

## **Wopkaimin Landowners, the Ok Tedi Project and the Creation of the Fly River Socio-ecological Region**

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### **Abstract**

*Following Godoy's (1985) approach to the anthropology of mining, this study of the Ok Tedi mining project and indigenous peoples is divided into an economic base and a derivative socio-ecological and ideological superstructure. The transnational Ok Tedi Mining Limited started their gold and copper mining of Wopkaimin's sacred Mt. Fubilan in 1981. Mining requirements for capital, labour and food for workers as well as the physical output of its operation integrated the surrounding indigenous peoples of the Fly River into a single ecological/economic region. From the beginning of production, the project has been nothing short of an environmental disaster. Wopkaimin protest has not only been confined to mine employment, and more broadly based ideological movements of social protest are spreading among indigenous peoples throughout the region.*

### **Mineral Development of a Sacred Mountain**

Following the anthropology of mining adopted by Godoy (1985), this study of the Ok Tedi mining project (Figure 1) and indigenous people is divided into an economic base and a derivative socio-political and ideological superstructure. The onslaught to Wopkaimin place and culture started with Kennecott test drilling on Mt Fubilan (Figure 2) in 1969, the location now commonly referred to as the "Pot of Gold" (Jackson 1982). To the Wopkaimin, Fubilan is a sacred mountain sitting on top of the land of the dead. Exploration determined that an extremely ambitious engineering project could convert Mt Fubilan into an 1200 metre deep mining pit.

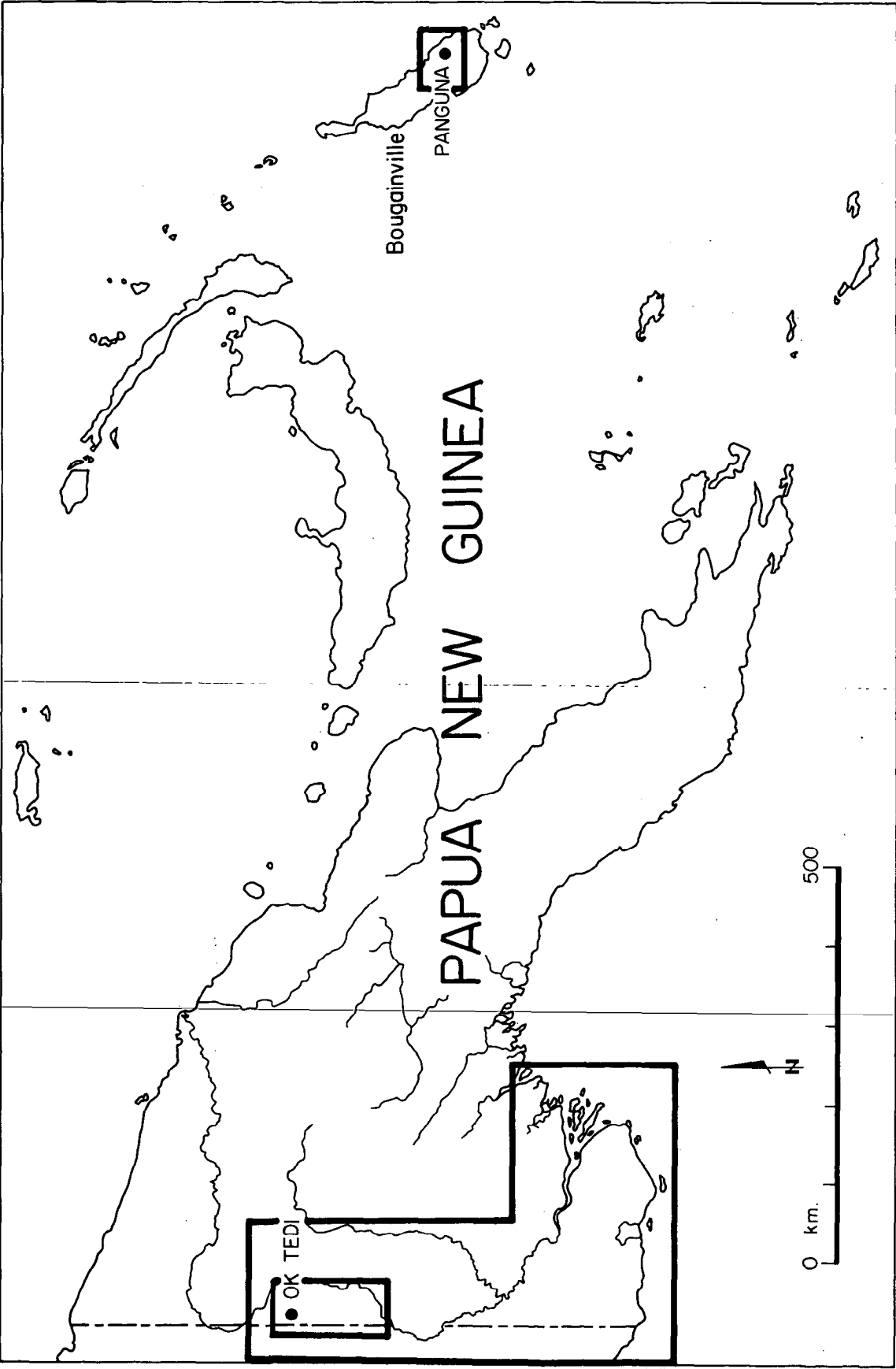


Figure 1.

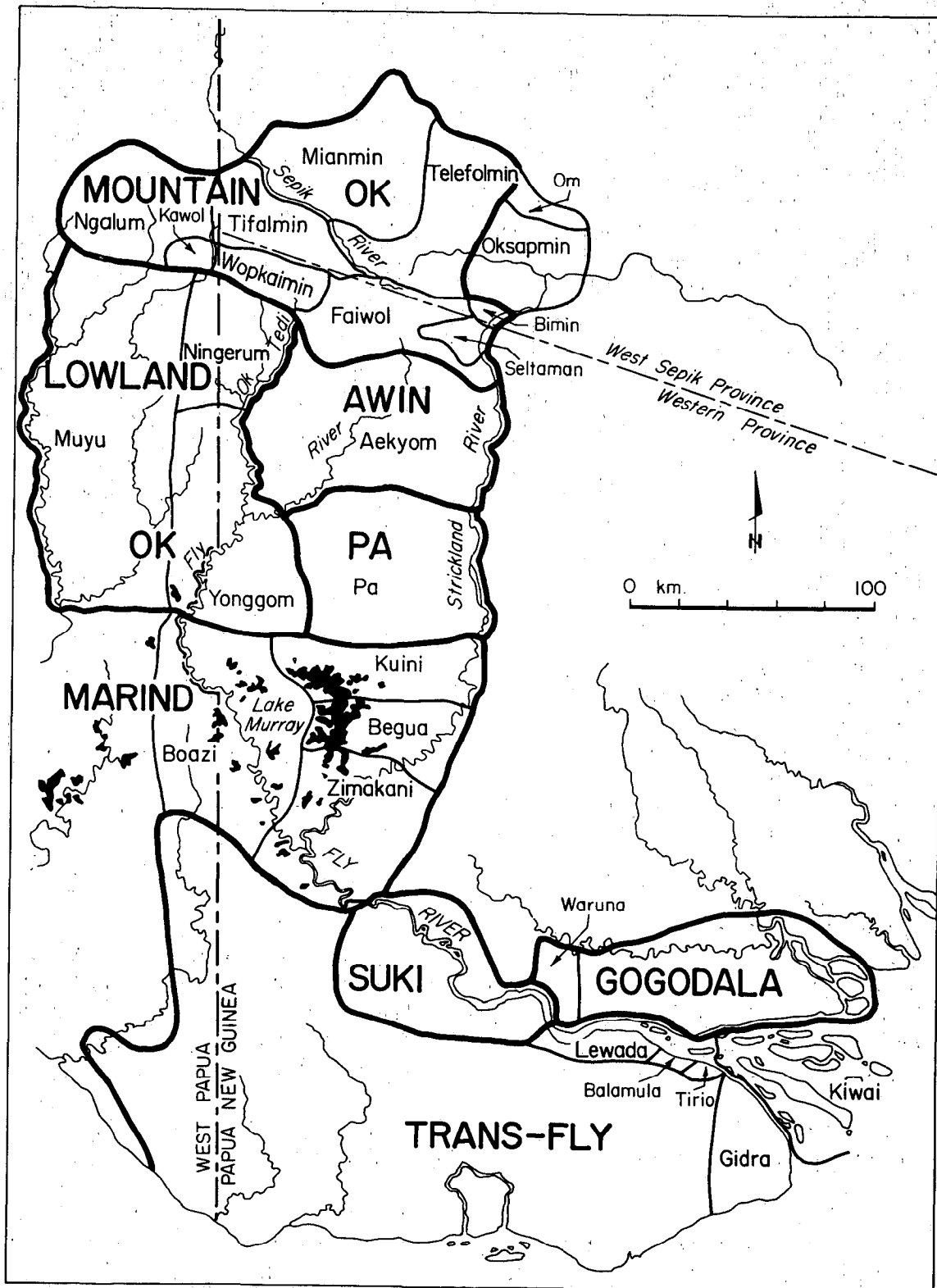


Figure 2.

Kennecott never mined the pot of gold. Having their copper mines in Chile nationalized by the Allende government frightened Kennecott into abandoning the Ok Tedi project shortly before Papua New Guinea achieved independence in September 1975. From the beginning, tax and arbitration provisions (Jackson 1982:40-72; Pintz 1984:32-49), rather than environmental or land owner protection, were the National government's primary concern.

Following soaring gold prices, the transnational Ok Tedi Mining Limited (OTML) consortium was created in 1981 to develop the project. With the development of the Ok Tedi project, gold and copper mining became the major force in the economy of PNG; in 1982 PNG produced 18,000 kg of gold and 170,000 tonnes of copper, each were two percent of the world total.

### **A Regional Socio-Ecological System Under Threat**

Mining requirements for capital, labour and food for workers as well as the physical output of its operation integrates surrounding regions into a single ecological/economic sphere (Godoy 1985:207). The PNG government decided for the Wopkaimin, and other indigenous peoples of the socio-ecological region, that their natural resources were to become national resources.

From the beginning of production the project has been nothing short of an environmental disaster. Weak environmental protection plans coupled with a long series of ecological disasters starting in 1984 have endangered natural resources sustaining over 40,000 indigenous peoples of the Ok Tedi and Fly Rivers (Figure 3). Within the socio-ecological region, the Upper Fly consists of 700 Wopkaimin Mountain Ok peoples, 3,000 Ningerum and 2,200 Yonggom Lowland Ok peoples and 6,000 Aikyom Awin-Pa peoples. Indigenous peoples of the Middle Fly speak Marind languages, including 2,000 Boazi and 1,500 Zimakani. South of the Strickland confluence are 1,000 Suki, 3,300 Waruna and 7,000 Gogodala peoples. On the Lower Fly are 200 Lewada, 170 Balamula, 280 Tirio and 23,000 Kiwai Trans Fly peoples.

By 1989 as outrage mounted from peoples throughout the Fly River socio-ecological region over increasing river pollution, the PNG government was forced to contract Applied Geology Associates of New Zealand to independently reassess the environmental impact of the Ok Tedi project. The National government bypassed 1 January and 1 April, 1989 deadlines for declaring Acceptable Particulate Levels (APL), but the new Prime Minister, Rabbie Namiliu, still stated emphatically that "we cannot and will not allow the wholesale destruction of aquatic life in the Fly River".

According to the Applied Geology Associates report the pollution from continued production with total discharge would be staggering, with an:

80% fish kill to the Middle Fly in the immediate term between 1990-1993 and a 60% fish kill for the life of the mine. The severe effect (60%) would continue down to the delta as well as into the Gulf of Papua and possibly the Torres Strait (*Post Courier*, 27 July, 1989).

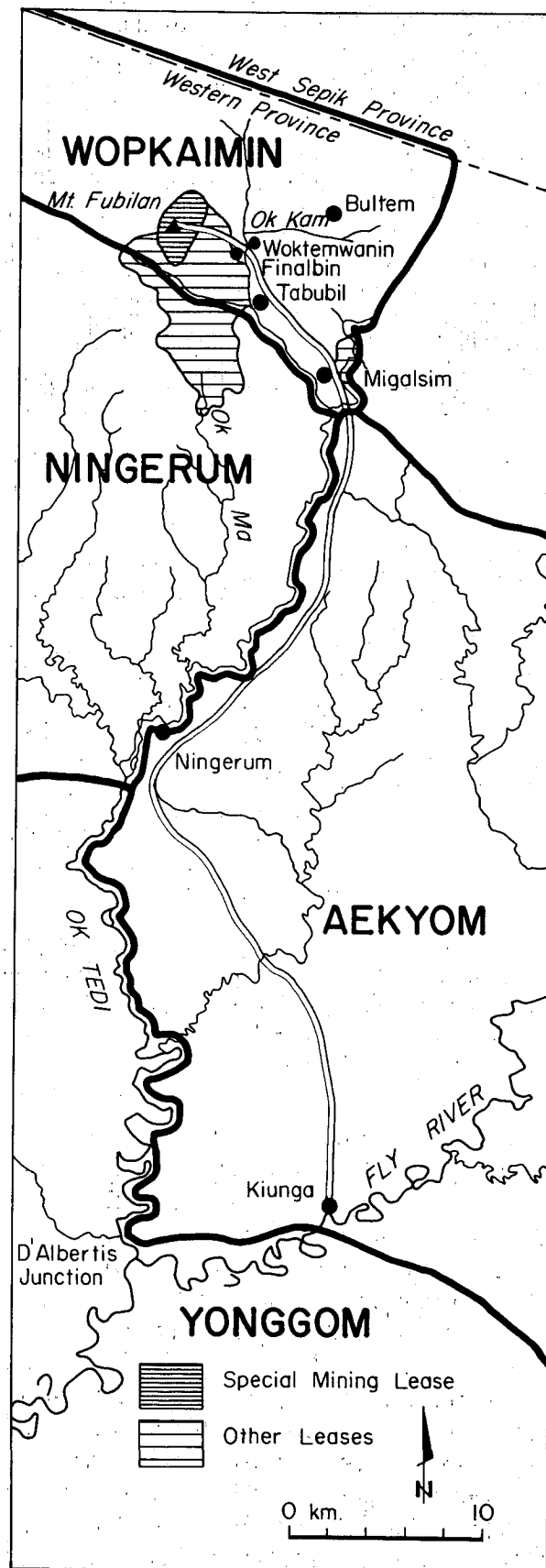


Figure 3.

Data presented from OTML to the National government (Table 1) on their predicted levels of fish loss due to continued mining without a tailings dam were even worse than than the Applied Geologist Associates report.

Table 1. Predicted Fish Catch Loss at Various Fly River Locations Under Current Ok Tedi Mining Limited Operations (source: Busse 1990)

	Fly River Locations												DELTA	
	KIAMBIT				OBO				OGWA					
	ss	pCu	FISH CATCH LOSS % ss pCu		ss	pCu	FISH CATCH LOSS % ss pCu		ss	pCu	FISH CATCH LOSS % ss pCu		ss	pCu
BACKGROUND	110	45	0	0	103	45	0	0	430	45	0	0	430	42
CURRENT MINE PLAN 1990	758	1236	54	88	531	1150	17	88	665	524	22	57	665	149
1991	803	905	57	77	612	1202	18	78	681	401	23	46	681	174
1992	805	715	57	69	647	879	18	69	682	321	23	32	682	184
1993	803	875	57	77	649	693	18	77	681	388	23	44	681	201
1994	842	581	59	61	647	850	18	60	695	270	24	33	695	201
1995	842	581	59	61	677	564	18	60	695	270	24	33	695	200
1996	784	562	56	61	677	564	17	60	674	253	23	33	674	195
'ss' refers to the level of suspended sediment.														
'pCu' refers to the level of particulate copper.														
'fish catch loss' refers to the predicted percentage reduction in fish catch for the predicted levels of suspended sediment and particulate copper.														

The National government had to make a choice between total discharge into the Ok Tedi or closure of the mine and by the end of July 1989 they were making an "environment or economy" decision for the peoples of the Fly River socio-ecological region. Finally on the 29th September, 1989 Jim Yer Waim, PNG Conservation Minister, announced "we decided in favour of the people". OTML was to avoid the estimated cost of K380 million for a permanent tailings dam and continue mining with total discharge of wastes in exchange for offering compensation money to the peoples of the Fly River socio-ecological region. An Ok Tedi Fly River Development Trust Fund of K2.5 million was to be created out of a levy paid to the National government for each tonne of ore processed and waste mined. According to Minister Waim, the State wanted to offset potential loss of fish with fish ponds, chicken farms and piggeries as alternative sources of protein. Underlying the National government's decision was the pragmatic view that, with the Bougainville mine closed, it was essential to secure K60 million from Ok Tedi in 1991. The decision "in favour of the people" was one of political expediency that jeopardised the welfare and health of 40,000 Fly River peoples.

## Roadside Villages: A New Socio-economic Order

For Wopkaimin landowners far more than the loss of hunting, fishing and gardening has been at stake with the intrusion of the Ok Tedi project. Traditionally, Wopkaimin culture was centred on male reciprocity. The Wopkaimin believed their way of life was founded by the 'great mother' ancestress Afek who built their most sacred cult house, the Futmanam, after she built the Telefolip. The Futmanam, permanently located in Bultem, integrates the Wopkaimin into a male initiatory cult. It is a permanent sacred site where youths are housed and transformed into men. Great Mother Afek nurtures her Wopkaimin children, in return for their maintenance of the sacred relics and performance of rituals and animal sacrifices to the ancestors inside the Futmanam. Reciprocity among initiated men ensures prosperity for all. The Futmanam excludes women. Indeed gender distinctions pervade Wopkaimin culture; men and women reside separately in women's houses and the men's house, instead of in family units, and elaborate prohibitions specify food acquisition and consumption by gender. Reciprocity between different hamlets is mediated through the Afek cult complex.

Total land leases by OTML amount to 16,530 hectares. The Wopkaimin alone lose 7,000 hectares to the Ok Tedi project (Figure 2). Monetary compensation for losing over seven percent of their land has been a cash payment of around K1 per person per day with an equivalent sum placed in a trust account for social inconvenience.

Simultaneously with the expansion of the Ok Tedi project, Bombakan, at the confluence of the Ok Tedi and Ok Kam Rivers, and Woktemwanin and Finalbin, south along the Ok Tedi, places traditionally used as temporary base camps for sago processing and hunting and fishing expeditions, were expanded into small hamlets (Figure 2). About a dozen Wopkaimin workers and their families lived for several years in Tabubil until 1981 when the entire surrounding plateau was converted into an instant township with over 5,000 outsiders. As white executives and their families moved into Tabubil, all Wopkaimin workers with their families were forced into Woktemwanin and Finalbin which grew into major roadside villages with over 350 residents by 1985.

By Wopkaimin standards these villages are extremely congested. Residents are predominantly Wopkaimin but include the Telefolmin and other Ok peoples from the Ifitaman Valley as well. Non-Wopkaimin are permitted to reside in the roadside villages but not to hunt or garden, so they are totally dependent on trade store commodities for subsistence. Villages use the term "corners" to refer to the aggregate of disparate neighbourhoods formed around previous Wopkaimin residential and descent group affiliation. Every "corner" has a trade store and commodities like rice and tinned meat and fish have not only become dietary staples but commodities to be sold rather than shared reciprocally, even among neighbourhood residents. From the 1970s, when they were entirely subsistence-oriented and dietarily self-sufficient, to the 1980s, the Wopkaimin have become increasingly dependent on a diet without many of their subsistence foods, especially *Colocasia taro*.

In the new roadside villages there is an ongoing breakdown of many aspects of traditional Wopkaimin culture. Established patterns of domesticity and social organisation are completely altered. Men no longer have a men's house in which

to congregate at the expense of conjugal ties, but in the new family houses men take separate bedrooms from their wives and children. Food is no longer segregated by gender and all food prohibitions have been abandoned. Household sovereignty in consumption reverses the Afek culture complex pattern of inter-hamlet reciprocity. Jorgensen (1990) has observed this same process occurring among Telefolmin followers of *rebaibal*, an ideological movement described below.

A major social problem was spawned in the new roadside villages with the introduction of alcohol which was absent in the traditional Wopkaimin diet. During the construction period from 1981-1985 under the American transnational Bechtel, the Tabubil commissary was only open to higher paid workers residing in company houses. The Wopkaimin were relegated to using inferior stores where beer became the only new prestige commodity available to them. Gender restrictions excluded women from beer drinking. Aggressive drunken behaviour, black-marketing, fighting and adultery associated with heavy beer drinking now threatens family life. The Wopkaimin use the Melanesian Tok Pisin term *spakman* not only to refer to excessive beer drinkers but also to contrast those who move into the new roadside villages from those continuing to reside in established hamlets.

Once Bechtel departed in 1984, with the phasing out of construction and the phasing in of gold processing, the Ok Tedi project became known to the Wopkaimin as the "place without work". However, even before gold production started many Wopkaimin men became dissatisfied with the role of unskilled wage earner. Realisation that vast disparities in wealth and status separated them from the Europeans effectively removed the prestige and satisfaction initially associated with wage earning. Protest, however, was not confined to mine employment and more broadly based movements of social protest are spreading among the Wopkaimin and other Ok peoples throughout the region.

### **Rebaibal and Afek: Ideologies of Social Protest**

Following the establishment of a Bible College by the Baptist mission in the Ifitaman Valley, a spectacular local evangelical movement emerged among the Telefolmin people. Many abandoned the Afek cult and replaced it with indigenous Christian revival movement commonly referred to as *rebaibal* in Melanesian Tok Pisin. Although the Baptists opened their first mission near the sacred Telefolip cult house in 1950, their threat to the Afek cult did not reach a crisis point until 1974 (Frankel 1976; Jorgensen 1981). Collective ecstatic outbreaks first occurred among the Telefolmin, especially the women. Later in 1977 a Telefolmin student of the Bible College experienced ecstatic seizures at Duranmin northeast of the Ifitaman Valley, triggering mass seizures, body shaking, crying, glossolalia, prophecy, healing, and exorcism and the rapid spread of *rebaibal* as the first popular indigenous acceptance of Christianity.

*Rebaibal* completely rejects established cultural patterns but it is much more than another transformation of a traditional cult system into a distinctly Melanesian Christianity (cf. Guiart 1970). Cult houses and sacred objects are destroyed and secret knowledge is revealed. Gender roles are altered and women acquire more equal status. Food prohibitions and reciprocity of the Afek cult complex are



abandoned in favour of nuclear families working, residing and consuming together (Barr and Trompf 1983).

By the time the Ok Tedi project started, *rebaibal*, with over 3,000 followers, represented the most popular indigenous acceptance of Christianity among the northern Ok peoples (Barr 1983). It has resulted in the destruction or desecration of men's cult houses in over a dozen Telefolmin villages and in Tifalmin, the closest northern neighbours of the Wopkaimin, the important cult house in Brolemabip was burned to the ground. *Rebaibal* has spelled the end of the traditional system of regionally organized initiations centred on the Telefolmin's supremely sacred Telefolip cult house. Rebaibalists argue there is nothing in the traditional Afek cult relevant to the problems posed by money, especially the development of the Ok Tedi project. An underlying theme of the *rebaibal* ideology is to legitimate household autonomy in opposition to community reciprocity in the use of cash. Rebaibal is an innovation and adjustment to culture change. Like the cargo cults of colonial and post-colonial Papua New Guinea, it is a major social protest and critique of an alien cultural system.

The Wopkaimin never experienced missionary proselytizing from whites but rebaibalists from the Telefolmin to the north and Catholic catechists from the Enkaikmin to the east are now competing for converts in the new roadside villages near the mine. The scale of information flow is becoming intense and is also reflected in the competing interests and values between indigenous Christians and traditionalists as they manipulate for political influence. Wopkaimin culture is characterized by individual autonomy and sensitivity to the pressures of others and to negative sanctions imposed through public opinion and their leaders are primarily ritual specialists whose paramount concern is to the continuity of the Afek cult.

Gesock is the ritual leader of the Afek cult centred on the Futmanam, the focal symbol of Wopkaimin identity. He was appalled after the rebaibalists burned down the Tifalmin cult house and now crusades actively against the influence of the indigenous Christians. In the 1980s, as the Wopkaimin established their roadside villages near the mine, Gesock ensured that they continued their commitment to the Futmanam. He establishes interpersonal networks and manipulates the flow of secret/sacred information to reaffirm his people's traditional belief in the ritual legacy bequeathed to them from Afek. The Wopkaimin realise the Telefolip in Telefolmin has lost its pre-eminent position in the region because of the rebaibalists and it is Gesock who arranges and leads the ceremonies focussed on their Futmanam. Hosting a major refurbishing ceremony of their Futmanam in 1981 and starting a new sequence of male initiations in 1983 has provided the Wopkaimin with cultural identity as a people and legitimated their claim that the Futmanam is still a significant cult house in the regional system of male initiations.

In addition to ensuring continuity of ritual performance, Gesock has organised construction of the new traditional hamlet at Bombakan with residentially segregated women's houses and a men's house. By the beginning of 1986 a core of over 30 residents has decentralised from the roadside villages to live with Gesock in Bombaken and others circulated in for temporary residence, especially from Woktemwanin. The decentralisation process gained momentum and by 1989 most Wopkaimin had abandoned Woktemwanin for Bombakan or Ayanglim in the Kam

Basin (Chris Roberts personal communication). Previously the Wopkaimin only aggregated for short-term rituals but the new roadside communities have been maintained well beyond the time periods appropriate to short-term rituals and this is creating significant social stresses among those who live there. Through the more recent decentralisation, the Wopkaimin are constructing relationships with the transnational intruders into patterns comprehensible to them in terms of the established Afek cult complex obligations that underlie their own social relationships.

The Wopkaimin are reinstating old patterns of inter-hamlet reciprocity in Bombakan and the Kam Basin hamlets and are establishing extensive subsistence gardens. Many value decentralisation as a way of preventing loss of cultural knowledge and also of ensuring that boys are initiated. They are demonstrating their culture has a limited capacity for exercising social control, especially in the confines of the new roadside aggregate communities.

The future prospects for the two social protest movements among the Wopkaimin is uncertain. Currently the indigenous Christian movement started by the rebaibalists and the decentralisation movement associated with the Afek cult do not interact in common social protest over the intrusion of the Ok Tedi project, rather they are mutually exclusive. The rebaibalists started among peoples marginal to the Ok Tedi project and gained their support precisely because they rejected the social order of the past in favour of the supposed benefits of rapid economic change. By contrast the Wopkaimin are protesting against the consequences of rapid economic change through their continuation of the Afek cult. They find little appeal in the *rebaibal* movement because it jeopardises the status they exert as the indigenous landowners of the mine. Through decentralisation and continued commitment to the Futmanam, the Wopkaimin are carrying past traditions forward to retain a sense of cultural identity.

The Wopkaimin volunteered for work at the mine, but after the infrastructure phase it became the "place without work". The Ok Tedi project became an enclave of skilled workers without the bulk of the Wopkaimin undergoing a voluntary or coercive process of proletarianisation. Bombakan is like a safety valve from the new stress of life in the roadside villages, rather than an expression of worker solidarity. The Afek cult ideologically continues the Wopkaimin kinship mode of production while they are largely excluded from the capitalist mode of production that is the mine enclave.

Movements of social protest, like *rebaibal* and decentralisation, are part of the global move from autonomy by indigenous peoples at the mining frontier clash with kinship and capitalist modes of production. *Rebaibal* and decentralisation offer some prospect of increased self-determination. The Wopkaimin have retained enough autonomy for self-determined cultural policies and choices. Whether they can successfully withstand a full thirty year onslaught of the Ok Tedi project remains to be seen.

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