, they will kill you." So, they held me. We went, came to Yawereng. Left Yawereng and went down and up and slept at Yambes. We left Yambes and went to Samgum in the eastern Urat. Now, Buiai ran away. I was one now. One with all the Kombio's. Many Kombio's. They were tied up. The white man was with us now. He stayed at Yambes and sent them all down to get us. I thought he wanted to kill us. But he said, no, he wanted to show us something. We got up and left the Urat and went to Salata. Came to Bonahoi and down to Salata. Slept there. Hased them too. And got some of them. Left there. Went down to the Nanu River and up again. Slept at Warengame. Got up from Warengame and went up this ridge. Went down and went all the way to the coast.

So we came to the coast. We looked and looked. They said, "Saltwater". Their language. In ours we call it *ro'pinip*. I was afraid. The sea broke and came up. We walked along the coast. We walked on top. Those who knew about the sea walked near it. We were afraid. It broke and came up the beach. We walked and walked and came to Aitape. We stayed at Aitape. We had laplaps now. They gave us laplaps at Yambes. All these things. Mother and father told us. And we thought too. I think all the men from before, our fathers and mothers who have died and gone, now they made all these things. Our fathers, our mothers, they saw these things. They said, "See, now they have come back." When the white man took out his teeth. They said, "See now, he has died and his teeth have come out." They were afraid too, when he took his teeth out.

Well, we stayed there two moons. Three now. Some of us stayed, some of us went. The white man took me. I went and cooked food in his cook house. Washed his clothes. I started to learn Pidgin now. They said, "He is a masta." He called out, "Boi!" Okay, I went and got his things for him. Now I thought. He is man that's all. He has another sort of skin. We have another sort of skin. Masta's have white skins. We have black skins. They said, "We have brought you to do work. To learn Pidgin. When you have learned Pidgin you can go back. If you don't know Pidgin, when you come you will try and kill us, or break our things. Your mothers and fathers will try and kill us. So now you have come to work and learn Pidgin. Later you can go back to your village." They said, The masta has come and got you. Now you must work for the masta. All of us must work for him. He will pay us with soap, matches and salt." Money we had not seen yet.

Then I went on top and signed my name. Made time. Three years. I didn't know how long. They said to put my name that's all. I didn't know. I thought I would stay in Aitape. I wanted to go home too. I thought about father and mother. I thought, later will I see them or not? But they said, "You stay, learn, three years, you can go back to father and mother. Now if you like to stay longer you can." Now I was clear. When my time was finished I could go back to my village.

Now at this time, the war came. It didn't come all the way. It stayed inside Rabaul. This war came. They threw out all the Germans. I signed for

three years. I stayed in Aitape. They said, "You can not hurry to go. There is sickness which has come. A big sickness. No good if you get it too." They did not tell us about the war. They said, "Some of you will go to Manus, some to Kavieng, some to Rabaul." I stayed. Then they rounded up the Germans and made them go. All of them went. But I was not very old. So I do not remember them well. They had red skins. Red all over. Then after one year, my masta took me to Rabaul. This masta, he was not German. He was distant relative only. He did not go. But all the others went. So he said, "Come on, you and I will go to Rabaul."

Okay, the two of us left Aitape. The ship took us. We went ashore at Wewak. There was no station. A native village that's all. We went ashore. Where there was a bush house. All the coconuts at Moem and Boram. They were just planting them then. We waited there for the big ship. My masta said, "We will go on that one." So we left Wewak. There was nothing there. Two bush houses on top where the District Office is now. That's all. The ship came. At eleven o'clock. They called out from on top. "Saloo.....Saloo..... Mandui i kam". My masta said, "That's the one, we will go now." The ship came. The masta went on top. Asked the captain. The captain said he was going to Aitape. He could not come back to Wewak. He was going straight to Madang. Alright he came back. He said, "Get everything. We will go." We went back to Aitape. Worked the cargo. Went to Madang. Left Madang and went to Manus. Left Manus, to Rabaul. We went ashore at Rabaul.

I there stayed for two moons. My masta said, "I cannot go to the plantation yet. After Christmas I can go." Then he said, "We cannot stay here in Rabaul. We must go to the plantation. We will go to Pondo." Okay, Christmas. Then, we went to Pondo. On a small ship. Went ashore at Pondo. Between Rabaul and Talasea. In the middle. I stayed there. In the cook house. I stayed and stayed and stayed. Then he got a youth from nearby. He helped me. Then he said to me. "Alright, you look after all the boi's." So I looked after them. They were finding insects in the coconuts. The coconuts were young. The insects go inside them. They had to find them and kill them. We carried paint, a knife and an axe. Carried them and walked around. You look at the coconuts. Find the insects. Bang the medicine in them. Tall coconuts. They climbed up and threw them down. I stayed one year in this work.

After one year. A Mannam man came to help me. I went and began cutting copra. This masta left me now. He went back to his place now. Another masta came now. Masta Jack Sprat. He was an angry man, no good. If he was alright, his hat was like this. If he was angry, his hat was like this. He hit us like this. He didn't use a cane. No. He got the tail of a fish from the sea. One that has a long tail. He held this. And a long thing for chasing cows with. If a man ran away from him, he would catch him with this long one. He would pull him down. Then he would hit with the other. He sat on a horse. He was a really bad man. He hit me. Cut me. Look here. He threw it at me. It got me here. (Laughing) We stayed there. Then a kiap came up. Kiap Moli. All of us boi's said, "We will tell him." He line us. Looked at all our things. Knife, spoon, plate. All of our things. Wrote it all down. Then he sat down. He said. "Okay, if anyone has anything to say, say it now. Speak now. It will be too late when I have gone back to Rabaul." He spoke to us. We were really afraid of this masta. We said "If we say anything he might hit

us." But I stood up. I said, "I don't have much to say. But I want to ask you about this man. This one standing here. Now if he hits us with a stick, that is alright. But look. He hits us with a whip. Now what is our skin. It's not the skin of cows. If he slaps us and swells our faces, alright. If he hits us with sticks, alright. But this whip is not good." So, he asked the foreman. The foreman was his friend. He said, "No, it's not true. He is good. He only hits them when they are bad." But the kiap asked all the workers. They all said "Yes! This talk of Binghoiye is true. He does not give us good food. If our sacks are not tight we lose our tobacco. We get hit with sticks." Alright, the kiap wrote it down. Then he went. This man was charged. The kiap said, "Binghoiye, this worry of yours is not too big. He is your masta. He gives you food. He shows you how how to work. You must listen him. But now I have come to hear your worries." So a new masta came.

He was good. He didn't hit us. But then I was given work on a ship. At this time they got a new machine. The machine cut the copra. The copra went on a ship. We worked on the ship. One from Manus, five from Buka. We stayed on the ship. A half-caste, John, taught me. He stayed on top and I stayed down below. In the engine room. This engine had three cylinders. A gas engine. When we wanted to go I opened the handle. The gas went sssss into the engine. The captain stayed on top. When he wanted to go he rang. The ring came down to me. I worked the engine. If he said, "Go", okay I did it. The gas was the same as this bottle they have at the hospital. One big one that's all. I stayed on this ship for five years.

I stayed on this ship for five years. Then I came back on leave. My first time back on leave. I came back. My mother cried. My sister. I came back. They told me. All my brothers were dead. Only one remained. Nihnih only. Borondai and Mahinga were all dead, with all the fathers. I carried some things with me. I left Pondo and went to Rabaul. I got money from the kiap. I got twenty pounds, no twenty seven pounds eight shillings. Then I wanted to go back. They tried to hold me. But I said I had a contract. I came on leave that's all. They said I would go and die there. They thought I was dead before. All the other men had gone and come back again. But I stayed. Then Mahanung came to Rabaul. He met me. We cried. Then he came back and told them. "No, he is not dead. He is there. At Rabaul."

I went back to the ship. I stayed on the ship. I stayed in '38, '39, '40, '41, and then. The masta told us, take the ship to the Solomon Islands. A Buka was the captain. I stayed in the engine room. We brought the ship to Solomon Islands. Then, they said. "The war has come." There was no way back. We stayed there. Then the 'Mandui' came up. This big ship. I thought good. A way has come. It took me. Round and round and back to Rabaul. We came back. All my friends were worried. They said something bad was coming. They told us, the boat crews, the foremen and the police. The workmen did not know. All the Europeans told their servants. We will soon be going. But we knew it was the war. I took a ship. Went back to Pondo. I stayed at Pondo, three weeks. On the fourth week, on Friday, bombs fell on Rabaul. The Japanese came. We were at Pondo. The Japanese came to Rabaul. The masta told us. Rabaul was wrecked.

He told us, the flying boat would come. The doctor, his number two and the clerk, they would go. He would stay. If the Japanese came, if they wanted to take him, it was up to them. We stayed at Pondo. Two weeks, three,

the Japanese came to Pondo. They came in boats. Planes above. I was looking after the power house engine. I was there. All the boi's were working. They did not know. We did not know the planes would come. The masta had told me, "If you hear the engines coming, or if you hear the bell on the big house ringing, run away. Tell them all to run away." Now, I didn't hear the engines. The engine in the power house was working. I was deafened. The boi's did not know. But the masta had told me to look out. At eight o'clock or ten o'clock. He came and talked to me. He went back into his house. The servant brought him tea. He sat down. Then he heard them. He jumped up and rang the bell. One, two, three. All the boi's asked me. "What is that?" I said, "Clear! Everyone clear! Planes are coming!" They came now. They came from the sea. Down low. I went to go up to the house but they came in shooting. All the boi's ran away. Everywhere. They saw them and they came around again. Bup-pup-pup-pup. Some of these planes had one engine. White. Green on top. And a red round mark underneath. Everyone ran away. The generator engine was still running. I went back and stopped the engine. I was leaving the engine house. There a ditch like this. A bomb came down. As close as that coconut. I went down. I lay on the ground. I heard it. See-see-see-see. I thought. That's it. The masta told me. A bomb. It was not a benzine bomb. It hit and flew everywhere. Above. I got up and wanted to run. They saw me. They came back around again. Another bomb came. I heard it. I fell down again. It exploded. Dirt covered me. I was deaf. I got up. I wanted to get across the ditch, the water. Another bomb came down. I tried to dodge them. But no. I was in the open. Bullets too. All around. I lay down. The bullets came. Fooooo-bang. I lay behind a coconut. A bullet hit it above my head. I lay there. I thought now. I will be hurt soon. I was very frightened. I went down into the ditch. There was a big tree there. I lay down there. I was tired. I thought, if they kill me, it doesn't matter. I will stay here. I lay there. Then one bomb fell down. Right on top. I was here and the bomb came down right above me. The dirt broke. I was here like this. The dirt broke. It didn't cover me. I was lying there. Then I thought. Its no good staying here. Dying here. I got up to run. No. A bullet went foookoo. I went here. A bullet went there. One smashed a coconut. I thought, today I am finished. The planes went round and round. They all ran away. Men, women. They lost their laplaps. Cocks and cunts, never mind. Run that's all. I fell into the water. Went under. Lay there. Stopped there. Then the planes went away.

I stayed there. Then I thought about the house. And the power house. Everything was open. I got up. I went back. I went up to the house. He had told me. If they come. Come in here. Take everything, the money. Leave the silver. Take this book. Take this. I got this. I straightened things. Put out the fire in the cook house. The house was wrecked. Holes everywhere. The engine house was smashed. I took these things and went out. I ran away into the bush. I went up. I looked back at the reef. The sea. Nothing. In the afternoon. Four o'clock. I went back again. I came back to the house. Went to our house. There was nobody. I went down to the beach. Along the road. Nobody. I called out. Nobody replied. I went back on top and called out. Some men were in the ditch. I told them, the planes have gone now. Then I went further up. The masta was up there. In the bush. I gave him his things. We sat down.

Then we thought about food. So I went down again. Made tea on the primus. Cut bread, took it back. He said to call out to the Chinese. The carpenters.

Come and get some food. I told him, my tea was on the stove. I brought seven loaves of bread, ten tins of meat, four of fish. He said, "That's enough." He gave me meat. He said, "That's for you. Find them all. See if some are dead. See if anyone has been hurt. We must stay here so we can see. No good if a warship comes." So we found them. Nobody was hurt. Everyone was alright. Children were lost in the bush. But we found them. At night, it was moonlight, we looked for them. We counted. How many from Aitape, from Sepik, from Madang, from Manus. Counted them all.

Then he said. "You go to the house. Open this bag of mine. In the office. The book inside. It has the names of all the men inside it." He gave me the keys. The key to the office, to the house, to the safe. I said "Masta, you hold the key to the safe." He said, "Ah, it is nothing. If the Japanese take it it doesn't matter. Just this book that's all." He spoke to me like this. We stayed there. About half-past-two I went to him. I said I wanted to go down now. He said it would be no good if the Japanese came in the night and caught me there. Or shot me. But I wanted to go. I didn't want to stay in the night in the bush. I thought, I don't want to stay here at night. Something from the bush might hold me. So I went down.

I came down. I went inside the house. I slept there. Now. I was asleep. Sitting up. Then I heard it. Something now. I was frightened. I heard it again. I thought, what is this? Half of me was afraid, half was alright. Half wanted to run away. Half said, oh never mind, sleep now. So I slept. I slept, sleep, sleep, sleep. Now I felt it. Holding my leg. I felt it. A man. I was not asleep now. My eyes were not shut now. My eyes were looking. The hand of a man that's all. But I could not see him very well. I looked. Then I could see him. Standing up close by. My thoughts left me. I fainted. Time passed. My thoughts came back. I thought. You cannot be afraid. I think it is your father. I reached out and felt him. Up, up. Then I saw the face of my brother. Mahinga. Now my belief came. This brother. He had died in the village. Mahinga. I could not move. Something was crying in my ear. Cry, cry, cry, inside my head. Then I thought. You cannot be frightened now. You cannot be afraid of bullets or bombs. Your brother is with you now. Looking after you. This is how I got my beliefs. My brother came and stayed together with me. Later, when a plane came and dropped a bomb, or whatever, I was not frightened. Why? He was with me. He was always there. In the fighting. He came back to the village with me. Then I was married. He stayed no more. I was married. He was there no longer. Now look at me. I am one. I have no brothers. It was like this. When I got up to walk around, he would get up and walk with me. When something was going to happen, he would tell me. I would avoid it. He did not go away when I first married. He stayed. First I married Nenung. Then later Manung. When I went to the aid post or went on patrol, they would see him. They told me. A spirit they said. He went in 1956. When Mahanung went to gaol for his cargo cult, by brother left me.

Alright, I slept in this house. When the sun came up I went on top to the masta. Now we had one small boat. It had an engine. Now all the soldiers were running away from Rabaul. So the masta said to me, "You. Take this boat and help these soldiers. Take them to Talasea." The good ones. They walked. The ones who were injured or sick, I took them. Took them to Talasea. A seaplane came down and took them all. I would go, go, go, and arrive at Talasea.

I would come, come, come back to Pondo. We worked at night. All night, go, go, go, go. When the sun came up I would go and hide in the mangroves. Cover up the boat and all the things. Hide, hide, hide until about 5 o'clock. Then we would go round again. When they were finished I came back and got my masta. Then some more soldiers. The number one soldier, his name was...a lieutenant...I have forgotten his name now. He was a tall man. He came and wrote down my name. He made a letter. He said, "You are strong, you are not afraid. We were in trouble. You helped us. You can come with us." But I said, "No, it would not be good if I came with you and Japanese found me with you and finished all of us. I will stay. I want to go back to my village. I wanted to go before when I heard of the war. But now there is no way. I will stay." So I took the canoe from Talasea. They brought me back to the plantation at Pondo. The soldiers took the boat. Some went in the plane. Some were still walking.

I came back. We stayed there. We worked a little. We had no masta. We stayed. Time passed. Then the Japanese arrived at Rabaul. They came to Pondo. By ship. Not big ships. Barges. Like the ones on the beach at Wewak. They held us, and took us to Rabaul. They took us to Rabaul and put us in gaol. Me, they tied me up. Rope around my legs, rope around my hands. They said I was 'bosboi bilong Australia'. They could not speak Pidgin. But one man from Rabaul came with them. They told him, "If you see anyone who has helped the white men, tell us." Four days we stayed in gaol. Tied up. They put food in my hands like this. When I wanted to sleep I had to sleep like this. Tied up. Then they lined us up. They said, all married men go on this side. So they went. All single men. You go on the ship. We went on the ships. Seven ships. They took us to Buna and left us there.

We carried their cargo. We followed their first line soldiers. They called them *hongo*. They went first into the fighting. We followed them. They walked. We went up into the bush. We nearly got to Moresby. We left Kokoda and went up, near to Bistapo. We were close to going into Moresby. But they came and blocked the road. They fought on top there. It was hard. We went back and forwards. Then back and back. They gave us food. Rice and fish. Fish with salt. They put salt on their fish. In big cases. No salt, alright they put this stuff, sauce they called it. Black and red. Cook sweet potato, okay put this over.

Now, at Bistapo, above on the mountain. Bistapo is here and Moresby is like Yangoru is from here. Cold, very cold. No fires. Kerosene that's all. They came now. Came and came. They wanted to chase us. They had mortars. We came, came, came, back to Kokoda. They said to us, "Oh Amerika bang bang nogut hia. Ranawe." We went on. Came to the big river Kumusi. It is below a station and a coffee plantation. It was not like the coffee we have here. It was like the coffee that Mahanung brought back from Hollandia. Like that. We came to this river. We waited. They all came. The soldiers came and went on. Then the number one said, "Alright, all black men go here." The soldiers went on. A guard stayed with us. One Japanese thought about us. He stayed with us. They selected me as a bosboi. I looked after this line of men. Then about six o'clock they said "Goodbye". They left us now. They went down to the coast, to Buna. They left us up in the bush. So we followed the river down. You see, I knew this area from before. When I was at Rabaul. My masta came to see his friend at Wau. Then his wife came to Kokoda to visit her brother. I came with her to look after her. Now I saw the house we stayed in, before. We came down. Then a plane came over. It was high at first. It

dropped cargo to the soldiers. Then it came to look at us. I told them, "You can't run away. Wait." There was nowhere to hide. Kunai everywhere. They could see us easily. Men everywhere. And one Japanese. He was sick and they left him. Now he followed us. We came up to an old Japanese camp. Where they had made fires and cooked their food. Some wounded were there too. Bullets had hit them. The plane looked at us. Then it went back. Back to Moresby. I said to them, "The plane has seen us. Hurry up, make fires, eat quickly." We talked. We said, "I think we will die now. Our fathers and mothers cannot help us. They did not send us to do this work. We came ourselves." But we said, "It is nothing if we die. It doesn't matter."

It was dark now. Some of us went up above. This Buka. He had some rice from the Japanese. He wanted to cook it. He sat down, down below. He wanted to light a fire. He wanted to boil it. He lit a match. But no. Bang. The wind of the bullet knocked him over. The Japanese fell down. The Buka jumped up and ran away. Then the soldiers came out. They put their rifles up. They came now. One man, Ben from Waria. He called out. "Alright, come on, New Guinea, Morobe, Buka, whatever place. I know you came with the Japanese but never mind. Come now". So me, and one man from Sepik and another from Nuku. We went up. Went on top and found the kiap from Kokopo there. He had gone before. Now he was here. He saw me. He asked me. "You were at Pondo before?" I said "Yes". I showed him the letter the soldier had given me. He asked if the Japanese had seen it. I said, "No". They asked us if everyone who had come was alright. I said, "Yes, everyone with us was alright but some are still with the Japanese. At Buka." He said, "Go and get them all." They came and got us. A long line. Man, soldier, man, soldier, like this.

We all came back. Now the man from Waria. He said, "Alright, all Sepik here, all Aitape here, all Buka over there. Tolai, Waria." The Papuans nearly finished us, but our kiap found us. We slept. Dawn. They lined us. Line to cut trees, line to cut posts, line to get kunai. They said, "Okay, you from New Guinea, you build ten houses. You from Papua, build ten houses." You see it was the war. We were all afraid. The Europeans said to do it. We did it. We made six houses before noon and four after noon. New Guinea was first. We washed and got food. Papua was still working. Then they said, "Okay, never mind, you help them to finish their houses." So we helped them. Papua and New Guinea, we were not friends. When the Japanese came and we came with them, we broke gardens and houses and things. Now they were angry with us about this. Pigs were killed. Women raped. Now they wanted to kill us. They nearly got us. But the soldiers came.

We came down to Buna. Fixed up the airstrip there at Bundua, near the sea. Now the kiap lined us. Alright, a plane came. Took us to Moresby. The big town Moresby. A truck took us from the airstrip. We went and slept in the houses at Hanuabada. The people had been chased away by the soldiers. Now they told us to sleep there. Morning. Lined us. They came and asked us. "Have you got brothers?" I said no, "I have no brothers." Alright, go here. This line, you will carry cargo. This line take blankets and go. We asked each other. "Why do they go? They have brothers. We stay here. I don't know." This friend from Waria came. We asked him. He said, "This line will go to fight. This line will carry cargo at Bulldog." Alright I went to see the kiap. I said, "Everything is good. But I have a little worry. My friend is in the other group. It is not good if he goes and gets killed and I stay. I think I would like to go with him." Alright. He asked all of us. "Who wants

to go and learn to fight?" Everyone said. "Yes!" Many of them. He said, "Oh too many, this half can go, this half can stay and carry."

Alright, we went to a doctor. He looked at us. We looked at things. He talked in our ears. "Do you hear it? Do you hear it?" Then we stayed. About four weeks. We learned to march. Left, right, about turn. We learned to shoot. If a man shot the target, he passed. If he did not, he failed. Then they said, "Okay get ready. Tomorrow you go on the plane. To Buna." They took us to Buna. In the plane. White soldiers, black soldiers, cargo bois. We walked together from Buna. But first I went to Wau. To look after the line. Then I asked to go and fight. We fought. From Salamaua to Lae. To Madang. Up the Ramu river. From Madang back to Moresby. Then to Bistapo then to Lae again. To a new company at Lae. NGIB. This time I was not a soldier. I learned about first aid. I carried medicine and things and went with the soldiers. When I was at Pondo I worked in the clinic. Now this doctor knew me. So he selected me for this work now, at Lae.

At Finschafen I was nearly killed. The Japanese were above, on a hill, in the grass. I went up first. This Japanese aimed at my head. He fired. I heard him fire and fell back like this. The powder burned my skin. The bullet made a mark. Look, here. I fell down. They thought I was dead. But not really. I lay very still. The Japanese thought I was dead. I counted. He fired again. Two, three, four, five. Now. Their rifles only had five rounds in the magazine. Now I stood up. Tat-tat-tat-tat-tat-tat. Finished him. My platoon thought I was dead too. I killed 38 Japanese. Shot them all.

When we were in Lae, a big fight occurred. Us and the soldiers. We came to Lae on ships. Trucks took us to camp. Then the next day we paraded. The sergeant-major said to us, "Okay, all of you NGIB from Moresby. Go down and take over the houses from those that are going. Later on half will go to Rabaul, half to Aitape." So we went down. Now one sergeant, a white man, hurried us Papua New Guineans. He hurried us. Now he hit a man from the Wosera. With a stick. He was a soldier, a black soldier. They were going to cut some timber somewhere. Alright, one Tolai and one Urat, from Musilo, he is dead now, Bepuwa, he stopped and spoke. He spoke in Motu.¹ He said, "Hey, you New Guineans. Why do you let him do this? Come on. we will hit him!" They all shouted "Yes!" So they hit him. With a knife. The sergeant. He tried to dodge but the Tolai got him. Then they hit the others. Two were hurt badly. Three were alright. Oh boy, a big fuss now. All the soldiers ran quickly and stood guard by the rifles and cartridges. Shut the doors. The black soldiers. They held all the rifles. The lieutenant came down to stop them. They held him too. True, we did not all make trouble. They were our workmates. But we had to help the white men. You see, we were in the hospital. The white men called to us. Hurry up all you medical orderlies. We went down. One soldier was hurt badly. Others were unconscious. They

1. So that the Australian soldiers would not understand. A number of Dreikikir men can speak Motu. Some can also speak Tolai.

hit one with a piece of wood here. Another here and another here. We took them on top. Alright, the colonel came. He said, "I will not not court you. They told me what happened. It is something that has happened inside our company." They told him to clear. They said it was something between them and the sergeant and lieutenant. He was their boss, but they had no argument with him. Alright this fight finished. They broke us, half to Rabaul, half to Aitape. Bepuwi went to Aitape.¹ I went to Rabaul. Then they sent me to Chimbu, in the Highlands. I stayed there. In 1945 they said, "This fight is finished now." Then I went back to Rabaul.

After the war we went to Lae again. A big parade was held there. A big man, I have forgotten his name now. A colonel. He said, "I am very happy with you men of New Guinea. Before some people told me, you were not good people. They said you ate people and had no education. But now you have lost these ways. Good. Now you and I will go back to our places. You go back to your homes. But do not think we have forgotten you. No. But now, go back and help the people who are living in your villages." Okay, the band played and we marched. All the white soldiers cried for us. We cried for them. They had been with us and us with them for a long time. Then I went back to Rabaul. I left Rabaul on the fifth moon in 1947 and came back here at Christmas.

I came to Aitape. Nihulu, the paramount luluai was there with many men from here. They had gone down for a Christmas singsing. The paramount luluai from Wam, Mahete was there, and the one from Yambes. I went to Yakamul and met them coming, so I came back to Aitape. Later the kiap called for me. I showed him my letter. He said, "It is good I have seen your letter. But I think you should put all your things in the store. You cannot take them back to your village." So I put all the things, food too, in his store and walked home, with my bed that's all. And food. So I came and stayed. Then I went back to be an aid post orderly. They sent me from Aitape to Wewak, to Boram.

I stayed at Boram. Building the new camp there. The hospital. Training too. 1948. 1949, January, they sent me back. Back to Dreikikir. The plane took me, brought me to Aitape. Sent word to Nihulu. But he and most of the men had gone to Tamaui.² So I walked back here. I got Saiyerume, and my brother's son, Moipakai, he is now at Hoskings, and some women. We went back to Aitape. We got all the medicines and carried them back to Dreikikir. Now this line which had gone to Tamaui came back. They were carrying iron and timber for the kiap's house at Dreikikir, which is there now. We came back from Aitape with all the medicine. I came up to Ngahmbole. I made an aid post. Alongside my house there, where Borondai's house now is.

There was no hospital at Dreikikir then. It was down below in the valley, by the river. There was a doctor there.³ Okay, I went down there. I showed him the letter from the doctor at Aitape. He didn't look at it. He pulled

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1. Another Tumam man.
 2. Near Maprik.
 3. Not a fully qualified doctor, but a European medical assistant.

the letter from me, screwed it up and threw it down. He said, "Fucking bastard!" I said to him, "I have no argument with you. I just came to show you this letter and to tell you I am here." But he was angry. He said, "It will be no good if you come and give these kanakas ideas." I said, "No. You are a doctor, I am just an orderly. I have no argument with you." But he told me to get out. So I went up and talked to the kiap. He sent a telegram to Wewak to ask them about me. The chief doctor got a plane from Wewak.¹ They sent word to me. I went. I took the letter with me. We had a meeting. This doctor, he spoke English all the time. He said he would not listen to my story. The chief doctor said, "You must speak Pidgin, then he can understand." He said, "I know you. And I know this man. I trained him in Wewak. He cannot read or write, but he has good ideas. You can help him with things which he cannot understand. You must work together." But I know why the small doctor didn't like me. He was a man who had many black women. Very many. He had one. Now she is at Musendai. Alright, the number one went back to Wewak. Then they called out for him at Vanimo. He went and crashed in his plane and died. He was a good doctor. This other man, they sent him to Madang and later to Australia. One woman took him to court. Her and the luluai of her village. But he had gone. So she came back to Musendai. He died in Australia.

Later I went to Bongos. Made an aid post there. They were really bush men then. I was there in 1950, 51, 52. While I was at Bongos, Augen and Anton started this rice work at Supari. It came to Musendai. I took some rice to Bongos and planted it there. They saw it. Then I was called back on top. Okay, they harvested it and carried it here. I said to them to take some to Brukham and to keep half to plant again. Akolasa and one tultul at Wosambu led this work there. But up here we were first. First Augen made it. Then Anton brought it to Musendai. We planted it and carried to Supari. The eastern Urat did not plant first. They looked at us going to Supari. They said, "What are you doing with that stuff?" We told them. So they got rice too.

Then they sent me to make another aid post down below at Yubanakor. So I built an aid post there. Now an orderly was sent there. Then an aid post in the Urim. Between Winyamon and Laninguap, down by the river. You leave the airstrip the priest tried to build. Two coconuts and a breadfruit tree. You go down there. They have moved it on top now. Then the doctor sent me again. I went here into the Bumbita area. To Indipi. There was an orderly there. But he got into a lot of trouble with women so I went and threw him out. Put another there. Also I told others to go for training. The first to follow me were men from Porombil, from Kombio, from Musendai, and from Gawanga. I sent them all. They trained. They came back and worked. So then I sent another lot. Toromble, now he is the MHA Moris, he came back from Buka so I told him to go. Muan, Pakai, Mekesi, Kwaltihi, Tewik, all of them.

After I went to Bongos and Yubanakor and Urim, I went down to Arokasami. Down on the river Yipunda. While I was there they made the tambaran dohia here. They called out to me. "You leave the government. Come back here and

1. Dr. John McInerney

return the debt of your fathers to their exchange partners." I sent talk back. I said, "Yes it is good. If you want to train in the way of our fathers, it is good. But the government has trained me in new ways. Now I must not leave this work. If I leave this work, later the government will say, oh he is not a good man. He has not followed our instructions. I must stay and look after our cousins." So they made the tambaran. I stayed at Arokasami.

Now I am working as an aid post orderly at Musendai. I have followed the work of the government. Some men have made bisnis. Some men have made kago cults. I have stayed with the government. Soon I will be too old and they will look after me. I will return here to live, with my children.

KOKOMO'S NARRATIVE

Kokomo's given name is Tambari, but he has assumed the Pidgin name of the hornbill and is know known universally by it. Kokomo is an impressive man, well built and greying now. When he is talking a slight smile flickers around the corners of his mouth and his eyes sparkle, creating the impression that he is not taking the proceedings very seriously. But Kokomo can be a very serious man, and none of the men in his village, nor in two neighbouring villages, can stand up against him in public debate. On one occasion I witnessed a confrontation in which Kokomo's fierce aggressiveness resulted in the councillors from Emul, Kokomo's village, and Pelnandu, slipping away from the meeting like scolded dogs. Much of Kokomo's power seems to stem from this sort of behaviour.

In 1972 Kokomo lost his seat in the House of Assembly. He made almost no attempt to campaign and states in his narrative that he was tired of being a Member. During his period in the House he resigned from the Dreikikir Local Government Council, where he had been the first President. People accused Kokomo of not working for his electorate, but of only increasing his own wealth. They pointed out that he had bought a new truck, built a corrugated iron store and increased his wives to six, in an area where polygamy is not very common. But it was obvious, if people did not respect Kokomo, they feared him. Even when he had relinquished all his officially sanctioned positions of power, he had a very strong influence within his own area.

I first met Kokomo in 1971 at the House of Assembly in Port Moresby. He expressed an interest in the research and provided support for it in the study area. The formal interviews from which this narrative is transcribed were collected in his house at Emul village, with only his younger brother and eldest wife present. His story was concise and sequential, but he disliked being queried or cross-questioned. I visited him on at least five occasions. Only when questioned about his connection with the Peli Association was he evasive. Then, during the last visit he made public his membership and expressed the opinions included in the narrative privately to me.

When I was born, when my mother gave birth to me, I was here. Then the Germans came. My mother picked me up and ran away. I don't know if they were white men or not. I was too small. I have heard the story that is all. Some white men and some black men. They came and chased the men and women. They ran away into the bush. They took the men, youths and boys, took them to work on the plantations. The Germans went out and the English came. They were the same. Chased the people and took them to work. Then the white men came and stayed at Bengil and Arisili. Then they came down here and chased us. They took women too, and dragged them away and married them on top at Bengil. They carried rifles and shotguns and shot at the trees and birds. They caught the women and took them up to Arisili. They took the men to work on the coast. My relations at Arisili came about like this. Women taken from here.

Well I grew up. Then I went to work for the surveyor. We held knives and the long pole and stood it up while he went and put his compass on the table and looked. I worked for him for four months. Finished. Then I went to cut copra at Suain for two years. I went there myself. My brother had gone first and I followed him. I finished and came back with my brother. Then we walked to Maprik and went to Salamaua to work the gold. We worked with shovels, picks, crowbar and explosives. We had water too and broke down the hills. We broke the rocks and later it went into the machines and was crushed and separated. Some worked outside with the water guns. Shot down the hills. I worked under the ground in the hole. It went down and down. Number one level the passages went this way and that. We had special hats, boots and trousers. No. 1, 2, 3, 4, 5, 6. No. 6 had a big pump pumping the water out. This water went into a tank and was used to wash the gold. Many men died in this hole. White men too. Men who were careful were alright. Those who were careless were killed or injured. It was hard work and we worried about getting killed, but it was good money. After two years you could go if you were frightened. But you had to finish the contract. If someone was killed, the company paid a lot of money to his father and mother.

When the war started I was in the police. I had just joined at Wau. We went down to Salamaua and they said the Japanese were coming, so we went back to Wau. It was my own idea to join the police. I saw many Sepiks in the police and I thought it was good work. When we were here in the village we said, they are one village, they are another village. When we were outside we changed our names and called

ourselves Sepiks. First we called ourselves Aitapes. Now we called ourselves Sepiks.

We went back to Wau. We got our belts, rifles, bayonets. They trained us in foot drill and showed us how to shoot. Then the Japanese came down on Salamaua and wrecked it. All the Europeans from Salamaua, Madang, Lae, Wewak, Aitape, they all ran away and walked to Madang. Later they went to Hagen and Bena Bena. I went with them. We crossed the Bulolo river and came to the Watut river, then up to the Markham river and then the Ramu river. Collected all the Europeans from Madang and came back again. Brought them to Wau and came back. When they were all collected we came back to Wau. Then we walked to Papua to a native village there called Bulldog. We went back and forth from here. The Papuan natives came up the river on canoes bringing cargo and carried it to Bulldog. We built a camp, houses and places, and we took all the Europeans across the mountain and down the other side. The police and kiaps that's all. We took all the Europeans and Chinese and helped them get away. We thought it was no good to leave them there. The Japanese would come and kill them. They had no rifles to fight with. So we were strong and helped them. We made the natives carry their cargo for them. They took them to Moresby. We stayed at Bulldog. They went down the river to Terepo. Then they went on ships to Moresby. Later they went to Australia by plane. We stayed at Kianti and the Japanese could not get it. We went to Moresby too then.

All the soldiers were coming to Moresby then. From Australia, from White America and Black America. They all came. Moresby was full up. They went out to 7 mile, 8 mile, 9 mile, 10 mile. Full up. Full up with soldiers. We were happy. We could not beat Japan, but they came to help us, black and white, to fight with Japan. The first fight, we went to Buna. We walked from Bisiatabu¹ to Woitape and walked and walked to Buna. We grew our hair long and grew beards. Then we went inside the villages and put their things on. We got their netbags and old knives. We went inside the Japanese lines and looked. Went around, sat with them, made them happy, looked at their machine guns and holes, sentries, guards. Then we came back and told the kiaps. They went on the wireless and told Moresby. They got the talk on the radio and replied alright, on this day get ready. We got ready. Readied our Bren guns and Owen guns, our grenades, our rifles. We were

1. A training camp on the Sogeri Plateau, inland from Port Moresby.

ready now. Now we rang up Moresby. Alright the planes came now. They were not fooling. The sky was full up with them, like a black rain cloud. Alright they came down. We got up and started. Machine guns on the planes shot the ships and men. Made them feel it. We started fighting, shooting, running, throwing away bombs, running. The fight went and went and went, midday, went, went, went, six o'clock, 7, 8, 9, 10. We kept going. Out of breath. Tightened our belts to stop the hunger. Put your hand in your pack for biscuits that's all. Drink a little water. Then go back and make them feel it. Go and go. Morning came. Finish. They ran away.

Now we looked after the men who had come from Rabaul with the Japanese. There were a lot from the Sepik. We found them in the fight, rounded them up, brought them out. First we found them before the fight. We whispered to them to be ready. That night at six or seven o'clock they had to come out. We waited and guided them out of the fight. There were men from the Urat, Urim, Kombio, Bumbita and Muhiang. We looked after them. At this time the Papuans were angry with us. They said we did not have any education. We were kanakas. We said, "If you are so smart, how come we are here helping you fight the Japanese. We have come a long way to help you. You got up and ran away and we had to come and take your place to stop the Japanese stealing your land. Now you have come back and you ridicule us." Alright we fought with them. With our hands, with sticks and with rifles. We shot some of them. But the police officers and kiaps came and stopped us. They said they didn't give us guns to shoot each other but to shoot the Japanese. If we wanted to fight we should fight with our hands only. This fight occurred at Bisiatabu. We told the new men from Rabaul to look out for the Papuans otherwise they would wait and shoot them in the back.

I shot one man with a shotgun. He was not a Papuan, he was a man from near Madang. I found them near the Bulolo river. I told them to line up. I sorted out the ones who were no good from the fit ones. I told them, 20 of them to wait while I washed and ate. When I came back they were gone. I called out but they had all gone. But one was hiding. I saw him and he ran away. I called out to him to stop. He would not stop. He went down and tried to cross the river. I got angry. I fired at him. He was hit in the head and fell into the river. I fired both barrels. I was angry. I went back and told the corporal. He gave me a letter and I went to the kiap and told him what happened. I said I had shot one man and he was

dead. I told him I had told them to wait and carry the cargo. But at this time they didn't come because they wanted to. They came because the white men wanted them to. We had to look after them. I said to him. "I was doing this for you, not for me. This is your war. I was bossing your labour. Now I have killed one. Now you must look after me." The kiap said, "Don't worry, it is wartime. There will be no trouble." Later on another line said they would pay me back for killing this man. They were angry. They tried. When we went to Buna I was looking for the Japanese with glasses when I saw them waiting for me. I had a Bren gun. I hid behind a small hill and they could not shoot me. I waited and then I fired on them down below. Then I came back. The officer asked me who was shooting. I said it was the Japanese, they had killed some Sepiks down below. I had seen them and had run away in case they got me too. I killed about 10 Japanese too. But they were in a hole and I threw a grenade in and killed them.

After Buna my line came back to Moresby for leave. I went to the depot to train as an NCO. Then I stayed in Moresby as a policeman. Then later I was at the depot again. Simogun was at Moresby by this time. Augen was not. He was here. Simogun went to Madang and then to Buka then he went to Australia. Then he finished and he was sent to Aitape as sergeant-major. I finished training and went to Moresby. Then I was sent to Lae. The war was finished. I came on leave, got married to my first wife, then I went back to Lae and then this trouble came up.

This trouble occurred like this. I was patrolling a section in Lae. I had to walk around at night, look after the stores, or stop people fighting and so on. Inside the town. I saw a man going down to shoot fish with a coconut torch, on the reef at night. This European and his wife were in their house. He saw the torch and he thought the man was trying to trick him. He thought he was going to come up and have intercourse with his wife. He took his pistol and shot him. The man lifted up the torch to look for fish and the European aimed at his head and fired. He was hit in the neck. He turned his head and the bullet hit the side and did not cut his pipes. But he fell down into the water. I saw this. I ran down to the man and went into the water. It was our police officer's servant. I asked him what he was doing. He said, "Oh policeman, I don't know why he shot me. I think I will die now." I carried him, all covered with blood and water. Carried him up to the road. Then I quickly went to

the telephone and rang up the officer. There were telephones on each section. I told him what had happened. I told him he had better hurry up with the car before the man died. So he came and took him to the hospital. They sewed him up and he was alright. I came back and went off duty. We went back to the barracks.

In the morning I lined up 39 policemen. We went down to get this European who had shot the man. The police officer had not done anything about it. I thought, "Fuck him. This man before, he did not want to fight. We helped him run away. Now the war is finished he has come back and now he is shooting at us with his guns." Before he was at Madang, now he had come back to Lae. He looked after the aerodrome. Now I was very angry. We wanted to kill him, but the officer came and stopped us in time and took the European and his wife away. I went and smashed his door with the butt of my rifle. Then I smashed all the windows, all the chairs, all the cups and things. Everything. I smashed them. The European was shaking. He was asleep in one bed, his wife in another. I smashed the door and he jumped up and began running about. I quickly ran to his room and took away his pistol and called the other policeman to come and take away all his rifles and guns that were lined along the wall. They came and held them. His wife screamed and he was shouting and running around. Then he started shaking and shaking. I kicked him and his wife. We kicked them out the door and kicked them again and pushed them onto the ground. Then, luckily, the officer came. The sergeant told him what we were doing. He stopped us from killing them. It was good. We were very angry and would have killed them. We were angry because, when the war came, this European did not stay and fight. He ran away. Now he wanted to come back and shoot at us and fight with us. We helped him in the war. We looked after the Europeans. So why did he fight with us now? We were good to them, showed them how to escape and now they wanted to kill us. Alright we got mad and wanted to kill him. But we did not. He took them and hid them in his house. He sent us back to the office. We lined up. He came. He asked us what we were doing. Why had not we come and seen him about this problem. I said, "True. We can ask you, but you won't do anything about this compatriot of yours." We were still angry. "You too. Suppose we had left you behind. The Japanese would have killed you too. But we hid you and looked after you. Now you say you are the kiap. We are tired of this. We have our villages. Our land and our mothers, fathers and brothers. But we came and worked hard trying to help you. Now you treat us like

this. Alright we must leave and go back to our villages." They said they would come back and give us good things but they came back and treated us badly. Now we were angry.

Now the kiap told us we could not stay. We had to get all our belongings. Three trucks came. We went back to the depot. Mr Sinclair had to decide what to do with us. We talked to him. We said, "We cannot stay in the police anymore. We must break our contract and leave. We don't want to go to court or anything else. Let us go that is all. If you try and court us you won't be able to hold us in the gaol. Put us inside and we will break it down and come out. Whoever tries to stop us, we will kill them. They are new policemen who have just come in. They don't know about killing. We have killed. We know how to do it. They are youths. We are old men who have won the war. Now you can let us go." Mr Sinclair said, "Alright, I'll let you know. First I must ask the chief of the police." He said, "No they cannot go. They are the best men we have. Go and tell them they must stay. Then they can go to another station." We replied, "No. We don't want to do this. The kiaps are new too. They don't know what we have done. They call us rubbish men and rubbish police. We want to get out and go home. We have land, and brothers and sisters, mothers and fathers. We are finished with this now." So he rang back. And the police chief said, "Alright they can go." So they let us go. We gave back our belts, rifles and so on. We waited at the depot. Sat around. Played Lucky¹ and waited. One month and the ship came. Some from Morobe walked. From the Sepik, and Aitape, we waited for the ship. The ship came. We went down. Came to Wewak, then to Aitape.²

When I left the police force I came back to my village and began this bisnis. I came back and went back to the old village. I stayed there about one year. I went to see the kiap, Kiap Doolan.³ Then I came back and made this camp here. I told him, "I don't like living in the old village, I want to go and make a new hamlet near the road." He asked me, "Whose ground is it where you wish to go and sit down?" I told him, "It is my ground." So I came and marked out this camp here. I cleared it and built a house, a long house which

1. A card game.

2. It has not been possible to confirm Kokomo's account of this incident from documentary sources because of a 30 year embargo on files in the Commonwealth Archives.

3. L.J. Doolan, District Commissioner, Chimbu District, 1972.

went from here to there. I built this, then I started my first bisnis, a trade store. I made this house and made a small room at the end. Then I went to see Kiap Havilland at Maprik. He gave me a letter and I went down to Wewak. I went and bought all the little things for the store. I came back and put them in the store. I bought them from the Chinese store at Wewak. First I went to see Mr Niall at Wewak. I told him what I wanted to do. Then I got the things and brought them back. Carried them to the airstrip. Came with the plane to Maprik to the airstrip there. Then I put all the things into the kiap's store there. Then I came back here. I got all my brothers and we walked to Maprik and carried back the goods on our shoulders.

Okay, we carried the things back here and I put them in the store. Now the kiap came to Emul to line us, and he came and bought two laplaps from me. He told the people, "This is a store. If you want things from it you buy them like this." Kiap Doolan, this was.

After this I went down to the coast. I went down to Ulau. I went to make salt at Ulau. I made salt and then I got rice from my brother there. First I saw rice at Sogeri near Moresby during the war. I saw it there. An agricultural officer planted it there near the police post where I was stationed. I looked at this rice and I thought about it. I asked the kiaps and the police officer, Mr Hicks. I said, "Later, if I go back to my village, will I be able to grow this and sell it to make a bisnis?" He said, "Oh you can. Then if you have some money you can buy a machine to hull it. Then you can eat it." This Mr Hicks was the police officer. Before the war he lived at Manus. Then he went to Wau and later to Moresby.

When I first asked the kiap about getting up a store he said it was alright. But later many tultul and luluai went and complained. All the people thought like this, they thought, "This work that they are making is not ture." They thought we were tricking them to take away the money they had earned on the plantations. They said, they are lying to us and later they will have all our money, all our shillings. So they told the luluai and tultul and they went and talked to the police, and the police told the kiap. Then every time we went to see him he said, "I don't think you are running a proper store. I think you are stealing their money." All the time he said this to us. But when I went to ask him about my store he did not try to stop me. He said, "It's up to you."

I left the police force in 1949. I started this trade store in 1950. Then I went to Ulau to get salt. I wanted to sell it in the store. I got the salt water, put it in a drum, boiled it and brought the salt back here. My clan went down and carried back the salt. I arrived at Ulau and I found my brother had cut some bush and had planted rice. His name is Sarawaha. He is a relative on my mother's side. He came from Arisili. His father died and some people from the coast took him to Ulau. Now he is married there. His mother came from Emul and went to Arisili to get married. Then his father died and the Catholic catechists took him to Ulau. I knew he was there. And when I went to the coast I went straight to him, sat there, ate there and slept there. Now I saw his rice. He said he got it from the kiap at Aitape. I got some from him. I brought it back and planted a small area. Later when it came up I cut it, broke it and filled up one bag. Later I went down and cut a big garden down at Mahli where the school is now. It was a big garden. I looked after it and it came up well. So I went and told Kiap Havilland. He gave me some new bags and told us to throw away the old rotten ones. So we came back and filled up the new bags. We filled them and carried them to my house. We filled up my house, right up to the roof. Then I went and saw Augen.

Augen he was in the police with me. We wanted to talk about this bisnis. Me and Augen and Simogun. Alright Simogun began his bisnis on the coast and Augen at Supari. We talked about this when we were in the police. We would go back and start bisnis in our home villages. So later we had to meet and talk. We split up the work like this. We said alright, you go and make this work here, you here and you here. Simogun he was the leader. He was our sergeant-major. He finished with the police and came and started bisnis at Dagua on the coast. He said to us. Me and Augen. "Alright, you two go and start bisnis in your villages. So we started it. Simogun did not give rice to me. He gave it to Augen. I got mine from Ulau, just a little bit in a small paper bag.

I went to see Augen. I said I have got a lot of rice now. He said he had too. We thought we should get a machine now. I said, "Wait, I will go back first and then I will return." I came back and counted how much money I had. I had about 400. This was my money, from the time when I was in the police and when I worked at Wau. When I won at Lucky I put half in the bank, always. When I came back from the police I had £3,000. I played Lucky a lot. I won for five

years in a row. I put this money, half in the bank, half in my money box. So I counted this money and went and gave it to Augen to put with his. We then called out to all the people and collected money from them. We bought one machine from Bainyik, carried it there and put it in the house. Then we cut the posts put them in and set up the machine. Put the rice in. Now the rice came up white. It was good. Now all the people came and looked. They said, "Oh I think this work is good after all." So we gave them all rice and said to them to go and plant it in their gardens. We cooked some for them and gave it to them. They tasted it and thought it was sweet. So we gave them some to plant. This rice at Emul, all my people came and we carried it to the machine at Supari. The machine hulled it. Now we filled up the bags. Now we called out to all the men and made frames. Piled up the bags of rice and carried them to Maprik. One European there, Bruce, he was there with a half-caste, he bought all this rice. Put it in his store. We held this money. We went back and held another meeting. Now all the people became members of the Society now. Now the Society came in and directed all this work. Now Anton and I started a new Society at Brukham. Anton got rice from me, he got one bag and dealt it to his people. Then all the people held rice and planted it. Later we got another machine and put it at Brukham. The rice from Supari went to Maprik, the rice from Brukham went to Dreikikir to the kiap. All the money from this rice went into the bank account of the Society. The work went well, but then Anton went wrong. He got another woman and took some money from the Society. And he and the woman went and bought things from his store. Now the Europeans came and checked up. Anton went to gaol and they broke up that Society.

The first villages to plant rice were Moseng, Luwaite, Bonahoi, Salata, Bumbita, Misim, Porombil and us. Luwaite and Porombil came with me to Mahli in the second year and we planted a large garden together. They planted by themselves after that. Later Mwalhiyer from Tumam came and got half-a-sack. I think he got some from Moseng first. When I first planted here I showed them how to do it. I learned to plant it at Ulau. Clean the ground, make a hole and put the seed in, like corn. Later, we went around holding meetings and telling people about planting rice. I marked committee-men in the Urat, Wam and Bumbita areas. When I went around I did not take rice. I just spoke to them. I told them to go and get it from Supari. I told them it was a good things. That the government

thought it was good. That they should not listen to the luluais who did not like rice.

When the Dreikikir society broke I went over here to Perembil and Asiling, Pelnandu and found they were losing their membership. So I went and I brought them into the Supari society.

Later we thought we must move the huller to Bainyik. We took away the machines and put them at Bainyik. Now all our rice went to Bainyik. So we got together and made this road. With sticks and shovels, we made this road so they would come and get the rice. Then later we bought two cars for the Society. Later Maprik's broke down. But we bought a big ten-wheeler. Then we got coffee. Planted it and made this bisnis as well. Then the money increased more and more, and we then bought all the Toyotas for the Society.

The kago cult began here in 1956. I said to Wahute and Mahanung they could come around if they wanted to. I did not go inside this work. At first Wahute came round and looked in the villages and removed all the sanguma and bad things from the villages. I told him we could do this. I invited him to come. I said, "If this is your work you come and do it here and clear the villages of all these bad things. You look and find them." He came to Emul, Misim. All around. They did it. Mahanung too. But they went on and cleared all the sanguma and then they said they were going to produce cargo and money. I said, "Rubbish." They were all courted and went to gaol. This kiap, he is now an MHA, Neville¹. He came here. I called all the people. I said to him, we haven't been doing this. Wahute is one only. This illness did not come into the eastern Urat. Only in the western Urat, Urim, Gawanga and Kombio. And at Ilahita.

Later we got coffee. First we asked for rubber. Then cocoa. Then coffee. They gave us coffee. I started a nursery at Bonahoi. The officer brought seed and we planted them there. I also planted all the coconuts there by the road. The nursery was near where the school is now. First we planted shade. Then we planted the seeds. Later when the trees were mature, the fieldworkers came and showed us how to process the coffee. Wash it and take off the skins.

1. Mr R.T. Neville, MHA, Southern Highlands Regional, 1968-

We had peanuts too, but they were no good. I got some seed from the agricultural officer. But the price was not good so we stopped planting them. The first year it was alright. But it was hard work. Cutting the bush and digging the ground. Then later, digging up the peanuts. All this work, fill up the sacks, and then get only a little bit of money. So we stopped this bisnis. We plant them only for food now.

When the Society became strong, I became a director. I was a director, and I was also the first councillor from Emul. I became the chairman of the council. Then I became the Member of the House of Assembly. Kiap John Stobart suggested the idea to me. He was leaving Dreikikir. So I organised a big singsing for him. He stood up and spoke. He told all the people to vote for me. Now I am tired of this work. The money is nothing to me. Another man can have it.

I have joined the Peli Association. I am a full member. I think like this about Peli. This thing has developed in my own country. So, I can join, go inside, and look at it. I am a man of the government. But I must go and look. Others can remain outside. I must go inside. I must see if this work is true or not true. If we remain not members, and this work goes on and on, and they want to do something, who can guide them in it? Later on, if the government wants to know about it, then I can say, I am here, I can tell you. If their work is not true, I will not be annoyed. I will tell them. This is your work. Yours and God's. Most people feel the same. They said they have given only 70 cents. This is nothing. It doesn't matter if it is lost.

Peli is New Guinea work, not European work. Bisnis is European work. But look. The SPCA officers do not work hard. They do not visit and talk with the members. They are lazy. I tell them but they take no notice. Peli is our own work, and we will do it.

MISIYAIYAI'S NARRATIVE

Misiyaiyai is known throughout the Dreikikir area by his assumed name of Anton. In 1972 he was living at Yarp, a small "camp" on the vehicle track from Bonahoi to Tumam, and about three kilometres from the village of his birth. Near his impressively large house and associated outhouses is the haus padi where rice and coffee are stored prior to purchase by cooperative agents. Anton's location reflects his aloofness from village affairs and the status he draws from his past achievements in bisnis and his present appointment as a director of the Sepik Producers' Cooperative Association.

His unwillingness to involve himself in the day to day affairs of his village is partly a result of his recognition of his slowly fading influence in all spheres of his life. Anton's greatest moments are now in the past and people realise this and no longer can he arouse their enthusiasm as of old, nor lead them in new enterprises. He maintains his directorship largely because people view the cooperative as "his work" and nobody can rightly take his place while he is willing to carry on. But many men are disgruntled with the cooperative movement and with Anton, although they do not say so publicly.

Anton supported the Pangu Pati in 1965, but in 1972 took very little part in the national elections. He remained quiet about the Peli Association also, neither supporting nor opposing, although many of his fellow villagers were strong supporters.

Anton's narrative was clear and concise. It was recorded in two sessions at the SPCA headquarters at Hayfield where he was living at the time as duty director. During one session Mwalhiyer was present but took no part in the discussion, apart from grunted acknowledgements of some of the events described.

I was born at Moseng (about 1920). My father's family were from Moseng, but my mother came from Kubriwat and her mother from Arokasamei. I was still a small child when the first whiteman came to Moseng. I think it was Melrose¹, but I don't really know. When I was a child, I was shown the flying fox tambaran.

1. Robert Melrose, District Officer, Aitape District, c1927-c1930.

I was recruited by Hook¹. I was still a boy. No beard. No hair on my genitals. We walked to Aitape and I made my mark. I was sent to Kavieng. I went to Rabaul first, and then to Kavieng. My work was to cut grass underneath the coconuts. I did this for three years. Then I made time again². But now I was a servant for the whiteman who was looking after the plantation. This man was a good man. But the first was very bad. He hit us with a cane from the bush and kicked us. We had to work in the rain and on Sunday. His boss, the boss of Burns Philp came. We stood up and told him about this bad whiteman. He was sent away and we got a good man then. I was a servant for this man.

When I came out of the bush I was like a fool. When I saw how the whitemen lived my head went around. I saw their houses. When I became a servant I saw inside their houses. I saw their beds and their chairs and tables. Their food and clothes. I thought all these things were good. I saw the stores too. I was amazed at the things in them. The knives and clothes and all the different sorts of food. I thought this was good too.

When I had worked as a servant for two years, the Japanese came. They came and rounded up all the whitemen and put them in gaol. The Japanese did not give them enough food and they became thin and sick. We felt very sorry for them. Some of us would go at night and sneak them food, soap and razor blades. I don't know what happened to them but I never saw them again. I think the Japanese killed them when the Americans came back.

When the Japanese came, I stayed in the European's house. The soldiers came and got me. They made me an overseer in the gardens. The Japanese showed us how to plant sweet potato, arrowroot, pumpkin, Chinese taro, melon, corn, onions and rice. Most of all we planted rice. I did not like all the Japanese. Some were bad. But the ones that gardened were alright. They looked after us. They learned to speak Pidgin. Not properly, but enough. I asked them about many things. I asked them about this rice. They said it was called *bali* rice. It was fatter than the rice now.

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1. Walter John Hook.
 2. "Signed" a contract.

When I was with the Japanese I got my first ideas. When I saw this rice, I thought, what is this? We eat rice. But what is this stuff? I watched. We planted it. I watched it come up from the ground. I thought, ah, the rice we eat, this is the way it is made. Later I planted it with my own hands. They taught us everything. We planted first. Later the food comes on it. Then the machine pulled it. I looked and looked. And thought and thought. Then I thought, and my thoughts went like this. The whitemen get their rice like this too. Before. Before the war, we did not understand. Now we did. I asked the Japanese, "Is the Australian rice the same as this? Do they get it like this?" The Japanese said "Yes that is correct. But this rice is another family. It comes from Japan." I saw the other things too, the tapioca, and the corn, but my thoughts stayed with the rice. I was happy to see where rice came from. I thought to myself, we must find a way to get money. I thought we could plant tapioca and sweet potato and corn and sell them and get money this way. I saw the Tolai people selling food like this. They bring it to the market and sell it for money. But I thought rice would be best. I thought, this is the way to get money. I took it into my mind. I didn't write it. I don't know how to write.

The Japanese planted rice the same way as we do now. They said, "We are planting rice." First they cut the bush and burned it. Then swept away the rubbish. Now they gave us sticks which we sharpened with knives. Now we stood together with the Japanese and planted. We made a small hole. Not very big. And threw the seed into it. That's all. About five days later you can see it coming up. Now they said we will clean the grass. So we cleared away the grass. The rice grew up taller. Two feet, three, four, five and then it got seeds. It was taller than Australian rice. Then we cut it. Carried it to one place. They had two sticks stuck in the ground, close together. We pulled the rice through it. The seeds fell off into a basket. Now this was the wartime, so they didn't have much machinery. A small machine only. They said, "Okay you have cut it. Now dry it." We put it in the sun to dry. Then we put it in the machine. It took off the outside skin. It left a small skin on the inside. They said that was their way. They said, "The goodness stays inside. It makes the soldiers strong. They can fight better if they eat it like this." So we put it in the bags, put the bags on trucks. They took it away to the soldiers.

These Japanese were good. But another sort. They called them *kempi tai*. They killed people and ate them. Our Japanese were called ami. They said to us, "New Guinea is a good country." They said, "Good! Good! Work! Work! Hurry up! *Kakari! Kakari!* Alright! Alright!" They said, "If you work hard, one day you will go back to see your fathers. If you misbehave your fathers and mothers will not see you again." They looked after us.

When the war finished the American kiaps came to Rabaul. When the big fight started we ran away. The bombs came down and we ran to the bush. The Japanese did not see us. They were fighting. We avoided the fighting. All of us. From all over Papua New Guinea. When it was finished and all the Japanese were imprisoned, they sent us letters from a plane. It came over and they fell down from the sky. They had writing on them. It said, "The war is finished." We were not afraid now. We came out of the bush. We sat down and built houses. The American kiaps came with the books. They called out for all the men from New Guinea to come. They wrote down our names. They sent us to one place and we worked for the American kiaps. They called them ANGAU. American and Australia only¹. They selected some of us to be police. Some of us were married [to local Kavieng women]. All the wives were sent away, back to their villages. The men were sent back to their homes in New Guinea. Later if they thought about their women and children they came back again. Single men were alright.

I was sent back to Aitape. I walked back to Moseng. Then I found the Japanese had been here too. They had killed one of my father's brothers and eaten him. They found his body with the meat cut off it. The village was wrecked too. I stayed for three months. Then I took ten Urat men back to Aitape. These men came from Moseng, Musendai, Musilo, Musingwik, Tumam, Ngahmbole and Daihunge. I took them to Madang. We worked for the government, cleaning up the rubbish from the war. We put all the petrol drums and wrecked trucks and tanks and guns on the wharf, ready for the ships. After one year I got work at Siar plantation. I was an overseer there for one year. I came back to Moseng in 1948. At that time I had £140 from my work, and from the money the government gave us for the things the war had wrecked.

1. Members of the Australian New Guinea Administration Unit, ANGAU were all Australians.

While I was at the plantation I went to a big meeting in Madang. My employer took me in his car. The bishop and all the big government men came. They sat on a big stage. The bishop held a big book. He spoke to us. He said, "The war is over. There will be no more fighting. We are very worried about all the Papuans and New Guineans who died. But we cannot worry more. The government will fix it. They will pay money for those killed, and for the damage in your villages. Before everyone said the people of New Guinea were no good, useless. They wouldn't listen to advice, they wouldn't work hard. They had no clothes. But now I have seen them in this war and they are good men. Strong men. Men from all over New Guinea stood together with the Americans and the Australian soldiers. I saw them fighting and I was proud and happy. I have seen the strong men and women of New Guinea. Now I have some advice for you. If you follow it, you will get the same standards of living as Europeans have. If you take no notice you will stay like your ancestors." I did not really understand all this. But I listened. I have told the people here about it too. They know.

Another thing happened when I was at Madang. My employer said to me, "How much money have you?" I said, "Oh sorry. Only about seven pounds." He said, "That is enough. This money you must not spend. You must put it in a bank account." He took me to the bank in Madang town and we put the money in the bank. Later when I got my pay I put it in the bank. I said to this whiteman. "Masta what about this money? Where does it really come from?" He said, "Did you hear the words of the bishop?" I said, "Yes, it is in my head." So he said, "Alright. You cannot spend this money now." So when I finished work I took this money with me to Aitape. I took away five pounds and put it in the bank. I took the rest back home. Many people did not understand this you know. This thing about money. I remember once. A whiteman was speaking. He said, he was holding some paper money, he said, "Look at this stuff, it's money. Look at this shirt, this knife. They do not appear. Hard work, that is all. Now think about this, and think about all the clothes and things you can buy." This was at Madang also.

When I came back to Aitape and tried to put the money in the bank, the patrol officer said to me, "What do you want?" I said, "I want to put this money in the bank. Later I will make some work with it." But he said, "What sort of work? You tell me first." So I told him. He said, "No. You cannot. You have no schooling. How

will you do it?" I said, "I will try that is all." Then he said, "What sort of thing are you thinking about?" I said, "First I want to build a house." He said, "What are you going to do with this house?" I said, "I will get some things and put inside it to show my people." He said, "That is alright. But where will the money come from. Your place is in the middle of the big bush. Patrol officers have only been in there a short time. They are just bus kanakas in there." So I said, "Yes. But I myself will try, that's all." He said, "I don't think you will be able to do it." But I said, "It is my money. So I can try if I want to." He asked me, "Where did you get these ideas?" I said, "I have been to Rabaul, to Namatanai, Kavieng and to Lae. I have seen Madang. I know enough to begin this work." "Oh," he said, "I think a lot of people will be angry with you and will kill you with spears." But I said. "It is my home. That is my worry." So I came here.

I came back. Dreikikir was only just built. Fenbury had gone. Gawi only remained, as a policeman. I came here. I told them. "I have seen the way. I know now." I got the luluai and tultul together. I told them. "I have seen the way. I have been to the plantations. I worked, but I did not get much money. The whiteman hit me too. He said to me, 'Bullshit talk, your people are bloody naked kanakas.' I was ashamed. I wanted very much to try another way, in my own village. Why? The whitemen made us work hard, in the rain, when we were sick or had sores. So I said, "We must find another way. I will try. If the patrol officer comes and puts me in gaol, too bad. I will try it." This I told them. I said this to them.

So I told my clan, the wild taro clan, *samas*, I told them to go and cut the timber. They cut the timber and we built the house. Then the house was finished. There were no roads then, no roads anywhere. No road to Wewak. No road to Maprik. A patrol officer came to Dreikikir. They called him 'Kiap Blue'¹. I thought I will take this money and go and ask him to help me. So I went to Dreikikir.

I went to his office. He said to me. "What do you want?" I said, "Kiap. This is my money and I want you to help me with it." He said, "I don't know about this." I asked, "Why not? I have been to Rabaul and Madang. I have seen the way it works. The ships bring

1. The officer at Dreikikir during this period was G. Morris, but it is not known whether 'Blue' and Morris are the same person.

the cargo and it goes into the stores. It is lined up and sent to the other stores and they sell it and get money. I know about this." And he said, "So you want to do the same eh?" I said, "I want to try, that is all." He became annoyed. He said, "If you do this your money will disappear for nothing. There is no money in this area. Who is going to buy the things from you?" I said, "I just want to try." "No. I will not help." I was angry, but I went home.

Then I got up and went to Maprik. To Havilland¹. I told him. He said. "Oh I'm sorry, but the war is just finished and there is nothing here. Why do you want to do this now? Where are you going to buy the things from?" I said, "I want to try that is all. I have seen the store in Wewak. I know it is there. Can you help me?" He asked me. "Have you got enough money to hire a plane to bring in the goods from Wewak?" I said, "I have only a little money. Kiap, you help me so I can get to Wewak." So he helped me. He put me on the plane. He gave me a letter for the District Officer. That was Niall².

I went to Wewak. I slept. Then I went to see Niall. I showed him Havilland's letter and he read it. He said. "Alright. But first you must talk to me." So the next day I went back to his office. He got his book. He said. "Alright, I want to hear what you are thinking about. I want to see if you can do it." I told him and he wrote it all down. All my thinking he wrote down. We talked for three days. Then it was finished. He asked me questions. He said. "If you put goods in your house, what will you do with them?" I said, "I will get this cargo and I will sell it to the people. They will buy it." "Okay," he said. "How will you sell it?" He got some tinned meat and some fish. Now, he said. "For this meat. If it cost you four shillings how much will you sell it for?" I said. "For five shillings." I got this knowledge from the European at Madang. He explained it all to me. He got his meat and rice and biscuits and put them on the table. Then he would ask me all these questions and I would answer. So I knew these things. This District Officer and I talked and talked. He asked me. "Where is the money to come from?" He said there was no money in my area. It was then I told him about the rice.

1. Mr R. Havilland, ADO, Maprik.

2. Mr H.L.R. Niall, District Commissioner, Sepik District and Morobe District, and later Speaker in the 1st House of Assembly, 1964-67.

I told him I was trying to grow rice. He asked me, "Where did you get rice seed?" I told him I had seen rice growing when I was with the Japanese, so I had gone to the patrol officer at Dreikikir and he had given me a small packet of seed¹. I told him how I had persuaded the patrol officer to give me the seed. I said, "I planted Japanese rice during the war, now I want to try Australian rice." I told him I had been given a little. This I had planted along the edge of my yam garden. The women made mounds of ash from the fire, and I planted the rice on these. "Oh," he said. "What happened? Did it grow?" I told him it was nearly ready. "The food will come on it soon," I said. He asked, "Is it good, or is it sick and yellow?" I said, "I saw rice with the Japanese and it is like theirs. It is good." He wanted to know what I was going to do with it. So I explained. I would wait and when it was ready I would cut it. Then I would dry it and hide it in my house. Next year I would cut a bigger garden and plant again. I talked and talked, and I won him over. "When you start this work, if any man wants to take you to court or if the Patrol Officer wants to stop you, show him the letter." Then he said, "You must understand, there is no money for this rice, you plant it only." He said, "Okay, when you plant this rice again next year, you must come back and tell me." But I said, "I have not enough money to come and go. I will tell Havilland at Maprik." Then I went home.

After I got home, Havilland sent word for me and I walked to Maprik. He said, "Next year. When you plant rice. If it comes up well, and if it has much food on it, you can take it to Bainyik and show it to the agricultural officer." Next year I did this, and the agricultural officer sent some to Niall. Havilland told me. "It is good rice. It is good."

This rice. At first it was only in the village, my own village, Moseng. We gave it to others close by. Apos, Musendai and Moseng had it first. They came to me. They heard the word going about. It was just like this Peli thing now. They came to see what I was doing. It was new work. New for my area, new for this ground. Then Mwalhiyer and Mejiare came from Ngahmbole². Mwalhiyer's wife

1. Kokomo insists that Anton first obtained rice seed from him. Anton maintains that he did obtain seed from Supari, but only after first planting seed from Dreikikir. The personal rivalry between the two men makes it difficult to resolve the question; however it is unlikely that the officer at Dreikikir had seed rice in store in 1951.

2. See Mwalhiyer's narrative.

was related to my mother. He came to me and said "Hey! What is this talk? What is this work with rice?" I showed him the seed in my house, I showed him the garden and how we planted it. I got a bag and measured out some seed. I said. "That is yours." Then Tumam came. My brother-in-law came with his wife. My clan sister. Biyerembere and Tewul. I measured out their rice. Now Moiwhak and Yerhmain too. That was the first time. But Tau and Kubriwat had seed at this time. You understand. It is my mother's birthplace, Kubriwat. And my mother's sisters are married at Tau. So I went and showed them first.

The next planting the luluai of Daihungai, Musembelem and Musingwik came. My in-law, Ripinep came from Daihungai. He is not truly my in-law, but many of our Moseng women are married there. They are thus our in-laws. And at Musembelem too, the same. I didn't send them word. They heard the talk and came to see me. There was plenty of talk going about, it was new work. Musingwik saw it at Ngahmbole. Not a man from Musingwik exactly. A man from Daihungai was staying at Musingwik and he went to Ngahmbole. He went back and told them and they came. Then the third time, Musilo, Musengwa and Nanaha came. And that was all. One language. The others just watched us. They said. "We will wait and watch. If you get money from it, alright we will try it too." That was the Urim and Kombio. I went and showed the Gawanga. They said. "Yes, that is good talk, but where is the road? It is all bush. We will wait." One man came and got us. But when we went they said, "Not yet." So it was only the Urat, the western Urat, *Yerhe*. The eastern Urat, *Wusiepngau*¹, they got their rice from Kokomo. You will have to ask him about that story. Only the Urat sent rice to Supari. When we brought the work to Brukham, then the others began it too. Kokomo and I promised. We said, you spread the work on this ridge and I will spread it on this ridge. We both went into the Bumbita together.

Now, many of the big-men were afraid of this rice. They said. "It is no good. What if this rice destroys our gardens, our yams, our tambaran, *yera 'engai*, our annual feast?" They shouted at us, "Get rid of this stuff. Hurry up!". But we would not, so they

1. In common with most villages and groups in the area, the Urat are officially known by the name applied to them by their northern neighbours, the Kombio. *Yerhe* means "us" in Urat, and *wusiepngau* "our language".

ran to the patrol officer. They told him. "These men say we must plant rice and make business. This is wrong. It is bad. We will lose the ways of our ancestors." These men were good men too. "Stone-knives"¹ from the old times. They were afraid. The patrol officer helped them. He sent for us. He said, "You cannot go about telling people to stop the old things. To stop following the ways of their ancestors. If you force them, I will put you in gaol." So we went quietly. If they wanted to make the tambaran, we left them alone. It was up to them. I looked for smart men in each village. I told them, "I want a man who can stand up before all their eyes, who can work, who can speak well, and who is intelligent. Not smart clothes or a nice shiny skin. Smart thinking." So I looked and when I saw one I said. "You are the committee for this village. You can organise this village, organise the rice planting here." And I told them. "Take only those who want to. Show them how to plant rice and leave the rest." But some luluai and tultul were angry. They reported us again. This time, the patrol officer was angry.

At this time, the luluai and tultul from the nearby Urat villages were with me. They were following me and were organising the planting of rice. The patrol officer sent word for all of us. We lined up. He said, "Ah! You are Anton's luluai and tultul are you? Well you can work for him and he can pay you. How would you like that?" They all stood up straight. They were afraid and said, "Yes sir, yes sir." But I was strong. I said, "Kiap, what is this? You want us to get rid of the rice. Where will we get money from? The whitemen and the government don't give us any." He said, "Yes, it is you who have put all these ideas into their heads." I told him. "Yes, I showed them how to plant rice. They are with me in this work." This made him very angry. "Ah," he said, "So all you luluai and tultul are with Anton eh? So he is your kiap now is he?" It was strong talk. My poor old luluai and tultul. He "cooked" them and me together. But we stayed strong. We all spoke the same language, we all came from the Urat. The rest ran away from this argument, but we stayed and talked back to him. Then he shouted. "Alright! I don't want to see your faces again. Clear! Get off the station! He is your kiap now!" So I said, "If that is what you want. Alright. But look at this." And I showed him the letter from Niall. I said, "When I first talked to you about this you were

1. Urats refer to old stalwarts as "stone-knives".

against it. So I went to see Niall. He gave me this paper." He looked at it. Then he said. "Alright. But look out. If you break the law I will finish you."

Then two patrol officers came from Maprik¹. They called out to us. We all went to a big meeting. One of them said to me. "So you have started bisnis and have destroyed all the old ways have you?" I said, "No. We cannot throw away the old ways. But we are working to bring money here. That is all." The officer said, "Oh, that is good work. But all these men have come crying to me. Why?" I thought, he is helping us now. So I said, "Kiap, I think they have been lying to you. We have not spoken about finishing the old ways. We have said, the things of the ancestors can stay. But we must think about working bisnis." This was not a small meeting, it was a big one. Many people were against us, but the Patrol Officer began to help us. He said it was a good road to follow, to get money. We could follow it, but we could not force people to come with us. Some men before, they would not weed their rice. I slapped their faces. They had told the patrol officer. Others said we were stealing their money. They believed they would get a lot of money from the rice. But they planted small gardens only. Their money was small too. So they cried to the officers. I explained all these things. I said, "When I first started they were ignorant. So I showed them. I gave them one shilling for their rice. Then I took them to my store and gave them a knife and took their shillings. I told them this was how the whitemen did it. This was how they got their things. They were happy then. Now they say I stole their money." The officers heard all our talk. They they said, "Alright. You can make this work. But you cannot hit people. You cannot force people to plant rice. The people must do as they like." But this was not the end of the trouble.

Kokomo and I joined Augen at Supari. The Agricultural Officer came and we showed him the money we had collected. We formed a Rural Progress Society. With some of the money we got a machine. Augen knew Simogun. They spoke the same language. Augen told us how to make committee men and collect the money. But Kokomo and I wanted to get a machine. It was too far to walk to Supari carrying rice. We found a place down by the river and we cleared the bush and built houses there. All the villages helped. We made an airstrip but it

1. See Report of a Visit to Dreikikir Area 12-23/7/54, F.V. Reitano ADO, Maprik.

was no good. This was all at Brukham, down below by the river. We carried the machine and put it there.

Then I had trouble with a woman. She came from Musingwik and lived with me. But she was married. Her husband took me to court and I went to gaol for three months. When I came back there was this trouble with the rice.

It was like this. It was new work. They did not understand. When the brought the rice to Brukham, they brought only a small amount. The machine broke down many times too. Many people began to say, "Anton is holding the money." But I said. "It is not big money. I don't hold it. The Agricultural Officer and the clerk buy the rice. I don't hold the money." But many men were angry. They said I was stealing the money. The source of the trouble was this. I took their rice. We hulled it, and sent it to Dreikikir where the patrol officer bought it for the police, the prisoners and the hospital. It was too far to Bainyik. Now all the people thought they would get a lot of money for one bag of rice. Ten pounds or something like that. But I said, "No. The Agricultural Officer did not say ten pounds for one bag. He said two pounds." But the people thought if they planted rice they would get a lot of money. It was their idea. I did not tell them that. They thought it by themselves. Many men went to the patrol officer. The patrol officer talked to the agricultural officer. They said it would be better if they took away the machines at Supari and Brukham and put one at Bainyik. The government would buy the rice and hull it. The Society could not buy the rice. The money was finished.

Now, before, many men had put in money. Many men did not have enough. It was one pound to be a member. So they put their money together. Five shillings, five shillings and so on. Now they wanted their money back. But their names were not written down. The agricultural officer tried to work it out. But he said in the end. "Oh finish it altogether! Give back all the money and finish the Society." So he gave back the money. But only some of it. Eighteen shillings came back and two shillings stayed. The people were angry. There was a large court. They said I stole the money. But I explained. The patrol officer and the agricultural officer believed me. I waited. They talked together. Then they said, "This is the way of people new to bisnis. They do not understand." So he gave back the money. But the debt money did not come back. It stayed. And they took away the machines.

The agricultural officer said this work was finished. I sat down and thought about this. I was very upset. I said, "It cannot finish now." I thought, "They have taken the machines but we still have the rice seed. They have only got the machines." I talked to Mwalhiyer. They said, "Dreikikir is finished. We will only look after Supari." So we asked them. We said, "We still have the rice. But you have the machine." They said, "If you want to plant you can. You can carry it to the road and the government truck will pick it up and take it to Bainyik. But the membership is finished." But we kept on going to the meetings. All the time. We walked to Supari and went to the meetings. We would not give up. Later they said, "So you are still here." We said, "Yes, we are ready to make another Society." And we did. Now we have the Sepik Producers' Cooperative Association, and I am the Dreikikir director.

MWALHIYER'S NARRATIVE

Mwalhiyer lived in Ngahmbole hamlet, Tumam village, where, as he relates, his parents brought him as a young child. In 1972 he was suffering from what appeared to be chronic bronchitis, and early in 1973, after I left Tumam, he died.

During my stay in Tumam he was restricted in his activities, and spent many hours sitting under the porch of his house, watching passers-by. Anyone who left the village to walk north towards Dreikikir and the Sepik Highway had to pass his house, and he kept a close watch on village affairs from this vantage point. He was completely opposed to the Peli Association, and members walking past his house had to run the gauntlet of his pointed comments, his sharp eyes and his chuckle at their obvious discomfort. Twice local Peli committeemen gathered at his house and attempted to silence him, but he debated them into silence, closing his case by pointedly spitting on the ground to clear the bad taste from his mouth. His main argument was that, although he was just a bush kanaka, he was not duped by the claims of the Peli leaders; his way was proven. Had they not received money from cash cropping? Did they not have clothes and better food as a result? Who was responsible for them having enough money to buy a village vehicle and to own trade stores? This case, combined with clever derisive and sarcastic comment on Peli's promises and failures, left his opponents fuming, but silent, and they were forced to walk away, defeated.

He similarly refused to listen to an evangelical missionary who was trying to persuade him to be baptised, and join the mission, as had his younger brother who had died in 1972. He pointed out there was no proof whatsoever of the existence of heaven, and that when he was dead, that would be the end of him. He had lived a full life, and did not desire a life after death. He would go wherever spirits of the dead go, as his ancestors had done before him. He claimed it was only since the missionaries had come that people became frightened of dying.

Mwalhiyer was a bigman in his own right as a former yam grower of reknown, as a moiety leader, as a clan leader, and as a sorcerer. Of all the prominent bisnis leaders in the study area, he was the only one who could claim this background. He was also the only one never to have been employed as an indentured labourer.

His skilled use of Pidgin was contrasted with the complete lack of Pidgin in other men of his age and background.

In his narrative, he spends much of his time speaking about his struggle to establish bisnis in the western Urat villages. His story is sometimes a little difficult to follow, because he jumps about in time, and is rarely strictly sequential in his narration.

When my mother gave birth to me, she was staying at Moihu'. She was at Moihu' when she had me. Alright. We stayed at Moihu' at first. Alright, white men, or what? They called them "German", they came. We ran away. I ran away and a thorn from the cane went into my foot. I was about as big as Tisimbawe¹ here, about three years old, or four. We were at Moihu'. My mother took us to the bush and a thorn went into my foot.

Well we left Moihu' and came up here.² We were fighting with the big village, Tumam. We stayed here. The fight occurred. I was as big as William here (my son aged four). We stood up there and watched them fighting. All us small boys. We watched the fight from up there. The fight started. They wounded a Tumam. They carried him down below. They wounded a Ngahmbole, they carried him onto. Then one man from Arisili.³ A man from Arisili. He came now. He shot two men of Ngahmbole. One man called Luiai. One called Bepelat. Bepelat died. Luiai lived. Mother took us and we ran away now. We heard the gun fire in the village. It was a new thing. We ran away onto and stayed with the Musilos. All our men they stayed down below. To hold the village. Now all of us, women and children ran away. We ran away to Musilo. We went and stayed with them. We did not stay for a year. No. We stayed with them. But they called us tarangu.⁴ They said, "What food have you got to give these tarangu who have come to live with us?" So we thought, we are not tarangu. We saw you were tarangu, so we came to help your warriors. Why do you call us tarangu? Alright, we ran away and came down here.

We came back. This year went out and the new one started. The fight was finished and they began to make a tambaran. They called it ngambo, the flying fox. That's its name. They initiated us now. Us now. Alright. Mejiare took me.⁵ We went and slept with this tambaran now. They took us up into the forest. Father and mother stayed behind. We went with them. Then they decorated us. We came back to the village. Then the white man came up. Chased us about. The German. Chased us. We ran away.⁶ The village was empty. Men and women were gone. They made houses around and about in the forest.

¹ Mwalhiyer's granddaughter.

² Ngahmbole hamlet, Tumam village.

³ A Wam village with which Tumam had reciprocal ceremonial links. Men at Arisili were in contact with the coast, and this man, had been given a shotgun with which to shoot birds-of-paradise by Chinese traders. See Chapter 3.

⁴ A Pidgin word, difficult to translate directly into English, which means variously, miserable, poor, pitiable, unfortunate.

⁵ His elder brother.

⁶ European recruiters did not actually enter Tumam at this time. They remained in the Kombio, and sent coastal men, armed with shotguns, south into the Urat.

We stayed in the forest. Stayed. We stayed. And stayed and stayed. Alright, one man, Taihiwor, a father of ours. He finished time and came back.¹ He came back to the village. He worked on Wallis Island. He called out to us. "You come." He took us from the forest and brought us back to the village. We made a small tambaran, *lahial*, all my brothers. I did not sleep with this one. Mejiare and my brothers did. But we all came back to the village and made houses, and stayed here now. We stayed. Decorated them.

Decoration finished. They came out. Alright, then they killed a pig of ours. Me'mwa and his younger brother shot a pig. They made soup with it, this pig. Made soup. We sang and danced until dawn. Then my father died. Mungulpe my father. He died. Sorcery killed him. We made a bed and put him on top in a tree. At Wersuhe, in the village. They all said, "He was a good man. We must put him in a clear place in the village where we can see him. In the middle. The smell must stay in the village." My father who gave birth to me. We stayed here. Mejiare was a young man now. He said, "Before I was a youth and our father looked after us. Now I am grown and he is dead. I will look after you young ones." My mother was still with us. Mejiare was like a father now. He planted food for us and our mother. Then mother died. I was about the same age as Mahinga, a young man. Now one year after my mother died, Mejiare's wife died. She died. I was about as big as Kumsasai, or Haundinde. I had hair on my genitals now. Just a young man. Mejiare speared Mokondete. That was his name. Mejiare made the water (for a divination). At night, dark about six o'clock. Speared him and he died straight away.² We ran away then. Fast to Musingwik to a sister who was at Musingwik. At dawn all our cousins came and got and took us down to Ngahonge, at the other end of Musingwik, near where Worospele is now. We stayed and I was a young man there.

I got one girl from Tumam. She was really a girl of Musilo, but she had come to live at Tumam. She was like a half-caste. I came and got her here and ran away with her to Musingwik. Her name was Temwa. We stayed at Musingwik. One cousin, he said, "Never mind you, later you can find another woman. I will marry this one." I said, "Alright, you marry her." They got married. I came back and I saw my brother die. Soporostiyahi, the father of Wapi here. He left Wapi and Mahoi. I said to Mejiare, "Who will look after those poor children? They are alone now. You stay here, I am going back to look after them. Back to my village." So I came back.

¹ See Binghoiye's narrative.

² Mwalhiyer's brother Mejiare stole a small stone axe head from a fellow villager, Mokondete, and traded it for a shell ring with men from Musendai village. When his wife died, he immediately suspected Mokondete of sorcery. He performed a divination which involves boiling excuviae from the suspect in water. If the water turns red, the suspicion is confirmed. Mejiare showed the result of the divination to other men of his clan, took his spear, went directly to Mokondete's house and speared him before he could rise from a sitting position.

I looked after them. Made a garden for them and a house. Then I took a woman. Made a tambaran, lahial, at Musilo. We sang at night and I took Na'anbaiye and came back here. There was no one to look after her. Mejiare was at Moihu'. I gave her to one brother, Sepine'he, father of Mekelieme. He said, "Alright she can stay with me." This woman stayed with him. Later I took her to my sister, Yohai, mother of Retehi who lives here now. I stayed here. Then I married her. I said, she is my woman now. I found her now. She stayed with me. She had her first child, Yaisi, and then the second, Teare. There were some who died. Three girls died. If they had lived there would have been many. Two boys, one I called Bwanise and one Mawaimbe. Girls, one I called Hyuhiai and one I called Borongele. One died and had no name. One I gave to my cousin but she died.

Then the war came. When I got the arm-band from the Japanese¹ I was making ngwal here.² Mejiare's leg was no good, an ulcer had come on it, a big one. He said to me, "You take my book and my hat and take them to Yakamul." The Japanese took these things and gave me their arm-band. I went to Yakamul. We lined up, all the tultul and luluai. All carrying their hats. The number one kiapatan³ came and took away the hats, put them together. Burned them. Those of us who were tultul, they gave us another kind of badge, a yellow one. Luluai they got a red one. They said, "You are number one kaipatan, you are number two." Wrote down our names. We came back to the village. Lined up all the people. Told them about it. We didn't say Australia was finished. We said, "We don't know what has happened. They say Australia is finished but we were at Yakamul and we saw all the planes of Australia flying over the sea. It is no good if the Japanese are lying and the Australians are not really gone." Later on we tied up a pig and took it to Yakamul. Me and Moihem. He too got a badge. He was a tultul then. We came back. Japanese said we had to take a pig to them. So we did. All the young girls, Tewul here, Tempakai, Kepuwaim they are still here, Botohube, now she is at Talasea, all the young girls then, like Na'anbaiye now, we took them to carry the food. All the older women were afraid. So we took them. Moihem's wife came to look after them, Na'anbaiye, she came to look after the young girls. We took them. I said, "Some men, bad men, would take you into trouble, but I am a good man and will take you straight there and straight back again." I took them all. Came to But. Afternoon. Slept. Now they came in the planes and dropped bombs on the airstrip. We were sleeping on the beach. We ran away. The bombs fell behind us. The planes came low and looked at us. But they did not shoot at us. The Japanese planes were there. But they did not fight. They were hidden. We ran away up the coast. Slept at the church at the mission near Tambalan. We slept there. In the morning we got up and walked to Ulau.

¹ The Japanese replaced the Australian appointed village officials' badge-of-office, the military type hat, with arm-bands, upon which were written Japanese characters.

² Preparing for an initiation ceremony.

³ A Pidgin term which the Japanese applied to their village officials.

Lef Ula and came to Mihet. Slept there. Left Mihet and came to the village that night. We slept. Then I told them. "It is not good if you believe the Australians have gone away. I saw their planes at But. They are still here."

We stayed here. I went down to Yakamul and back. The Yakamuls came here. Then the war came now. They all said, "Fenbury has come and is at Tong."¹ Alright. I got up and went to Yalangel. I was like this before when I was strong. I was not afraid of anything. I went to Yalangel. I waited and I saw them coming. And I went and talked with them. Walked with them to Musembelem. I came down with them. Now before, Mejiare, Wenbilbil and Ketehi. We were making *ngwal*, making food for the tambaran. We were making sago down below, when all the young boys came running down to us. They said, "Oh all Yakamuls have come and they have killed Hook."² He is dead." Me, and Nihulu and Mejiare got up. We went on top and came midway between Ngahmbole and Musilo. The other two went up to Ngahambur and I went and I stayed down below. I called to them. "Oh sorry, come back. It is not good if we go up there and they see our faces and write down our names. Come back. Never mind about being tultul and luluai, come back again. It will be bad if later on trouble overtakes us."

So Mejiare told Nihulu, "He is one man, but he speaks well. Let us go back." So they came down again. We came down and stayed. They buried Hook on top. They took all the good things, his money and goods. Then they went away to Yakamul. We went on top and looked at the hole where they buried him. Gawi³ was there. He said, "Come and see the grave." He said, "This poor man came and lived with us and now they have come and killed him. Men from this side, I have seen their faces. Now you men from this side, I have not seen your faces in this. You have come to see me that is all." We looked at this. They were picking up all the rubbish from his house, plates, knives, spoons, scraps of paper. That was all that was left. So we went home again.

We thought they⁴ were finished. We lived our lives and thought they were gone. Time passed. And Fenbury came back. Now we had a court. It was afternoon like this, and we went on top. Nihulu, me, Saiembulu and Tumbulope. The kiap called out for us now, for a court. He asked us for our hat, our badge. He asked, "Now why did you take the Japanese arm-band? Did you want to or did they make you take it?" We spoke, "You have asked us so we must talk. We are very sorry, but we are like women. We are here. That man who was married to us is where? He has gone. Now you came and married us. Now we are not like men."

¹ Mr D.M. Fenbury, an A.N.G.A.U. officer who had established a camp and dropping zone near Tong village, about 12 kilometres north of Tuman village.

² Wally Hook, the labour recruiter. He was killed in 1943.

³ A policeman in charge of an Administration police post and camp established at Musembelem.

⁴ The Australians.

We are not like you. How we can we overcome other men? We are like women." We won him over with this talk. He listened to it. He heard our talk and could see it was right. Who could have helped us poor people? We told them you had gone. If we had said you were a good friend of ours, they would have killed us. We thought you had gone. We thought, alright, that's alright, we will do as they say. They gave us their badge, and we did their work. Now you have come back to us. Alright. We have no argument. It is nobody's fault." No. Alright. We won this argument. Now they took the men who had killed Hook and shot them all. One from Nanaha, Masapo, one from Yalangel, called Bangwodin, one from Yaurang, Worokamap. They killed them all.¹ Us no. Gawi spoke. All the men from Tumam and Ngahmbole, Musingwik, Musilo. Their faces were not here, they were making *ngwal* down below. They have not got trouble from killing Hook. We won this talk about the Japanese. We stayed alive.

Then the Japanese came chasing us, and we ran away.² Later we came back. The village was like the bush. We cleared it away and built new houses. Then we sat down. The war was finished.

Fenbury came and got us. I worked at Dreikikir building the patrol post which is there now. All these young men here came back from the war at this time. These carriers who had been to the fight. They came back to the village and I went to Dreikikir. We built all the houses, the haus kiap too. They were made from bush materials and morota,³ that's all.

So, we came out of the bush. We had been hiding in the bush. Before we had sentries. We went to the Americans and the Australians and told them, "The Japanese are there". They came and bombed them. We hid in the bush.

The Japanese were at Kubriwat. Fenbury got us. We went and fought at Kubriwat. Chased them all out. They ran away and went to Wamgrir. We went and captured them all there. One luluai of ours, he is dead now, he used to live here, his name was Saiyerume, and his tultul, he has gone to Talasea, he wasn't the tultul then. My big brother Mejiare was. This man was a boy. Alright, we went, captured them and imprisoned them all at Dreikikir. They all said, "The war is finished." We caught them. They told them the war was finished. We imprisoned them at Dreikikir. We imprisoned them. We made a big house, we worked hard. It went from here to there and we put them in it. I was very happy then. I was in my prime then. I had three children. I was in

1 Between May and June 1944 (ANGAU War Diary).

2 The ANGAU patrol which apprehended those implicated in Hook's death was one of a series of patrols which entered the area in an attempt to assess Japanese operations there, prior to a move inland by Australian troops. The Japanese advanced as far west as the Urim census division in the last quarter of 1944.

3 Sago leaf thatch

charge of all this work and was important. We made this big house and put them in. They didn't have any clothes. Their trousers were torn beyond repair. They carried limbum¹ that all. The women in the Urim and around Wamgrir had got them and filled them up with food. We brought them as prisoners a long way. They didn't have any fat under their skins. Just bones. We imprisoned them. They waited. They sent them away. Soldiers came and got them and took them away. Then we came back to the village. We began to work again. We thought, the war is finished, what are we going to do now. Then Anton came.

The war finished and he came. The war finished and Anton built his store. At Moseng, his home village. One hamlet is on top and the other down below. He built it in the middle. He planted rice alongside it. He planted a little rice now. Not very much. Just a little. He said to his people, "You people cut this little area of bush here. I want to plant some rice." Alright they cut it and he planted rice. They cut the rice. It came outside [of his village]. It came to us. They cut it and he called out to us, "Come and get some rice. Later you can work bisnis." We went and got it. Me and my older brother the tutul, Mejiare. We went and got it and planted it in our old garden. Down below here where my coffee is now.

The rice came up very well. Its good ground there. It came up very well. We cut it then. Some other villages heard about this. They went and got some for themselves. Moiwhak and Yerhmain, they went and got some. Alright, we cut this rice. Augen had bought a huller. It was at Supari. He talked to us. "Okay, bring your rice, I've got a machine." Augen talked to us. "When you see the rice has grown up dry, then you cut it." He sent a message to us. Augen talked to Anton and Anton talked to us. "When you see the rice is dry, its stalks are dry, alright cut it."

Alright, they saw my work with the Japanese was good. There was no trouble. They said, "What sort of work can we give this man?" Then talk came. Bisnis. They said, "I think you must kamiti² in this work. I said, "Alright, I will try it. If it is no good, someone else can do it. I will try it first." We went to Brukham. I said, "I will try it. I am just a kanaka but I will try it. If it goes wrong someone who has been away can help me." So I tried it. I did it. I pulled the people together for a meeting, walked about all the time, talking. Some men did not hear this talk. They said, "Ah bullshit, bloody bush kanaka that's all." But some became friends with me. And the younger men said, "Alright, where is someone who has been away and can do this work? You don't want to do it! Alright! He will do it. Listen to him then!" Many men saw the way I lived and said, "He is a good man. He is intelligent, and knowledgable about all things. His talk is good." They said, "Alright you can carry this work for us." So they gave me

¹ A large bark sheath from a palm of the *Kentiopsis* species used as a carrier in the Torricelli area.

² Become a committee man or village leader.

the bisnis to look after. Now if I had not been like this, they would not have. I am a village man. I have never been to the plantations. No. I am a village man. I stayed in the village. All the things I have, I have learned here. I have learned Pidgin. I heard men speaking it. And I learned it. Now they gave me this work.

We carried this rice a long way. But you look. We carried it to Supari. Carried it on our shoulders. There was no road, we had no car to help us. We went through Musendai once. Another time we went through the eastern Urat. I got this old woman here (his aged second wife). We two went. We went to this little place here, Moihu'. Then we came to Sangum. There is a road there now. Okay, we came to Luwaite. We went down here to the river Nanu and came up to Wareli and Bana. Then we followed the big road to Supari. Once we slept at Bonahoi. Other times we slept at Wareli. We carried to Supari one year that's all. Later we went to Brukham.

We didn't like going to Supari. It was too far. So we bought a machine for ourselves at Brukham. Its close to here. Alright, now we planted a lot of rice and took it there. This machine at Brukham hulled it. We sold white rice to the Europeans who came and got it from us. We worked like this. But they found this little machine did not do a good job on the rice. No, it crushed it and broke it. So they took it out. They came and took them both away. The one at Supari and the one at Brukham. They took them away. The Europeans from Bainyik. They said, "Its not good. We will take them away. We have a good machine at Bainyik. You can bring the rice there." The people didn't like this. They didn't like it and the work at Supari collapsed. Our work at Brukham collapsed. It collapsed now, our work. All the people came. They said, "Finish it!" They tired now. They were not up to working this bisnis now. But my name stayed. I was stubborn. When they had a meeting at Supari or Bumbita, I was there. My thoughts stayed with this work. I said to them, "Okay. You don't have to do it now. Later you will plant it again."

I went to all their meetings. I brought the news back to this village. When Tumam and Ngahmbole had heard, I told the other places. The other places in the western Urat. When this was done and they were growing rice I went to the Kombio. I had meetings in the Kombio and Urim. I left here and went to Ringin. Then I went on top. The meeting was at Sakngangel. Three meetings on top. At these meetings I told them to plant rice. I said, "It's no good if we lose this rice altogether. We must keep on planting it." They planted it at Nanaha, they planted it at Yambes, then they came from the Kombio and planted it. I said to them, "Hear me. If you work it then later you will have money. You will have good things. But if you take no notice of me then you will remain as bush men." So they got up and planted rice now. They all planted rice. Everywhere, at every village. Some villages produced one bag. They didn't plant individually. They planted together. They planted a little bit here and there. In my area, yes they planted big gardens. They planted big gardens, but not as individuals. We planted together. The first time we were still stupid. We planted together in our clans. The hawk clan planted here, the parrot clan here, the grasshopper clan here. We planted together that's all.¹ We took it to

¹ Mwalhiyer has jumped back in time here and is describing the initial planting of rice.

Dreikikir now. They took away all the machines. Our work was finished. The rice that used to go to Brukham was finished. This cargo cult came in here then. Mahanung's cult.¹ But I didn't lose the rice. I planted a little bit in my gardens [laughs]. Wherever I made a garden I planted a little rice. I said to this old woman here [his wife], "Plant a little bit here. Plant a little bit there." This cargo cult became very big. All the men inside this work forgot about their rice. They lost the rice seed.

The Europeans had come and said, "Finish! Throw away this rice." All my members had given up two dollars, two dollars, one pound, one pound, this is the old way of saying it, one pound, one pound. We gave it at Brukham to be members. We gave it to a European from Bainyik. We paid it first. Then they took away the machine. This was our machine, it belonged to the people. Plenty of people were angry with me. They said, "Ha, they took away our machine, the one we bought with our money. They lied to us eh?"

Alright, I went to the opening of the Council House at Maprik. I gave a report to Master Spet. He had come to take the place of Mister Ken. I said to him...No...Anton said to him, I did not. He said, "All the people have been angry with us, about their money. The luluai too are angry. They say we lied to them and didn't bring good work to them." Mister Spet said, "Never mind. Go back and tell them I will give them back their money." So he came on top and gave them back their money. He said, "You people are finished with this work. Finished with the Society and with rice. When you hear how the people at Supari, or Tamaui or Hayfield are planting rice and making a lot of money, too bad. You don't want to work. Okay, I'll finish it here. You can stop in the bush." I was very sad. In my thoughts I cried for this work of mine. The members said to me, "Mwalhiyer, what happened to your work." I said, "Oh sorry. It is the fault of the people. My work has collapsed. Now you are finished. You have nothing."

They had meetings at Supari. I went. The agricultural officers had meetings, I heard, I went. They saw my eyes there. [Loud laugh.] They said, "Hey, Mwalhiyer, I thought your work was finished. What are you doing here? Didn't you want to finish it?" I said, "I didn't want to finish it but you took away all the members. But I am still here. I don't want to see another place with money and mine with none. So I will work." They said, "Ah, you cry for your work. You give your rice to the Government at Dreikikir. Our work is finished." So we planted rice, a large garden, every place, and we gave it to the Government at Dreikikir. They got a machine (huller) there. We planted rice and sold it to the kiap. He bought it and put it in his machine and ate it.

I now thought about this road. Many men went to work copra on the coast. Many gave their names to Europeans who bought them. I didn't like this sort of work. I wanted to bring the Society back inside this area. This was my work. I planted rice and sold it at Dreikikir. It's close. There was no road to send our bisnis out. Then a small road came up to Dreikikir. We got some coffee. This European said to me, "You go and work with rice and plant coffee. You are strong man,

¹ See Mahanung's narrative on the 1956 kago movement.

you can pull them back. Later you can give me five pounds to be a member. Can you do it?" I said, "I don't know. I will work." This was Master Spet, I don't know his father's name or where he is now. Alright. We sold our rice and got money to buy our membership. We bought our membership and got ready for coffee. We planted rice. Some men were lazy and didn't. But we did. I had meetings and talked to them. I said, "Don't throw away your money in the stores. Don't go and buy a pig. Hold your money and we will start a Society." Plenty of villages were angry with me when I went and held a meeting. They said, "He's a liar. Before we did this at Brukham and it collapsed. Don't let us listen to his talk." But I was strong. I was angry with them. I said, "Alright! You are angry with me! But later you will be pleased. Hear me! Later you will be happy. If you don't listen later you will be sorry. You will stay with your mother and father." I said, "Finish this annual feasting at Christmas time, the tambaran, whatever things our ancestors did. These things belong to the ancestors. This is a way that is not good! We must follow the Europeans! Then we will become strong and rich!" These were my ideas. My own. The old ways were no good. We had to establish bisnis on our own if we were to succeed. The old ways were rubbish. I had never been away from the village. You know that, I told you before. This man up here, Binghoiye, heard a meeting I was having. He said this was good work. He said, "I must stop here and establish this work." He said, "You are just a kanaka, but it is good work." Tomi said to me, "I will go and do the work of the doctor. You stay here and do this work. You have very good ideas." The kiap wanted to make me a luluai but I said no, I have other work to do.

One time we were taken to court over this work. The kiap said, "Are you Anton's foreman? You and Augen and Anton. What are you doing? This work, this rice you are planting. What are you doing this for. Where did you get it from?" I said, "We are planting on our own. I am determined. It is our idea. No European gave it to us. It is our idea." The first time we planted rice, the kiap was angry with us. Moiwhak and Yerhmain argued on the track, down here by the stream. They were afraid the kiap would gaol us. Some had rice. The others fought them. "What are you people doing?" they said. "The kiap will gaol us all! This is no good." The first time we planted it we planted it like bush men. We planted it very roughly the first time. But I thought that the ideas of Anton and Augen were good, so I followed them.

But they all sang out to me. It is no good if you plant rice and cause trouble to come to the people. The people from Muhiang came to the court. Men from Bumbita. They came and talked to the kiap. They said their kamiti was causing trouble. Causing harm to come to the people. The kiap called for us. I didn't have a kamiti then. The luluai came with me. Mejiwor from Musembelem. Daiyurumbe from Moiwhak, luluai from there, Muripakai from Musilo, Saiyerume. They all helped me. I stood up in front, they stood in front, they stood behind. I said, "I have no fight with them. I am just looking after my road to money. I plant rice, I go to the meetings, I go to their gardens. I don't make trouble with them. I talk to them quietly. Alright you plant rice, later you can cut and sell it and get money. They all hear me, and there is much rice. Now this argument that these men talk of, and your talk about stopping this work, I don't understand."

These people from Bumbita were angry with their committee. I don't know their names, they are a long way away. They said their committee was causing trouble, hitting them and getting angry with them. They wanted the kiap to help them stop this work. They were afraid this work would wreck the gardens and destroy the food. It would upset the tambaran and the food would not grow well in the gardens. They thought everyone was going to throw out their food gardens and plant rice.

I told the kiap. I have no argument with them. I told him my ideas about planting rice. About holding meetings. So they could get money. The kiap said, that this was good work and the people at Bumbita-Muhiang were not right. He was angry with them now. He said, "Your work is good. You go and plant rice." This was at Dreikikir.

Alright, we planted rice, planted rice, gave it to the kiap. Gave it to the Government. But I didn't lose them. I said to Kokomo and Wangu. "When there is a meeting, bring me news of it." I went to the meetings, but I wasn't a member. One day the European said, "Mwalhiyer, what do you think? For a long time now you have come to the meetings." My thoughts were that I must get this work going. We must get a Society. He didn't like this. He said before you had one, but they threw it out. "No", I said, "I will work and we can have another one at Dreikikir." He said, "Alright go ahead and build up your own Society. Supari can stop here. You can have one of your own."

They sent an agricultural assistant. I said I would look after him, and give him food. He came from Samarai. We made a house for him. Now we started work. I marked my committee now. I wrote their names. Turenge from Moisilo, Mek from Tumam, Tasiau from Ngahmbole, Wilpahoimei from Musingwik, Haptas from Daihunge, Kumwa from Moiwahak, Masipiere from Yerhmain, I wrote their names for the meeting at Sevenaka. Lemuk from Nanaha, Matahupe from Musengwa. These people in the Urat were first. We started first. I chose them myself. I asked them, "Who is the man who can speak well, who is intelligent, who can walk around, who can fire the people to work?" These people were the committee. I went around and held meetings in every village. It was not good if one place stayed like bush men.

The first time I went around the Urat. Then to the Kombio and Urim. Yauatong, slept there. Got up from there and went to Kilmanglen. Called together Krungungam and Pineng there. Got up from there and went to Laninguap. Went to Yagrumbok both villages. Came back. Went again to Bongos, a long walk. Bongos, Kubriwat, Tau. I told them to cut their bush and plant rice. I told them we had seed. They heard my meetings and came here. We gave them rice for nothing. We said later you can come and help us in the Society. The Kombio got theirs from Nanaha. Tau got theirs from us and from Anton. Bongos got seed from us. Tomi went to the Aid Post and Bongos. He took some seed there and planted it. He cut it and gave it to them. They planted it. Anton and Augen had the rice first. They gave it to the Maprik villages. They filled up their rucksack and went to Maprik and scaled it out to each place. Augen is the source of all this work.¹

¹ Mwalhiyer has again jumped back to the time of the initial diffusion of rice.

I went around. Told them to get their five pounds ready to make the Society. I went to Maprik with a car that came to get a sick man. I slept at the hospital. It was the time this man down here who goes about on crutches was sick. I stayed with him. I walked to Bainyik and was there early. Stam came and saw me. "What are you doing here?" he said. I said, "I want to get bags for rice." He was annoyed. He said, "You haven't got a Society. Your name is not here. You haven't got any bags here." So he said, "Okay steal some of their bags and get your rice in them. Later I will send some bags to you. When will you be ready for a meeting?" I said next week.

I went back and told them all to come to Dreikikir. They came. He came. He asked them if they were capable of running a Society. They all called out "Yes!" and clapped their hands. He said, "Alright, your name can go to Bainyik now." He said, "Get ready, I will come back and get your money." The next Monday he came back. He got our names and our money. I had written them down first. This assistant had done it. He was a black man, but he had a good knowledge of these things. We waited at the Patrol Post. My committee waited in a little house but I went and listened by the kiap's office. I heard them talking and went back and told my committee, "Okay we have won. We will get a Society now."

Mister Stam and another one came. Many villages came. There was a lot of money, ten dollars, ten dollars. They said, "Hey, we thought you had no money, now look." There were two boxes, patrol boxes, full of money. They took it Bainyik and started our Society.

When we first made the Society at Balif, we elected Wangu. They came to me and said, "Who shall we elect?" I said, "Wangu. Look at him, he is a strong speaker. He will lead us. Then the work will be good. Anton? Kokomo? Yes, but look at their weakness, look at them shake. Women that's all. They will wreck it." Alright Wangu was made leader. He selected me first committee for the Urat. He said, "He is the first committee for the Urat. Listen to him, all you committee hear his talk." First time there was rice. We did it alone. Later, coffee came and the fieldworkers were there to help us. Look at me now, I am an old man now. I have worked hard.

LOA'S NARRATIVE

Loa is a slightly built man, almost bald, who lives in the small and isolated village of Sambu, just below the Torricelli watershed in the Kombio census division. His house is located at one end of the village on a prominence, and is conspicuously larger than other houses. Prior to the establishment of a Local Government Council, he was the Sambu village luluai. Loa greets European visitors in a mixture of English and Pidgin, and often during the recording of this narrative, he broke into English, especially when using superlatives.

The recordings from which this narrative was transcribed were made at Tong Aid Post in October 1972. A large number of helpful onlookers made any attempt to cross check factual statements almost impossible. As well, Loa was, to some extent, playing to the audience, and his narrative is the least reliable of those presented here. It is included however, because of his important part in the early establishment of rice growing in the northern Kombio area, and his Australian experiences.

When the Chinese came, before, my mother and father, they had no clothes, no clothes at all. They were quite naked. When the Chinese came, and when the white man came, everyone, everyone ran away into the bush. They went and hid about inside the bush. You couldn't talk. "Shut your mouth! Quiet! No talk! Shut up! Hide well and no talk! No talk at all! Hide!" When they came, if they heard talk, they would come down and chase us around in the bush. Chase the men into the bush, grab the women and rape them, grab the young boys to take them to the station. They grabbed me like this. Just like this. They caught me like this. We were here. They came. All my age-group ran away, but they held me. No. First, they tied up my brother, my eldest brother. But my father said, "My first son. No he cannot go, he is a grown man. He has a small brother who is hiding in the bush." Well, we were all hiding in the bush. They came to find us. They called out, "It is no use running away, we can see you." And we cried out, "Tambaran! Its a tambaran coming after us!" We did not know. So that's the story behind how I was caught.

Well, the Chinese went to the station. We all went to the station too. Simatara, simatara. Now this kiap, a German, ah...ah...he was the big man at Aitape, and all the Chinese, Tuwai, and Ah Sing, they all came and chased us. Ah Sing caught me. He took us to the kiap. Now do you want to know why my fathers' did not attack the Chinese? Well I'll tell. He came up here and made mischief everywhere. He came up here, firing his gun, shooting everywhere. All the people ran away. When they heard he was coming, they all went and stood guard, here and there. "Which way is he coming?" Okay, they would all go and hide the other way. He had a gun. We had spears. He would have killed us. He fired at trees. He frightened the kanakas. They said, "Oh if we shoot him with a spear, he will shoot us with his rifle."

So, I went to Aitape. We were all children. Small that's all. We had to sweep the rubbish around Aitape. When that was finished. Then the kiap sent us to Rabaul. Rabaul. To sweep the roads all about Rabaul. Sweep, sweep all around everywhere. All us children. We were small, about as big as those children there. Early morning. Dark. The police master would say to us. "Alright, off you go to sweep." We went and swept. Sweep, sweep, sweep. At first, we cried for our mothers and fathers. But how could we get home? Then, we stayed a long time. We forgot about them. We stopped worrying. But we held our language. We did not forget that. Well, we swept and swept. Then they sent me to ah...Mr Darby.

Darby, he was a police master. I stayed there. Then Darby went and Mr Lukay arrived. I was with him. Then they sent me to Government House. I worked at Government House. I cleaned the brass, put out the whiteman's clothes, put out the water for washing. I stayed there. Then the Governor, he went and I went to work for Dr Jackson. An important doctor, Dr Jackson, of Brisbane. It was like this. We would work. Then if the white man went off, we would go back to the police officers. The Government looked after us all the time. We worked for all the white men, around and about. I worked for Mr Lukay. Well the kiap, oh...I forget his name now, we went to Namatanai. You understand, the Germans were gone now. Now it was the English. Mr McCarthy. Oh he was tall, his head was way up there. But that's the way of the English you know. He was at Aitape. Well, I went to Namatanai. Then we came back again. I went to Mr Wedak. Ah Mr Wedak, well he went for good. Then I went to Mr Carson. Lou Carson from Melbourne. Well we two, we went to Melbourne. We went for a holiday to Melbourne. I was his personal servant. He was married with a wife and a child.

We went on a ship. The 'Mantoro'. First we went to Rabaul. Made time. Finished the last contract, and made a new one to go to Australia. When I finished making my mark, the kiap spoke with me. He said, "If he doesn't look after you, if he doesn't give you any money, if he doesn't buy you clothes, shoes and other things, later you can tell me. Later he will get into big trouble if he doesn't look after you." I made the contract. Then we went.

Eight o'clock at night we left Rabaul. Sailed all night. The sun came up. We came up to Moresby. Inside the harbour. The copra was loaded. Finished loading, eight o'clock left Moresby. We went out. Went, went, went and came to Brisbane first. Brisbane is first. Australia is later on. Stayed at Brisbane for a short time. Loaded cargo, loaded water. Then left. Went to Australia now. Carson said, "Okay get ready now." So I got ready. Readied all the suitcases and bags. Then we arrived. Tied up to the wharf. The car came down to the wharf. We all went in the car. They carried all our bags and things to the car and we went in the car. We went to Sydney, to the hotel. When I saw Sydney, I thought, "Ah it is very good." Sydney, it was good. We stayed and stayed. Two days, today and tomorrow. Then the wireless came. No the telephone. The telephone call came from Melbourne. I called out, "Hey missus, hey master!" But they did not come and the telephone was ringing. So I picked it up. "Hello, hello, hello." He said, "Where is Lou Carson?" I said, "I am his boi." "Ah, when he comes you tell him..." So when he came I told him and he called

back. He said, "Get everything ready. I am coming together with my boi." So we went to Melbourne. We stayed there.

I didn't work there. Just went about with Carson. Looked after him, that's all. But, oh the houses. Way up, very high indeed. And long, long, all the way along the road. And one thing was very, very good. We went in this thing. Go inside, like this, push the button and go down. Right down. Push the button. Go up, all the way up to the top. If you want to go back, push, go back down. I saw all these things. I saw the whiteman's business. The white men. They work. If their clothes are torn, if their trousers are no good, too bad. They don't care. One bottle of tea, half a loaf of bread, some biscuits, that's all they eat. Its too hard, their work. They work. Us black men do nothing. They don't wear good trousers like you and me. No. Torn and broken. They don't worry. Put their bottle of tea in this pocket, biscuits in here, that's all. Then they work. Carrying the cargo onto the ship. I saw the factories. The factories make all the things. The machines in the factories make the things. But the white men make the machines you know. But they go to school. When they have school, then they have the knowledge of how to do it. No school, no knowledge. Is that right? I think so. These do not just happen. Oh no.

Well, Lou Carson had leave. We stayed and stayed, then we came back again. Came back to Rabaul. Yes, I saw all the things in Melbourne. Oh, very very good. Not like us here. Look at us. Now look at you, you white men. You work hard, too hard. Now you want to show us. But we must listen to you. We must follow your way. Think about this, then follow this way. It is a good way. Now this way of Hurun (the Peli Association). I didn't find this in Australia. I didn't find it there. It is no good if I speak without knowing. I don't know about these things at all. I don't know about this method, I don't know about this work.

So we came back on a ship, back to Rabaul. I worked at Rabaul. But I fought in a local village. I was always fighting. Fight, fight, fight. Alright, the kiap at Rabaul, he said, "Oh Loa, we are sick and tired of you." I was always fighting. Fighting over the girls. That's what fights are always about. Fight, argue, shout. With the Tolai. So they banished me from there. They said, "The Government can pay for your passage and you can travel home. We are too tired of you. Always fighting and making trouble." So I came back. I stayed a while. Sat down here. Then I went back to Aitape. Worked at gold mining. At Aitape. In the mountains at Sabau, and in the Kombio. With Mr Mack and Mr Hano. I worked looking for gold. Then. The war. The war came now.

I came home to Sambu. I talked with the European. He said, "Where are you going to go? You are my foreman. How can I do without you?" I said, "Yes, but I am thinking of my wife. I must take here home to Sambu first. The war is coming." So I brought her home and the war came up. War came, so I came home and stayed. Then we helped them. All the time we stood guard, sentry, all about. For ah... Milligan, no no ah... Fenbury, he is still alive you know. Yes Fenbury.

He told us. "Yes, all of my luluai and tultul. I have no penis. I have a vulva. Soon I will go away from you. But I will not go for a long time. Soon I will think of my children. Later I will come back. If I am strong enough I will come back." He gave us this talk at Ringin. Alright. He went. Now us, the Japanese came up here and buggered us up.

They took us and made a camp here, at Yasuwa. They took me too. I was afraid. They made a camp, houses, holes. Then they got all of us, luluai and tultul. Talked to us, "Luluai and tultul, all of you carry your book and hat and take them to But. Burn them there." Well, we took the books but our hats, no. We hid them in the village. They talked, but we talked among ourselves. "They will burn our hats." So we tricked them. Alright they stayed. They stayed for a little time. But Fenbury did not mess around. No, no. He turned around and came back to Aitape. He called out to us. "Luluai and tultul of mine, come back to me now." We went down. He told us, "Now, look out good. Watch well, stand guard well." So we came back and watched. Carefully, carefully. We saw Japanese here, we sent word, "The Japanese are here, or here." Okay, bombs and strafing. We did this, and did this, and finished them.

After the war, we talked with Simogun. He said, "Yes we have fought in this war. We have died. Now we have won it. Now what are you whitemen going to show us black men." He spoke at Wewak. A big meeting. Man! He walked inside the flags, on a stage, back and forwards, speaking to us. All of us luluai and tultul here were inside. All the soldiers were there, the police there. There was wire about to mark the place. Us natives were like the trees in the forest. Many, many of us. Now, we had a meeting with Simogun. At night. We said, "Simogun you must say this, you must say that, if he comes, you must say this." We helped him. We said, "Whatever ideas, whatever knowledge. Later on, the Europeans must come and teach us." We met him first at his village, Dagua. Then we walked to Wewak with him to wait for the big white man to come. I walked to Dreikikir, to Maprik, then to Yamil and down to Dagua. Came back on a plane. Me and Wangu, you know Wangu, and Pita of Maprik, they say he is the council chairman now. We talked together. And another man from the Speik. We talked. We said, "Sepik you are second. Simogun is first to speak. We will all listen to you. You two speak for us, say these things and all of us, all of us luluai and tultul, we will shout "Yes!" We will "yes", we agree with this talk."

Alright, this bigman from Australia he spoke and finished. Then Simogun replied. He replied, "Yes. We have helped you in this war. Now we are like cousins, like brothers. We two have won the war. Now, whatever knowledge, whatever ideas you have, you can give them to us. But before, all the little things we did, you goaled us, and you fined us, all the time. But now. What now?" Alright. He replied like this. Then he, the big king from Australia, he spoke again. He said, "Yes you and I, we have carried a huge stone. We have thrown it away to one side. I have no argument with you now. Whatever you want to do you can do it. That is all." The speaking finished. We heard it. Finished. We came home. Home to here, Sambu. Okay, I started bisnis.

I learned about bisnis from Simogun and Mr Bob.¹ This was later on. A lot of talk came up from the coast. First, when we had the big meeting to speak with the bigman, that was the beginning of it all. Simogun told us to come back. Then talk came up, so I went back. They told us how to plant coffee, how to plant rice, how to form a committee, to make a cooperative. I came back and marked Kesbuk as my committee. I held meetings everywhere. The first time, I held a meeting at my village. Sambu. Then I came to Makupmanip. Then I went all around, around all of them. I made a meeting. I told them, "You sit down without anything. You have no money. You have no nice things. You have no knowledge. You work, work hard, you will get money. You will become like the white man. The two of us, Kesbuk and me, we came to Tong, Yakumbum all around. Yaurang. They said, "Yes we want to carry your talk." I said, "Yes, if you work alright, but one thing. You may work for the government. Then you get a cheque, then you have money. You work by yourselves, you have got nothing. No money. You must put some money in the bank. Then the government looks after it. Government will help. Government will lift you up." I told them. "We want to make a cooperative. You give your hands and we will build a strong business." Some helped me, but some took me to court. Klaik from Komala. Tultul at Komala, he charged me. The kiap said, "Loa you cannot teach them. Their knowledge, their thoughts, they can follow their knowledge. The knowledge of putting the money together, the knowledge to get money, if they do not know, you cannot teach them." The government spoke. He put the law on me. He said, "It is their affair, if they don't like your work, leave them alone." Before, yes, I was hard with them. "If you sit on your bloody arse, where will you get money from eh? You will not become a good man, will not get a good knowledge." I told them about Australia. But now the kiap said, "No." So I thought, "Never mind."

I had only two committeemen, Kesbuk, and Dalis from Sambu. Dalis is still alive. I collected money from all the villages. One stick² or something like that. Everywhere it was alright. Only Klaik didn't like this. One pound if they didn't have enough. Or one shilling. First, we planted rice. That was our first bisnis. This seed came from Pita at Maprik. And Toria, they worked at Maprik, I worked here, Simogun at Dagua and all around Wewak. I got a little bit of seed from Pita. Planted it at Kombot here. It came up well. Planted it again. But I went to Dreikikir to ask the kiap about a machine. Nothing there. So I went to Maprik. The agricultural officer. Bought a machine there. We carried it from there on a pole. Brought it back here. Turned it and took the skin from the rice. That was our first bisnis. The first bisnis. We did this first. Then us and the Urat and all around got together and we marked Joseph Lambore, from Nanaha. We marked him and he went for training. But this was later.

This rice, I gave it to all the places, all around here all around the Kombio, they all planted rice first. Some people planted it. Some

¹ Mr R. Pulseford.

² Five pounds, or 10 dollars.

did not. One year, two, three, four or five years something like this. Two of Simogun's people, a man and woman from Woginara or Dagua came here to help.¹ The woman died here. Then the bisnis broke down. Later on they wanted to make a Society. I said, "Oh, I am finished with this now." I have coffee. Communal coffee and "pocket coffee." That is all. Just a little bit of money for my pocket.

That's all my story.

¹ This statement was not confirmed by Simogun. It seems likely a coastal man married a Kombio woman and lived there for a time.

KESBUK'S NARRATIVE

Kesbuk lives at Makupmanip village at the end of the Kombio road. He is a well built man, white haired now, with a quiet, confident manner. His house seemed to be inhabited by countless numbers of small children, who also climbed all over him during the taping of his narrative. The taping was listened to by a number of youths, but Kesbuk took little notice of them. During his narration it became apparent that of all his experiences, his war experiences have made the deepest impression upon him, and this is reflected in the amount of time he spent talking about them.

Although Kesbuk no longer holds any official position in the village, he obviously still has a great deal of influence among the village men. Kesbuk, together with a number of other men had joined the Seventh Day Adventist mission, but in 1972, showed no signs of enthusiasm for the church, and he refused to speak about it, saying it was finished now.

Makupmanip can be reached by vehicle only after two or three days without rain. It lies on a major walking route for people from the northern Kombio villages of Komala, Sambu and Serepmel, as well as those from Nialu, on their way south to Dreikikir, or to the Catholic mission at Yasip.

My mother bore me at Sakngangel, the old place up above here. When I was still a child, about twelve years, they came looking for labourers and took me. The Chinese came and chased us. The first Chinese came, started at Aitape and came up here. He was...ah...he stayed at Aitape. Mr Charlie...no...Oh I can't remember his name. He grabbed us and held us. I ran away, but they surrounded us quickly. It was the morning. We were going to make sago. I was getting the bark sheets ready. And the stone hammers for making the sago. I had my back towards them. I didn't see them coming. They walked quietly, quietly and came up close. I looked up and saw them, they saw me, I turned this way and that way and tried to run. But no good. They had me. I called out a bit but it was no use. They took me and put me with the Chinese. He came with other black skins from Yakamul from the coast, Sarok too. Was his name Tu We? I don't know. He took me to Aitape to work and wait for a ship. He gave my father a knife and salt. Father cried but for what purpose? What could he do? This was the way before. They didn't know about white men. They just took me away. They had shotguns. They were afraid of them. Before, my fathers said, "This is a bad thing. It will make mincemeat of a man and he will die."

We went around like this. First to Sambu, then Komala. Then left Komala and followed the river down. This was after Loa was taken. He went first. We went to Aitape. The kiap looked at us first and then sent us to Tavir, behind Aitape. We stayed there for three months. Then the "Mandram" came to Aitape. We got on the ship and went to Rabaul.

There they lined us up and checked us off to go to the plantations. I went to Kokopo. We went to all the business masters. Now all the white men looked at me and said you cannot work on the plantation yet. You must stay here with us.¹ So I stayed with the European and cooked for them. Made their food. I stayed there, stayed, stayed, stayed. Then when I was a man the master said, "Now you can go and be a foreman." I stayed there until the war with Japan. The Germans had gone before. When I went to Aitape and first came to Rabaul some Germans had gone and some were still there with the English. It was very hard work then. The bell rang in the night. At the first cock's crow, the bell rang and we had to get out then and work. Cutting grass and cutting copra. But I stayed in the kitchen at the masters' houses. They taught me to cook and look after their things. They didn't work. They were there, that's all. They looked out and told all the men what to do. The master went around all the time and told them, do this, do that. They had children too. I went to be a foreman. Told the men what to do. Cut grass, cut open the dry nuts, find the palms with insects in them and put tar on them, cut out the copra, fill up the sacks. I saw Wangu at that time. He was foreman at Burns Philp at Rabaul.

One day, Saturday, I took my bicycle and wanted to go to the town. I got to Malabo, just past the corner. Then. Boom! The mountain blew up. All the people in Rabaul. They ran about in all directions, white men and women and all the labourers. It was terrible. What was it? A masalai² perhaps? I don't know. Now this place Karavea, the plantation, the doctor's place and the dry dock, the dirt covered them all up and finished them all. All the people too. Covered. And too, the sea tricked many people. Why? At this time it was very dry. No rain. The bush was dry, very dry. Not much food. The sea went out and all the people wanted to go and get the fish. Then the sea came back. It shovelled all the men and women right over the beach into the bush. Right into the bush. Finished them. The dirt fell down and covered them up. We watched from a long way away and were afraid. Boom! A big cloud went right up, very high up and the stones began to fall down, small stones, not heavy, they came down all around, on the ground and in the sea, everywhere. Covered up the sea. I went back to the plantation and all the Europeans and labourers ran away from Rabaul to Kokopo. Time passed. Then later the dirt was firm. They went back. They shovelled away all the dirt which covered up the houses and roads. Inside the houses too. Then they washed it all with salt water.

Then the war came. There was talk. They said another sort of man is coming. Short men. Bad men. So we heard this. We wondered. Will they be good or bad? Will they shoot us with the white men or will they leave us alone and shoot them only? We waited. One day all the Europeans in Rabaul ran away. Why? They had guards watching. The soldiers were watching ready to return the fight. But the No. 1 Kiap said to them. No! We cannot fight back, we must run away. So they

¹ Because he was too young. At that time, recruits had to be aged 12 years or older.

² A natural spirit.

all ran away. Ran away to one place and a ship picked them up. At Arawe. I stayed there. Master, our master at Yakumbanga, he was not good. All the rest ran away, but he made us work on that day. I lined them up and told them, "Okay work today. Fill up the bags with copra. But don't fill them right up. Half-bag only." Why? It was a bad time that's why. Alright. They heard this and went and cut copra, but they didn't fill up their bags. Half full, that's all. Put them on the cart and brought them to the foreman. The master came and looked at this. "Hey!" He held the bags and shook them. "These are not full up. What are you doing?" He was angry now. He shouted on. But all the labourers spoke to each other. "This is a bad time." "We cannot work." "All the others have run away." But he said to me, "Tell them all, pile up the dry coconuts here and then they can break them and fill up the sacks." So I told them but they said, "No. We will hit the master. This is a bad time." Well they all said this together. When he came back from his house he said, "Hey! What are you doing sitting down?" And he tried to hit one of them. But no. They all got up and hit him together. Oh ho, they beat him up. They hit him with dry fronds and sticks till he was bleeding everywhere. He got up and he said to me, "You stay here, I am going to get the kiap." But where was he to find the kiap? Where were the police? They were all gone. Later he came back. About six o'clock he came back. He called me in. He said, "Okay pull the whistle." So I pulled the whistle and they all came up to the house. He said, "Okay. This is a bad time. Open the store. Get out the bags of rice, cases of fish, tobacco, matches. Bring them outside." They were all inside this tin shed. He put them in his car. Then he said, "Alright, we will run away now." And to me he said, "Come on." But I said, "I have no place to go. Where can I go? Now all the natives, what will they do to us. It's wartime. They might be good to us or they might kill us. How do I know?" Now the master filled up these bags and the women and men went on top. But I said, "I cannot go. I must stay here." He was adamant, but so was I. I would not go. So he said to me, "Alright, you can stay." He took down two bags of rice, and two cases of fish, one box of matches and two cases of tobacco. Now he said, "If you are hungry you can buy food with this stuff. You cannot take it for nothing. It is the war now. They will kill you." So I stayed, me and four friends, two from the Sepik and two from Kavieng. So the master took all the rest in the truck and ran away to Butbut. He got away. Found the ship.

Alright, I said to the others, "We will dig a hole and bury one bag of rice. The other one we will eat." We collected up all the blankets, plates, spoons and things belonging to the others who had run away and put them in one of the houses. Then we waited. We broke open the rice, cooked it and ate it. Now the fighting came closer. The warships came and filled up the passage at Miokapalpal. Here, the sea was full of them. Now we heard all the big guns firing into Rabaul. They asked and there was no reply. Asked again, no reply again. Soldiers poured off the ships. The warships put down the soldiers and they filled the town everywhere. Rabaul, Kokopo, everywhere, until there was enough. They came and wrecked everything. Killed all the Europeans, until there were none of them left. I said to all my friends, come on we will light a lamp and go and see one of our friends who is married to a native here and who has run away into the forest. We went to see them. I dealt

out the tobacco, matches, newspaper. Then we lit the lamp and set out. But the planes from the ship came over and bombed us. We ran away in all directions in the dark. They saw the light and thought we were Europeans. The planes came from the ship and bombed us. We ran away to the native village and stayed there. We gave them tobacco and paper, matches. Then near dawn we decided to go back.

Now the Japanese had arrived at the plantation in the night. They had wrecked the master's house, broken open the store, tipped out the rice, ripped up the laplap, and broken open the tins of fish. Now we came alone and they hid in the house. Oh man! They jumped up and grabbed us. They hit us with their rifles and put their bayonets against our skins and cut them. Man. Ha ha ha! They were bad men. They said, "I think we will shoot them." They said, "Siutim yu oriat ah?" Man, we were shaking. It was new and we were frightened. But I said, "No. Don't be afraid. Stand up straight like policemen. Pull yourselves together. Don't be afraid." So we stood up straight. They sent one soldier to their captain. He was in the master's house. He came down. He had a long sword on. He said, "Alright. We didn't come to shoot you. We came only to shoot the Europeans. So why did you run away from us?" This talk was finished. He said, "Okay, we can go, you have no trouble." Then they shot all the cattle, the horse, the pigs, and smashed up the fowl run. Wrecked the plantation completely.

So we stayed there. Later they called out for us. They said, "All the time you can make gardens and supply food for us. Our rations are not enough. And on Monday and Friday you must come and sweep the main road. That is all. The rest of the time you can sleep or plant a garden for your own stomachs." But the people became tired of the Japanese. All the time they came to get food. All the time they told them, "Climb the coconuts! Climb the coconuts! Climb the coconuts!" Now the insides of their legs became sore, in here. The skin rubbed off. One car would come. "Go up the coconuts!" Then another one, "Go up the coconuts!" Some coconuts were old and very tall. If someone didn't like to, they put a stick to his head and knocked him down. If a man followed their instructions they would stand at the bottom holding their rifles and watching. Now, if you said, "No." They would just shoot you. Ha ha ha, oh the Japanese! Haha, they were very bad. So, all the people would run away into the bush. When they heard the trucks coming they would shoot off into the bush and only us kiapatans would stay. They gave us their emblem. They looked after us. But the others, they hammered them if they caught them. Beat them and left them to die. They were bad, oh ho, [chuckling].

Then after a little time, they lied to us. They said to come. A truck came to get us and took us to Rabaul. They lied to us. They said, "Now you will go on a ship back to your home villages." They lined us up and we went on the warships. Fill up one, then another, then another. One would come in. Full up. Go out and another would come in. We went on a huge ship. A warship. All of us labourers went on this one. It was huge. Now all the planes took off and went to look out. We went on a ship. We went and went. But they didn't take us to Aitape. Oh no. We arrived at Papua. At Buna. At night. Then a four-engined plane from Moresby came over and looked at us. All the guns on the ship fired at it. Shot at it, but they didn't hit it. They came and saw us. Went back and told them all at Moresby. The war has come to Papua now.

We went ashore about six o'clock at night. I heard a truck on the road. So I said to the others, "Where are we? What station is this? You wait here, I will go and find out." So I went to the road and asked a man there. I asked a man from Mannam Island. He had been all around as a ship's crewman. He said, "We have come to Papua, at Buna. Before we were not allowed to come here. It was against the law. Now we have come in. The Japanese have brought us here." So I went back and we slept. Dawn came. Then the four-engined planes came from Moresby. They came and bombed the ships. They wrecked the ships. Broke them into pieces. Some Japanese died. Some lived. Cut them to pieces. Then we were called to the beach. Altogether. We had to help all those Japanese who were cut about. Half a leg. Half an arm. Cut very badly. But we didn't know the planes were going to bomb the beach. One man with glasses was watching. But it was no good. He saw them coming, but they were too close. He threw away the glasses and started running. Oh man. They cooked us. Machine guns all down the beach. We ran away everywhere. Some ran into the swamps. Papua is all swampy on the coast. Some lay on the ground. They came round and round. Round and round. I lay there. Four o'clock. Ola man. Natives were dead. Japanese dead. Everywhere. The beach was like a rubbish heap. Men, bits-and-pieces everywhere.

We ran away into the bush now. Some ran away towards Waria and arrived at Salamaua. Some went towards Wau. They ran away from the fight. Many of them. But we stayed with the Japanese. Went with them into the bush. We went following the fight. To Kokoda. Then. The Americans came to help Australia and they started to chase us. Why? We had no food. No ammunition. We stayed without anything in the bush. We ate fruit from the trees and stole food from the Papuans. From their gardens. They watched their gardens too. Once they killed a Sepik. We wanted to take some taro. The man hid by the gate into the garden. He held an iron spear and hid in the grass. We had the taro and were coming out. He rammed the spear right through him. He fell down to one side and died. So we ran for the bush. It was the wartime. Oh man, hahahaha.

Now Australia and America were strong and they chased us back to Kokoda. We were close to getting to Moresby. But they chased us back. Binghoiye was there at this time.¹ We were at Kokoda and we came back. Back to the Bapaki River. It's a swift river. They said. "Us Japanese will go first. You can come after." In the boats. Their boats. They had a wire across and a block. We helped them. Helped. Then at last all the Japanese were finished. And they cut the wire and the boats were swept away downstream. And all the labourers called out and shouted. We thought Papua would kill them. They followed the river down. Then a kiap, a police master came. He knows me. He has been here. But they followed the river down and this kiap came up to them. Lucky, I think if it had been a kiap from Papua he would have killed them. We had gone with the Japanese. Killed them. Wrecked their gardens and houses. But this New Guinea kiap came. The Papuan soldiers. They said to themselves, "You shoot the Japanese, we will shoot these kanakas." But no. The kiap stopped them at Bapaki. Three

¹ See Binghoiye's narrative.

youths, Tolais, tried to swim across and they were washed down and the kiap saw them. He fired to attract their attention. He called to them. "Where are the Japanese?" They told him. "All the Japanese have gone. Only us labourers." "What about down below?" the kiap asked. "No, only the carriers." The soldiers fired in the air. Into the tops of the trees. They all called, "We have no Japanese here. Only us." So he came. The Papuan soldiers said, "Alright, we will kill them now." But he said, "No, they are not Japan's men, they are New Guinea's." He told them. "Before you went with Japan. You stole food and wrecked houses. Now we have you back again. You must stay with us. We will give you food now, but you must stay with us." So they followed the Japanese down to the coast. Until the sea was close like this and there were only a few Japanese left on the coast.

Now me, I went with the Japanese. I was the last. All the rest went to the Americans, but I stayed with the Japanese. I stayed with them. Where could I run to? I thought, if I leave them, the Americans may send me to another place and I will be lost. Okay, I stayed with them. Near the beach. One day I went and talked with the officer. I said, "We are hungry. We eat the fruit of the trees and the sago. We are tired of this. I know of a village near here with coconuts. Let me and some of my friends go and bring back some here. The Americans are there, they have put their flag up there. We want to go there and go up the coconuts, eat some there and bring some back here for you." The Japanese said, "Alright you can go. But you must avoid the sentry. The Japanese sentry down by the ship on the beach." One of the ships had been bombed and was up on the beach. "They are not good men. Avoid them and go straight to the village."

So we went. One from Manus. Me. And one from Wewak and a Sepik. And others. We went. We came to the first sentry, showed him the pass and he said, "Alright go on." The next was the same again, "Alright go on." Then we came to the ship. Some of us stayed back and the Manus went to the sentry. He showed him the pass. "What's this? Where do you want to go?" "We want to go to the village over there." "No, the Americans are there. They will shoot you." But the Americans had mortars. They watched us through the glasses and thought we were Japanese. They phoned up the mortars on top and they pumped the bombs into the air. Down they came. This Manus went down and lay on the ground. His head cut off. An Urat. Took out his stomach. One Yakamul, cut away all the muscle here. One Buka, cut him up there. One Bogia, took off his arm here and his shoulder. Many of them were killed. But I lay in the water in the swamp. Two men were dead. Three were not dead, but they lay in the river. They called out and called out. The water was red with blood. Me and one old Manus were alive. The mortars finished. We got up and buried the two dead men in the sand. Then we went back to the Japanese. Why did we go back. Because they had bombed us with their mortars. The Japanese were annoyed. "We told you to stay away from the ship. Why don't you listen? It's your own fault."

Okay we stayed there at Buna. Another night the Americans mortared the Japanese hospital. They killed all the wounded men and the house burned down too. This night we ran away and hid in the swamps at the base of the sago. We talked. We said, "This is bad. In the morning

early we will run away." So at dawn we cut our way through the bush. First we went through the bad place where the bombs had churned up the ground and the bullets had cut down the trees. But later we came to a clear place and we walked easily through the bush. We ran away from the Japanese now. We walked and walked.

We walked until we fell down with hunger. One of them said, "Let us cut some sago here. I am starving." So we cut down a palm, pounded it and washed it and collected the food from it. Covered it in leaves and cooked it on the fire. Then we slept. At night we listened to the mortars. They fired over us onto the beach. But tomorrow they would adjust them back a mile and they would fall here. We got up and went on. Then we heard the sea breaking. So I said, "You two Sepiks go and look. Go quietly and see where we are. If the wrecked ship is behind us we are clear." So they went like two dogs after a pig. Carefully. They came out to the beach and the ship was a long way off. A long way away. They called out. "Hey! Come on. We have left the Japanese now." So we came out onto the beach. We were happy now. We would join the Americans and Australians now.

We came to a house. I took a watermelon. A big one. It was growing in an old house which had burned down. But there was a hand grenade. It was in the house. Another house. They had pulled the pin until it was just holding. This Sepik went up into the house. He saw the grenade and he picked it up. Bang! Man! It broke him open right down here. He fell back with all his cargo. Now we ran away everywhere. "Fight? Fight?" We stopped. "Where is the fight? I think the Sepik went into the house there. A hand grenade has killed him." Okay. The Americans heard the grenade. Down came the mortars. Ola man! We ran about everywhere. Into the swamp, under the mangroves. We lay there. The mortars fired, fired, fired. But two Urats ran and ran. They came up to a lieutenant in a hole near a big mango tree. He heard them coming. He was ready with his gun. He stood up and stopped them. "Where are you from? What are you doing?" They told him. "No, Japanese, only us New Guineans." He stood up and called out. "Hey ring ontop and tell them. Stop firing. It's only bois." I came up. He asked me, "How many?" I said, "Many of us, but I think the mortars have cut some of them up." But they all came. Then I said, "Two are missing. Come on we must look for them." But no. They had already come, the Urats. The captain came up. He said, "Hey bosboi, did some of you get killed by the mortars?" I said, "No. We are all alright."

So we came to them. They asked me. "Are there plenty of bois with the Japanese?" I said, "No. There are none left. We are the last." They looked at us. We were bearded and hairy like a tambaran. They gave us razors and mirror. They said, "Wash and shave." We came back. Clean again. They said, "Good." The policemen lined us up. They asked us, "Where did you get these knives and cups? You have stolen them from Europeans. You were with the Japanese and you are thieves." Slap! Slap! They made us feel it. Made our face swell up. Ho ho! Ha! They were tough on us. The next day they took us to the camp. We saw our friends. We stayed with them. Later we went to answer the kiaps' questions. "How many Japanese are left?" "Not many," I said. "We were the last to come and there are not many Japanese left." They are

along the main road and on the beach. They have not made holes. Just small shelters." "Okay," they said. "Tomorrow you will come with us in a plane and show us where the Japanese are." So they rang up Moresby and all the planes came from there and we went up from Buna. They put me in a two-tail. They hooked me here and here, put a strap over here. Oh man I was scared. I was in with the men dropping the bombs. We were the first plane in. Front. On Friday we went. Us on top and down below the men with rifles and grenades. We finished the Japanese. And that finished them.

Now the planes took us to Samarai from Buna. Oh this is a long story. We stayed at Samarai. All the Samarai people were gone when we got there. Gone to Salamaua and Lae to fight there. Niall rang up from Wau. So they lined us up. Sent us off. I bossed one line. We carried all the ammunition from Samarai. Left Moresby. We went with one European. We didn't carry it. Our job was to pick up the ammunition left lying about. Put it together in dumps. The ammunition that they had grown away here and there during the fighting. We went to Samarai. We went to one man who was bossing all the cargo on the beach. You should have seen all the cases they had on the beach. Piled up. Very high. All the men walked around on top of them, writing on paper and climbing up ladders. Cargo. So much cargo. Oh, too much! We came to the boss of this. Showed him the paper. He said to his clerk. "Open the store. Take out rice, biscuits, fish." We dealt it out. Then slept. Then in the morning he made out more forms to all the kiaps on the road to give us rations. He said, "You follow the coast. Go and go and go, until you come to the airstrip. Give the man there this letter." So early next morning we got up early and went to the airstrip. Oh the airstrip was a big one. Flat and clear all around. Many, many planes at this place. Then we went to Moresby from here.

There the No.1 American said, "Take them and follow the others." But the No.1 Australian said "No. They have all gone in the ships and if they go in a ship alone, the Japanese might bomb them. They will have to walk." So the American took us and we left Moresby and walked. We went up the Laloki River in canoes. Then we walked to Bulldog. It's a bad place. We carried cargo to Waria from Garaina. I became sick, I thought I would die. Fever. Me and a Bogia and one from Wapei, and one Buka. We got sick at Manmanu, a village near Waria. They made a bed and carried us up. The kiap looked at us. He could see we were too sick to walk. One kiap from Madang, one from Aitape, one from Sepik. The army big man told them, "Look after these men. Take them to Wau and don't lose any on the road. Before the Japanese killed many of them. So now you must look after them properly." So they carried us, and we came to a policeman near Waria in the bush from Garaina. This was a place where the planes brought cargo from Moresby. We stayed in the hospital. The three kiaps and the carriers went onto Wau. The plane took us from Garaina to Wau. There I bossed a big line, growing vegetables and making coffee. Mr Corney's. He left it behind at Wau. Pick it, wash it, dry it and then put in a machine to crush it, put it in a bag and sent it to the soldiers. Carrots too. Lettuce, cabbage, beans. Put them in bags and later the planes took them to the soldiers.

One day they marked the day to finish the war at Lae and Salamaua. On this day, Friday, they all got up together and filled up the planes. They went down to Lae and finished the Japanese at Lae. I was still at Wau when the war finished. After the war, they said. "You can stay here and rest for a year. Then you can go home." So I stayed there and rested. Then I took a ship from Lae and came to Aitape. I wanted to go to Rabaul and look for all my things but they said, "Oh you are man from a long time before. You go straight home." So I came to Aitape. First from Salamaua to Lae. Then to Wewak. A plane took me from Wewak to Aitape. Then I walked up here. From the time I left Sakngangel until after the war I never came back. I stayed there all the time. I forgot about this village. My language I remembered some and forgot some. But all these men, these adults here, I didn't know them. My parents had died too. I don't know how. Brothers too.

So I came up here and looked about. The old village was empty and grown over. They had moved down here. I asked the tultul, he is dead now, "I see all these men and women here that they have borne, but I do not know them." They did not see me when I went to the station. It was half German time. Now they saw me. They said, "That is Kesbuk." They knew my name. In the morning the tultul lined them all up and told me their names. These children here, they are the children of... these here are children of, and so on. He showed me them all. I shook hands with them all and gave them all money. Later, the tultul died and I took the hat. Time passed and later the luluai died, so I took the luluai's hat.

After the war, I was tultul and we went to get the rice. We followed the main track to Maprik. First down to Dreikikir. Then along the old walking track from Dreikikir to Bonahoi. Then on. On to Maprik. Arrive at Maprik and go to Pita's house. He used to live where the market is now. He and Toria. We went and sat down. He said, "I think you two friends had better take this rice and go and plant it. It is a good way to get money." So we took it and came. He said "This stuff. We did not have it before. It came from the white men themselves. You two take some. Go and plant it in your village. Then when it comes up and there is plenty of it, cut it, bag it and sell it to get money." I do not know where Pita got his rice. This was the first time I had seen him. I did not know him before. We heard the talk, that is all. The talk came up to our village. It said, the men who have bisnis are at Maprik, so we got up and went. We said, "We two will go and see these bisnis men." We arrived. We sat down. We talked around and laughed. That is the way of bisnis, you know. We talked, they talked. Then we said, "Yes, we would like this stuff. So we will take it and go and plant it." They said, "Oh that's alright. You take some and plant it. You do it like this and this and so on." We had not seen rice growing before. True. Loa went to Australia in the 'good time' but after that he stayed home.

We came back. We talked to all the people. "Cut the bush and get it ready for planting." Down below here at Kombot. We planted it on this ground. The first time. It came up well. Then it came up well again. So we went and bought a hand huller. We cut the rice, threshed it and put it in the huller. We bought the huller at Bainyik.

We collected money from all the villages all around. They had pigs then and sold them to get money. When you have pigs, you have money. They sold pigs and got money. Now the council has passed a rule and the pigs are finished.¹ Before, yes. Many pigs. We brought this huller and put it at Sambu and hulled the rice. Then the machine broke down. So we left it. We stopped planting rice. We planted only once here. But many men from all the villages planted. Some rice we put in the machine. Some we gave to them to plant. They got tired of walking and carrying rice. No trucks then to help them. They tired. So they left it. We only started planting again after we got coffee about 1965. Now, again they have tired of rice. Now they only look to their coffee.

Loa went down to Simogun's camp. He saw him and Mr Bob Pulseford. He heard their meetings and talk. Came back and held a meeting here. This work was not the first. Loa went to see Simogun and Mister Bob. He got the method from them. Came back here and taught us. So we started bisnis here. Bisnis, store or whatever thing. Before they did not do it. Loa and I started it here. Held the meetings here, walked around to all the places told them too, went down below and told them. The Urat too. Everywhere. Then they started the work. Men started trade stores, men started to plant rice and things like that. Before there was no bisnis. Loa and I were the start. The sawmill too. The same thing. We two held meetings and the Urats got together and did it there, at Musengwa.

The first rice came from Maprik. We planted it at Kambot. It was new then. Before we did not have rice. Then Loa and I went and got rice from Maprik. Pita and Toria of Maprik had it. We two went and got it and planted it at Kombot. We planted it and it was there. Now, all the people did not work hard. Some were lazy and lay about not working. So the rice finished. The first time. Now again. The agricultural officer has brought it. So we have planted it again.

Pita Tamande was a bisnis man. Augen was at Supari. We were first here. Loa and I. And these two at Mparik. Loa bought a hand huller from Bainyik and put it at Sambu. We hulled the rice. But the machine blocked. It did not do a good job on the rice. We left the machine at Sambu, and it is broken down there. It is rusty. It is there still.

Simogun started his work over there, not here. He didn't send his men here. Some from Karawop came here. Mr Corrigan's men. They were cutting timber with a sawmill. First at Maprik on Toria's land. Then later here at Musengwa. The work was carried on for a while. Then they got tired and left it. We first heard the talk that this work had started at Supari. The work of planting rice. So we went and got some. Brought it. And planted it.

Later, they wanted me to be the councillor. So I stood for the council, and became the councillor. Now that is finished. I sit down here now. With all my grandchildren.

¹ A Local Government Council by-law requires that no pigs be kept in the village. Many people misconstrued the new law, and believed they were not allowed to keep any pigs. Even when the law was explained many found the effort of keeping pigs in bush pens was too great.

AKOLASA'S NARRATIVE

Akolasa's narrative was collected during a brief stay of 24 hours at Kuyor village in the southwestern Gawanga census division. I was unable to assess his present influence in his village and those surrounding it, but in the past, he has had considerable sway over a large number of people. The two Europeans who he mentions in his narrative, Mr D.M. Fenbury and Father Schwartz SVD were also contacted and have independently corroborated some aspects of the events described by Akolasa. Father Schwartz added that Komalako, the man who attempted to kill him, wanted Akolasa to become the "King of New Guinea" following the establishment of the millenium, but that Akolasa was reluctant to take an active part in the movement, and twice warned Schwartz to leave the area. Mr Fenbury, then an ANGAU officer, observed that AIB patrols in the area during 1944 were allowed to roam almost uncontrolled and as well as causing trouble similar to that described by Akolasa, caused villages to be bombed and strafed by Allied aircraft without warning villagers to leave them, and at times when it was completely unnecessary.

Akolasa was interviewed in the evening, in the company of two other Kuyor men, who listened quietly and assisted only with names or other factual material which Akolasa could not recall on the spur of the moment.

I was born at Kuyor and lived here till I was a young man. Then the first white man came. It was after the big earthquake when we saw the first white man.¹ The old people said it was their dead ancestors come back. They said this because they looked at his face and recognised their ancestors. I think this man was a surveyor. He gave them salt. I was too young to be brave enough to go close to him. He came as far as Kuyor and Bongowaukia and then went back again. Another one came not long after. He slept here too. The third one came. He was following the river. I was older now and I went to see him. I took him some bananas. He gave me a belt. Then Wood² came to Wesor.

When Wood came to Wesor he had a man from Kubriwat with him. He was the interpreter. Wood gave steel knives to our fathers. I was fascinated by this man. This white man. I followed him. He said I was too young to go with him, but I followed him. He went to Kwatengisi to Bongowaukia and then to Kubriwat. From there to Tau and on to Musendai. Now I was too far from home to go back alone. I was frightened, but I wanted to go with him. To see from where he came. From Mosendai we went down to Nungwaia. At Apangai the people tried to attack us. Wood fired his shotgun at them. We walked through the Wosera to Maprik. Wood got sick. He went on a plane. We walked to Wewak. I made my mark there and was sent to Salamaua on a ship.

¹ 1935. See also Stanley et al. (1935).

² J.H. "Diwai" Wood, a labour recruiter.

At Salamaua I worked carrying cargo to Wau and Bulolo. The white men were working gold there. They did not tell us about the war. They said something bad was coming. When the Japanese came towards Wau, I ran away along the coast. There were many of us. Fenbury¹ was there. He came with us as far as the Sepik. Then he went back. We crossed. I walked to Wewak, then along the coast. I think it was 1943 when I got back here. It took nearly a year.

At that time I was the only person here who spoke Pidgin. Some patrols came. I would talk with them and help them. One white man made a camp near Kuyor. There was another at Klafle. But then there was trouble. Some black soldiers came here.² They killed a pig. Then they saw women in a garden. They grabbed them and raped them. They had a woman of Nuku with them too. Some of our men caught them and held them. The woman ran away. Then the soldiers got away. They left their rifles and packs behind. One went to the Kombio. The others went and told the white man at Kalfle. I think he was really a half-caste Chinese.³ The soldiers came back. I told them what had happened. I gave them back the rifles and packs. They pointed their rifles at me and said they would shoot me. I called to the people to run away from the village. But they went away. Then they came back. There were two white men with them. They burned the houses here at Kuyor. Some of our men tried to attack them with spears. Two men from here, Akolasa, my namesake, and Abilindi were shot and killed. One man from Mahmsi, one from Wesor, three from Bongowaukia and one woman. They broke down the gardens, pulled up the yams and taro. They then went away. I don't know if we killed any of them.

We planted new gardens and began to make the flying fox tambaran. Then Fenbury came to find out about the trouble. Costello too. They stayed at Kuyor. They questioned us. Then I went with them to Aitape with four other men. We went on a ship to Lae. We stayed there until Christmas. There was a court about the shooting. We told the court what happened. There were some Bongos people there. So we brought them home with us.

When I came back from Lae I began my work. First I told them to build a rest house. Then I organised people to clean up the village. Cut the bush back and make good tracks. I did this here around Bongos and at Seim. Fenbury came back. He made me tultul. I made them dig latrines and make cemeteries. I taught people how to speak Pidgin. I did these things because I had seen the good life of theirs. The white men that is, I thought, if we do these things, we will be able to live like them too. I told them about the life of the white men. I said, "They have good houses, good food, clothes and everything. Their skins are beautiful. They are big. They do not fight and argue with each other. We too must stop our fighting. Stop our disputes." People

¹ Mr D.M. Fenbury.

² Probably policemen attached to an A.I.B. unit based in the area, west of the Ipunda River.

³ In fact a Filipino, J. Conboy (Feldt, 1946).

asked me, "Why should we bury the dead people?" I told them, "Because that is what the white men do." I said, "Look at us. We have sores and our skins are covered with grile.¹ We sit on the ground, always in the dirt, like pigs. We must change all this."

When I had done this I thought what else can I do. Then the ² doctor sent Tomi from Ngahmbole to build an Aid Post at Bongowaukia. I organised the materials for this. I was tired of carrying the sick people to Dreikikir. Tomi told me about a new work which had started in the Urat. He said that it was about rice. He brought me some rice seed from Ngahmbole. He said that it was bisnis. That money came from it. I thought, if I plant this I will get money too. I cut a garden and planted this seed. It came up and I have this seed to other men. Some men from Kiyor, Bongowaukia, Kwatengisi, Mahmsi, Abegu, Daina, Masalaga and Wosambu. All planted rice. Then I went to see Anton. I took some men with me carrying rice. Anton gave us money for it. We talked about rice. I went back. I called a big meeting. All the people came. I showed them the money. I said, "If you plant rice, money will come." Then I divided the money among all the people who had grown the first crop.

But I thought. There is no one here who can help us make this bisnis strong. We need someone to teach our children about these things. I went to find someone. At Laninguap I found a priest. He said he would come with me and have a look. I organised everyone to make a house and a school. So when he came I said, "Father. This is your house." So he said he would come. I marked leaders, organisers to get the children to the school. From every village they came. The priest came and lived in his house.

The patrol officer heard about this. He came down and asked the priest, "Who does this land belong to?" Then he told us, "You cannot give land to white men." He asked us, "Why do you want a priest here?" I told him, "We want all our children schooled. Then they can be like white men. They can be doctors, teachers, Patrol officers, nurses." He said, "Shut up! You are mad. No black man can ever do these things."

At first many people did not want the priest here. They said the white men would try and kill us, as before. But I was strong. Then I organised the people to build the airstrip. When the first plane came here it was the bishop. Everyone was very happy. They were not worried now.

I was still thinking about bisnis. When I was at Lae I saw the white mens' bisnis. They had many women. They gave them money and clothes and food. They had sexual intercourse with them. I told people about this. I said this must be another way. Every man must give his wife to this work. When we carried rice to Brukham, our women prostituted themselves with the Urat men. We did not have enough money

¹ *Tinea imbricata*.

² See Binghoiye's narrative.

to do it here. But they had more money. So we made a bisnis like this.

But the people became angry with me. I was telling them, "You must finish the tambaran. The white men do not have the tambaran." I showed the school children a pig which the Wesor men were bringing to the tambaran initiates. The men were very angry. Some of the luluai went to Dreikikir and told the patrol officer I was making trouble. They told him about the women too. He sent a policeman to get me. I was put in gaol for six months.

When the kirapkirap¹ came here I was not sure. I thought it could be true. I thought, the white men I have been with might have hidden the truth from me. When I saw the people fainting I was frightened. Then Komalako talked to me. He held me and blew on me and I felt dizzy. Then I fell over. I could not stop it. But I did not go with them. I went and stayed at my house. Komalako tried to kill the priest. He thought the priest was preventing his father sending him the things.

Then Waiengorome started his work. This time I thought it was true. He told us he had been at the plantation in New Ireland. He was walking on the road. Then he fainted and spoke with the dead. They gave him a book. He bought a suitcase and put this book in it. He came home. He told us to get suitcases and give them to him. He would fill them with money.² We all gave him two pounds. The priest came and had a look. He said the book was just a school book. The patrol officer came. He made us get our suitcases. He told us we were stupid to believe this. But we did. Waiengorome then took the body of his infant nephew and buried it. He built a house on top. We put our cases in the house. He said the spirit of the dead baby would fill the cases with money. I really thought the patrol officer was trying to stop us from finding the way.

We became tired of being in trouble all the time. The patrol officer asked us, "Did we want bisnis?" Some men said they were tired of always being in trouble, they were tired of bisnis. But he said, "I will send you a white woman that will bear you many children." He was speaking in pictures. He was speaking about coffee. We all planted coffee. Toromble³ was the one who brought the patrol officer all the time. He said Waiengorome's work was rubbish. I think that is right now.

¹ The 1956 movement, so named because of the way in which adherents jumped up and down.

² The "Red Box" movement.

³ Member of the House of Assembly for Dreikikir Open, 1972- .

WAHUTE'S NARRATIVE

Wahute is everywhere acknowledged as the source of the 1956 kago movement. In 1972 he remains a man of presence. There is something almost undefineably different about Wahute. He moves slowly, and holds his head still, moving his eyes to look at things. He speaks very quietly, almost in a whisper at times, and grasps peoples' arms when shaking hands. Some men avoid shaking hands with him; the power that many witnessed in him in the 1950s is obviously still foremost in their minds.

Wahute lives at Selni, but moves around a lot, visiting Mahanung three or four times a year. Both men are still quietly continuing their search for the entrance to an underworld which is marked by a buried shell ring, and is located near the summit of Mihet. In December 1971 they shared a brief rejuvenation of their former status when they led an expedition, which included the leaders of the Peli Association, into the mountains around Mihet, to try and find the spot where God created the world.

Wahute is still known as a glasman, a seer. He claims he no longer uses his old powers, but his presence in a group makes people with troubled consciences ill at ease. Thus Wahute spends much of his time alone. He frequently walks alone on his visits to his old contacts. He says he can bring on a shaking fit if he wishes, but does not do it any more because it frightens people.

Wahute's narrative was not easy to follow. Much of his description was in the form of analogies or hinted suggestions of actions which might or might not have occurred. Some of what appears in apparently concrete terms in the narrative should be read with the difficulties of translating such material in mind. Wahute also stops in mid sentence, mouth open, momentarily transfixed. When he begins speaking again he frequently does not take up where he left off. Given his description of fits during his adolescence and later, this behaviour is possibly the result of a mild epileptic condition.

I was born at Mahimbulhime at Selni village (about 1920). When I was very small my mother left her body. My father looked after me and my father's brother's wife gave me food. Then later again my father left his body too. I cannot remember the first men from outside coming to Selni. I was too small. But when I was small we had a luluai and tultul.

I started working for a surveyor when I was young. I was too young to work properly so I just stood by the map table to chase away the insects. I served food in the camp and did washing too. I worked for three surveyors, "Sitni", "Hip" and "Brai"¹. We went along the coast between Aitape and Matapau. We went to the top of the river that lies near Bongos. We went to Maimai and Wewak. And on the Sepik River. To Ambunti and the Ara River. We worked. We made airstrips at Maimai, Apau and Agarona. At Maimai one surveyor became very sick. We carried him to Wewak but he died². He was buried there. We also worked in Palai, Lumi and Wapei. I know all these areas. They went with their glass, always looking.

When I finished my contract with the survey I got work at Wewak and went on a boat up the Sepik. I worked for some Europeans. At Chambri. I was a servant there.

My work started when I first worked for the survey. I was still very young. I did not have to shave then. I was sick at Wewak. For four months. Then I felt as if I wanted to leave my body. I felt this thing, like a wind. This was when I began to believe in this work. I felt the wind. At the Wewak Hospital. This wind came into me. It made me shake and loose my body³. Then I became stronger. I did not leave my body any longer. Later, when I was older it came back again.

I came back to my village. Then the war started. Some men, who were police before, they became kiapatan⁴. They looked after the village. We went to Tadji near Aitape. We worked on an airstrip there. We made the first one, then the second one. We went for a few months then changed with another line from our own area. I was lucky. I changed and went home and then bombs came down. They were killed by the bombs. When I came home, this whiteman who was a surveyor before, he came and got me. He was in the army now. We worked at Nungwaia and made a camp there. We patrolled about the ridges down there. We had a small camp near Tumam too. Down by the stream under the trees. We had camps at Musilo, Pelnandu, Musendai and Bongos, Nuku and Aitape. One half-caste Filipino was living near Bongos. The Americans came with us sometimes. Okay, the war finished.

1. It is difficult to identify these men. "Sitni" is possibly G.A.V. Stanley.

2. Probably H.D. Eve, who died of scrub typhus in 1939.

3. Possibly, Wahute was suffering from a form of epilepsy.

4. Japanese village representatives.

When the war finished I went to Rabaul, to Kokopo. I was a foreman. I stayed for one contract. One year and a half.

The first time I heard about God was from the missionary. Father Kunisch came from Ulau. He made a service in the Wam. He told us to get rid of sorcery and to listen to the word of God. Later catechists came. Their names were Danerai, Mundumar, Gabriel, Kapus and Kangar. But I first personally heard God speak at Wewak. When the wind came into me. I did not leave my body for ever then. I came back. My sister left her body in the village. She came to me in Wewak. She told me she had left her body. She did not want to. She told me a man had worked sorcery against her using her menstrual blood and now she had left her body. She had come to tell me. I was asleep and my sister came to tell me. She came and stood by my bed. I listened to her. She said, "Hey you, get up, I want to tell you something." She told me that a man (her husband?) had wanted to get rid of her and had used her blood. I talked with her. At dawn she went. Later they sent me word that my sister was dead. I said, "Yes I know, she came and saw me."

My little girl died in 1954. I tried to bring her back to life but I could not. The people came to my house to be with me and to show they were sorry. I wanted to get them some coconuts to drink. I did. Then I went to the latrine. I saw a coconut lying beside the path. I thought, I will feed this to my daughter. I took the coconut and made soup with it. Then I put a tanget in the ground by my child's head and put croton leaves around it. I told the people to stop crying. I sat by my daughter and held her head in my lap for a long time. Then I ate the soup which I had made. It was dark now. People made a fire beside us. I don't know what happened. Did I sleep or what? My wife tried to rouse me, but she found I was asleep. But my spirit had left my body and was with my child's spirit when she tried to waken me. When she touched me I began to shake. I could not stop. Men tried to hold me but I was too strong. They rubbed me with leaves and then I stopped. The next day we buried my child.

After my child was buried I began to shake again. I looked at another man. And he too began to shake. I could make the spirit go into them. They began shaking and falling over. My child was killed by sorcery. I told them, you must look up. All the time you are doing bad, secret things. I looked up. I saw the sun, the man who looks after us. We pray and he sees us. He sees everything. He writes it in his book. Everything. I said to them, you believe,

you are Catholics, you follow God's word as it is written in the Bible. But I have not learned these things. I am a man of no account. But the spirit has come into me.

I went to Dreikikir to the priest. I went because I was worried about sorcery and lying, and about leaving my body all the time. I came up to the priest. I said I was worried by the sorcery and magic. I wanted to follow God. I went around revealing sorcery and magic. My own brother had sorcery. When I looked at him he fell on the ground. I did this with some other men too.

Kokomo¹ heard about my work. He sent a tanget to me. He wanted me to help get rid of all the sorcery. I did it. I worked in Luwaite, Emul, Porombil, Musenau, Namaiasang, and at Dreikikir. But the priest did not like me. I argued with him once before. He did not properly teach the children in the school. No English. Only Pidgin. And only singing hymns. He was blocking the road. I threw the blackboard out of the door. Father Yonoman wrote to the kiap. He told the kiap that I said I had died and been resurrected by God. The kiap sent for me. I told him that was not true. Only that God's spirit came into me sometimes. My eyes were clear then. But they have closed the road for me. Now I am not clear.

When I was at Dreikikir some men from Moihu' came to me. They said a woman had died and they wanted me to come. So I went there. She was dead. So I held her hand. I felt the spirit coming into her body. I asked her if she wished to come back to life or to stay in the spirit world. People saw her spirit, like a bright light. But she died again. I raised her. I raised another in my village. I look at them, that is all. It is not my power. They want to leave their bodies, that is their business. But I look at them and their spirit returns. They open their eyes and they get up. There were three altogether. One was very bad. She was dead for three days. She was swollen. But she came back. She is still alive. But now I have eaten the wrong foods and I have lost this.

After this some rice was stolen from Supari. Augen sent for me, to find who had stolen it. The kiap at Maprik told them to ask me to find the thief. I went to Supari. The police came also. I lined all the men. I told them God's spirit came into me. If they lied to me God would kill them. I began asking them one at a time, if they had stolen the rice. But they were afraid. They said they

1. See Kokomo's narrative.

had taken it. Four men came and said it was them. At Supari many people from Bumbita saw me. They asked to go to their villages. I went with a policeman called Bun. He was from Albinama. We went to Amakai, Ningalimbi, Bulamita, Wareli, Bana, Bombolsilime, Hambini, Selni, Selnau and Arisili. Only at Warengamei did the people stop us. The luluai was angry. I told them if they wanted to live with sorcery and evil things in their midst I would not try to help them. It was their affair. Later I went alone to Mihet and Labuain. In these villages I could make men fall down and shake. But it was not my personal power. It was God working through me.

I went to Maprik to see the kiap. I told him this story. The first man was Kalmin. It is he who makes the earthquake. He is the beginning of everything. God made the heaven and the earth. God put a shell ring, an iron and a pig's skull on Mihet. Now the first spirit, Kalmin came from Mihet to us. Now, although we follow the Catholic church, the source is with Kalmin. He holds the key to Mihet. Now there were brothers. Three brothers. Their sister was Tombili. The oldest brother was Napil. The next Kalmoi and the last Ingambilis. They were the children. The oldest brother broke the law. God's ten laws. So God said, you can stay here and work hard. Make gardens and give birth to children. The other two went to England and Australia. The sister's children went to America. They are our brothers and cousins. We are one family. We are the older brother and you are the younger brothers. The kiap said I was mad and to get out of his office.

Mahanung¹ was at Brukham, working on the airstrip. He heard Jenar the luluai from Moiwahak talking about me. It was in the evening after work. Jenar knew of a woman named Kwinmi at Albalung. Jenar wanted me to go and see Kwinmi because she was doing this sort of work too. Mahanung and Jenar came to Selni to find me. We all walked from Selni to Albalung, with some other men too.

We arrived late and slept. Three men from Kilmanglen were there to see Kwinmi, Apnimbo, Bun and one other. I talked to them and they began to shake. They fell down. Then Mahanung also began to shake and he fell down. When they woke up we went to see this woman who had died. I raised her from the dead.

I walked back to Selni. Mahanung stayed at Tuman. Then Mr Neville came and arrested Mahanung. They called out for me. A policeman came for me. He took me to Laningwap. I told the kiap my story.

1. See Mahanung's narrative.

They put a rifle to my head and asked me if I was afraid to die¹. I said I was not afraid because God had spoken with me. The kiap became less angry now. We were taken to Maprik. I was put in gaol for five months. Later I was gaoled again, but that time for adultery. When I was in gaol the second time Pita Lus was there too. He was making this work.

Now other men are trying to find the road. Yaliwan will not find the road at Hurun. It is hidden at Mihet. That is where God made the world. That is where the Germans first came. Number One Aitape², not number two. I could have found the way if they had not held me. The people saw me lose my body. They became frightened I would not come back. So they held me. Now my eyes are not clear. I am blind now. They have closed the road.

1. An independant European witness, Mr J. Waters, now of Canberra, says he did not see this happen. It is possible the police threatened or suggested to Wahute that he would be shot. Minilam independantly also mentions the threat of shooting. Summary executions occurred during the war.

2. A reference to the pre-war administrative divisions of the then Aitape District.

MAHANUNG'S NARRATIVE

Mahanung lives in Ngahmbole hamlet, Tumam village. During my stay in the village, I was living only a few hundred metres from his home. He was very interested in my work, and we had frequent, far ranging discussions, which were often very difficult for me to follow. My lack of knowledge of Urat myth and of myths and legends which Mahanung has heard in other parts of New Guinea, as well as the sort of teaching he received from SSEM missionaries, prevented me from making complete sense of many of his stories. He is a tall man for an Urat, with long arms and legs, and a slightly wild look in his eyes when excited. He is also a very sensitive person who appears to be continually struggling with his conscience, perhaps a consequence of his strong awareness of "sin".

Shortly before I left Tumam, I heard Mahanung singing in his house, as he had done often during my stay. Later however, he burst in the door of my house and grasped me tightly by the arms and asked in an intense whisper if I would take him to the cemetery and show him how Europeans gained access to their wealth. I tried to explain that my father had not shown me, and that I did not know about these things. Tears streamed down his face and he turned and left, obviously not believing me. It was an extremely disturbing experience.

This transcription is the result of two sessions, in which I asked Mahanung to speak specifically about his life, and not to dwell on any subject for too long.

Mahanung is Binghoiye's father's brother's son.

My mother and father made me ontop at Moiengepe. My mother slept and my father came and had intercourse with her. Moiengepe is in the middle of the village. Tasienge is right at the top. Moiengepe is in the middle and Ngahmbole down below. It is close to the track down to Moimele'e. My mother slept in her bed. My father got up from his bed and went and had intercourse with her.

She became pregnant. She went to a rough little house, a birth hut. My father made it. Just like a shithouse. At Tasienge. She cut my umbilicus. My twin brother died.¹ He stopped at Tasienge. My big brother stayed in the burial ground. How he has assisted me in my work. My body is here. His spirit is here. That's true.

Alright. Before there were no Europeans. When my mother gave birth to me, I didn't see any Europeans. Time passed and the Germans came. The Germans came and sat down at Aitape and the Chinese. One

¹ It is not clear whether or not Mahanung's brother died at birth as he claims, or lived until about 16 years of age at Moiwhak village. What is noteworthy is the similarity between this passage and Binghoiye's description of his Pondo experiences. I think it likely Mahanung has "borrowed" from Binghoiye's experience.

Chinese, that's all, came to Suain. I have forgotten his name now. He had a shotgun and he shot the birds on top here. The people of Sumul, Whaleng, Labuain and Mihet, and Arisili and Selnau and Sumbaure. All these places knew him. We did not. We were just kanakas. We had not heard anything. We had stone knives. When I was little my father and my big brother would go and cut the bush. I was only able to sit down and look after the fire. He and my brother did the work. I ate food, that's all. My brother would get water for me. I would drink. Later on, they did the heavy work. I held their things. Planting mami or taro. They planted and I carried the plants to them. Later my mother left me. She died. My father looked after me. I was an older child and I did work too.

The first iron knife came. They got them first in the Kombio and the Western Urat. They bought them. Yambes got them from the Kombio. Our parents got rings and went and bought them. When they came to a ceremony, or a tambaran, they brought them. When they showed them to us, we said, "That's mine, that's mine." They all said that. They were elated. They bought them. By the time I was a young man we had tomahawks and bush knives. We knew where to buy them. Before they all came together. They worked as one. They all got up and cut one man's garden. Then they cut another's. And another's. Now they go about on their own. One man and his wife now cut their own.

The first men that came here from the coast had black skins. There were no white skins then. The Chinaman was at Suain. They went down and worked for three or four months. All these men from Labuain, Mihet and Kombio too. He bought them. We didn't know about the coast then. We lived in the big bush. When they finished working for the Chinaman they went to Aitape. They saw Kiap Lepat. They got money. They knew now. They bought things. They came back. They had plenty of knives and axes. They said, "Alright, let's go back and get many rings from the Urats." They brought many knives and gave them to our parents. They knew about this now. First they said, "Where do these knives come from? I think a masalai must make them." I was small then. I heard them talking that's all. Time passed. Then they came and got one of my fathers, Borondai. My son carries his name now. Taihiwor too. They came and took Borondai. They tied his hands like this. They didn't drag them away. They just held their hands. When they were up the road further, at Sahik, they took the ropes off. Then they went down to the coast. They thought they might run away. They asked them if they wanted to go. They said yes. They went down to the coast. Now all the other places, Nanaha, Moilenge, Yerhmain, Moiwahak, Musilo, Daihunge they did not. Men went from here first. Yaumbilis from Asilinge was the first. He was made paramount luluai. He went first. Borondai he did not come back. He died at Wailis Island. Ten years he stayed there.

When the others came back they talked. They talked about the huge ocean. And the white men who were at Aitape. They called them masta. They said their skins were all white. Men here said, "What sort of men are these? Masalai I think?" Men who had been said, "No. They have a country of their own, Germany." We understood then.

We stayed in the bush. Then some men from here went down to the coast. They cooked the ashes from the fire, the same way as they made salt before and they brought it back. They cut some dry coconuts and put salt water in the shells. They brought them back. Men here drank it. They said, "Oh man, that's good. Number one." I went with them with my brothers and fathers. With Taihiwor. After he came back from Wailis Island. We went to Samark first. Then to Yasum and then followed the Amuk River to its head and came to Mihet. Came up to Kwalam. Right ontop now. You can see the ocean. Then down to the coast. Follow the river and come up to the coast. At Ulau. There were no white men at Ulau then. Taihiwor had seen them at Aitape. The kiap had made him luluai. He came back with his hat. This was a good thing. It made us strong. Yaumbilis was the first luluai here. He marked the other luluais and tultuls.

During this time my father moved from here to Hultuwam.¹ I was small. When I came back from the coast first, I came back to Hultuwam. We moved to Hultuwam because we were worried about the new things. On top there they knew Pidgin. We didn't. They knew about the coast. We didn't.

When the first kiap came here, the word came from Yaumbilis. It was Kiap Thompson.² We lined up here at Ngahmbole. The men and women were shaking. They were frightened. We knew about Europeans from the people in the Kombio. So we didn't hide in the bush. He lined us and marked our luluai. First Taihiwor was tultul. Later he gave Mejiare the hat and Taihiwor became luluai. When he died Me'mwa got it. Then he died and Sepehoi got it. He died and his grandson Saiyarume got it. Yaumbilis talked to us. One man of ours had been to Rabaul, Kohimip. He knew how to translate. And Taihiwor. Halto too, had been to Manus and knew Pidgin. The kiap came back again. And then again. Two times more. He took our names. We were not frightened now. Thompson was a big man, fat, with a beard. He had policemen with him. They shot the coconut there. The mark is still there. Before Bepelet was killed here with a shotgun.³ The policemen stood around. The kiap said, "Don't try to fight us. We are too strong." The sergeant took our names. Yaumbilis translated.

Then Hook came.⁴ He was a tall man. He had salt, was trying to persuade them to let us go with him. He stayed over at Musingwik, where Halto lived. I went there and saw him. He asked us, did we want to go with him. He gave me a red laplap. He gave other men laplap. He gave our parents matches. He wrote down our names. He gave them knives and beads and salt. Our fathers were sad. They cried. Mahinga cried for us. But Binghoiye had gone already to Rabaul. I don't know who he

¹ A hamlet of Tumam village, first established during this period.

² Oliver Giles Thompson, District Officer, Aitape District, 1923. (Report to the League of Nations, 1923.)

³ See Mwalhiyer's narrative.

⁴ Walter (Wally) John Hook, labour recruiter.

went with but you can ask him.¹ We left. We went to Asilinge. Yaulimbis' village. Then to Saunes, slept there and got some more men. Then to Wamsis, followed the river to Suain. Then to Yakumul and to Aitape. Hook gave us rice and fish. We saw Kiap Thompson, told him how long we were signing on. I was going for three years.

The first time. Oh dear. We didn't have anyone to look after us. No one to cook our food. It was cold and we were sick. We slept on the deck of the ship. We came to Boram near Wewak. There was no kiap there, just bush. Boram had a plantation. One bush house and a policeman. We said we wanted to go ashore. To cook some rice. We ran away here. Me and one man from Tumam. The policeman caught us. But we got away again and came to Ulau. Came along the coast. At Ulau we found the road and came back here. Hook came back. He wasn't angry. He asked us why we ran away. We told him. We were hungry. We got no food. The crew hit us. So we ran away. We couldn't understand them. We had our language, that's all. We hid from the policemen at Ulau too.

Three months went by. Then Hook came back. He asked for me to come back. I went back. Kiap Thompson was not angry. I told him what had happened. This ship was called "Meteran". It belonged to Germany. We went again on this ship. Went to Boram. Cooked food there. We had a man to look after us this time. Then we came up to Rabaul.

We looked at Rabaul. We saw cars and ships, white men, and women, Chinese and Malays. We went to the Carpenter lines. The clerk took our names. We stayed there. Later they sent us to the plantations. "You in this group go to Kavieng. This group to Baining. This group stay here." I went to Baining for three years. At the end I came back to Rabaul. The clerk asked me. Did I want to go back to my village? I said no. So I stayed another three years. I went to Mister Malale, at Natowa. The Europeans didn't work. They sat down in their houses. In the morning we lined up in front of his house. He came onto the verandah. He would say, "Alright, this line cut copra. This line cut grass." He stayed in the house. All the time. For three years. He asked me if I wanted to go home. I said yes, but I lied. I wanted to go to another place, to see a new place. The first time, we had a bad European. We took him to court. This man was small, short. He liked to hit us. He shouted, quickly like this, "You are bad men...yayayayaya." Like that. He would jump about like this, and hit us, oh boy. He had a whip like a jungle cane. We got angry. Some Sepiks ran away, went to Rabaul. Okay, we took him to court. The kiap came and said, "Alright, get your things and get out for good." Then Mister Kasowil came to look after us. He was a good man. We ate rice, tinned fish, sometimes meat. We slept in a house that we built. The clerk gave us a blanket, spoon and fork, plates and a box.

While we were there we fought and argued. Some men found girls to have intercourse with. But while I was at Baining I didn't have a girl. Some men used young men like girls, but I didn't like that. These boys came from the plantations too. They went up them, just like girls.

¹ Binghoiye was taken by force by an unnamed European. See Binghoiye's narrative.

This was bad. It was the men from Yakamul that started it. They do it there. I fought with them because of this. Argued. Then at Natowa again. Fought and argued. With the Sepiks. They wanted to get the young boys. I said, "They not your women. They are boys. They have come to work." But they were strong and took them. We argued with them. We got all the young boys from Tau¹ who were there. We fought and cleared out the Sepiks. Only men from the Urat stayed there. While I was there I got into trouble with a girl. Not real trouble. No one saw me. She liked me. She asked me. She was the wife of a man from Rabaul. We did it twice, that's all. It finished then. After that there were no more girls. I stayed strong.

I came back to my village. One year later I got my wife. One year later the earthquake came². When I came back, they were making a tambaran. That morning they were lining up the yams to go to the tambaran at Musingwik, Daihunge, Musembelem, Musilo. The yams were lined up. They went from here over to there. We wanted to repay our debt to them. We had collected the husks of coconuts so we knew how many yams we had to return to them. When I came back I didn't know about these things. My father told me. Go to the bush and feed sago to the pig. Help me. You are a young man and you go with the young women. It is not good if you ruin my yams. You had better stay away. He said this to me. So I stayed away from the place where they had the yams.

I had to make a garden first and build a house. So I stayed here while they went around on the tambaran. This day, it was like this, morning. Then the earthquake came. First it was slow. A big noise. Then the second time. Bang! The next one was a big one. Men fell over, cried out, trees fell down, coconuts and houses. We put the yams away. We thought we were lost. The ground was broken all down the village, cracked open. The hills had fallen into the valleys. The trees were smashed. One catechist from the coast. The priest had told him, get some holy water and pour it on the stone, the one on top of Mihet.³ He poured it down the side. I think if he had poured it straight we would have been finished. He tipped it on the ground. Alright the ground shook. Kalmin⁴ was angry and rocked the ground. He was angry about the tambaran too. The house tambaran fell down. The gardens were alright. At Musengwa the hill fell down and blocked the river. We went and looked. All of us went and helped them with men from Daihunge, Mulenge, Musembelem, Musingwik, we all went and cleared the rocks. The water ran away. Then it fell again and blocked the stream completely.⁵

1 The Tau villages are Gawanga villages two hours walk south from Tumam.

2 11.30 am, 20 September, 1935. See Stanley et al (1935). There were two large shocks, the second occurring at 2.00 pm on the same day. After-shocks occurred for over a month following the initial shocks. This earthquake had a magnitude of 7.9 on the Richter scale. Its epicentre was located north of Lumi (CSIRO, 1972:9).

3 A peak in the Torricelli's north of the Dreikikir area.

4 A creator spirit.

5 Two reasonably sized lakes still exist near Musengwa village.

We looked after the yams. Then the leaves were dry. We took them out and put them in the house. You can't have intercourse during this time. It's the same with children. If you do you will ruin the baby. It's skin will get sores and it's eyes will run. Now you pile up the yams. The women see them and they are very pleased. They say to their daughters, "This is a good man. You will not worry for food or for your children. He is a strong man." When the women have come and got the yams and put them in the house, alright, that night you can go inside your wife, in your house. You go to her bed. You go inside her. You put the semen into her womb. Then when you are finished and your penis is small, you go back to your bed. The semen stays there. It is very small after the first time. It sleeps in the womb. Later it will grow bigger.

Alright, close to this time the war came. There was a lot of talk about it. It came from the coast. It said the Japanese had come. Now men from plenty of villages went to see them on the coast. They were at But, Milian, Korokor. Later they came and marked their kiapatans here. They marked Saiarume, Mwalhiyer, Nihulu and Hausarp. I stayed here for some time. Then I went to work. All the kiapatans sent us. They said you can go and work for the Japanese at Korokor. I went and worked there. Then to But. I helped them with a woman from Mesen. I took them to court. Melkatanai from Labuain, he was a kiapatan. They argued with me. They said I could not report them. They got together and raped a woman. I came back to Korokor. Then the Japanese took me to Hollandia. We went on a big ship, then on a canoe with a motor. Then the war came close.

We worked on the airstrip at Skomambu, Sokosai, Sokoyu, Sokoyambis. We stayed at the airstrip. We made ditches on each side and at the ends. Then planes came over. The first line dropped bombs. When the first bombs came down we lay down in the ditches. The planes came over very low. I think the pilot understood. He saw we were all black men. He didn't drop any more bombs. When it finished, we got up and went into the bush. The lookout who looked for planes looked through his binoculars. Looked. There were no more planes now. We came back. They called out, the planes have gone. They said to us. Australia and America have come together. They are close now. You had better go home. I said to them. We want to go to our village. Alright I got one line. We walked to Sokosai. We got a canoe and came across the water. A long line of men. Some from the beach and some from the bush, together. Some from Vanimo, some from Arop, Malu, Sanu, we came. Yakamul, Ulau. The Japanese saw us. We told them we were going home. They said, "Alright, you go." We came to Aitape. We entered the bush. Came up to Palai and through the Urim to our village.

I came back to Hultuwam. Australia came to the beach. The bombs were dropped on the beach. At But, Wewak, Aitape, Limian, Korokor, Ulau and Yakamul. Then all the Japanese came inside here.

The Japanese came up everywhere. All the villages. Binghoiye fought them at Finschafen. They beat the Japanese. Man, the black men can really fight. It's true, ontop in the planes it was not us. The way you fight is alright. You look at the time, the two of you.

You come, they come, now you fight. Black men fight differently. They fight horribly. Our fight, black men's fight is very strong. We don't think. We just fight. You look at the time, talk on the radio, then you fight. Black men just go and fight.

Alright. The Japanese came. I ran away into the bush. Down below here. Around in the bush. Once this man here tricked us. Moihem of Tumam. We slept in our house. He trapped us. He took the Japanese. They caught us and made us carry their cargo to Yaurang. They were getting ready to fight there. I took the cargo and came back. I didn't stay. Some stayed there. When the fight came, hand grenades were thrown into the house where the Japanese were asleep. One policeman shot some too. The rest of them ran away.¹ Later on the Australians would have shot Moihem. But Nihulu, the paramount luluai hid this story. He didn't tell them. So he is here now. I didn't go and help them round up the Japanese. I stayed here and fixed up my gardens and house at Hulituwam.

Then the evangelists came. The labour recruiters came too and bought plenty of men. They went to Rabaul, Lae, Salamaua, Buka, Kavieng, and all these places. I stayed here. Some went to work and came back. Went and came back. I stopped here. The kiap came to Dreikikir. But then a man in the Kombio killed a woman. He killed his wife and cut her sister. Then only the doctor stayed at Dreikikir. The kiap went away from Dreikikir. Why? Because they killed people. They were always making trouble. Fighting and arguing. Over their ground, their women. The kiap got tired. He went. Only a policeman stayed. There was no kiap for a long time. Four years. Or five years.

The evangelists came and stayed at Namon where the Co-operative Society's shed is now. I went to their school. I walked there. Some days I stayed and looked after my garden. One woman came to Hultuwam sometimes to hold church services. I went to this school because Binghoiye said we were living in the bush. We had nothing. He told me to go to this school. Me and Bihwiliam went to this school. Later he did not stay good. He is dead. I lived a good life and I am here.

Then at this time Saiyerume wanted to work another tambaran at Christmas time. I left the school and came to help him. He said I had to pay back the debt owed by my father. So I went with them to do this. It took a long time. Not one month. A whole year. I did it. I killed pigs and cassowaries, cooked food. Made decorations. Collected the blood from the cassowaries. Got the yams. Made the decorations inside the house. Then Mwalhiyer and Yuruwainga's men went inside and saw them. We made a large feast. We put nettles on their penes, cut them, decorated them, danced and sang. They caught and

¹ Japanese camped at Yaurang were attacked by an ANGAU patrol under the command of Mr D.M. Fenbury on 17 June 1944. Seven Japanese were killed and 540 kg of rice was captured. (ANGAU War Diary, September 1944.) Moihem was forced to arrange carriers under threats of death.

cooked a pig to repay us. Plenty of pigs. We planted yams, watched them. They came up well. The leaves went dry. Then we pulled them out. Brought them up to the village. Then they had intercourse with their wives.

After this Wahute started his work. They all said. This man is a seer, he can divine many bad things. He can tell a man has been having intercourse with other women. So I said. Let's go and see him. First he came to Moihu'. He came here. One woman had died. Wahute came and told them. Get one pig and tie it up. Cook it. Make a table. Do it by four o'clock. They did this. At four o'clock they washed and came back. They put the food on the table. Wahute stood in front of the table. He spoke to God. Then they ate the food. The bones and the scraps stayed on the table. They sat and talked. Then this dead woman came back. Some people jumped up with fright. They said, "Hey, look, there is one white woman coming here." This was the start of the work. This woman was dead and was in the cemetery. But they made the small feast. And she came back, shining, like a pressure lamp. Everyone was frightened. If they had not jumped up and been frightened, I don't know, she may have stayed alive. She might have been here now. When I heard this, I wanted to see if it was true. I thought it was a lie. They said it was true.

Now, one man Jenar luluai of Moiwahak, came and saw me at Brukham.¹ I was there helping to make the airstrip. He said, "I think you and I should go and see this man. He knows about sanguma. He is doing good work." I said, "Have you seen him?" He had seen him at Moihu'. Alright we went. We went to Wareli and Warengame and came to Selni. We spoke to him. He said, "What do you want?" We said, "We have come to see you, so that you can look at us two." People had said we were sorcerers who had eaten sorcery magic and had killed men. Wahute said, "You luluai, no. You, Mahanung, yes you have eaten the sorcery, but you have not killed any man." Alright. He got up and said, "We will go. He got his brother and the tultul and luluai, and we went.

One woman from the Urim had sent word for him to come. Her name is Kwinmi. She lives at Yalikem near Albalung and Yauatong. We went. Pen and me and Jenar and some others from here. We came up and saw a dead woman. She was swollen. She was covered with blankets. She was not rotten. Just swollen around the stomach. We went to the village and stayed until dark. We slept. Now Kwinmi said to Wahute. "Come to the cemetery with me." They went there. At night about nine o'clock. Wahute said, "What do you want me to do?" I didn't go with them, but Wahute told me what happened. Kwinmi said, "You can go up me." Wahute said, "Oh no. I didn't come here to fuck you. I came to see what sort of work you have been doing." He was angry. They came back. He didn't do it. If he had and he had lied it would have destroyed his work. We slept.

¹ The site of Anton's rice project.

In the morning at dawn we woke up. There were three men of Krungungam. The spirit had come into them and they shook. Wahute said for them to go and get three more men and come back with them. The three came. We, all came together. Yauatong, Kilmanglen, many people. The three came. Wahute called out, "Slope arms!" And they all fell down. When I saw this I began to shake. I jumped into the air and fell down. I fell down. When I too fell down all the people began to shake and fell down. Many men and women shook and fell down. Only the stubborn stayed normal.

Then I got up. Wahute marched us, like policemen. "Left turn! Right turn! About turn!" Wahute called out like this and we followed. Like policemen. This is the source of the work. Then he called out, "Finish." Everyone became normal again. Except that when I came back here it started again. Hahaha. It was eight o'clock by now. I stood up by her like this. Wahute stood up alongside me. He looked at her. I didn't shake. I stood still. His eyes looked at hers. She had been dead for one day, one night, one day, one night. She was close to being rotten. Wahute stood up. He looked and looked and looked. Her eyes did this [blinked]. Then she did this [took a deep breath, then another and another]. Once, twice, three times. Then she sat up. I thought. We have resurrected her. Now we won't die anymore. The road is not blocked now. And another woman, her name is Tinkanuwiahe. She lives at Mulenge now. She comes to church here now. Miss Held has asked her about it. I have spoken to Miss Held about it. She says yes, you brought her back.¹ This woman said she had been to a good place. A clean place. She saw her ancestors there. She came back. When everyone saw this they were very impressed. Wahute said, "You get a green coconut and warm the water. Don't give her cold food." They gave her soup. She became strong. Washed.

He resurrected one more at Selnau. She is still alive. We came back here. He went back to his village. This thing stayed with me. It was strong inside me. I said, "All you men who know sorcery, get the things and throw them away." My brother helped. His spirit helped me. Now Moihem and Apangai tried to stop my work. They had bones and things. They did Sstan's work and blocked the way. They had a skull. Samas too and Lusiya. I dodged this and I stayed alive.²

I came back here. I made a lot of work here. I caused many people to fall down. I stood up and looked at them and they fell down. I had some leaves from a tree. I stood and held the leaves towards the newly risen sun. Then at about six o'clock I came back to the village. When I held these leaves and pointed them at men or women, they fell down. Wahute showed me how to do it. But first I went to Laningwap where

¹ An evangelical missionary. She states that the woman probably was resurrected, but by Satan, not God, in an attempt to lead people away from God, into darkness. She did not witness the resurrection.

² This incident, in which a group of people started their own chapel using SSEM forms of worhsip together with some traditional forms, occurred later the Mahanung implies, in about 1963.

Minilam lives. He did this alone. The spirit came to him. He caught a pig and tied it. Ten pigs. Put them on a table as payment to his ancestors. He then got up and went around all the bush and ground of Laningwap. He came back and waited. Then an earthquake came. Only at Laningwap. Not here. One book came up, a bible, with a chain. Clothes, a shirt and a rifle and many many letters. He got them. I got a lot of people and I went to see him. From all the villages around here. We came. He held these things. I didn't see the rifle, he hid it.¹ I saw the bible and the clothes. When we went to gaol he got three years. They said he stole the things from the priest. But he didn't. God gave them to him. Minilam gave me part of the book. He said to go and come back in four days. But I could not. Tamuwat wrote a letter to the kiap at Maprik.² Mekego took it. Mekego from Porombil. Mister Ron³ got a sergeant, and a lot of policemen. They got a car and came to Dreikikir. They sent word to me. They lied. They said I should go to Dreikikir. I went at night and they held me there. In the morning we came back here, to the house kiap at Tumam. Mister Ron said, "Alright let me see your work now." He saw it. He said, "Alright let's go to Laningwap." He went there. There was a court there. Minilam gave him the bible. He said Minilam had stolen it and the clothes. He didn't steal them. If he had why would we shake like we did? Alright, we had no answer. We went to gaol. Minilam got three years. Akorika from Tauhundor got four years.⁴ I went and told him about this work. First I went to Selnau to Wahute. Later I went to Moseng, Musendai, Apos, Tauhundor and Tauhimbiet. They came and got me and asked me to go to them. A lot of men came and consulted me.

When I came back from the Urim first I worked in Ngahmbole. Then I walked through Tumam. Wenbilbil at Tumam had felt the spirit too. I didn't talk to them. My mouth spouted the talk from Kalmin and from Wahute. My ears rang. I talked and it went into their heads. I walked like this. I marched like a policeman. When they came close, I did this. "Attention!" I stood straight. Then I looked at them. Then I carried a rifle here [slaps arm]. My [dead] brother walked with me. He had the rifle, I had nothing, but he came with me. Later they said I was lying and was a cargo man. But it was not my choice. My brother was with me. I did this. "About turn! Right turn!" [Exhibition of drill.] This was what I did. We did not follow the old ways. We walked about straight. I looked at them and they began to shake. They fell down. Got up. They sang out songs. *Moikiere, umai, taiembo*. These are songs of ancestors. They spoke in other languages too. They stopped when I told them to. I said, "Lookout good. Don't let any other men hold you. Only your husbands." To the men I said, "Don't hold other men's wives. If you do you will destroy this work."

¹ Nobody but Minilam saw the rifle.

² This did not occur. The movement was reported by a European medical assistant at Dreikikir, Mr G. Waters, after word reached Dreikikir that Father Schwartz SVD, had been attacked at Bongos.

³ Mr R.T. Neville, MHA for Southern Highlands. April 1956.

⁴ Akorika claimed and was given, sexual rights to all young women in his village. He was convicted of rape.

When I marched they marched with me. Then we went to gaol. Mwalhiyer did not go to gaol. He had not been to the plantations to see the good things the Australians had there. When the sentence was finished the kiap said to me. Go to your village. Don't go back to the village straight, but go a little way away. Plant peanuts there. The other people can stay with the luluai in the village. So I went down near Moiyise and planted peanuts. But they got their dogs and spears and went to hunt pigs. They broke the law on my land. They had sin and they ruined my work in that place. They had magic to catch the pigs. So I went to Hollandia again. Puaporoken came too. I asked the kiap. He said, "Alright." So I went. I only stayed three months. They stayed until the Indonesians came. I came back and went to this place at Ngahmbole. Then I went to gaol again. I wanted to start my work again. I stood up at Hultuwam. I said I wanted to start my work again. Saiyerume made me angry. I hit him and he took me to court. I went to gaol. At Dreikikir.

I came back. Then Bowongei put me in gaol again. I went to Hultuwam. I said they shouldn't do this other work of Apangai's and Moihem's. They should follow me. Stand up straight. And pray. God told me he didn't like this work with men's bones. Okay, I got angry again. I hit Bowongei with a stick from the fire. He took me to court. I went to gaol for three months.

Oh, and I went to gaol at Telefomin too. That was the second time. I came back from Maprik. They had peanuts. They had brought them back before. They only had gaol for three days. I got six months. When I got back they were planting peanuts and there I started my work again. Here onto at Ngahmbole. I went about and told them about their ancestors. I went to Musengwa. I told them heaven was under the ground not in the sky. Only the sun is up there, with the Holy Spirit and God. Heaven and the good things are under the ground. I talked to them, that's all. I went to the burial places. I spoke to the ancestors. I listened to them. They spoke to me. The first time, I saw them. They have cars and planes and ships and good clothes and food. They don't die. It is a clean place. But I didn't have the book, the Book of Life and I couldn't get to them. The road was blocked. But I could see them. Mejiare courted me this time. I went to Telefomin for six months. My spirit saw them, while I was asleep.

I grew tired of all this trouble. I still follow my work. But only inside my own house. Now this work has started at Yangoru. I am a full member. I have told them of my work here, and of my knowledge. But I am too old now. My son is the committee member for my village now. I am too old now.

MINILAM'S NARRATIVE

Minilam lives in Laningwap village in the Urim Census Division. In 1972 he was the village's representative on the Local Government Council and frequently visited Dreikikir for meetings and other council affairs. Minilam made two visits to me at Tumam and his narrative was recorded there. Mahanung was present on both occasions and probably influenced Minilam's account of events, although it is almost certain that in 1956, Mahanung did not directly contact Minilam, except for the chance meeting he describes.

Minilam's influence in Laningwap and the Urim area appeared to be slight. His election as councillor is related to his knowledge of affairs beyond the village and is recognition of his past leadership. He contributes almost nothing to council affairs. Nor is he making an effort to actively lead Urim people again. Younger men have taken over that role in the Peli Association. The older men of the 1956 movement have been deliberately excluded from positions of leadership to avoid Peli's opponents drawing a parallel between the two movements, as Minilam does in the conclusion of his narrative.

Minilam himself seems unworried by his loss of formal status. He is known every where in the area, and some people fear him, for they believe he was once the repository of some form of supernatural power. He does nothing to refute those suggestions and his mysterious air and enigmatic smile convince all but the most skeptical.

My mother gave birth to me at the small hamlet of Awon in the village of Laningwap. I grew up there. When I was old enough I was recruited as a labourer by Wood¹. Wood was in the Palei area. People from Womirar came and told us he was there and we went to see him. He gave me a knife, some cloth and some paint and told me to come back and give them to my parents. He came and collected us from here. We walked to Kubriwat with this man. Then to Tau across to Musendai and up to Emul. From there we went over the mountains to Suain. We went through Mihet. I was only a boy then, no hair on my face but just a little on my body. At Aitape I signed a contract for three years.

1. J.H. Wood.

We went to Pondo near Rabaul on a ship. We worked for Mr "Trevenga". He was not a good man. He was an angry man. He hit us often with a cane. We worked opening the nuts to make copra. Sometimes outside, sometimes inside the copra house. When the copra was white we tipped it onto a table, a long table. Then onto another table, then down onto a scale, then into another big box. Everyday, we worked like this. Everyday for three years.

When I went out from here I saw the white men. I thought like this. About their wealth. What is this? Where does it come from? Do they make it themselves or does it come from somewhere else? I thought about it. I thought about it a lot, many times. I didn't ask anyone. I just thought about it, thought about it.

My first three years finished. We were waiting to come home and the Japanese arrived at Rabaul. The European in charge of the plantation told us something was going to happen but he did not speak out. He said wind and rain were coming soon. It was tok bokis.¹ He was really talking about the Japanese. We puzzled about the meaning of his words. We worked for a few more weeks. Then the Japanese landed at Rabaul.

Oh man, they came. The sea was black with their ships. We looked and the sea was black. They came, came, came. Dropped one bomb, two, three bombs. And then we all ran away. We ran into the bush. We came out again, but no. They came back and we ran away again. We did not come back to the plantation now. We stayed in the bush and slept there. We slept two nights in the bush. Then the Japanese came. They took us away. Only us. Our money, our pay for three years work, our boxes, our laplaps, were all lost. We left them behind. The Japanese took all the food from the plantation and put it on one ship. We were put on another.

The ship took us to Rabaul, to Konanu. They gave us an armband to wear. We had to carry their cargo. We went on a ship and came to Buna, in Papua. We went to the mountains. This was a very hard time. Many Sepik men died then. Tolais too, also died. Many men died. Lost. Some committed suicide. Why did they do this? Because we had to work so hard. They were exhausted from walking and carrying. Very hard work. Our minds were not normal. We just thought of killing ourselves. And some did. Never mind, just killed themselves. They died here and there.

1. Speech with a hidden meaning.

We came back to the Bapaki River. The Japanese left us there. Tomi (Bingahoiye) was there. He helped us. We would have died if he had not helped us.¹ The Australians caught us. We walked back to Kokoda. They took us to Hanuabada in Port Moresby. On a plane. Then we went to Bisiatabu and made gardens. After a short time, I went back to Moresby. I joined the PIR. I was a forward scout.

When I joined the PIR I went to Lae. First we trained in Moresby. Foot drill, tactics, weapon training. From Lae we went by plane to Aitape. From Aitape we walked to Tong, in the Kombio. From there to Yubanakor and made a camp at Nungwaia. A kiap took us. We fought the Japanese. From Nungwaia to Ilahita, Aupik, Apangai and Maprik. At Maprik there was a big fight. Our sergeant was killed at Maprik. He threw a hand grenade and it bounced off a tree and came back. I was injured then. It came back and exploded in the middle of us. I was carried back to Aitape. Later I went to Nazab. When the war finished I was there.

When the war finished we gave back all our shotguns, machine guns, and other weapons. And they said to us. "All these things will stay here. Later we will get your names. When the war is finished. First you go and live in your villages. Later you can have them." They said this to us. They promised us these things. Bren guns, machine guns, all sorts of guns. Bulldozers, good food, bombs, cartridges, Owen guns, cars. They told us this. But we have waited and waited. Nothing!

I came from Nazab to Aitape. In a plane. I walked back here. I was here for three years. Then this new work began.

This work came then. First it came to Wahute, then I heard about it. They would take a man who had sorcery or that sort of thing and take him to Wahute. I came here and lived. I did not think anything would happen to me. I sat down here. I heard that Wahute's work was becoming very important. Word of it went about everywhere. And some men and women went to see him doing this work. I did not. I wanted to go to Brukham to the rice mill. I went and I met Mahanung. He shook hands with me. I met him at the last hamlet in Tumam. I wanted to take my rice to the mill at Brukham. The other people had gone ahead and I met Mahanung. He had not seen Wahute's work yet. I went onto Brukham and I came back. I spoke with my people. I said,

1. See Binghoye's narrative.

"It is true that Wahute has this new work, but I think a man at Tunam also has something. Have you not seen this man?" They said they had not seen him. I said, "Oh man, I have seen Mahanung. A tall man. We shook hands in the road. Now he wants to go to Wahute. Why? Because he has this thing too." Okay, I stayed here. Then this work appeared at Kilmanglen¹.

I came and saw it at Kilmanglen. I came to Kilmanglen and stayed with two old men, one whose leg is crippled, Higalen and Minha of Kilmanglen². And I saw it take them. They began to shake. Their heads became dizzy. They jumped up. Then they fell about like this. On the ground. I wanted to roll a cigarette but no. It came into me too. I fell down too. I fell and jerked about on the ground. Alright, I went home again. Nothing more happened to me. I slept well. I did not shake again. I slept with my little girl lying beside me. I was sleeping. Then a light came into my house. It was like the pressure lamp. It came to me. I wanted to sleep but no. The light came. As if it was coming to get me. It shot into me. I jumped up and began jerking. Jerking and jumping. I did this all night and the next morning.

In the early morning I sent my wife's brother to get a coconut. A special coconut. I had seen it. God had put it there. I said to him, "You go. Take the climbing rope and go up the tall coconut. Don't drop the nut. Hold it and bring it down. If you throw it down it will be damaged. If you throw it, I will drink it but I will not be able to receive the knowledge. If this happens I will not be able to understand anything nor see nor think about everything." It would have been bad if he had destroyed my thoughts in this way. So he held it carefully.

I drank from that nut. I tried to drink. But no. My tongue went back and I fainted. The back of my tongue came forwards and the front went back. I remained like that. Then after some time it returned to normal. My tongue was alright. I returned to consciousness. I went on doing this. Jerking, shaking, fainting. I went running around the village and my land. I came to a large stone on my land. I fell down on it.³ And he spoke.⁴ He said, "All your

1. A village west of Laningwap about one kilometer.

2. These two men had witnessed Wahute and Mahanung at Albalung.

3. Accounts by other men suggest a small earthquake occurred when the voice spoke to Minilam.

4. God.

belongings have arrived in the village." So I went back. I went, went back and came straight to one house. This house was the house of the catechist. I got the crucifix, and the clothes, like the priest wears at mass.

I took these two things. Now at this time, all the letters appeared. They appeared, and kept on coming. There were not just a few. Very many. They came from nowhere. Appeared in my house only. In my bed. I collected them. Now I couldn't read or write. But I could understand these letters. It was as if I could read and write. These letters came from God. I did not make them.

So, I did not find the way to money. But I did find the way to the letters. The way to the letters and the other good things, I found that. I placed all the letters in a box. When they arrested us, Mr Neville took them.

Okay, I marked a day now. The Holy Spirit gave it to me. God himself. He spoke to me as if it were my own thoughts. He spoke as follows. "In nine days you will see something. You will see the road. The way in which all the good things come." Now, did God speak the truth, or did he lie to me? I don't know. Mahanung came to see me. I told him about the day. I gave him the day. I marked the ninth day. But Mr Neville came and arrested us. So we did not find out after all. Mr Neville asked for the man who started this work. I told him I had never been to Albulung. I went only to Kilmanglen. The police wanted to handcuff me. They wanted to shoot me. I told them. You can shoot me. I have been through the war. I am not afraid to die. They took me to Maprik with them.

Before this work came to me I was working with rice. I was the leader in this village. I walked to Tumam and saw them planting rice there. Then I went to Musendai and saw Anton. Before that I started a trade store but I did not ever sell any goods. It was too far to carry them from Aitape.

When Neville took me to Maprik I was taken before the court. I told them the crucifix and the clothes were given to me by God. They did not belong to the priest. I told the judge, "It was as if I had a small man inside my heart. He spoke to me and I went and found these things. These were not the priests. His were different. Mine were different." The priest came to the court. He said I stole his things. Our catechist too, he said I stole them. But the catechist gave the priest his things back. Then they said I stole them. I was gaoled for three years. I worked on the roads, with Mahanung and Wahute, and Melming from here.

I returned home in 1959. In 1962 the people marked me as their councillor.

Now I think my work has appeared again. I think so. At Hurun¹. So I have joined. I think this is the same as my work. If I had not taken a second wife, I might have been able to find the road. But now I have two wives and the road is closed to me. But I think that Michael Somare and Pita Lus are wrong. They say Yaliwan is not making true work. But how do they know? All kinds of work are good. We must try every kind. Then later on we will know which are good and which are not good. Who can say now whether the Council will succeed or whether Peli will succeed? Nobody knows. You just have to wait and see. The mission is good, and so is Peli. The mission first told me about God. First it was the Catholic mission. The priest came from Yakamul and made a school at Laningwap. Not a proper school. A bible school. I went. The catechist beat us with a cane so I ran away. Then I went to the plantation. God gave us the bible. God gives life to all men. God gives knowledge to all men. God is under the ground and in heaven. I have never seen him so I don't know if he is black or white. He is a spirit, our spirit.

1. The Peli Association.

APPENDIX DFAR EASTERN LIAISON ORGANISATION PROPAGANDA LEAFLETS

The following are a selection of leaflets dropped over the Maprik and Dreikikir areas between 1942 and 1944. The originals are held in the Australian War Memorial, Canberra. Some are printed with brightly coloured Australian coat-of-arms or a traditional coastal New Guinea design on the back. The fascimiles reproduced here are reduced by one-quarter.



OL LULUAI NA TULTUL NA LAPUN NA BOI BILOG GUVMAN.

Oi taim Guvman salim tok long yupelo long balus.
YU NO KEN HALIPIM JAPAN.

Supos sampelo longlong man no laik hirim dispelo tok long Guvman, orait bihaind Guvman mekim kort long dispelo boi nogut. Nau tupelo boi NEGWA bilong Lavin, nau ANIUM bilong Lababia i no hirim tok nau stap ontaim long halipim Japan. Guvman markim distupelo man bihaind Guvman mekim kort long im.

OL BOI MAST KILIA LONG JAPAN. SUPOS YU STAP ONTAIM, MIPELO SUTIM YU. YU NO KEN HALIPIM.

GUVMAN I TOK.

P.M. 68

All luluais, tultuls, old and young men of the Government.

Many times the Government has told you in these letters from the aeroplane,

YOU MUST NOT HELP THE JAPANESE

If some stupid men ignore this message, later the Government will arrest these bad men. Two men, NEGWA of Lavin and ANIUM of Labibia, ignored this message and helped the Japanese. The Government has marked who they are and will arrest them later.

EVERYONE MUST KEEP AWAY FROM THE JAPANESE. IF YOU STAY WITH THEM, WE WILL SHOOT YOU. YOU MUST NOT HELP THEM.

THE GOVERNMENT SPEAKS.

TOK BILONG GUVMAN

Mi Taunsen, yu save mi. Ol Sepik i save mi. Plenti Kirismas (Christmas) nau mi bosim yupala. Long man nogut mi at pala man. Tok belong mi i stret nau yu erim.

Iapan i no winim mipala ol i gamon dasol. Yu lukim pait i stop yet. Yupala no ken elpin Iapan, save, yupala kilia longwei, go ait long wok long bus nau waitim mipala.

Mi yet mi ron long balus nau tromoi pas. Mi save ples belong yupala. Sapos yu stop wantaem Iapan biae yu kaikai bam belong mipala. Mi no ken sori. Inap long umbak bilong yupala.

THE WORD OF THE GOVERNMENT

I am Townsend, you know me. All the Sepiks know me. For many years I was in charge of you. I was hard on bad men. My words are true, so listen to me.

Japan has not beaten us, they are lying that is all. The fighting is going on. You must not help the Japanese. Understand. Keep a long way away, go and hide in the forest and wait for us.

I am going around in this plane throwing out these letters. I know your village. If you stay with the Japanese later you will eat our bombs. We will show no mercy. It will be your own foolishness.

P.M. 18

Oloqeda boi arim tok bilog Qavman. Iapan i qamonim iupala i tok ol i kisim Posmosbi pinis na ol i qo pait log hap bilog Sitni olsem Australia. Ol i qamon dasol. Tru ol i laik qo log Posmosbi dasol mipala kilim ol na rausim oloqeda. Ol ino inap log qo log Australia. Bikipiles bilog mipala na bikipiles bilog Iglis na bikipiles bilog Amerika istap qut. Ino qat wanpala Iapan istap log en. Log bikipiles mipala wokim palanti balus na qan na laenim ol soldia.

Iapan i laik kisim Wau dasol mipala pulim ol i qo log bikbus na kilim ol pinis. Ol Iapan log Lae istap noqut tru. I noqat sip i save brigim kaikai log ol. Sapos sip i ron log solowara balus bilog iumi i tromoi bam na sip i lus wantaem ol kaikai. Ino log taem tupala ten wan sip i laik kamap log Lae na i lus olsem.

Oloqeda de balus bilog iumi tromoi bam log Lae log ol Iapan na ol i karai noqut. Baibai soldia bilog iumi pinisim ol tru.

Oraet iupala arim tok bilog Qavman. Iupala lusim bikipiles nau ait log bus log liklik wok. Olsem Iapan i nokan painim iu. Iu no qo log hap bilog Iapan. Iupala no bug. Iu no stap wantaem Iapan. Sapos balus i lukim man istap log hap bilog Iapan olsem i lukim pinas i ron kwik taem i tromoi bam na qan masin i sur.

Iupala nokan peren log Iapan. Sapos iupala peren log ol, mipala nokan lusim biae.

Sapos balus bilog iumi olsem bilog Amerika i pordaun iupala lukaut qut log masta, na aitim log ol Iapan. Sapos i qat piles i salim tok log Iapan log masta bilog balus baibai balus bilog iumi i kam na dispala piles i bagarap pinis.

Mipala save pinis log wonem boi i olimfas masta na brigim log Iapan. Mipala nokan lusim nem bilog boi i mekim olsem. Biae mipala bekim.

IUPALA NO LUSIM DISPALA TOK.

All men, listen to the word of the Government. The Japanese have lied to you. They have said they have taken Port Moresby and are attacking Sydney in Australia. They are lying. They tried to go to Port Moresby but we killed them and stopped them. They cannot attack Australia. Our main cities and the cities of England and America are secure. In our cities we are making many aircraft and guns, and training soldiers.

The Japanese tried to take Wau but we pushed them back into the bush and killed them all. The Japanese in Lae are in a bad way. They have no ships to bring them food. If one of their ships puts to sea, our planes bomb it and sink the food with the ship. Not long ago 11 ships were sunk trying to get to Lae.

Everyday our aircraft bomb Lae and the Japanese are suffering terribly. Later on our troops will finish them off.

Alright, listen to the word of the Government. Leave your villages and hide in the forest so that the Japanese cannot find you. Do not go to where the Japanese are. Do not meet with them. Do not stay with them.

If an aircraft sees people in a Japanese area it will quickly bomb and strafe them.

You must not be friendly with the Japanese. If you do we will not forget about it.

If one of our planes, or an American plane, comes down, look after the pilot, and hide him from the Japanese. If a village tells the Japanese about a pilot, later our planes will come and completely destroy this village.

We know already, which men have given away Europeans to the Japanese. We will not forget their names. Later we will pay them back.

YOU MUST NOT FORGET THIS MESSAGE.

P.F. 5

KASINDU.

OL BOI BILOG SEPIK.

LONG OLGETA PLES NAU JAPAN KLOSTU BAGARAP PINIS.

MIPELA RAUSIM PINIS JAPAN LONG WAU, NA SALAMAU, NA
 LAE, NA FINSCHAPEN NA MANUS, NA TALASEA, NA KASMATA
 RAIKOS IKLIA PINIS NA SOLDIA BILOG YUMI I STAP
 LONG MADANG NA SEK. SOLDIS BILOG YUMI AMERIKA KOSUA
 PINIS LONG AITAPE NA HOLAND. KIAP BILOG YUPELA I
 ONTAIM SOLDIA LONG OLGETA PLES, NA HALIPIM OL LONG
 PAIT.
 MANUA BILOG YUMI I BANISIM OL JAPAN I STAP LONG BUKA,
 LONG RABAU, NA LONG KAVIENG, OL JAPAN I OLSEM LAT
 LONG HOL. I NOGAT ROD LONG RONWEI NA I NOKAN KISIM
 NUPELA KAIKAI.
 BALUS BILOG YUMI MEKIM SAVI TRU LONG WIWIAK NA BOGIA
 NAU OL I LAIK GO HAIT LONG BUS LONG SEPIK. GUVMAN I
 TOK YU NOKAN HALIPIM OL. YU MAS HAIT LONG OL. YU NO
 HARIM TOK LONG JAPAN. YU NOKAN GIVIM KAIKAI NAU SOWIM
 ROD.
 YU NOKAN SAKIM TOK BILOG GUVMAN, SIPOS SOMPELA BIKET,
 IM I LUKAUT BIHAIN.

GUVMAN I SAVVI.

Greetings (?)

To all Sepik men

Everywhere the Japanese are nearly destroyed. We have pushed the Japanese from Wau, Salamaua, Lae, Finschafen, Manus, Talasea, Kasmata and the Rai Coast. Our troops are in Madang and Sek. American troops have landed at Aitape and Hollandia. Administration officers together with soldiers from many villages are assisting in the fight.

Our warships have trapped the Japanese at Buka, Rabaul and Kavieng. The Japanese are like rats in a hole. They have nowhere to run and no way of getting food.

Our planes are pounding them at Wewak and Bogia. They are moving into the inland Sepik. The Government says you must not help them. You must hide from them. You must not obey them. You must not give them food or guide them.

You must not ignore the word of the Government. If some people defy the word of the Government, they had better look out later on.

The Government will know.

APPENDIX EINTERVIEW WITH PITA SIMOGUN

Dagua, 5 December 1972

- Q. *When did you first think about starting this work, business?*
- A. The first time was after the war. I had all these men, Kokomo, Augen, Pita Tamede, Makainamo of Lumi, he was not a police man, he was a luluai there. Here at Wewak, when I came back I held a meeting about starting all this work. At this time there was a kiap, Mr Lexon at Wewak, and DC Niall. First I came back to Makupini. I held a meeting only. I did not start anything then. I took the frond of a coconut. I stood up and I broke the twigs one at a time. I said, look, if you don't come together this will happen. You have seen the way of the Japanese, the Americans, Australians, New Zealanders and Englishmen. The Japanese came and took your land. If the Australians had not had the help of the Americans to drive out the Japanese, they might still be here, and your land may have been taken over for ever. But you were lucky. They came and helped you, and you have got back your land and now you are back living on it again. Now the same thing. You, yourselves must come together. If you see a European, don't call him masta. It doesn't matter about the colour of his skin, black or white. All must come together. And I held the coconut twigs and said. Look one at a time they are easy to break. Five together they bend, ten together they are too strong. Australia, America, New Zealand, England, they all came together in this way. So they won this war. They came here, joined with us, and made us strong. So it must be now. We must all come together with them.
- Q. *At this meeting, where did they come from?*
- A. From Woginara, [other local Dagua area names indistinct].
- Q. *Maprik?*
- A. No, my area here only, the coast and into the bush. They all came here first. Later on Maprik and Yakamul. Now the first time, I did not talk about rice or coffee. I just brought them together and spoke about getting some people to come here and help us. I told them. You can plant coconuts, or whatever you like, work the soil. So, after this I went back to the police.
- Q. *What year was that?*
- A. Ah, 1947. I went back to the police for two more years. At this time, the government had paid war damages. Money for the village houses and pigs, all the coconuts destroyed by the war. Now all this money, the government was getting it back again through their stores. I came back and I said, "Hey, give me five pounds each." This money altogether came to 1,500. I put it in a metal cabinet which had belonged to the Japanese, locked it up and gave the key to my wife. I went off to Manus and later Rabaul. I came back, in 1949. I came back here in 1949.

First I planted a little rice. I got it from Yakamul. The rice came from Hollandia. A brother of mine, Thomas, he is now dead, he went to Yakamul and brought back a handful of seed. It came from Hollandia. From the Japanese or not, I do not know. From Hollandia that is all I know. Long rice, white rice. So I planted this, some peanuts, some cocoa and some coconuts. I told Mr Niall, I would like to start a cooperative society in my village. He didn't like this. He said, you must give back this money. It is not enough. We disagreed. I said to him I think you know Papuans and New Guineans don't like money. They like only knives, tomahawks, meat and fish. Why? I don't like this. Mr Niall knew one man, Mr Conroy. He looked at this money and he said he didn't think there was enough. So I told Niall, I want Mr Miller, a cooperative officer at Port Moresby to come up here and have a look. So he came by plane and came out to Dagua. We looked at the coconuts and cocoa, rice and peanuts. He said "This is not enough for a cooperative, but when I go I will send a European to start a Rural Progress Society." Alright, he went back and sent Mr Marr of Port Moresby, the Director of Agriculture I think. He came and looked. He said, "Okay, you can plant rice here." He said, "Do you have strong winds here?" I said, "Yes, all year round." He said, "Alright don't plant cocoa yet, plant rice and peanuts first. When the trees grow up again, then you can plant cocoa." The war had finished all the trees along the coast. So plant rice, coconuts and peanuts first. Before there were no coconuts between here and Wewak. Now look at them. The Japanese cut down every coconut in Dagua. I told the agricultural officer and he got us coconuts from Samarai, and some we got from Yiwor, Kairiru. Now you see them all along the road.

So I started off this. In 1950.

Q. *When did Bob Pulseford join you?*

A. In 1952 he came up here. He did a good job, at first. But later. You know this money I told you of this money for shares in the rural progress society. Well Bob was wrong. He got too many things. Two tractors, a boat, a sawmill. This money for shares was used up. Why? We did not have a strong business yet to make money to put with this share money. So the society collapsed when this money was used. But we planted rice. Bob set up the mill, and the rice grew well. The government bought it and the business men in Wewak bought it. But there was no transport. So we got this boat. Later on we planted peanuts. There was no market. Then Frank Martin started a business buying peanuts. And he bought some rice. But the price for peanuts went down so we left them. Now rice. There was an insect on the coast here. If you hold it in your hand it smells terrible. It has a long mouth. Like a mosquito. It sucks the rice dry and it dies. So I called for two men from Maprik, Nabasil of Yelikum and Peter Tamede of Maprik. I told them, take this rice and plant it in the bush. It is no good down here. I said take the rice and plant it and plant coffee. Never mind about cocoa. They said how will we get coffee. I said, later, later ask the agricultural officer and they can get some for you. Plant rice first.

Q. *Did you also tell them how to form a Society?*

A. Yes. Yes. This question. First they planted the rice. When it came up well, they came back and asked me, how do we start a society, how do we get committee, how do we get a society at Maprik, as you have here at Dagua. You see when we were policemen. I told Augen at Aitape, when you are finished here, go back to the bush and help me start businesses. I told Kokomo at Port Moresby, go home and start a business. I talked to many policemen during that time but only three listened to me. Augen, and one from Morobe, Nibuk. He lives in the Markham Valley and now has a cattle project and all sorts of things going. And Kokomo and Peter Tamede.

Q. *Who came here to see your work at Dagua?*

A. Augen came here. He is the same language as me. Kokomo, no. I went to Supari once and saw his work there, together with Augen. I went there and showed them how to hull the rice in garamuts and winnow it in the wind. Plenty of men came here. Many young men. But how can you teach young men these things. I taught the mature men and they were able to make the people follow them.

Q. *Do you know Loa from the Kombio?*

A. Yes, but not very well.

Q. *He lives in the mountains where there is no road?*

A. Yes. It was hard then, very hard you know. There were no roads. Bob Pulseford and I started these roads here. From Dagua to Wewak. I started it, then I went to Port Moresby and he carried it on. I came back and carried on again. And so on.

Q. *Now when these men from the mountains and inside the bush came here to see you, what did you tell them?*

A. I told them about societies. I said, "I have been to Australia and there I saw this thing, 'cooperatives'". Now I saw this business there. But here we have no coconuts so we could not start one. But the agricultural officer has helped me start a Rural Progress Society. So you must first start a Rural Progress Society. Then later when you have coconuts, and rice and things, you can start a cooperative.

Q. *Did you get your first ideas about cooperatives in Australia?*

A. Yes that's right. When I went down during the war I walked around with many Europeans and they told me about many things. But when I came back and talked with the kiaps I didn't tell them this, I hid it from them. Why? Because if I had talked about this new country and this new things and the cooperatives had gone wrong they would have been in court together with me. If it was just me, it would be only me in trouble.

Q. *Some of the men at Dreikikir have told me they had trouble with the kiaps when they tried to start stores after the war. Why do you think they were against this sort of work?*

A. Well they thought us kanakas were not capable of this sort of work, you know. But I told them, don't take any notice, you do it. Never mind their threats, do it. Many of the kiaps were okay. It was not the District Officers, it was mainly the young Patrol Officers.

Now another thing started with me. Mr Corrigan and Mr Hutton. I said, Europeans cannot take any more labour from here. I will show you this. This started with me first. Niall told Corrigan, Simogun has the BEM, British Empire Medal. He called out to them to come and see it. He told them, Simogun fought in the war and now he has all these medals. Now he wants to start this work here. I have talked with him and he has won the argument. If he wants to do this here that is his business. I think these people were afraid. I stood up to them, defied them, would not listen to them, and the kiap was on my side. This time, the kiaps came and helped us and the trouble finished.

Q. *When the war finished where were you?*

A. At Aitape.

Q. *You were Sergeant-Major. And Augen was there too?*

A. Yes he was there with me. I told him go back and start a business.

Q. *Now some other men at Supari, Wangu and Nalowis?*

A. Yes I know Wangu.

Q. *They have told me that you came there once following a star which went across the sky. Can you tell me about this?*

A. Yes, this star went over and I thought it had fallen down over the mountains. I got some men together and set out to look for it. I wanted to know where it fell down. It was not a small star. The whole sky lit up, oh a big one. So I went to Sowim and they said it went that way. I went up into the bush and they told me over towards Supari. So I went there. I thought if it came down, the bush will be dead all around and we will be able to see the place. We would be able to find it and see, did it have a cross with it, or what? We looked and looked and looked but could not find.

Q. *This cross. What would you have been able to do with it?*

A. I just wanted to know that's all. Some of the missionaries had told me a story that it was a cross and I wanted to see it. They said, if it came down the bush will be burned and you will see where it fell. So I went to look for it. But we could not find it. I think it must have burned out up there.

Q. *Was this the only time you went to Supari?*

A. No I went again. That time Augen had only the salt. The second time I went to see Kokomo's rice, at Emul. Then I went to see Wangu, he had a store at Warengame. Then down to Supari where Augen had a big rice garden.

Q. *Did you go to Brukham at this time?*

A. Yes I went to Brukham, down on the river. I didn't go any further because I got sick. I wanted to go to Nuku but I had to come back.

- Q. Now I have read some reports in which the agricultural officers were annoyed because they said you were interfering in their areas? They said you were sending in talk about rice?
- A. Yes I sent some of my men. They called them bosbois, but they didn't know their real name was kamiti. You see people didn't understand what a kamiti was, so I called them bosbois at first. I said, you are a bosboi. You go and boss this work. When they came down here and I talked with them, I said, alright you go back now and make this work. You are a bosboi and you must lead this work. Every place, I did the same. I said, you go back to your village and do what we are doing here.
- Q. Where did they come from, all these men?
- A. Oh from every place. Angoram, Ambunti, Aitape they all came. To get rice and plant it. But in some places the insects ruined the rice and some men did not understand the work properly.
- Q. Now some men have told me, Anton at Musendai and Kokomo, that some men before, did not understand properly. They thought that if they planted a little rice then later on they would get a lot of money. Is this true?
- A. No no, these men who thought this were these bad people, these cargo cult men. We did not think this at all.
- Q. No, no, not you. But some men, did they think this way?
- A. Oh yes some men thought this at first. But after they had planted it once or twice they found out and forgot these ideas. Now when the rice got going around Maprik, some of the agricultural officers were annoyed with me. They said I was interfering in their work, yes. So I went to Bainyik and talked with them. I told them, I am helping you. If you had told people to plant rice they would not have listened. I have sent men to every place. They are to help you. And my own work is to help you.
- Q. Now I would like to follow the rice. First you got it from Yakamul and they got it from Hollandia? Now Kokomo says he got it from Ulau?
- A. Yes, Ulau. But first it came here, then when it was growing well here, it went back to Ulau. It came down and went back again.
- Q. Now Augen. Nalowis tells me he got rice from the kiap at Mparik, Havilland?
- A. Yes, I think that rice came from Peter Tamede.
- Q. Peter Tamede. He was a policeman during the war?
- A. That's right. MHA too. And Councillor. He is dead now. So is Makanimo. He first planted coffee at Lumi. He got coffee from Wewak. One policeman brought some from the Highlands to Wewak. Makanimo took it to Lumi. At Lumi he started a business. He planted coffee first, then the agricultural officer saw it grew there and followed him. He was first. I told him. Go to Lumi and plant cabbage, sweet potato and other vegetables and make a market. He said, what's the use of a market at Lumi. I told him the planes come. Take them to Wewak or wherever. This is a

colder place. European vegetables will grow well there. Plant coffee, European cabbage, beetroot, carrots. Plant Arabica coffee. But later on they changed them to Robusta. At Maprik I told them, you plant rice, cocoa and coffee. At Lumi, I said coffee and vegetables. Then when I was at the House of Assembly I told them, try tea. They said we don't know about tea. But I said that doesn't matter. Plant it first. Try rubber too. But first you must plant something to attract the agricultural officers. When they see that it can grow then they will help you. They said, the agricultural officers won't come. But I said they will come, but first you must plant all these things to pull them to your place to have a look. Then they can see which are best for your place and can help you with them.

- Q. *Now this area inside here, is an area of many cargo cults? What do you think about this?*
- A. Oh that is another story. In 1957 I started the Local Government Council here. Now when they tried to start a cult, I told the councillors, go and burn their houses, break down their things.
- Q. *Now this Peli Association. What about it?*
- A. This is the same things. Thinking money will come out of the ground. Same rubbish.
- Q. *Did this sort of thing exist here before the war?*
- A. All the time. The first time about 1936 [?] it started in Wewak. I was working for the Company. A German company. Most had gone but some were still here. At Marun. They said if men fished in the sea, first they would pull in fish, the buai and daka, then cargo. I didn't know, I just heard the talk.
- Q. *Round Dreikikir they say the talk came about 1930 that for three days it would be dark and the ancestors would bring cargo. Did you hear of this down here?*
- A. Yes it was here. When the war started it was at Boiken and Kairiru. I tried to stop it and took them to court. But when the war started they joined with the Japanese. The cult leaders became kiapatan for the Japanese. Everywhere, the people brought pigs and food for the Japanese. Everywhere. But when the war was over and I came back, they were all dead. They killed them all, at But, at Wewak and ontop here above Dagua.
- Q. *Do you know a man called Suahe from the Wam?*
- A. Oh yes I know him Suahe. I have met him at Wewak. He lives there now.
- Q. *I have heard he wanted to bring all the Wam people to the coast. But I don't know all the details. Do you know what happened?*
- A. Well he wanted to buy a ship. He collected their money to buy a ship. That was the source of it. But the money was frittered away and there was big trouble. One man from Walpol, he was a policeman too Awol, he did this too. And here when the war was over, Joseph did it too. Collected money to buy a ship. When they took them to court they wanted to gaol them all. But I went and told them no. It was their decision to give these men

money. Many people liked their ideas and gave them money and persuaded them to take it and buy a ship. I said, look at me. I too wanted to start a new work, a cooperative. I too collected money, from all the people. I worked straight. They went foul. If you start with small things and go carefully you are alright. Now Yoga, he collected money and started a sawmill. That was alright for a while until it broke down. But it was not much money. But Joseph and Yaown collected a lot of money for a big thing. They were in a hurry. They would have been better to start with something growing in the ground. A ship is too big. They had a court here. I went and spoke for them. So they were not gaoled. They went home. It is something for the people, their money, their business.

- Q. *Now, Dagua was the first RPS. How come it is now collapsed yet the later ones, Maprik and Dreikikir are going well?*
- A. Dagua fell down because men would make copra or cocoa but they would not sell it to the Society. They sold it to Europeans. So the Society fell down. If they had a law to stop them, I think it would have been alright. But the Society would buy for 4 pence, and another man would come along and buy for 5 pence. One man would say, I get a lot of money from the European and the Society gives me little. But the Society gives a receipt and later a dividend. But the European does not. I told them look. The European gives you an extra penny. But if that penny stays with the Society later on you have a profit. If you don't do it this way, no profit. But many men did not sell to the Society.
- Q. *Now did you get tired of this and go to Hoskins?*
- A. No, no. I went to Hoskins because Papua New Guinea is a new country. If I stayed here, many men would not have gone to Hoskins to start this new business. So I thought I will go and they will follow and make this new business strong. They knew me, I was the first to go and they followed me. Many men from all over the Sepik.
- Q. *Like before with the rice?*
- A. Yes. But it was not my work. It was theirs. I told them go and make this work in your village.
- Q. *But they called this rice, rais bilong Simogun?*
- A. Yes, that's what they called it but it was theirs, not mine.
- Q. *Now when you went to Australia, what did you see there?*
- A. I went for training, to fight in the bush. But I went around too. I saw rice growing and I saw cooperatives. In 1944 I went back to Australia and I went to see all the businesses in the bush. At this time I did not understand English, but if you change Pidgin a bit, it is much the same and I could understand a bit of what they were saying. But when the others were going around looking at whatever it was, wheat or something, I stayed by myself and looked in the sheds and at the machines and things. In my head, I worked out what was happening. I thought, I think he does it like this and this and so on. You see? I would see a man planting wheat, or rice, or sugar cane,

or growing cattle. My eyes would see it and then I would hear just a little of his talk and together I could see how they were doing it.

Q. At first, did you wonder where the Europeans got their things from?

A. That's right, that's right. But when I went to Australia I saw how they did.

Q. Now you know Yali? He too went to Australia, but he went wrong somewhere? How come you too didn't go wrong?

A. When Yali was up at Hollandia and was lost in the bush after they killed his friend, a European, he came out and said a snake had brought him. He had been killed but a snake brought him back. So he later made this cargo cult. It came from this. I tried to talk him out of it, but it was no good. While he was in gaol.

Q. Have you talked to Yaliwan?

A. No, no. I was coming. Tom Ellis asked me to come, but when I was on the way one of my relatives died and I went back.

Q. Do you know Jim Shimbago?

A. Oh yes, Jim Shimbago is my younger brother, and Joseph Bula, before he worked in the bank.

Q. I have talked with Jim Shimbago. I don't know what to think. Does he really believe, or is he just in it for the money he can trick out of people?

A. I don't know, really I don't know. Hahaha. My son put some money in it too you know. Fifty or 100 dollars. I called out for him when I came back, but he isn't taking any notice of me. He won't listen to me. That's his look out. If they put all this money into a business it would be alright. This time I wanted to go to Mt. Turu. I wanted to talk with them. To tell them. You people must put some of the money, put it into a political party, or make a proper association. Speak truthfully and hold proper meetings. Call for the kiaps and others and explain what they are doing with the money. It will be no good if later on they have trouble with the people. It would be better if they formed a political party, like the Labour Party or something. I had a party before, Christian Democratic Party. Something like this which all the people could join would be alright.

Q. They use that name now too, you know? Danial Hawina uses it?

A. Yes Hawina. Do you know, before the war, his father started a cargo cult here. Hawina, luluai before. I took him to court, with many others. Up at Marambanja. They got bones and buried them in a house. Then they got vines and bamboos and tied them up. They said this was their wireless by which the talk would come. They put some bones of a bench inside one of the houses and decorated them with flowers and things. I went up there and burned down the houses and pulled out the masts. Later on, the same things started up at Kairiru. Muschu, Sabwuak, Laulau. Then down to Boiken and then up to Saussia. We went up there. Me and

the kiap. They were burning bamboos. The kiap thought they had rifles, but I said, no, only bamboos burning. We arrived. Beat them up. And one women, Pasuwe, they said she had died and come alive again and brought back these ideas. This was the first time and the second time. Then almost immediately at Tuanbil. I didn't go up there, but the sergeant saw it, throwing money into holes, 1 and one hole and 5 in another. The kiap told them if they wanted to throw away their money they could. He didn't care. So it finished. If they had gone to Yangoru right at the start it would have been finished now. But now it is too big. Now it is people everywhere, Vanimo, Aitape everywhere. Oh dear. Hoskins too. And another one which is theirs. At Gasmata up in the bush. I went with one kiap, but they won't listen. I think, let them alone. Here, I had a meeting here on Saturday. There are only about 10 men who have not joined. None of my brothers have joined. None of them. Leave them. When their money is finished, so will this thing. I told them, I won't try and stop you. If you want to do this, that's your affair. If you want to sell copra and cocoa good. If you want to sell copra and cocoa and give the money to Peli, alright, it is your money. But if you don't work, where will you get your money from? Better if you work and you will have money for Hurun.

You know, before, my younger brother, while I was in Aitape, he would speak at the meetings, as if he were my mouth. He went about, but they said my words were like water. And all the people tricked him. They said that I was making this work and that I was going to bring the Americans here to start this cargo cult work. He was taken to court at But. A big court, the kiap from Aitape came down to But. My brother was to be tried but the tultul said no. If you want a trial call out for Pita to come. They are his ideas. So the court was stopped and they came to see me at Aitape. I told them, my brothers, I was not working for America, or Australia, or any other country. But I said, never mind, go back and wait for me to come. The kiap tried to hold me but I said, "No, I am going to my village." He told the kiap in Wewak. But when the ship called at Wailis Island, I got off and got a canoe straight to here. The kiap at Wewak sent word for me to come but I ignored it. I had a letter for Niall but I threw it away. I stayed to help my brother.

Q. *You are a baptised Catholic?*

A. When I was a child and a young man I ignored the mission. But before the war, I saw the mountain erupt at Rabaul. The Bishop went into the fire and smoke. I thought the Catholic mission must be strong so I joined them and was baptised. Now during the war, I went to Communion first and then I was never hurt. Many bombs and bullets came close to me, but I was never hurt. I have thought about it and I think it must be true. Now I follow what they say. Before I had three wives. Now I have one. We were married in the church.

APPENDIX F

TABLE F.1 MEMBERSHIP IN THE PELI ASSOCIATION BY VILLAGE, 1972

	Total No. of Adults	Total No. of Peli Members	%
Asiling	65	57	88
Daihungai	207	84	41
Emul	163	150	92
Moiwhak	131	62	47
Misim	144	142	99
Musenali	109	91	83
Musendai	292	246	84
Museng	199	190	95
Musilo	138	*	*
Musengwa	31	31	100
Musingwik	140	123	88
Namaisung	79	12	15
Nanaha-Mulenge	160	89	57
Pelnandu	95	86	91
Porombil	227	13	6
Tumam-Ngahmbole	130	101	78
Yerhmain	70	34	49
Total Urat	2,380	1,511	63
Apangai	268	206	77
Apos	201	190	95
Asanakor	302	22	7
Bongowaukia	555	0	0
Daina	105	4	4
Kubriwat	469	1	0.2
Tauhundur	106	106	100
Tauhimbiet	223	214	96
Masalaga	188	0	0
Kuyor-Wesor	229	0	0
Mahamsi	229	0	0
Kwatengisi	321	0	0
Wosambu	162	0	0
Yubanakor	269	241	90
Total Gawanga	3,697	984	27
Albalung	130	130	100
Kilmanglen	77	77	100
Krungunam	145	135	93
Laningwap	198	27	14
Mimbiok	57	3	5
Pagilo	143	25	17
Winyamon	41	41	100
Yakrumbok	200	180	90
Yauatong	82	82	100
Total Urim	1,073	700	65

	Total No. of Adults	Total No. of Peli Members	%
Ben	40	0	0
Serepmel	154	12	8
King	139	0	0
Koupem	82	0	0
Komala	118	0	0
Kumbum	125	0	0
Meringe	112	7	6
Muyem	44	0	0
Nyumatil	35	*	*
Makupmanip	58	5	9
Samark	51	*	*
Sambu	63	14	22
Soaiyaip	112	0	
Tong	56	12	21
Yakio	28	*	*
Yalangel	46	29	63
Yambes	199	65	33
Yakulm	61	3	5
Yasile	43	4	9
Yawereng	90	2	2
Yakumbum	78	0	0
Sangaien	35	*	*
Mup	70	*	*
Setnyam	*	0	0
Nialu	*	4	*
Yetnimum-Yasumboret	194	10	5
Total Kombio	2,033	167	8
Arisili	255	249	98
Bana	109	0	0
Hambini	216	10	5
Luwaite	159	21	13
Sahik	70	68	97
Selnau	153	149	97
Selni	205	205	100
Sumul-Whaleng	201	201	100
Wareli	75	0	0
Warengame	335	301	90
Yasum	26	*	*
Total Wam	1,804	1,204	67
Total Dreikikir	10,987	4,566	42

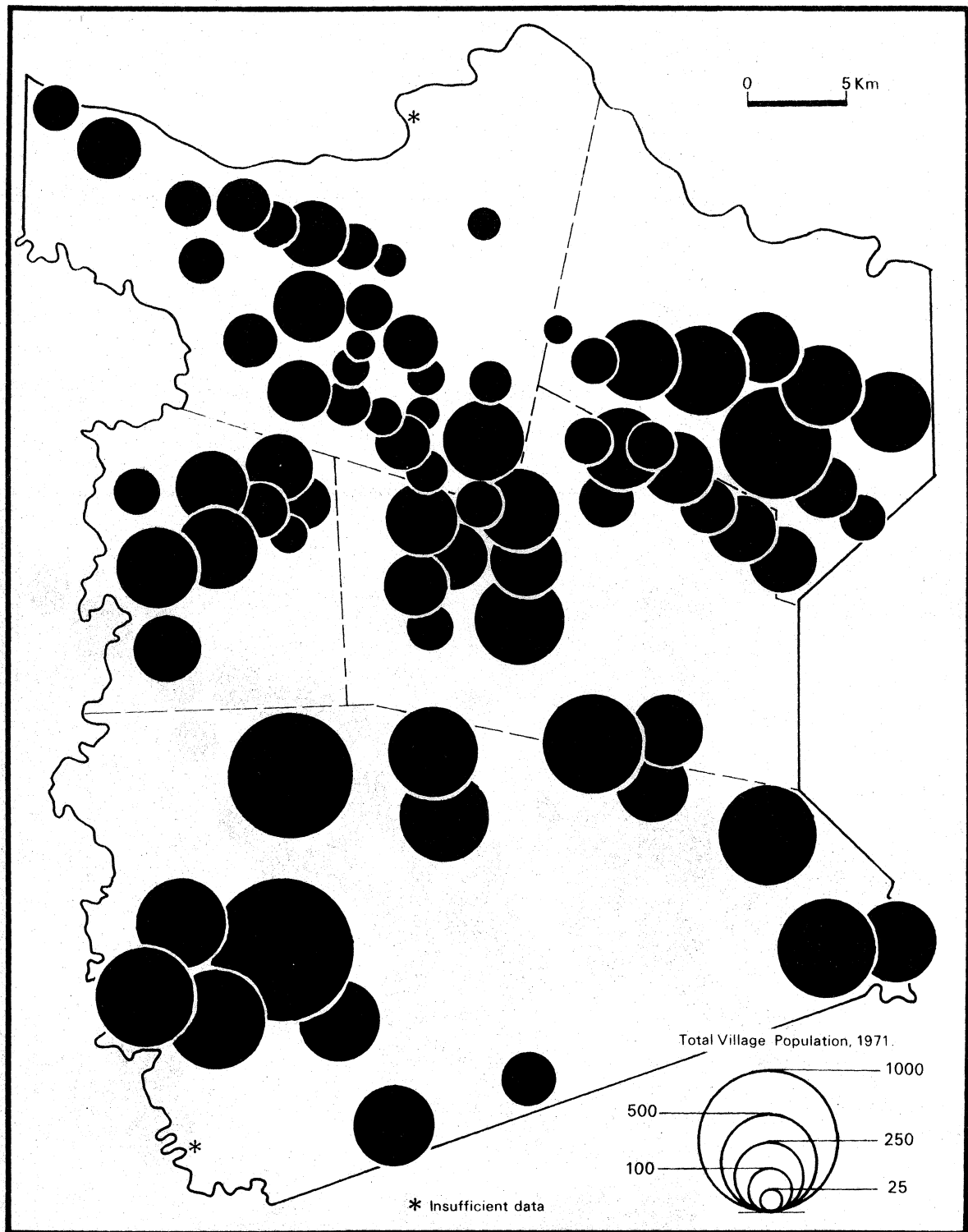
Notes: * No information.

Source: Village censuses 1971, Dreikikir Patrol Post;
Fieldwork 1972.

APPENDIX G

FIGURE G.1

VILLAGE POPULATION, DREIKIKIR, 1971



Source: Department of District Administration census books, Dreikikir Patrol Post, 1972.

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